

Report to Inform Screening for Appropriate Assessment

Large Scale Residential Development

Courtstown

Little Island

Cork

Report prepared for Ruden Homes Limited

By Karen Banks MCIEEM

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West End
Knockagree
Mallow
Co. Cork
Tel: 0834218641
Email: greenleafecology@outlook.com

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1 Introduction

Greenleaf Ecology has been commissioned by Ruden Homes Limited to undertake a report to inform screening for Appropriate Assessment (AA) for the proposed Large Scale Residential Development at Courtstown, Little Island, Cork. The location of the Proposed Development is illustrated in Figure 1-1.

This report comprises information in support of screening for AA to be undertaken by the competent authority in line with the requirements of Article 6(3) of the EU Habitats Directive (Directive 92/43/EEC) on the Conservation of Natural Habitats and of Wild Fauna and Flora; the Planning and Development Act (as amended), and the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011) as amended.

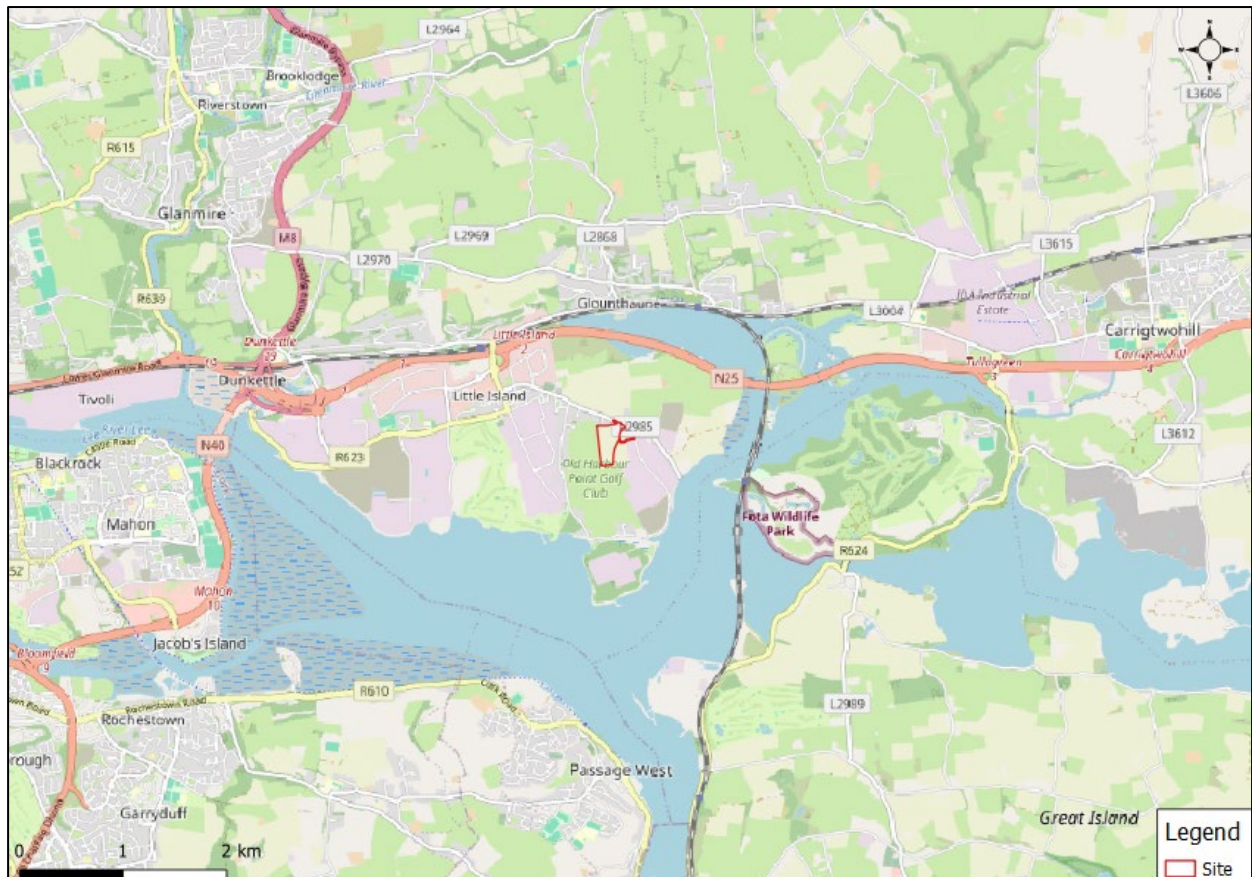


Figure 1-1: Large Scale Residential Development, Courtstown

1.1 Statement of Authority

This AA Screening was carried out by Karen Banks, MCIEEM. Karen is an ecologist with Greenleaf Ecology and has 18 years' experience in the field of ecological assessment. Karen has extensive experience in the production of reports to inform screening for Appropriate Assessment and Natura Impact Statements including those for transport infrastructure, small to large scale housing and mixed-use developments, flood alleviation schemes, solar farms and wind farms.

1.2 Legislative Context for Appropriate Assessment

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, better known as "The Habitats Directive", provides legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as Natura 2000.

The Habitats Directive has been transposed into Irish law by Part XAB of the Planning and Development Act (as amended) and the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477/2011) as amended. In the context of the proposed development, the governing legislation is the Birds and Habitats Regulations.

Articles 6(3) of the Habitats Directive set out the decision-making tests for plans and projects likely to adversely affect the integrity of European sites (Annex 1.1). Article 6(3) establishes the requirement for AA:

Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subjected to appropriate assessment of its implications for the site in view of the site's conservation objectives. In light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.

Natura 2000 sites are defined under the Habitats Directive (Article 3) as a coherent European ecological network of special areas of conservation, composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, shall enable the natural habitat types and the species' habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range. In Ireland, these sites are designated as European sites and include Special Protection Areas (SPAs), established under the EU Birds Directive (79/409/EEC, as codified by 2009/147/EC) for birds and Special Areas of Conservation (SACs), established under the Habitats Directive 92/43/EEC for habitats and species.

The competent authority is obliged to consider, in view of best scientific knowledge, whether the proposed works are likely to have a significant effect either individually or in combination with other plans and projects. If screening determines that there is likely to be significant effects on a European site, then AA must be carried out for the proposed works at Courtstown, including the compilation of a Natura Impact Statement (NIS) to inform the decision making.

2 Methodology

2.1 Stages of Appropriate Assessment

The Department of the Environment, Heritage and Local Government guidelines (DELHG, 2009, rev. 2010) outlines the European Commission's methodological guidance (EC, 2002) promoting a four-stage process to complete the AA and outlines the issues and tests at each stage. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required.

The four stages are summarised diagrammatically in Figure 2-1. Stages 1-2 deal with the main requirements for assessment under Article 6(3) and Regulation 42 of the European Communities (Birds and Natural Habitats) Regulations 2011 as amended. Stage 3 may be part of the Article 6(3) Assessment or may be a necessary precursor to Stage 4. Stage 4 is the main derogation step of Article 6(4).

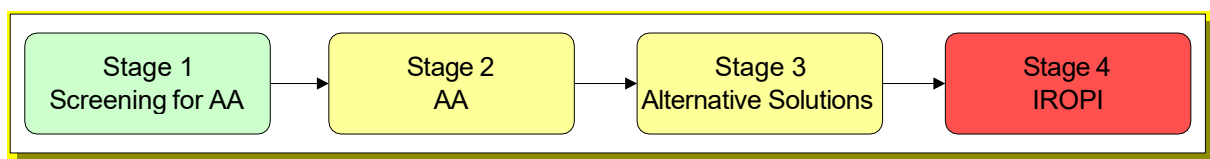


Figure 2-1: Stages of Appropriate Assessment - Taken from *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities (2010)*

Stage 1 - Screening is the process that addresses and records the reasoning and conclusions in relation to the first two tests of Article 6(3):

- i. whether a plan or project (in this instance the proposed project) is directly connected to or necessary for the management of the European sites, and
- ii. whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on the European sites in view of their conservation objectives.

If the effects are deemed to be significant, potentially significant, or uncertain, or if the screening process becomes overly complicated, then the process must proceed to Stage 2 (AA). This report fulfils the information necessary to enable the competent authority to screen the proposal for the requirement to prepare an AA.

This report forms Stage 1 of the AA process and sets out the following information:

- Description of the proposed works;
- Characteristics of the proximal European sites; and
- Assessment of significance of the proposed works on the European sites in question.

The methodology followed in relation to this assessment has had regard to the following guidance and legislation:

- European Union Habitats Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora 92/43/EEC;
- *Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities (DOEHLG 2009, rev 2010)*;
- The Planning and Development Act (as amended);
- *Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC*, Office for Official Publications of the European Communities, Luxembourg (EC, 2018);
- *Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC*, Office for Official Publications of the European Communities, Luxembourg (EC, 2021);

- Interpretation Manual of European Union Habitats. Version EUR 28. European Commission 2013;
- The European Union (Environmental Impact Assessment and Habitats) Regulations 2011; and
- The European Communities (Birds and Natural Habitats) Regulations, S.I. No. 477 of 2011 (as amended).

2.2 Information consulted for this report

The Screening assessment had regard to the following sources of data and information:

- Information on the location, nature and design of the proposed project;
- Department of Housing, Planning, and Local Government – online land use mapping www.myplan.ie/en/index.html;
- Department of Housing, Planning, and Local Government- EIA Portal <https://www.housing.gov.ie/planning/environmental-assessment/environmental-impact-assessment-eia/eia-portal>
- Environmental Protection Agency (EPA) – Water Quality www.epa.ie, <http://gis.epa.ie/Envision>;
- Geological Survey of Ireland – Geology, soils and Hydrogeology www.gsi.ie;
- [Water Framework Directive website – www.catchments.ie](http://www.catchments.ie);
- National Parks and Wildlife Service – online European site network information, including site conservation objectives www.npws.ie;
- National Parks and Wildlife Service – Information on the status of EU protected habitats in Ireland (NPWS 2019a, 2019b);
- National Biodiversity Data Centre – www.biodiversityireland.ie;
- Ordnance Survey of Ireland – Mapping and Aerial photography www.osi.ie;
- Site surveys, undertaken between March 2024 and June 2024 by Ms K. Banks (see Section 3.2); and
- Wintering bird surveys undertaken in February 2024 and March 2024 by Limosa Environmental.

2.3 Screening Protocol

The sequence of events when completing the AA Screening process is provided below:

- Ascertain whether the plan or project is connected with, or is necessary to the management of the European site;
- Description of the plan or project and its impact factors;
- Definition of the likely zone of influence for the proposed works;
- Identification of the European sites that are situated (in their entirety or partially or downstream) within the likely zone of influence of the proposed works;
- Identification of the most up-to-date QIs and SCIs for each European site within the zone of influence;
- Identification of the environmental conditions that maintain the QIs/SCIs at the desired target of Favourable Conservation Status;
- Identification of the threats/impacts - actual or potential that could negatively impact the environmental conditions of the QIs/SCIs within the European sites;
- Highlighting the activities of the proposed works that could give rise to significant negative impacts; and
- Identification of other plans or projects, for which in-combination impacts would likely have significant effects.

2.3.1 Screening Determination

In accordance with Regulation 42(7) of the Birds and Natural Habitats Regulations 2011 (S.I. No. 477/2011) as amended, the competent authority shall:

“determine that an Appropriate Assessment of a plan or project is not required where the plan or project is not directly connected with or necessary to the management of the site as a European site and if it can be excluded on the basis of objective scientific information following screening under this Regulation, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site”.

2.3.2 Zone of Influence

In accordance with EC (2021) *Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC*, identification of the European sites that may be affected should be done by taking into consideration all aspects of the plan or project that could have potential effects on any European sites located within the zone of influence of the plan or project. This should take into account all of the designating features (species, habitat types) that are significantly present on the sites and their conservation objectives.

In particular, it should identify:

- Any European sites geographically overlapping with any of the actions or aspects of the plan or project in any of its phases, or adjacent to them;
- Any European sites within the likely zone of influence of the plan or project. Natura 2000 sites located in the surroundings of the plan or project (or at some distance) that could still be indirectly affected by aspects of the project, including as regards the use of natural resources (e.g. water) and various types of waste, discharge or emissions of substances or energy;
- European sites in the surroundings of the plan or project (or at some distance) which host fauna that can move to the project area and then suffer mortality or other impacts (e.g. loss of feeding areas, reduction of home range);
- European sites whose connectivity or ecological continuity can be affected by the plan or project.

The range of European sites to be assessed, i.e. the zone in which impacts from the plan or project may arise, will depend on the nature of the plan or project and the distance at which effects may occur.

2.3.3 Likely Significant Effects

The threshold for a likely significant effect is treated in the screening exercise as being above a *de minimis* level¹. The opinion of the Advocate General in CJEU case C-258/11 outlines:

“the requirement that the effect in question be ‘significant’ exists in order to lay down a de minimis threshold. Plans or projects that have no appreciable effect on a European site are thereby excluded. If all plans or projects capable of having any effect whatsoever on the site were to be caught by Article 6(3), activities on or near the site would risk being impossible by reason of legislative overkill.”

In this report, therefore, ‘relevant’ European sites are those within the potential zone of influence of the construction and / or operation of the proposed development, and to which likely significant effect pathways were identified through the source-pathway-receptor model.

¹ *Sweetman v. An Bord Pleanála* (Court of Justice of the EU, case C-285/11). A *de minimis* effect is a level of risk that is too small to be concerned with when considering ecological requirements of an Annex I habitat or a population of Annex II species present on a European site necessary to ensure their favourable conservation condition. If low level effects on habitats or individuals of species are judged to be in this order of magnitude and that judgment has been made in the absence of reasonable scientific doubt, then those effects are not considered to be likely significant effects.

3 Project Description

3.1 Description of the Project

Permission for the following Large Scale Residential Development (LRD) comprising:

- The construction of 172 no. residential units to include 146 no. dwelling houses (with 83 no. dwelling houses to include the option for constructing a ground floor extension to the rear); 6 no. duplex units; and 20 no. apartments.
- Provision of 1 no. creche and 4 no. commercial units.
- Upgrading of the existing vehicular access to the site and the creation of a signalised junction on Ballytrasna Part Road (L-2985-0), including footpaths, cycle lanes and pedestrian crossing points, to facilitate access into the site,
- The provision of a new distributor road, including footpaths and cycle lanes, connecting the proposed residential development with Ballytrasna Park Road.
- All associated infrastructure and ancillary development works to include the provision of roads, footpaths and cycle lanes as well as the provision of vehicular connections to adjoining lands with pedestrian/cycle facilities; Proposed diversion and undergrounding of the existing 10KV overhead electricity line and associated poles traversing the site; landscaping & amenity areas, lighting, drainage and services connections; bicycle and car parking; bin storage; and boundary treatments including fencing and landscape buffer of mixed native hedge planting along the eastern boundary of the site.

3.1.1 Surface Water

SuDS features to be adopted include:

- Permeable Paving: Where carparking spaces are provided, these will be constructed in the form of permeable paving, with an overflow provided to the public surface water sewer.
- Swales: Where practical, the landscape will be provided with swales, as indicated on the drainage drawing enclosed within the Civil Engineering Report (MMOS, 2024). Surface water gullies on the estate roads will be directed to these swales to allow for infiltration and cleaning of surface water. An overflow pipe back to the main surface water runs will be provided to prevent against flooding in scenarios where the swales are overwhelmed during periods of excessive rainfall.

The proposed development will consist of a new dedicated surface water drainage system to collect generated runoff from roof and hardstanding areas, water runoff will discharge by gravity to the SUDS features adopted above and the below ground gravity surface water sewers. Runoff for both areas will combine into the local drainage and the surface water will flow into two online storm water attenuation tanks.

The proposed attenuation tanks provided on site are sized to accept 1 in 100 year rainfall event (with additional capacity for 20% increase for climate change). Discharge is limited to the expected flow rate from a greenfield area. The site will contain 2 No. attenuation tanks which have all been designed based on the percentage area drained as a proportion of the entire site.

The restricted outfall from the attenuation tank will then flow by gravity into the existing surface water network located on the Harbour Point Business Park Road.

3.1.2 Foul Water

The proposed foul sewer system will consist of a new 150/225 mm diameter UPVC Pipe located within the site that will collect foul drainage from the units and will outfall to the existing foul sewer network located on Harbour Point Business Park Road.

Feasibility of connection has been confirmed with Irish Water. As stated within the Civil Engineering Report (MMOS, 2024), the current PE load collected by Carrigrennan WWTP is 274780 PE. The PE load from this proposed development has been calculated by MMOS using the flow in l/sec which equates to a load of 612 PE. Hence the proposed development will cause a minor increase of 0.2% on the loading of the Carrigrennan WWTP.

3.1.3 Flood Risk

Office of Public Works (OPW) mapping (<http://www.floodinfo.ie/map/floodmaps/>) indicates the CFRAM coastal flood extents for Lough Mahon and instances of historic flooding in the vicinity of the site. As illustrated in Figure 3-1, the flood extents do not reach the proposed site.



Figure 3-1: OPW flood risk mapping of the proposed site and its environs

3.2 Existing Environment

The proposed site is comprised of an arable field (BC1) bound by treelines (WL2) to the north, west and south, a hedgerow (WL1) is present to the east of the site.

No invasive plant species were recorded within the proposed site and its immediate environs.

There are no active drains, watercourses or waterbodies present within the proposed site.

No Annex I habitats or Annex II species were recorded at the proposed site.

3.2.1 Avifauna

Winter bird survey at the proposed site was undertaken by Limosa Environmental in February and March 2024. A copy of the winter bird survey report is enclosed in Appendix A.

Methodology

The survey was conducted over the entire site (agricultural field). The field was in arable use at the time of survey (Fossitt code BC1), containing winter stubble.

A series of short replicate survey periods was considered to be a better method for this survey than fewer, longer count sessions; the aim being to enhance/maximise data collection over various days, times and tidal stages. Therefore, eight separate 1-3 hour survey sessions were completed.

On each survey visit the survey proceeded with a one-hour vantage point watch over the site. The site was scanned using binoculars from a vantage point to the north (existing entrance to the field) (the 'look-see' basis (Bibby et al. 2000)). Following the vantage point watch, the field was then walked and visually searched for signs of feeding waterbirds such as droppings or feeding signs. All bird species were recorded during the surveys using the 'parks method' of survey as set out by Chamberlain et al. (2007).

During each visit, the field observer walked along a survey route that took her to within 50m of every point of the site. All bird species seen and heard were recorded onto a field map (aerial photo) using the species code (two letter system developed by the British Trust for Ornithology (BTO)). The habitat that each bird was located within was recorded. The bird's behaviour was also recorded where possible, and birds flying over and obviously not interacting with the site were recorded separately.

Bird survey fieldwork was carried out at various times of the day and in suitable weather conditions (dry, light winds), although given the period of bad wet weather during the early part of 2024, some surveys encountered rain.

Survey Results

A total of 32 bird species were recorded during the winter surveys. No Annex I species (EU Bird's Directive) were recorded. The species list includes ten species that are listed as Birds of Conservation Concern in Ireland (Gilbert et al. 2021), including four that are Red-listed and are of highest concern (Stock Dove, Snipe, Kestrel and Meadow Pipit). The species list includes all birds recorded, including those in adjacent habitats. More detailed results on species, numbers and their locations are provided in Appendix A.

No Special Conservation Interest (SCI) species listed for Cork Harbour SPA were recorded within the site. One waterbird was recorded within the site overall - Snipe. This Red-listed wading bird was recorded on one survey visit only in March 2024, and a single individual was flushed from the site during the walkover survey. No other signs of use of the field by waterbirds (e.g. droppings, feeding signs) were observed during any of the walkover surveys.

Three gull species (Great Black-backed, Herring and Common) were recorded flying over the site but were not interacting with the site.

28 non-waterbird bird species were recorded overall. Of these, one species, Raven, was recorded in flight over the site only.

Nine species were recorded inside the site, including notably, the Red-listed Stock Dove. A total of 19 species were recorded within the site boundaries, a notable species being the Buzzard. Another raptor

species Kestrel (Red-listed) was recorded in flight, but on one occasion was flying/hovering over the site, therefore actively foraging over the site. A total of 15 species were recorded within adjacent habitats, largely within habitats to the south and east (former golf course). Some of the most notable observations are detailed below.

Stock Dove – this passerine, a member of the dove and pigeon family, was observed foraging within the site on one survey occasion (7 individuals). It is a resident breeding bird. Stock Doves are associated with arable farmland and open woodland, hence the habitats within and surrounding the site are highly suitable for this species. This species has declined by over 50% in the Republic of Ireland during the lifetime of the Countryside Bird Survey (Lewis et al. 2019b) and is consequently a Red-listed species of highest conservation concern. Smiddy et al. (2022) states that flocks of 10-20 individuals are regularly recorded around Cork Harbour, and in East Cork.

Sparrowhawk – this raptor was recorded perched in a tree within the former Golf Course on one survey occasion. The species is found across a range of habitats where there is sufficient cover (trees) and small mammal species to prey upon. This species is currently exhibiting a moderate decrease in population size within the Republic of Ireland.¹

Buzzard – this raptor was observed on six survey visits. It was recorded flying (hunting) over the site once, the remaining observations were of birds (2 maximum) within the former Golf Course. On the 7th March, a pair of Buzzards was observed carrying nesting material and flying into the trees to the south of the site. This suggests that Buzzards may be breeding close to the site.

Kestrel – a Kestrel (Red-listed) was observed on two survey occasions, once in flight in adjacent habitats and on one occasion hovering over the site, actively searching for prey. This species is in decline in Ireland (Lewis et al. 2019b).

Crows – Five members of the crow family were recorded (Magpie, Jackdaw, Rook, Hooded Crow and Raven), the latter species recorded in flight over the site only. Most records were from the site boundaries, or birds in flight over the site.

Finches – five members of the finch family were recorded (Chaffinch, Bullfinch, Greenfinch, Linnet, Goldfinch). The most common species were Goldfinch and Chaffinch, and most records were from the site boundaries.

3.2.2 Surface Water

3.2.2.1 Water Bodies

The proposed site is located within the Tibbstown_010 River Sub Basin. Lough Mahon is a transitional water body situated c.0.6 km to the south-east of the proposed site; this waterbody flows into the coastal waters of Cork Harbour c.6 km downstream of its location in the environs of the proposed site.

The proposed project overlies the Little Island Ground Waterbody (GWB).

The EPA waterbody codes for the proposed site and its environs are included in Table 3-1.

Table 3-1: EPA Waterbody Codes

EPA Waterbody Name	Waterbody Type	EPA Code	EPA Waterbody Code
Lough Mahon	Transitional	n/a	IE_SW_060_0750
Little Island	Groundwater	n/a	IE_SW_G_090

¹ <https://birdwatchireland.ie/our-work/surveys-research/research-surveys/countryside-bird-survey/countryside-bird-population-indicators/>

3.2.2.2 Surface Water Quality and Risk Characterisation

The WFD status for Lough Mahon transitional waterbody is ‘Moderate’ and ‘At Risk’ of failing to achieve WFD objectives. The Little Island ground waterbody is of good status and is not considered to be at risk under the 2016-2021 WFD round (www.catchments.ie).

A summary of the WFD and Risk status² is shown below in Table 3-2.

Table 3-2: WFD and Risk Status for Regional Waterbodies

EPA Waterbody Name	Code	Risk	WFD Status 2016-2021
Lough Mahon	IE_SW_060_0750	At Risk	Moderate
Little Island	IE_SW_G_090	Not At Risk	Good

3.2.3 Soils, Geology and Hydrogeology

The GSI soils map ([Geological Survey Ireland Spatial Resources \(arcgis.com\)](http://Geological Survey Ireland Spatial Resources (arcgis.com))) indicates that the site is overlain by Deep well drained mineral (Mainly basic). In terms of bedrock geology, Cork Red Marble Formation, described as Red brecciated calcilutite limestone underlies the site, as well as the Little Island Formation described as Massive and crinoidal fine limestone. The bedrock which underlies the site is mapped by the GSI as part of the Regionally important aquifer- karstified (diffuse). Groundwater vulnerability is a term used to represent the intrinsic geological and hydrogeological characteristics that determine the ease at which groundwater may be contaminated. The proposed site is of ‘High’ groundwater vulnerability. There are no karst features in the vicinity of the proposed site.

3.3 Description of the European Sites

This stage of the screening for AA process describes European sites within the likely zone of influence of the proposed development. The methodology for establishing the likely zone of influence is described in Section 2.3.2.

Connectivity between the proposed development and European sites has been reviewed. Connectivity is identified via the potential source-pathway-receptor model which identifies the potential impact pathways such as land, air, hydrological, hydrogeological pathways etc. which may support direct or indirect connectivity of the proposed development to European sites and/or their qualifying features.

In view of the location of the proposed development in relation to European sites (see Figure 3-2) and the characteristics of the proposed development (Large Scale Residential development, see Section 3) and the source, pathway and receptors of potential impacts, a 15km radius is considered an appropriate zone of influence to screen all likely significant effects that might impact upon the European sites. The establishment of the likely zone of influence is in line with *EC (2021) Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC*.

The European sites located within 15km of the proposed development are outlined in Table 3-3 and Figure 3-2. There are 3 European sites located within 15km of the proposed development:

1. Great Island Channel SAC (Site Code: 001058);
2. Blackwater River (Cork/Waterford) SAC (Site Code: 002170); and
3. Cork Harbour SPA (Site Code: 004030).

Connectivity between the sites and the proposed development has been reviewed. Connectivity is

² <https://www.catchments.ie/maps/>

identified via the potential source-pathway-receptor model which identifies the potential impact pathways such as land, air, hydrological, hydrogeological pathways etc. which may support direct or indirect connectivity of the proposed development to European sites and/or their qualifying features.

The proposed development does not support connectivity to Blackwater River (Cork/Waterford) SAC via surface water, groundwater or any other pathway.

The proposed development does not support hydrological connectivity to Cork Harbour SPA and Great Island Channel SAC. However, the proposed development and small sections of Cork Harbour SPA and Great Island Channel SAC are located within the Little Island ground waterbody and the proposed development and these European sites are in relatively close proximity.

Table 3-3: European Sites within 15km of the Proposed Development

Site and Name Site Code	Qualifying Interests	Distance from Proposed Site (km) ³	Connectivity
Great Island Channel SAC (001058)	Annex I Habitats Mudflats and sandflats not covered by seawater at low tide (1140) Atlantic salt meadows (Glaucopuccinellietalia maritimae) (1330)	0.6km	There is no connectivity via surface water. The proposed site and small sections of this SAC are both located within the Little Island Ground waterbody. The proposed site and this SAC are in relatively close proximity.
Blackwater River (Cork/Waterford) (Site Code: 002170)	Annex I Habitats Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Perennial vegetation of stony banks [1220] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glaucopuccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation [3260] Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0] * <i>Taxus baccata</i> woods of the British Isles [91J0] Annex II Species	14.9km	There is no connectivity via surface water, groundwater or any other pathway.

³ Direct line distance

	<p><i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029]</p> <p><i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092]</p> <p><i>Petromyzon marinus</i> (Sea Lamprey) [1095]</p> <p><i>Lampetra planeri</i> (Brook Lamprey) [1096]</p> <p><i>Lampetra fluviatilis</i> (River Lamprey) [1099]</p> <p><i>Alosa fallax fallax</i> (Twaiite Shad) [1103]</p> <p><i>Salmo salar</i> (Salmon) [1106]</p> <p><i>Lutra lutra</i> (Otter) [1355]</p> <p><i>Trichomanes speciosum</i> (Killarney Fern) [1421]</p>		
<p>Cork Harbour SPA (Site Code: 004030)</p>	<p>Bird Species:</p> <p>Little grebe (<i>Tachybaptus ruficollis</i>) [wintering]</p> <p>Great crested Grebe (<i>Podiceps cristatus</i>) [wintering]</p> <p>Cormorant (<i>Phalacrocorax carbo</i>) [wintering]</p> <p>Grey heron (<i>Ardea cinerea</i>) [wintering]</p> <p>Shelduck (<i>Tadorna tadorna</i>) [wintering]</p> <p>Wigeon (<i>Anas penelope</i>) [wintering]</p> <p>Teal (<i>Anas crecca</i>) [wintering]</p> <p>Pintail (<i>Anas acuta</i>) [wintering]</p> <p>Shoveler (<i>Anas clypeata</i>) [wintering]</p> <p>Red-breasted Merganser (<i>Mergus serrator</i>) [wintering]</p> <p>Oystercatcher (<i>Haematopus ostralegus</i>) [wintering]</p> <p>Golden Plover (<i>Pluvialis apricaria</i>) [wintering]</p> <p>Grey Plover (<i>Pluvialis squatarola</i>) [wintering]</p> <p>Lapwing (<i>Vanellus vanellus</i>) [wintering]</p> <p>Dunlin (<i>Calidris alpina</i>) [wintering]</p> <p>Black-tailed Godwit (<i>Limosa limosa</i>) [wintering]</p> <p>Bar-tailed Godwit (<i>Limosa lapponica</i>) [wintering]</p> <p>Curlew (<i>Numenius arquata</i>) [wintering]</p> <p>Redshank (<i>Tringa totanus</i>) [wintering]</p> <p>Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [wintering]</p> <p>Common Gull (<i>Larus canus</i>) [wintering]</p> <p>Lesser Black-backed Gull (<i>Larus fuscus</i>) [wintering]</p> <p>Common Tern (<i>Sterna hirundo</i>) [breeding]</p> <p>Wetlands</p>	0.6km	<p>There is no connectivity via surface water. The proposed site and small sections of this SPA are both located within the Little Island Ground waterbody.</p> <p>The proposed site and this SPA are in relatively close proximity.</p>

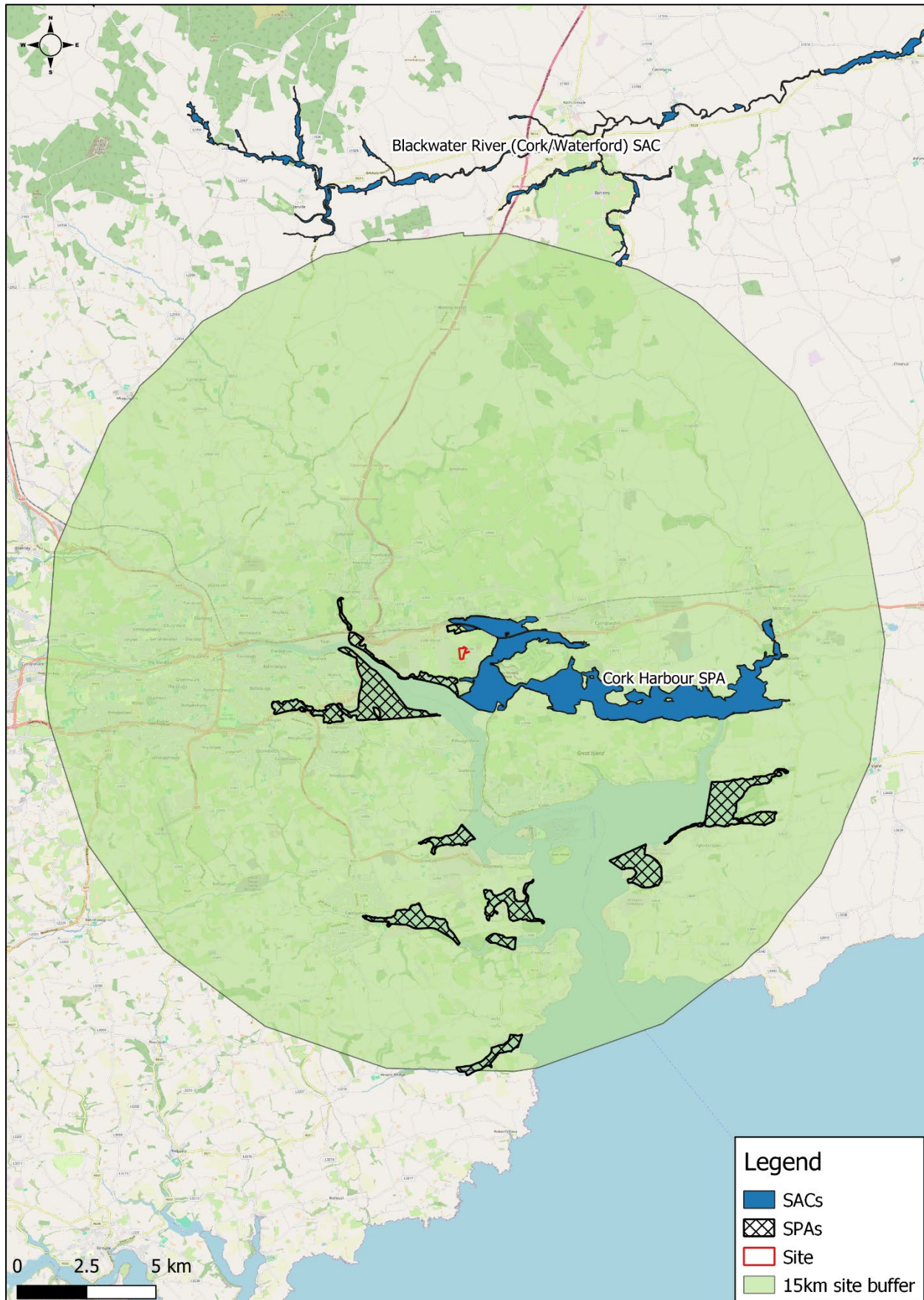


Figure 3-2: European Sites within 15km of the Proposed Development

3.3.1 Conservation Objectives of European Sites

The integrity of a European site (referred to in Article 6.3 of the EU Habitats Directive) involves its ecological functions. The decision as to whether it is adversely affected therefore focuses on, and is limited to, conservation objectives set for a particular site (EC, 2018).

European and national legislation places a collective obligation on Ireland and its citizens to maintain at favourable conservation status areas designated as SAC and SPA. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

The qualifying features for each site have been obtained through a review of the conservation objectives available from the NPWS: <http://www.npws.ie/protected-sites>. Site specific conservation objectives (CO's) are available for Great Island Channel SAC, Blackwater River (Cork/Waterford) SAC and Cork Harbour SPA; these were accessed in June 2024. For brevity, the site specific CO's are summarised thus:

- To maintain or restore the favourable conservation condition of Annex I habitats and Annex II species for which the SAC has been selected; and
- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for the SPA.

4 Screening Assessment Criteria

4.1 Management of European Sites

Appropriate Assessment is not required where the proposed development is connected with, or necessary to, the management of any European site. In this case, the proposed development is not directly connected with, or necessary to, the management of any European site(s).

4.2 Direct, Indirect or Secondary Impacts

Table 3-3 lists the European sites within 15km of the proposed Large Scale Residential development, Courtstown. There are three sites in all, two SACs and one SPA. The proposed works are not situated within any SACs or SPAs, therefore no direct impacts will occur through land take or fragmentation of habitats.

There is no connectivity via surface water, groundwater or any other pathway between the proposed site and Blackwater River (Cork/Waterford) SAC. There will be no likely significant effects on Blackwater River (Cork/Waterford) SAC as a result of the proposed development.

Disturbance Impacts

Ex-situ Impacts

Cork Harbour SPA is of special conservation interest for wetlands and wintering waterbirds. The proposed site predominantly comprises arable land; there are no waterbodies within the proposed site and its immediate environs. Relatively few species would likely utilise the site due to factors such their ecology, behaviour and preferred habitat (a detailed assessment of the potential for each SCI for Cork Harbour SPA to use the proposed site is included within Table 5 of the bird survey report prepared by Limosa Environmental, enclosed in Appendix A). Overall, the proposed site is considered unsuitable for use by the majority of species listed for Cork Harbour SPA. No Special Conservation Interest (SCI) species listed for Cork Harbour SPA were recorded within the site during site surveys undertaken in February and March 2024. In consideration of the factors described above, it is considered that any disturbance/ displacement or ex-situ impacts to the qualifying interests of Cork Harbour SPA as a result of the proposed development is unlikely. The qualifying interests of Great Island Channel are habitats, not species, therefore ex-situ disturbance impacts are not relevant to this European site.

Noise Disturbance

A variety of plant items will be required during the construction phase, such as lifting equipment, dumper trucks and general construction plant items. There will be vehicular movements to and from the site that will make use of existing roads and will be a source of noise emissions. In view of the separation distance between the proposed site and the shoreline of Cork Harbour SPA (0.6km) and the buffer of existing industrial and business estates to the east and west, no likely significant effects on the SCI species for Cork Harbour SPA as a result of noise disturbance during the construction or operational phase are expected.

Visual Disturbance

As noted previously, the proposed site is located c.0.6km from Cork Harbour SPA with a buffer of existing development at Little Island to the east and west of the proposed site, agricultural land bound by treelines and hedgerows to the north and agricultural land and Carrigrennan WwTP to the south. The Waterbird Disturbance Mitigation Toolkit⁴ indicates that for some species, behavioural responses to visual disturbance during feeding may commence at around 300m distance (e.g. Curlew), whilst for

⁴ Available at: [Slide 1 \(divio-media.org\)](https://divio-media.org), accessed on 17th June 2024

others, a range of 150m to 100m is the response threshold (e.g. Dunlin). For roost sites, a generic response threshold radius of c. 300m has been derived, based around the approach distance for the most sensitive species. In view of these findings, the distance of the proposed site from the shoreline of Cork Harbour (0.6km), and the screening provided by existing developments and treelines at the site and within the wider landscape, no significant effects on SCI species for Cork Harbour SPA as a result of visual disturbance are expected to arise from the proposed development.

Water Quality

Lough Mahon and Cork Harbour SPA and Great Island Channel SAC are located 0.6km to the east of the proposed site at its closest point. There are no watercourses or active drainage ditches present at the proposed site and Lough Mahon and Cork Harbour SPA are buffered from the proposed site by c.0.6km of built land, and agricultural lands. Therefore, there is no potential connectivity between the proposed site and Lough Mahon and Cork Harbour SPA and Great Island Channel SAC via surface water connectivity or overland flow.

During the operational phase, the proposed development incorporates SuDS features including permeable paving and swales. It is proposed that the foul network for the development will discharge to the existing foul sewer network and will be treated at Carrigrennan WwTP. The proposed development will result in a minor increase of 0.2% in the loading of Carrigrennan WwTP (Civil Engineering Report, MMOS (2024)). Uisce Éireann (Irish Water) have confirmed feasibility of connection.

No potential for likely significant effects on European sites as a result of degradation of surface or groundwater during the construction or operational phase has been identified.

4.2.1 In-combination Impacts with Other Plans and Projects in the Area

As part of the screening for an AA, in addition to the proposed Large Scale Residential Development, other relevant projects and Plans in the area must also be considered at this stage. These Plans and projects are considered further in this respect in Table 4-2.

Table 4-1: Other Projects and Plans that could result in potential cumulative impacts

Plan / Programme/Policy	Key Objectives/Policies/Proposals	Potential for In-combination Effects and Mitigation
Cork County Development Plan 2022	<p>The Cork County Development Plan includes the following Objectives of relevance to this report:</p> <p>BE 15-2: Protect sites, habitats and species:</p> <p>a) Protect all natural heritage sites which are designated or proposed for designation under European legislation, National legislation and International Agreements. Maintain and where possible enhance appropriate ecological linkages between these. This includes Special Areas of Conservation, Special Protection Areas, Marine Protected Areas, Natural Heritage Areas, proposed Natural Heritage Areas, Statutory Nature Reserves, Refuges for Fauna and Ramsar Sites. These sites are listed in Volume 2 of the Plan.</p> <p>b) Provide protection to species listed in the Flora Protection Order 2015, to Annexes of the Habitats and Birds Directives, and to animal species protected under the Wildlife Acts in</p>	<p>Policies and objectives of the Cork County Development Plan 2022 ensure that local planning applications comply with proper planning and sustainability and with the requirements of relevant EU Directives and environmental considerations, there is no potential for in-combination effects on European Sites.</p>

	<p>accordance with relevant legal requirements. These species are listed in Volume 2 of the Plan.</p> <p>c) Protect and where possible enhance areas of local biodiversity value, ecological corridors and habitats that are features of the County's ecological network. This includes rivers, lakes, streams and ponds, peatland and other wetland habitats, woodlands, hedgerows, tree lines, veteran trees, natural and semi-natural grasslands as well as coastal and marine habitats. It particularly includes habitats of special conservation significance in Cork as listed in Volume 2 of the Plan.</p> <p>d) Recognise the value of protecting geological heritage sites of local and national interest, as they become notified to the local authority, and protect them from inappropriate development</p> <p>e) Encourage, pursuant to Article 10 of the Habitats Directive, the protection and enhancement of features of the landscape, such as traditional field boundaries, important for the ecological coherence of the Natura 2000 network and essential for the migration, dispersal and genetic exchange of wild species.</p> <p>BE 15-6: Biodiversity and New Development:</p> <p>Provide for the protection and enhancement of biodiversity in the development management process and when licensing or permitting other activities by:</p> <p>a) Providing ongoing support and guidance to developers on incorporating biodiversity considerations into new development through preplanning communications and the Council's guidance document 'Biodiversity and the Planning Process – guidance for developments on the management of biodiversity issues during the planning process' and any updated versions of this advice;</p> <p>b) Encouraging the retention and integration of existing trees, hedgerows and other features of high natural value within new developments;</p> <p>c) Requiring the incorporation of primarily native tree and other plant species, particularly pollinator friendly species in the landscaping of new developments;</p> <p>d) Fulfilling Appropriate Assessment and Environmental Impact Assessment obligations and carrying out Ecological Impact Assessment in relation to development and activities, as appropriate;</p> <p>e) Ensuring that an appropriate level of assessment is completed in relation to wetland habitats subject to proposals which would involve drainage or reclamation. This includes lakes and ponds, watercourses, springs and</p>	
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	<p>swamps, marshes, heath, peatlands, some woodlands as well as some coastal and marine habitats;</p> <p>f) Ensuring that the implementation of appropriate mitigation (including habitat enhancement, new planting or other habitat creation initiatives) is incorporated into new development, where the implementation of such development would result in unavoidable impacts on biodiversity - supporting the principle of biodiversity net gain.</p>	
<p>Draft River Basin Management Plan 2022-2027</p>	<p>The project should comply with the environmental objectives of the Irish RBMP which are to be achieved generally by 2027.</p> <p>Ensure full compliance with relevant EU legislation</p> <p>Prevent deterioration</p> <p>Meeting the objectives for designated protected areas</p> <p>Protect high status waters</p> <p>Implement targeted actions and pilot schemes in focus sub-catchments aimed at: targeting water bodies close to meeting their objective and addressing more complex issues which will build knowledge for the third cycle.</p>	<p>The implementation and compliance with key environmental policies, issues and objectives of this management plan will result in positive in-combination effects to European sites. The implementation of this plan will have a positive impact for the biodiversity. It will not contribute to in-combination impacts with the proposed development.</p>
<p>River Basin Management Plan 2018-2021</p>	<p>The project should comply with the environmental objectives of the Irish RBMP which are to be achieved generally by 2021.</p> <p>Ensure full compliance with relevant EU legislation</p> <p>Prevent deterioration</p> <p>Meeting the objectives for designated protected areas</p> <p>Protect high status waters</p> <p>Implement targeted actions and pilot schemes in focus sub-catchments aimed at: targeting water bodies close to meeting their objective and addressing more complex issues which will build knowledge for the third cycle.</p>	<p>The implementation and compliance with key environmental policies, issues and objectives of this management plan will result in positive in-combination effects to European sites. The implementation of this plan will have a positive impact for the biodiversity. It will not contribute to in-combination or cumulative impacts with the proposed development.</p>
<p>Inland Fisheries Ireland Corporate Plan 2021 -2025</p> <p>The Inland Fisheries Act 2010.</p>	<p>To place the inland fisheries resource in the best sustainable position possible for the benefit of future generations. To protect, manage and conserve Ireland’s inland fisheries and sea angling resources and to maximise their sustainability and natural biodiversity.</p> <p>To sustainably develop and improve fish habitats.</p> <p>To protect, maintain and enhance Ireland’s wild fish populations.</p> <p>To actively engage with stakeholders in the continued stewardship of our shared resource.</p> <p>To play a leadership role in achieving our climate action and biodiversity goals.</p> <p>To value our people and support their development and performance.</p>	<p>The implementation and compliance with key environmental issues and objectives of this corporate plan will result in positive on-combination effects to European sites. The implementation of this corporate plan will have a positive impact for biodiversity of inland fisheries and ecosystems. It will not contribute to in-combination or cumulative impacts with the proposed development.</p>

	<p>To foster a culture of value for money and evaluation of performance in a measurable, transparent and accountable manner.</p> <p>Harness the power of innovation to continue to deliver a modern fisheries service.</p>	
IPPC Programme	<p>Industrial Facilities operating under Integrated Pollution Control (IPC) licences in the vicinity of the proposed site:</p> <p>Tapella Limited (IPC no: P0103-02). License surrendered (licensable activities have ceased).</p> <p>Goldenville Limited (IPC no: P0389). Goldenville site is now closed: no activity.</p> <p>Punch Industries Ltd (IPC no: P0127). No AER available online.</p> <p>Corden Pharma Limited (t/a Corden PharmaChem) (IPC no: P0462). Licence surrendered.</p>	<p>Discharges from these facilities are governed by strict limits to ensure compliance with quality standards. The long-term in-combination impact is predicted to be negligible.</p>
Local Planning Applications Under consideration⁵	<p>The online planning system for Cork County Council⁶, was consulted on the 10th June 2024 for the townland of Courtstown.</p> <p>A total of eight complete applications with associated decisions made by the local authority were returned for the last 5 years:</p> <p>Murphy Transport Ltd Ref: 234661</p> <p>The proposed development will consist of the construction of a transport depot comprising; 1) an administration and warehouse building incorporating a 2-storey administration block (495 sqm) and mezzanine store (163 sqm), truck maintenance garage (505 sqm). warehouse (511 sqm), dock leveller and rooftop photovoltaic solar panel arrays (150 sqm). 2)A service block building incorporating a boiler house (305 sqm), tank washing bays enclosure (605 sqm) truck wash enclosure (183 sqm), covered outdoor tank heating station, 2 storey administration block (148 sqm) and roof top photovoltaic solar panel arrays (75 sqm). 3)Proposed site and drainage works including a service yard, 2 no. vehicular accesses, new boundary treatments, landscape works, storage, circulation, staff parking areas with sixteen spaces including one disabled space, underground attenuation tank, underground fuel tank, 1 no. silt trap, 1 no. wash down separator, 1 no. forecourt separator, 2 no. compartment separators, 1 no. full retention separator, 1 no. 5 m high aeration tank. 1 no. 5m high balancing tank, weigh bridge, rainwater harvesting, underground pumping chamber and all other associated site development works.</p> <p>East Cork Crane Hire Ref: 235051</p>	<p>Adherence to the overarching policies and objectives of the Cork City Development Plan 2022-2028 ensure that local planning applications and subsequent grant of planning comply with the core strategy of proper planning and sustainability and with the requirements of relevant EU Directives and environmental considerations, there is no potential for adverse in-combination effects on European sites.</p>

⁵ Planning applications made and not yet determined or granted within the past five years that may contribute to potential cumulative impacts on the European sites of concern. Search undertaken on 10/06/2024

⁶[ArcGIS Web Application](#)

	<p>Permission for the development which will consist of a new two-storey office building, a maintenance warehouse, a crane wash ramp, a maintenance ramp, a single storey storage shed, car and crane parking, a concrete hardstanding and all associated site development, drainage and landscaping works.</p> <p>Liam Davis Ref: 204350</p> <p>To construct a warehouse building consisting of five separate units for light industrial / warehouse use, parking and yards, entrance off existing estate road and all associated site works.</p> <p>Ruden Homes Ltd Ref: 195522</p> <p>Demolish existing outhouses and for the construction of 3 no. dwellinghouses and to carry out all associated siteworks.</p> <p>CEVA Logistics Ltd Ref: 235655</p> <p>The provision of external signage to East facing elevations of units U2 and U3 and all other ancillary and associated site development works</p> <p>Right Price Carpet and Furniture Centre (Cork) Ltd, T/A EZ Living Furniture Ref: 224008</p> <p>Retention planning permission for the change of levels at the site, Permission for the construction of 1 No. Warehouse building with ancillary offices, staff facilities and meeting rooms with a total floor area of 9,967m², along with a car park area, hardstanding areas, entrance off existing estate road, site levelling and contouring works and all associated site development works on a site of 2.44 hectares.</p> <p>Harbour Point Warehousing and Logistics Limited Ref: 216173</p> <p>The construction of 2 no. Strategic Logistical, storage and distribution warehouse units, incorporating office accommodation, 2 no. bicycle shelters, associated site signage (4 no. 1.8m high totem signs), adjusted site entrance access off existing Estates Road, site levelling and contouring, 2no. waste compactors, truck loading, hardstanding and truck parking bay areas, 66 no. car parking spaces of which include, 4 no. disabled spaces, and 4 no. electric charging spaces, and all other ancillary and associated site development works including landscaping. A Natura Impact Statement will be submitted to the planning authority with the application.</p> <p>Pallas Foods UC Ref: 204835</p> <p>Construction of additional internal office and ancillary accommodation floor area at the first floor and also alterations to the existing layout at ground floor level all of which areas shall be ancillary to the existing warehouse use, alterations to elevations, 2 new canopies over the dispatch and loading areas on the north east</p>	
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	<p>elevation and the south east elevation, new signage, additional car parking and additional van and truck parking and associated site works all to an existing warehouse.</p> <p>Anchor Business Park Warehouse Development Units</p> <p>Planning permission has been granted at Lower Courtstown for four light industrial/warehouse units and associated spine road (under 235640, 214093, 234651, 234324), where Unit 7 is currently under construction. The proposed warehouse units here will connect with the existing/permitted light industrial/warehouse units via an extension to the spine road.</p>	
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4.2.2 In-combination Impact Assessment Conclusion

All possible sources of effects from the proposed large scale residential development and any other effects likely to arise from other proposed projects or Plans have been identified. No other pathway has been identified by which any Plan or project could have a significant in-combination effect on European sites. Therefore, no significant adverse cumulative or in-combination effects are anticipated to European sites.

4.3 Screening Assessment

Table 4-3 identifies the potential direct, indirect and secondary impacts of the Proposed Development on European sites within a 15 km radius.

Table 4-2: Potential significant effects on European Sites from the Proposed Residential Development

Site Name	Direct Impacts	Indirect / Secondary Impacts	Resource Requirements	Emissions (Disposal to land, Water or Air)	Excavation Requirements
Great Island Channel SAC (001058)	No impact on QI	No impact on QI	No impact on QI	No impact on QI	No impact on QI
Blackwater River (Cork/Waterford) (002170)	No impact on QI	No impact on QI	No impact on QI	No impact on QI	No impact on QI
Cork Harbour SPA (004030)	No impact on QI	No impact on QI	No impact on QI	No impact on QI	No impact on QI

4.4 Likely Changes to the European Site(s)

The likely changes that could arise from the Proposed Development have been examined in the context of a number of factors that could have a significant effect on the relevant European sites (Table 4-4).

Table 4-3: Likely changes to European Sites

Site Name	Reduction of Habitat Area	Disturbance to Key Species	Habitat or Species fragmentation	Reduction in Species Density	Changes in Key Indicators of Conservation Value (Water Quality, etc.)	Climate Change
Great Island Channel SAC (001058)	None	None	None	None	None	None
Blackwater River (Cork/Waterford) (002170)	None	None	None	None	None	None
Cork Harbour SPA (004030)	None	None	None	None	None	None

4.4.1 Elements of the Project where the Impacts are Likely to be Significant

No elements of the proposed Large Scale Residential Development, Courtstown, Little Island, Cork are likely to cause significant effects to the relevant European sites.

5 Conclusion

This report to inform AA screening has been prepared to assess whether the proposed development, individually or in-combination with other plans or projects, and in view of best scientific knowledge, is likely to have a significant effect on any European site(s).

The screening exercise was completed in compliance with the relevant European Commission guidance, national guidance and case law. The potential impacts of the proposed development have been considered in the context of the European sites potentially affected, their qualifying interests or special conservation interests, and their conservation objectives.

Through an assessment of the source-pathway-receptor model, which considered the zone of influence of effects from the proposed development and the potential in-combination effects with other plans or projects, the following findings were reported:

- The proposed Large Scale Residential Development, Courtstown, Little Island, Cork, either alone or in- combination with other plans and/or projects, does not have the potential to significantly affect any European site, in light of their conservation objectives. Therefore, a Stage 2 Appropriate Assessment is deemed not to be required.

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Appendix A Winter Bird Survey Report

Winter bird survey at a site at Courtstown, Little Island, Co. Cork.



Limosa Environmental
ecological & environmental consultancy

April 2024

Revision	Report Reference	Description	Author(s)	Checked by	Date
A (Draft)	RP24-GW207-09-A	Report	L J Lewis	LJL	18 th April 2024
0 (Final)	RP24-GW207-09-0	Report	L J Lewis	LJL	19 th April 2024

Limosa Environmental (2024) Winter waterbird survey at a site at Courtstown, Little Island, Co. Cork. April 2024.

Front Cover photo: Ballytrasna Park Road (L2985), Courtstown, Little Island, March 2024.

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1. Introduction and background

Limosa Environmental was commissioned to undertake a winter waterbird survey at a site at Courtstown, Little Island, Co. Cork. The survey was commissioned to provide information to assist in the process of Appropriate Assessment screening (AA screening) of a proposed residential development at the site (Figure 1).

The obligation to undertake Appropriate Assessment arises from Articles 6 (3) and (4) of European Union (EU) Council Directive 92/43/EEC (Habitats Directive) and transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011 – 2015 (S.I. 355/2015). Screening is the first stage of an Appropriate Assessment (AA) and aims to establish whether a proposed plan or project (in this case a project) either alone or in combination with other plans or projects, could have significant negative effects on a Natura 2000 site in view of the site's conservation objectives. At Stage 2 (Appropriate Assessment), the impact of a project or plan alone and in combination with other projects or plans on the integrity of the Natura 2000 site is considered with respect to the conservation objectives of the site and to its structure and function (DoEHLG, 2009).

Natura 2000 sites are Special Areas of Conservation (SACs) designated under the EU Habitats Directive,¹ and Special Protection Areas (SPAs), designated under the EU Birds Directive.² As signatories to these Directives, Ireland like other EU Member states, has designated prime areas of ecological importance as SACs and SPAs and these are part of a network of sites of 'community importance' for biodiversity across the EU called the 'Natura 2000' network.

The proposed project lies close to Cork Harbour Special Protection Area (SPA Site Code 4030) (Figure 2). While this designated site covers marine and intertidal habitats of Cork Harbour, there is a requirement during the AA process to consider 'ex-situ factors' i.e. the possibility that waterbird species listed for the SPA may utilise terrestrial habitats around the harbour, and as a consequence, may be impacted by development of the site.

The SPA Conservation Objectives Document for Cork Harbour SPA (NPWS 2014a) states the following: *'several of the listed waterbird species may at times use habitats situated within the immediate hinterland of the SPA or in areas outside of the SPA but ecologically connected to it. The reliance on these habitats will vary from species to species and from site to site. Significant habitat change or increased levels of disturbance within these areas could result in the displacement of one or more of the listed waterbird species from areas within the SPA, and/or a reduction in their numbers'*.

During field surveys, carried out across the months February to March 2024, we recorded observations of waterbirds and other bird species within the site and on the site boundaries. This report details the results of this survey.

¹ Council Directive 92/43/EEC on the conservation of natural habitats and wild flora and fauna, as amended by Council Directive 97/62/EC. The Directive was transposed into Irish law by the European Communities (Natural Habitats) Regulations 2011, amended and later consolidated by the European Communities (Birds and Natural Habitats) Regulations 2011 – 2021.

² Directive 2009/147/EC (Birds Directive) on the conservation of wild birds (the codified version of Council Directive 79/409/EEC as amended).



Figure 1. Location of survey site (red line boundary) and proximity of Cork Harbour Special Protection Area (yellow shading) and Great Island Channel Special Area of Conservation (grey hatching).

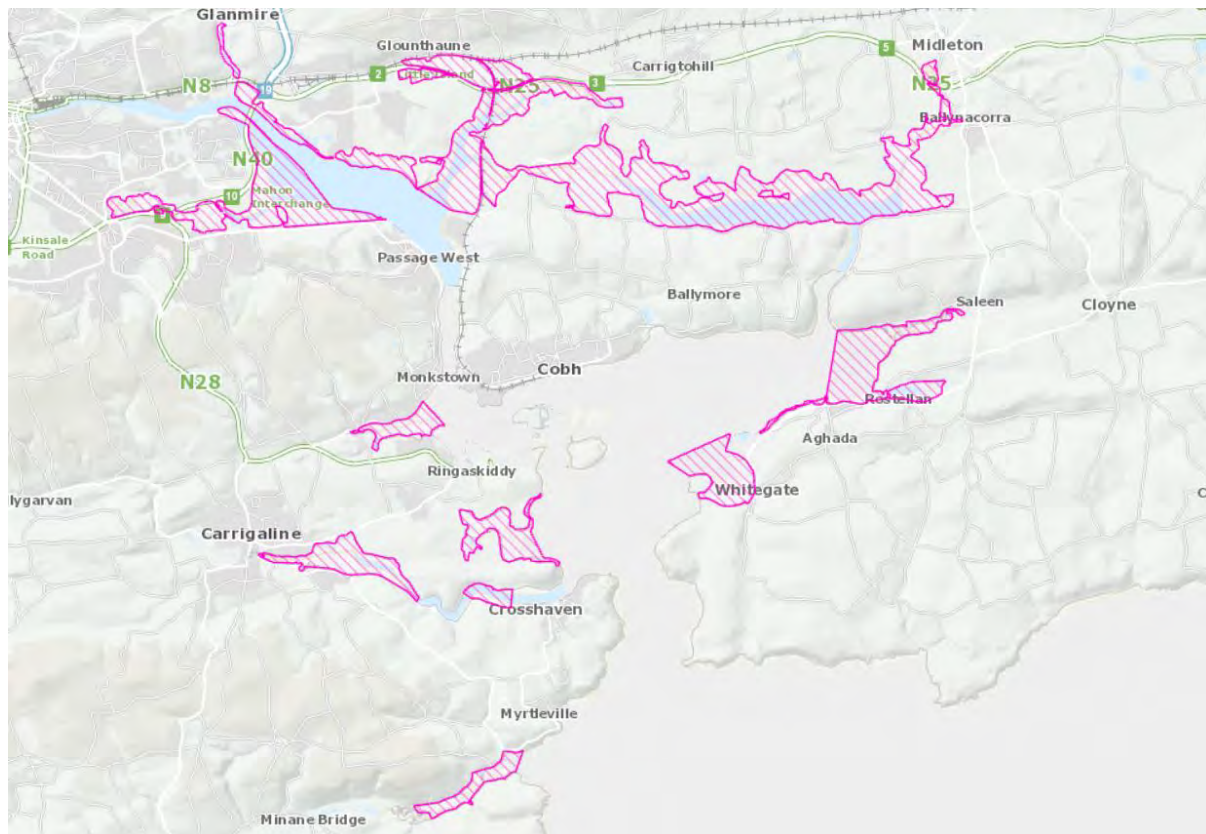


Figure 2. Cork Harbour Special Protection Area (Source: NPWS Designations Viewer/Esri).

2. Methods

2.1 Survey site

The survey site is located on Little Island at Grid Reference W 76861 71935 (Figure 3). The site is accessed from the north along the L2985 local road. The survey was conducted over the entire site (agricultural field). The field was in arable use at the time of survey (Fossitt code BC1), containing winter stubble.



Figure 3. Survey site.

2.2 Field survey methods

A series of short replicate survey periods was considered to be a better method for this survey than fewer, longer count sessions; the aim being to enhance/maximise data collection over various days, times and tidal stages. Therefore, eight separate 1-3 hour survey sessions were completed (Table 1).

Table 1. Survey dates and times.

Day	Visit	Date	Start time	Finish time	Cloud %	Wind (Force)	Rain	Visibility
1	1	15/02/2024	9.00	11.30	100	0-1	Drizzle	Good
1	2	15/02/2024	12.00	14.00	60	0-1	None	Good
2	3	29/02/2024	11.00	13.00	100	2	None	Good
3	4	07/03/2024	8.40	10.30	100	1-2	None	Good
3	5	07/03/2024	12.50	14.15	100	1-2	None	Good
4	6	22/03/2024	11.00	13.00	60	3-4	None	Good
5	7	25/03/2024	8.30	9.53	100	1	Drizzle	Good
5	8	25/03/2024	12.30	13.53	100	2	Drizzle	Good

On each survey visit the survey proceeded with a one-hour vantage point watch over the site. The site was scanned using binoculars from a vantage point to the north (existing entrance to the field) (the 'look-see' basis (Bibby et al. 2000)). Following the vantage point watch, the field was then walked and visually searched for signs of feeding waterbirds such as droppings or feeding signs.

Given the time spent on site, we decided to record all bird species during the surveys. We used the 'parks method' of survey as set out by Chamberlain et al. (2007). This method was considered more suitable for this site than a line transect through the middle of the site, because the latter may run the risk of not adequately picking up birds in the boundary treelines/woodland, especially those species that are relatively 'quiet' e.g. Treecreeper *Certhia familiaris* and Goldcrest *Regulus regulus*.

During each visit, the field observer walked along a survey route that took her to within 50m of every point of the site. All bird species seen and heard were recorded onto a field map (aerial photo) using the species code (two letter system developed by the British Trust for Ornithology (BTO)). The habitat that each bird was located within was recorded. The bird's behaviour was also recorded where possible, and birds flying over and obviously not interacting with the site were recorded separately.

Bird survey fieldwork was carried out at various times of the day and in suitable weather conditions (dry, light winds), although given the period of bad wet weather during the early part of 2024, some surveys encountered rain.

2.3 Data analysis and reporting

Following each field survey, the raw data were transcribed from the field maps into MS Excel. At the end of the survey season, the data were compiled, validated and entered into a MS Access database from where data summaries could be produced.

This report aims to provide a baseline of the wintering birds within the site. The report summarises the bird assemblage and highlights important species, aggregations, and habitats as appropriate. Where mentioned, habitat names and codes follow Fossitt (2000). Bird species common names are

used in the report text; Latin names are provided in Tables 2 and 6. A statement of the competency of the author of this report is given in Appendix 1.

3. Background to Cork Harbour Special Protection Area

3.1 Overview

Cork Harbour Special Protection Area (SPA) is a large, sheltered bay system, which stretches from the two main estuaries of the River Lee, near Cork City in the northwest, and the Owenacurra River, near Middleton in the northeast, southwards as far as Roches Point. It is a complex site and encompasses many other estuaries and inlets including the North Channel, the Douglas River Estuary, inner Lough Mahon, Monkstown Creek, Lough Beg, the Owenboy River Estuary, Whitegate Bay and the Rostellan and Poul nabibe inlets.

Cork Harbour is regarded as an internationally important wetland site, regularly supporting in excess of 20,000 wintering waterfowl, for which it is amongst the top ten sites in the country (Fitzgerald et al. 2020). At the time of site designation, the site supported Black-tailed Godwit *Limosa limosa islandica*, and Redshank *Tringa totanus* in numbers of international importance, while a further 20 non-breeding (wintering) waterbird species occurred in numbers of national importance. Annex I species Common Tern *Sterna hirundo* has a breeding population within Cork Harbour, and this species is also listed as a Special Conservation Interest (SCI) for this SPA (NPWS, 2014b).

The Special Conservation Interest (SCI) species for Cork Harbour SPA are listed in Table 2 together with their baseline data³ and conservation importance, in terms of All-Ireland importance or international importance, at the time of site designation. Also included is the recent five-year mean peak count (2017/18 – 2021/22) as published by the Irish Wetland Bird Survey (I-WeBS). These recent data show that Black-tailed Godwits still occur in numbers of international importance, while 17 other waterbird species occur in numbers of national (all-Ireland) importance. Of the wildfowl and wader species, Grey Plover now occurs in numbers that are below the national threshold.

Note that the thresholds used to determine numbers of national or international importance are applicable to the timing of the survey. All-Ireland thresholds currently follow (Burke et al. 2019) while international thresholds currently follow AEWA (2022). No thresholds are produced for gull and tern species.

³ Baseline data based on the Irish Wetland Bird Survey (I-WeBS).

Table 2. Waterbird Special Conservation Interest (SCI) species for Cork Harbour SPA (* denotes numbers of all-Ireland importance; ** denotes numbers of international importance). Annex I species are shown in bold font.

Special Conservation Interest Species	Baseline Data (Mean peak 1995/96 – 1999/00 I-WeBS) (Source: NPWS, 2014b)	Conservation Status during baseline period (Source: NPWS, 2014b)	Recent Data 5-year mean peak number 2017/18 – 2021/22 (Source: I-WeBS)
Shelduck (<i>Tadorna tadorna</i>)	2,009	All-Ireland Importance	823*
Wigeon (<i>Anas penelope</i>)	1,791	All-Ireland Importance	1,302*
Teal (<i>Anas crecca</i>)	1,065	All-Ireland Importance	1,442*
Pintail (<i>Anas acuta</i>)	57	All-Ireland Importance	25*
Shoveler (<i>Anas clypeata</i>)	103	All-Ireland Importance	22*
Red-breasted Merganser (<i>Mergus serrator</i>)	121	All-Ireland Importance	53*
Little Grebe (<i>Tachybaptus ruficollis</i>)	57	All-Ireland Importance	82*
Great Crested Grebe (<i>Podiceps cristatus</i>)	253	All-Ireland Importance	124*
Cormorant (<i>Phalacrocorax carbo</i>)	521	All-Ireland Importance	252*
Grey Heron (<i>Ardea cinerea</i>)	80	All-Ireland Importance	104*
Oystercatcher (<i>Haematopus ostralegus</i>)	1,809	All-Ireland Importance	1,176*
Golden Plover (<i>Pluvialis apricaria</i>)	3,342	All-Ireland Importance	1,727*
Grey Plover (<i>Pluvialis squatarola</i>)	95	All-Ireland Importance	14
Lapwing (<i>Vanellus vanellus</i>)	7,569	All-Ireland Importance	1,157*
Dunlin (<i>Calidris alpina</i>)	9,621	All-Ireland Importance	3,647*
Black-tailed Godwit (<i>Limosa limosa</i>)	1,896	International Importance	2,996**
Bar-tailed Godwit (<i>Limosa lapponica</i>)	233	All-Ireland Importance	320*
Curlew (<i>Numenius arquata</i>)	2,237	All-Ireland Importance	1,043*
Redshank (<i>Tringa totanus</i>)	2,149	International Importance	1,582*
Black-headed Gull (<i>Chroicocephalus ridibundus</i>)	3,640	All-Ireland Importance	3,827
Common Gull (<i>Larus canus</i>)	1,562	All-Ireland Importance	260
Lesser Black-backed Gull (<i>Larus fuscus</i>)	783	All-Ireland Importance	204
Common Tern (<i>Sterna hirundo</i>)	102 breeding pairs	All-Ireland Importance	n/a

3.2 Conservation objectives

For coastal SPA sites, conservation objectives are defined for attributes relating to waterbird species populations, and for attributes related to the maintenance and protection of habitats that support them. These attributes are (1) population trend; (2) population distribution, and (3) habitat range and area. Site-specific conservation objectives for Cork Harbour SPA were published in 2014 and are shown in Table 3.

Table 3. Conservation Objectives – Cork Harbour SPA (after NPWS, 2014a, 2014b)

<p>Objective 1</p> <p>To maintain the favourable conservation condition of the waterbird Special Conservation Interest species listed for the SPA.</p>	<p>To be favourable, the long-term population trend for each waterbird Special Conservation Interest species should be stable or increasing. Waterbird populations are deemed to be unfavourable when they have declined by 25% or more, as assessed by the most recent population trend analysis.</p> <p>To be favourable, there should be no significant decrease in the range, timing or intensity of use of areas by the waterbird species of Special Conservation Interest, other than that occurring from natural patterns of variation</p>
<p>Objective 2</p> <p>To maintain the favourable conservation condition of the wetland habitat at the SPA as a resource for the regularly occurring migratory waterbirds that use it.</p>	<p>To be favourable, the permanent area occupied by the wetland habitat (2,587 ha) should be stable and not significantly less than the measured area, other than that occurring from natural patterns of variation.</p>

3.3 Conservation status

The conservation status of non-breeding⁴ waterbird species of Cork Harbour SPA in relation to Objective 1a (population trend) is provided in the Conservation Objectives supporting document (NPWS, 2014b) and shown in Table 4a below. However, this conservation status assessment would now be considered out of date. As site trends, as published by I-WeBS, are not available for Cork Harbour (https://birdwatchireland.ie/app/uploads/2023/08/iwebs_trends_report.html), the current, and national trend for each of the waterbird SCI species is shown in Table 4b.

Table 4a. Waterbird Special Conservation Interest (SCI) species for Cork Harbour SPA and current conservation status (condition)

Conservation status (condition): Population Trend	SCI Species
<p>Highly Unfavourable</p> <p>>50% decline</p>	<p>Pintail, Shoveler, Red-breasted Merganser, Cormorant, Grey Plover, Lapwing, Black-headed Gull, Common Gull and Lesser Black-backed Gull.</p>
<p>Unfavourable</p> <p>Decline of 25% – 49.9%</p>	<p>Shelduck, Wigeon, Great Crested Grebe, Dunlin, Curlew and Redshank.</p>
<p>(Intermediate) Unfavourable</p> <p>Decline 1% to 24.9%</p>	<p>Teal, Grey Heron and Oystercatcher.</p>
<p>Favourable</p> <p>Stable/increasing</p>	<p>Little Grebe, Golden Plover, Black-tailed Godwit and Bar-tailed Godwit.</p>

⁴ Conservation status is not given for the breeding population of Common Tern.

Table 4b. Current national trend for each of the waterbird SCI species based on I-WeBS data 1994/95 – 2019/20 (Kennedy et al. 2023).

Special Conservation Interest Species	Current 23-year national trend (after Kennedy et al. 2023)	Trend Classification
Shelduck	Increase (9.3%)	Stable or Increasing
Wigeon	Decline (18.2%)	Intermediate decline
Teal	Increase (19.4%)	Stable or Increasing
Pintail	Decline (-13.7%)	Intermediate decline
Shoveler	Decline (-10.8%)	Intermediate decline
Red-breasted Merganser	Decline (-14.7%)	Intermediate decline
Little Grebe	Increase (+38.2%)	Stable or Increasing
Great Crested Grebe	Decline (-10.8%)	Intermediate decline
Cormorant	Increase (42.9%)	Stable or Increasing
Grey Heron	Increase (+6.6%)	Stable or Increasing
Oystercatcher	Increase (+10.8%)	Stable or Increasing
Golden Plover	Decline (-58.8%)	Large decline
Grey Plover	Decline (-54.1%)	Large decline
Lapwing	Decline (-63.9%)	Large decline
Dunlin	Decline (-45.2%)	Moderate decline
Black-tailed Godwit	Increase (+92.3%)	Stable or Increasing
Bar-tailed Godwit	Decline (-5.1%)	Intermediate decline
Curlew	Decline (-43.1%)	Moderate decline
Redshank	Increase (+6.7%)	Stable or Increasing
Black-headed Gull	Unknown	-
Common Gull	Unknown	-
Lesser Black-backed Gull	Unknown	-
Common Tern	Unknown	-

3.4 Potential for Cork Harbour SCIs to occur within the site

Not all waterbird SCIs of Cork Harbour SPA could occur within the site due to their ecology, behaviour, preferred habitat etc. Table 5 shows the likelihood of the waterbird species listed for Cork Harbour SPA to use inland terrestrial sites for either foraging or roosting; this assessment was based on species ecology and habitat preferences.

Table 5. Potential for the waterbird SCI species listed for Cork Harbour SPA to utilise terrestrial agricultural lands for foraging or roosting.

Special Conservation Interest Species Cork Harbour SPA	Potential to use inland terrestrial sites for foraging or roosting
Shelduck	Although the species will breed at inland sites it would be unusual to find Shelduck within an agricultural stubble field.
Wigeon	A dabbling duck and herbivore, Wigeon can be found foraging in wet pastures, however the subject site is considered unsuitable for use by this species.
Teal	Widespread species on wetlands with good cover, such as reedbeds. Wide variety of habitats, both coastal and inland, and usually below an altitude of 200 metres, including coastal lagoons and estuaries and inland marshes, lakes, ponds and turloughs. Inland terrestrial foraging is not a well-known occurrence in Ireland however and the subject site is unlikely to be used to any extent by this species.
Pintail	Across their range, during the nonbreeding season, Pintails may use flooded and dry agricultural fields, lakes, reservoirs, estuaries, saltmarshes, freshwater and brackish wetlands, and bays. Inland terrestrial foraging is not a well-known occurrence in Ireland however and the subject site is unlikely to be used to any extent by this species.
Shoveler	Shoveler are mainly planktivorous, and typically filter the upper centimetres of the water column to collect zooplankton (e.g. Guillemain, Fritz & Guillon 2000). The subject site is considered unsuitable for use by this species.
Red-breasted Merganser	Feed mainly on fish and considered almost a wholly aquatic species. The subject site is considered unsuitable for use by this species.
Little Grebe	Wintering habitat includes ephemeral wetlands, sheltered coasts, estuaries and coastal lakes and lagoons. The subject site is considered unsuitable for use by this species.
Great Crested Grebe	Considered almost a wholly aquatic species. The subject site is considered unsuitable for use by this species.
Cormorant	Aquatic species, marine, coastal and freshwater. The subject site is considered unsuitable for use by this species.
Grey Heron	Although a largely aquatic species (coastal and freshwater), Grey Herons can be found in terrestrial sites foraging on earthworms. Possibility therefore that this species could be found in inland agricultural fields at times.
Oystercatcher	Wading bird species that is frequently found in terrestrial habitats when foraging. The hard and compacted nature of the soil in the subject site may lead to it being unsuitable for foraging however.
Golden Plover	Wading bird that often frequents terrestrial habitats such as grassland, arable crops and winter stubbles (e.g. Mason & McDonald, 1999, Gillings, 2003). We cannot rule out the possibility that this species utilises the subject site from time to time.
Grey Plover	Considered a coastal/intertidal species during winter but there is now some evidence of movement inland, especially during the night and when such a species may make movements along with other species such as Lapwing or Golden Plover. The subject site is unlikely to be used to any great extent though.
Lapwing	Wading bird that often frequents terrestrial habitats such as grassland, arable crops and winter stubbles (e.g. Mason & McDonald, 1999, Gillings, 2003). We cannot rule out the possibility that this species utilises the subject site from time to time.
Dunlin	Considered almost wholly dependent on intertidal habitats. The subject site is considered unsuitable for use by this species.
Black-tailed Godwit	Wading bird species that is frequently found in terrestrial habitats when foraging. The hard and compacted nature of the soil in the subject site may lead to it being unsuitable for foraging however.

Bar-tailed Godwit	Considered almost wholly dependent on intertidal habitats. The subject site is considered unsuitable for use by this species.
Curlew	Wading bird species that is frequently found in terrestrial habitats when foraging for earthworms. The hard and compacted nature of the soil in the subject site may lead to it being unsuitable for such a foraging wader though.
Redshank	Wading bird species that is sometimes found in terrestrial habitats when foraging, but generally close to wetlands.
Black-headed Gull	A gull species that will readily feed in terrestrial habitats. Often move onto land to follow tractors after ploughing or spreading manure. The subject site has some potential to be used by gull species at certain times.
Common Gull	A gull species that will readily feed in terrestrial habitats. Often move onto land to follow tractors after ploughing or spreading manure. The subject site has some potential to be used by gull species at certain times.
Lesser Black-backed Gull	A gull species that will readily feed in terrestrial habitats. Often move onto land to follow tractors after ploughing or spreading manure. The subject site has some potential to be used by gull species at certain times.
Common Tern	Seabird species. The subject site is considered unsuitable for use by this species.

4. Survey results

4.1 Species diversity

A total of 32 bird species was recorded during the winter surveys (Table 6). No Annex I species (EU Bird's Directive) were recorded. The species list includes ten species that are listed as *Birds of Conservation Concern in Ireland* (Gilbert et al. 2021), including four that are Red-listed and are of highest concern (Stock Dove, Snipe, Kestrel and Meadow Pipit). Note that the species list includes all birds recorded, including those in adjacent habitats. More detailed results on species, numbers and their locations are provided below.

4.2 Waterbirds

No Special Conservation Interest (SCI) species listed for Cork Harbour SPA were recorded within the site. One waterbird was recorded within the site overall - Snipe. This Red-listed wading bird was recorded on one survey visit only in March 2024, and a single individual was flushed from the site during the walkover survey. No other signs of use of the field by waterbirds (e.g. droppings, feeding signs) were observed during any of the walkover surveys.

Three gull species (Great Black-backed, Herring and Common) were recorded flying over the site but were not interacting with the site (Table 6).

Table 6. A list of all bird species recorded during the winter survey. Species are listed by taxonomic order, and Red and Amber-listed species under 'Birds of Conservation Concern 4' (Gilbert et al. 2021) are shown.

Family	Code	Species Common Name	Latin Name	BoCCI 2021
Pigeons, Doves	FP	Feral Pigeon	<i>Columba livia</i>	
Pigeons, Doves	SD	Stock Dove	<i>Columba oenas</i>	Red
Pigeons, Doves	WP	Woodpigeon	<i>Columba palumbus</i>	
Sandpipers, Snipes	SN	Snipe	<i>Gallinago gallinago</i>	Red
Gulls, Terns,	CM	Common Gull	<i>Larus canus</i>	Amber
Gulls, Terns,	GB	Great Black-backed Gull	<i>Larus marinus</i>	
Gulls, Terns,	HG	Herring Gull	<i>Larus argentatus</i>	Amber
Raptors	SH	Sparrowhawk	<i>Accipiter nisus</i>	
Raptors	BZ	Buzzard	<i>Buteo buteo</i>	
Raptors	K.	Kestrel	<i>Falco tinnunculus</i>	Red
Crows, Jays	MG	Magpie	<i>Pica pica</i>	
Crows, Jays	JD	Jackdaw	<i>Coloeus monedula</i>	
Crows, Jays	RO	Rook	<i>Corvus frugilegus</i>	
Crows, Jays	HC	Hooded Crow	<i>Corvus cornix</i>	
Crows, Jays	RN	Raven	<i>Corvus corax</i>	
Tits	BT	Blue Tit	<i>Cyanistes caeruleus</i>	
Tits	GT	Great Tit	<i>Parus major</i>	
Wrens	WR	Wren	<i>Troglodytes troglodytes</i>	
Starlings	SG	Starling	<i>Sturnus vulgaris</i>	Amber
Thrushes	ST	Song Thrush	<i>Turdus philomelos</i>	
Thrushes	B.	Blackbird	<i>Turdus merula</i>	
Chats, Old World Flycatchers	R.	Robin	<i>Erithacus rubecula</i>	
Chats, Old World Flycatchers	SC	Stonechat	<i>Saxicola rubicola</i>	
Old World Sparrows	HS	House Sparrow	<i>Passer domesticus</i>	Amber
Accentors	D.	Dunnock	<i>Prunella modularis</i>	
Wagtails, Pipits	PW	Pied Wagtail	<i>Motacilla alba</i>	
Wagtails, Pipits	MP	Meadow Pipit	<i>Anthus pratensis</i>	Red
Finches	CH	Chaffinch	<i>Fringilla coelebs</i>	
Finches	BF	Bullfinch	<i>Pyrrhula pyrrhula</i>	
Finches	GR	Greenfinch	<i>Chloris chloris</i>	Amber
Finches	LI	Linnet	<i>Linaria cannabina</i>	Amber
Finches	GO	Goldfinch	<i>Carduelis carduelis</i>	

4.3 Other bird species

28 non-waterbird bird species was recorded overall. Of these, one species, Raven, was recorded in flight over the site only (Table 7).

Nine species were recorded inside the site, including notably, the Red-listed Stock Dove. A total of 19 species was recorded within the site boundaries, a notable species being the Buzzard. Another raptor species Kestrel (Red-listed) was recorded in flight, but on one occasion was flying/hovering over the site, therefore actively foraging over the site. A total of 15 species was recorded within adjacent habitats, largely within habitats to the south and east (former golf course). Some of the most notable observations are detailed below.

Table 7. Peak number of birds recorded within any one survey visit, along with their location (within site, site boundaries, adjacent habitats, or in flight), highlighting Red and Amber-listed species under ‘Birds of Conservation Concern 4’ (Gilbert et al. 2021).

Species Common Name	Latin Name	BoCCI 2021	Within site	Site boundary	Adjacent habitats	In flight
Feral Pigeon	<i>Columba livia</i>		3			4
Stock Dove	<i>Columba oenas</i>	Red	7			
Woodpigeon	<i>Columba palumbus</i>		16	4	1	21
Sparrowhawk	<i>Accipiter nisus</i>				1	
Buzzard	<i>Buteo buteo</i>			1	1	2
Kestrel	<i>Falco tinnunculus</i>	Red			1	1
Magpie	<i>Pica pica</i>			1	1	4
Jackdaw	<i>Coloeus monedula</i>			2		13
Rook	<i>Corvus frugilegus</i>		1		2	40
Hooded Crow	<i>Corvus cornix</i>		4	4	3	4
Raven	<i>Corvus corax</i>					1
Blue Tit	<i>Cyanistes caeruleus</i>			3		
Great Tit	<i>Parus major</i>			2	1	
Wren	<i>Troglodytes troglodytes</i>			5		
Starling	<i>Sturnus vulgaris</i>	Amber		3	4	1
Song Thrush	<i>Turdus philomelos</i>			1		
Blackbird	<i>Turdus merula</i>		2	3	1	1
Robin	<i>Erithacus rubecula</i>		1	6		
Stonechat	<i>Saxicola rubicola</i>			1		
House Sparrow	<i>Passer domesticus</i>	Amber		4		
Dunnock	<i>Prunella modularis</i>			3	1	
Pied Wagtail	<i>Motacilla alba</i>				1	1
Meadow Pipit	<i>Anthus pratensis</i>	Red	1			
Chaffinch	<i>Fringilla coelebs</i>		1	6	1	1
Bullfinch	<i>Pyrrhula pyrrhula</i>			2		
Greenfinch	<i>Chloris chloris</i>	Amber		1		
Linnet	<i>Linaria cannabina</i>	Amber			2	
Goldfinch	<i>Carduelis carduelis</i>			7	1	3

Stock Dove – this passerine, a member of the dove and pigeon family, was observed foraging within the site on one survey occasion (7 individuals). It is a resident breeding bird. Stock Doves are associated with arable farmland and open woodland, hence the habitats within and surrounding the site are highly suitable for this species. This species has declined by over 50% in the Republic of Ireland during the lifetime of the Countryside Bird Survey (Lewis et al. 2019b) and is consequently a Red-listed species of highest conservation concern. Smiddy et al. (2022) states that flocks of 10-20 individuals are regularly recorded around Cork Harbour, and in East Cork.

Sparrowhawk – this raptor was recorded perched in a tree within the former Golf Course on one survey occasion. The species is found across a range of habitats where there is sufficient cover (trees)

and small mammal species to prey upon. This species is currently exhibiting a moderate decrease in population size within the Republic of Ireland.⁵

Buzzard – this raptor was observed on six survey visits. It was recorded flying (hunting) over the site once, the remaining observations were of birds (2 maximum) within the former Golf Course. On the 7th March, a pair of Buzzards was observed carrying nesting material and flying into the trees to the south of the site. This suggests that Buzzards may be breeding close to the site.

Kestrel – a Kestrel (Red-listed) was observed on two survey occasions, once in flight in adjacent habitats and on one occasion hovering over the site, actively searching for prey. This species is in decline in Ireland (Lewis et al. 2019b).

Crows – Five members of the crow family were recorded (Magpie, Jackdaw, Rook, Hooded Crow and Raven), the latter species recorded in flight over the site only. Most records were from the site boundaries, or birds in flight over the site.

Finches – five members of the finch family were recorded (Chaffinch, Bullfinch, Greenfinch, Linnet, Goldfinch). The most common species were Goldfinch and Chaffinch, and most records were from the site boundaries.

5. Discussion

While survey work can only be considered a ‘snap-shot’ view, the multiple site visits conducted during this winter bird survey adds confidence to the conclusion that the subject site is unlikely to be used by SCI species of Cork Harbour SPA, to an extent that would be considered a significant negative impact upon their populations. We have also considered the habitat type of the subject site (a stubble field) and the ecology of the waterbirds listed for Cork Harbour SPA, and relatively few species would likely utilise the site. Also of note is that the site (field) is used by local people for dog walking (*pers. obs*) and this may result in a reduced likelihood of the field being used by large numbers of birds.

The site and adjacent habitats were found to have a relatively diverse assemblage of passerine bird species however. The avian assemblage is likely benefitting from the expanse of open wooded grassland to the south and east of the former Golf Course.

Overall, the subject site is considered unsuitable for use by the majority of species listed for Cork Harbour SPA. For those species that are known to utilise terrestrial habitats, we conclude that it is highly unlikely that the subject site at Courtstown, Little Island is used by wintering waterbird species listed for Cork Harbour SPA to an extent that would lead to adverse negative impacts upon the species and impacts upon their conservation objectives.

⁵ <https://birdwatchireland.ie/our-work/surveys-research/research-surveys/countryside-bird-survey/countryside-bird-population-indicators/>

6. References and information sources

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Appendix 1

Lesley Jane Lewis has a first-class honours degree in zoology and a PhD in estuarine and waterbird ecology, both from University College Cork.

Lesley has run the ecological consultancy business 'Limosa Environmental' since 2004. Seeking to work on larger projects than a sole ecologist can, Lesley started this business with the aim of putting together teams of specialist ecologists to cover all necessary aspects of ecology needed on projects. In addition to staff management, Lesley has also managed all financial, health and safety and risk management duties in relation to the operation of the business. To date she has gained considerable experience working on a range of contracts including Environmental Impact Assessments, Ecological Assessments (EclA), Stage I Screening for Appropriate Assessment and Natura Impact Statements (NIS). While coastal ecology and waterbirds have always been a key part of work, Lesley has worked on a variety of projects from road developments, windfarms, housing developments to industrial projects with clients such as county councils and state agencies as well as private developers.

In addition to Limosa Environmental, Lesley has worked on a part-time basis for BirdWatch Ireland since 2009. Between 2009 and 2014, Lesley was employed by BirdWatch Ireland but was contracted to the National Parks & Wildlife Service (NPWS) as a waterbird ecologist. In this role Lesley was responsible for the design and implementation of the NPWS baseline low tide waterbird survey programme. Lesley was the project manager for the programme of surveys that ran over three winters (2009/10, 2010/11 and 2011/12) with surveys undertaken across 32 coastal Special Protection Areas (SPAs). Data collected from the low tide waterbird survey programme were analysed and used in the process of formulating conservation objectives for coastal SPAs. Lesley worked on all aspects of this process from the initial stages of conception and development, data analysis, through to the production of conservation objectives documents for all 32 coastal SPAs and the publication of standard low-tide survey methods for waterbirds in Ireland. From 2014 onwards, Lesley worked on various aspects of the Irish Wetland Bird Survey (I-WeBS) project. In addition, she worked on other BWI projects including those concerning forestry birds and seabirds; in 2015 acting as assistant project manager on the Seabird4 survey (survey of cliff-nesting seabirds 2015, NPWS). Since 2017, Lesley has been the project manager for the Irish Wetland Bird Survey (I-WeBS) and the Countryside Bird Survey (CBS).

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