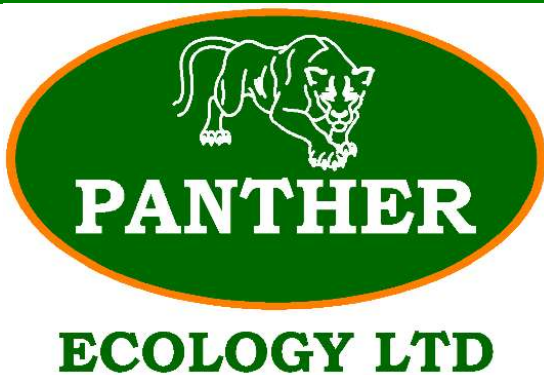




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NATURA IMPACT STATEMENT **REPORT**



PROPOSED LRD AT COOLFADDA & KILBROGAN, BANDON, CO. CORK

2026

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DATE:	17 th April 2026	REVIEWED:	Martin O'Looney, BSc.

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1.0 EXECUTIVE SUMMARY

Panther Ecology Ltd. was commissioned to prepare a Natura Impact Statement (NIS) for a Large-Scale Residential Development of 240 no. residential units (156 no. dwelling houses and 84 no. apartments) and a creche facility at Coolfadda & Kilbrogan, Bandon, Co. Cork.

This report identified the presence of European sites within the potential zone of influence of the proposed development as the Courtmacsherry Bay SPA (Site Code: 004219) located approximately 10.7km to the south-east and the Bandon River SAC (Site Code: 002171) located approximately 22km to the west. The potential for Likely Significant Effects (LSE) to these European sites as a result of the proposed development including potential surface water quality impacts, introduction of invasive species, habitat loss, and impacts from noise, air and dust were considered and the level of risk posed was assessed.

During Stage 1 Screening for Appropriate Assessment, it was considered that there may be potential for likely significant effects on the qualifying interests of the Courtmacsherry Bay SPA and the Bandon River SAC due to a potential deterioration in water quality during the construction phase. Therefore, a Natura Impact Statement was prepared.

Due to the mitigation measures outlined within this NIS which will be implemented during the construction phase, it is considered that there would be no significant risks to the conservation objectives of the habitats and species for which the aforementioned designated sites have been designated.

It is considered that there will be no significant risk of negative impact, either alone or in combination with other plans or projects, to the integrity of the Natura 2000 network.

A pre-consultation meeting (PPS 25/348) with Cork County Council was held on the 5th May 2025 in relation to this development. This NIS was submitted for a pre-planning LRD opinion with Cork County Council. The NIS was updated as per below;

- *Only native trees are proposed with the inclusion of native and non-native planting as per the All-Ireland Pollinator Plan.*
- *All revised drawings and information e.g. Landscaping, drainage, bridge details, soil assessment, site layout, description etc.*

2.0 INTRODUCTION

Panther Ecology Ltd. was commissioned on behalf of the client, to prepare a Natura Impact Statement Report for a proposed Large Scale Residential Development of 240 no. residential units (156 no. dwelling houses and 84 no. apartments) and a creche facility at Coolfadda & Kilbrogan, Bandon, Co. Cork.

The principal aim of this study is to assess whether likely significant effects (LSE)/adverse impacts to European sites (the Natura 2000 network) are likely to occur as a result of this project in accordance with Article 6(3) of the Habitats Directive and the Planning and Development (Amendment) Act, 2001, as amended. This report has been prepared with regards to the European Communities (Natural Habitats) Regulations 1997 (S.I. No. 94 of 1997), and the later amendment regulations (S.I. No. 233 of 1998; S.I. No. 237 of 2005, S.I. No. 477 of 2011 and S.I. No. 293/2021).

A study was undertaken by Ms Paula Farrell of Panther Ecology Ltd who has a BSc in Wildlife Biology from Munster Technological University (formerly IT Tralee). Paula has a combined experience of 7 years in elasmobranch, fauna, bird, invertebrate and habitat surveys. Paula also has experience managing and conserving nature reserves in Ireland. Paula also gained extensive experience in wildlife education and delivered to all levels in relation to peatlands. Furthermore, Paula was a Heritage Expert under the Heritage Council and an educator under the Marine Explorers Programme. This comprised a review of the proposed development, site visits on 25th February, 3rd March and 19th June 2025 to examine the ecological context of the proposed development, a desk study of the information on European sites within the potential zone of influence of the site and an analysis of the information in the context of the guidance to determine if a Natura Impact Statement is required.

The Appropriate Assessment and Natura Impact Statement shall be undertaken in accordance with the guidance outlined in “*Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities*” (DoEHLG, Dec 2010) and “*Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites*” (EC, 2021) and “*Managing Natura 2000 sites: The provisions of Article 6 of the ‘Habitats’ Directive*” (EC, 2019).

- DoEHLG (2010) “*Appropriate Assessment of Plans & Projects in Ireland*”
- Environment DG, European Commission (2021) “*Assessment of plans and projects significantly affecting Natura 2000 sites - Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*”, Part 1 and 2.
- Department of the Environment Heritage and Local Government (DoEHLG) Circular Letter SEA 1/08 and NPWS 1/08.
- Department of the Environment Heritage and Local Government (DoEHLG) Circular letter NPWS 1/10 and PSSP 2/10
- OPR Practice Note PN01 (2021) “*Appropriate Assessment Screening for Development Management*”

3.0 LEGISLATIVE CONTEXT

The EU Habitats Directive (92/43/EEC) on the conservation of natural habitats and of wild fauna and flora, as amended by council directive 97/62/EC, 2006/105/EC, and Regulation EC1882/2003 of September 2003, as transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477/11), provides the framework for legal protection for habitats and species of European importance. The Natura 2000 network provides an ecological infrastructure for the protection of sites that are of particular importance for rare, endangered or vulnerable habitats and species within the EU. The Natura 2000 network in Ireland is made up of European Sites which include:

- Special Areas of Conservation (SACs)
- Special Protection Areas (SPAs)

Article 6(3) of the Habitats Directive establishes the requirement for appropriate assessment when planning new developments that might affect a Natura 2000 site. Article 6(3) of the Habitats Directive states;

“Any plan or project not directly connected with, or necessary to the management of the site, but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site, 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.”

Stage 1: Screening for Appropriate Assessment

This stage involves an initial screening assessment of the potential impacts of the project, either alone or in combination with other projects, upon a Natura 2000 site. If it can be concluded that there would be no significant impacts upon Natura 2000 sites, the assessment stops at this stage. If not, or if further assessment is required, the assessment proceeds to Stage 2.

Stage 2: Appropriate Assessment / Natura Impact Statement (NIS)

This stage assesses the impact of the project, alone or in combination with other projects or plans, on the integrity of the Natura 2000 site, with respect to the site's conservation objectives, the site's ecological structure and function and its overall integrity. The output of this stage is an NIS, which also includes any mitigation measures required to avoid, reduce or offset negative impacts of the project. If this stage determines that adverse effects on the Natura 2000 site cannot be excluded, then the plan or project should proceed to Stage 3 or be abandoned.

4.0 METHODOLOGY

Stage 1 - Screening

Screening is the first stage in the Appropriate Assessment process, and is carried out to determine whether a Stage 2 Appropriate Assessment and a Natura Impact Statement (NIS) is required. Screening addresses and records the reasoning and conclusions in relation to the first two tests of Article 6(3);

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1. Whether a plan or project is directly connected to or necessary for the management of the European (Natura 2000) site; and
2. Whether a plan or project, alone or in combination with other plans or projects, is likely to have significant effects on a European (Natura 2000) site, in view of its conservation objectives.

Screening should be undertaken without the inclusion of mitigation measures. 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 and an NIS.

The findings and conclusions of the screening process should be documented, with the necessary supporting evidence and objective criteria. This is of particular importance in the cases where the Appropriate Assessment process ends at the screening stage because the conclusion is that no significant effects are likely.

Stage 2 – Natura Impact Assessment

The scope of this assessment follows the appropriate assessment statement methodology as defined within the European Commission guidance document “*Assessment of plans and projects significantly affecting Natura 2000 sites*” (2002), Section 3, Part 2. Guidance from the Department of the Environment, Heritage and Local Government “*Appropriate Assessment of Plans and Projects in Ireland*” (2010) and “*Managing Natura 2000 sites: The provisions of Article 6 of the ‘Habitats’ Directive*” (2019) and “Appropriate Assessment Screening for Development Management” OPR Practice Note PN01 (2021) have also been used in the preparation of this report. In accordance with this guidance, the following methodology has been used to produce this Natura Impact Statement:

Step 1: Information Required

Identifying the conservation objectives of the Natura 2000 site and the aspects of the project, alone or in combination with other projects or plans, which have the potential to affect those conservation objectives.

This process involves gathering information for the Natura 2000 site, including the conservation objectives of the site, factors contributing to conservation value, aspects sensitive to change and the existing baseline condition of the site. The principal source of information used for Natura 2000 sites, their qualifying interests and conservation objectives is the National Parks and Wildlife Service (NPWS). Information is also required for the project including the size and scale of the project, the relationship (distance, connectivity etc.) of the project to the Natura 2000 site and the characteristics of existing, proposed or other projects which have the potential to affect the Natura 2000 site.

Step 2: Impact Prediction

This process predicts and identifies the likely significant effects of the project on the Natura 2000 site. Potential impacts are identified as; direct and indirect; short or long-term duration; construction, operational or decommissioning; and isolated, interactive and cumulative effects.

Step 3: Conservation Objectives

Once the potential impacts of the project have been predicted and identified, it will be necessary to assess whether these impacts will adversely impact upon the integrity of the Natura 2000 site, as defined by the site's conservation objectives and status of the site. Where it cannot be demonstrated that there will be no adverse impacts upon the Natura 2000 site, mitigation measures must be proposed for the project.

Step 4: Mitigation Measures

Upon the identification of potential impacts, the project will have on the Natura 2000 site (alone or in combination with other projects or plans), mitigation measures will be proposed to eliminate, reduce or offset these negative impacts. Mitigation measures should be considered with preference to the hierarchy of preferred options outlined in the guidance document "*Assessment of plans and projects significantly affecting Natura 2000 sites*".

4.1 METHODOLOGY BACKGROUND

This Appropriate Assessment has been carried with reference to the following guidelines:

- *Appropriate Assessment of Plans and Projects in Ireland. Guidelines for Planning Authorities.* DoEHLG, 2010.
- Circular NPWS 1/10 & PSSP 2/10 Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities
- *Managing Natura 2000 sites – The Provisions of Article 6 of The Habitats Directive 92/43/EEC.* European Commission, 2019.
- Circular L8/08 Water Services Investment and Rural Water Programmes – Protection of Natural Heritage and National Monuments 2 September 2008
- *Assessment of Plans and Projects Significantly Affecting Natura 2000 sites. Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC.* European Commission, 2021.
- Commission Notice "Managing Natura 2000 sites The provisions of Article 6 of the Habitats Directive 92/43/EEC. European Commission, 21.11.2018
- CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.2. Chartered Institute of Ecology and Environmental Management, Winchester.
- OPR Practice Note PN01 (2021) "*Appropriate Assessment Screening for Development Management*"

4.2 DESKTOP RESEARCH

Desktop research was carried out to gather information on the ecology of the site and surrounding areas. The locations of the Natura 2000 sites within the zone of influence of Coolfadda and Kilbrogan, Bandon, Co. Cork were identified from National Parks and Wildlife Service (NPWS) online map viewer.

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Water quality data from the EPA was reviewed for the assessment of biological and environmental data collected on waterbodies in Ireland (Assessed September 2025).

Information on the characteristics of the Natura 2000 sites within the potential zone of influence was reviewed from the conservation objectives documents, site synopses and Standard Natura 2000 data forms available on the NPWS website.

4.3 SITE SURVEY AND LIMITATIONS

Site characterisation assessments were undertaken on the 25th February, 3rd March and 19th June 2025 to examine the ecological context of the development site, by systematically walking the site and boundaries and determining the habitats present. The habitat survey was undertaken in accordance with the standard methodology outlined in Fossitt's "*A Guide to Habitats in Ireland*", a hierarchical classification scheme based upon the characteristics of vegetation present. The Fossitt system also indicates when there are potential links with Annex I habitats of the E.U. Habitats Directive (92/43/EEC). Cognisance was also taken of the Heritage Council guidelines, "*Best Practice Guidance for Habitat Survey and Mapping*", (Smith *et al.*, 2011).

Bird species and signs of fauna activity were also noted. Particular attention was given to the possible presence of habitats and/or species, which are legally protected under Irish and European legislation and to assessing any potential ecological connectivity with Natura 2000 sites or supplementary or stepping stone habitats of relevance to Natura 2000 sites.

Surveys were undertaken within the optimal period for mammal (February) and floral (June) surveys. Some areas of dense scrub inhibited access, therefore the look/search method for signs of mammals was implemented.

5.0 DESCRIPTION OF PROPOSED DEVELOPMENT AND EXISTING SITE

5.1 PROPOSED DEVELOPMENT

Planning permission is sought for a Proposed Large Scale Residential Development consisting of 240 no. residential units comprising 156 no. dwelling houses, 84 no. apartments, a creche facility and all ancillary site development works at Coolfadda & Kilbrogan, Bandon, Co. Cork (ITM Coordinates: 548488.16, 555705.73) as shown in Figure 4.1.

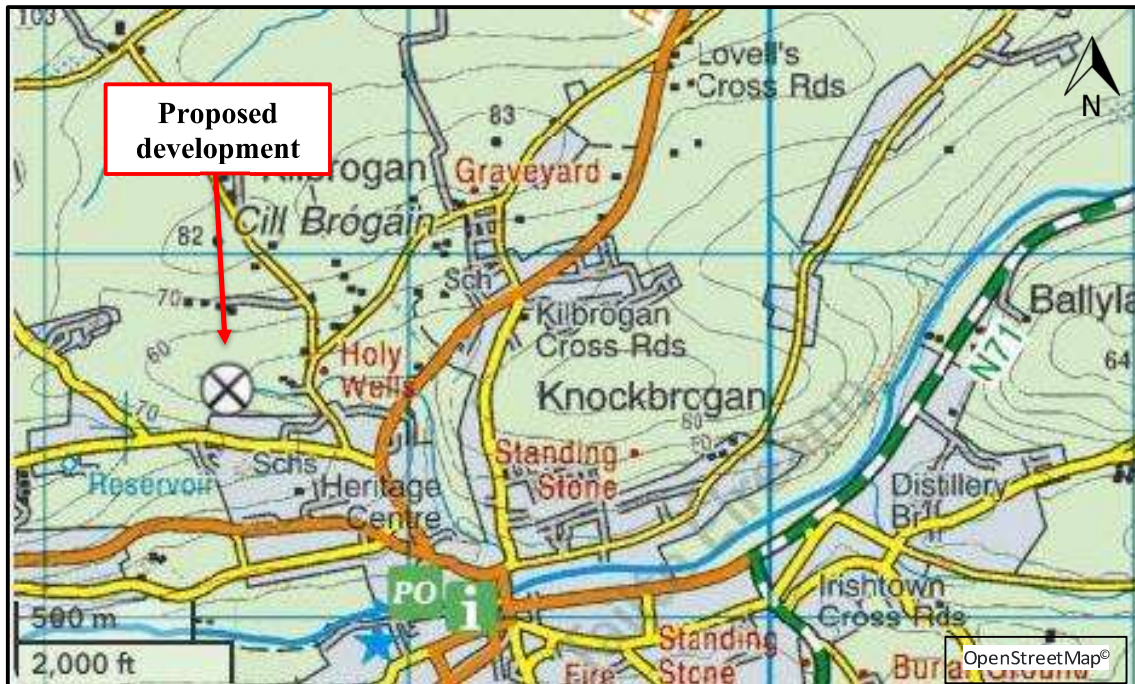


Figure 4.1: Location of Proposed development at Convent Hill, Bandon, Co. Cork

The proposed 156 no. dwelling houses comprise of 29 no. 4 bedroom detached/semi-detached dwellings, 126 no. 3 bedroom semi-detached/terraced units and 1 no. 2 bedroom detached dwelling house. The proposed 84 no. apartments will consist of 60 no. 2 bedroom units and 24 no. 1 bedroom units to be accommodated in 4 no. three storey apartment buildings.

Vehicular and pedestrian access to the proposed development will be provided via new entrances from Upper Convent Hill (L-2033) which will serve western areas of the proposed development and via Kilbrogan Street (L-2039) which will serve eastern and northern areas of the proposed development. The proposed development also provides for 2 no. shared vehicular entrances from Convent Hill to the south (L-2011) to serve 22 no. of the proposed dwelling houses.

The proposed development also provides for public realm enhancements to Kilbrogan Street (L-2039), which include a raised table, and new footpath to connect to existing footpath infrastructure. Other ancillary site development works include landscape and amenity areas, public open spaces, servicing and drainage proposals (including SuDS measures), bicycle parking and bin storage facilities and a vehicular bridge crossing over an existing watercourse to serve as access for 26 no. of the proposed dwelling houses in northern areas of the site.

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The total red line boundary of the proposed development site is 9.590ha and the total buildable area is 7.025ha. The heating system will be air to water.

Potable water will be provided via connection to mains. Domestic foul water will be collected via a new internal drainage network and will be directed to an existing foul line within the site via a new connection for treatment at the Bandon Waste Water Treatment Plant (WWTP) (D0136). This foul line connection will require works beneath the bed of the Kilbrogan watercourse to lay down the pipes to the east. Irish Water have confirmed feasibility of connection without requiring upgrades (Ref: CDS25001467).

Surface water comprised of rainwater run-off from roofs and hardcore areas from the east, west and north of the site will be managed separately. Surface water from each zone will undergo attenuation prior to discharging to the stream onsite. The surface water drainage network will include a number of SuDS features such as three underground attenuation tanks, a swale and permeable paving (see accompanying drainage plans and engineering report). The attenuation tanks have been sized for a 1 in 100-year rainfall event and includes a 20% allowance for climate change. Overflow will discharge to the Kilbrogan watercourse within the site boundary via three new outfalls. Prior to discharge, surface water will pass through a petrol interceptor. Three new headwalls will be installed within the Kilbrogan watercourse at the outfall locations to facilitate the proposed surface water drainage network. The proposed attenuation tanks will restrict outflow to the watercourse. Surface water runoff from the north of the development site will be directed to a new swale with overflow directed to an attenuation tank prior to discharging to the Kilbrogan watercourse. Additional SuDS features will include rainwater butts to the rear of each house.

The proposed development will require the removal of scrub within the internal areas, grassland, trees to the south, sections of hedgerow to the west and north and an immature woodland to the south-east of the site. According to the arborist report prepared by Holly Arboriculture, most of the mature trees along the boundaries are in good condition. There are 5 category A trees, 12 category B trees and 7 category C trees. The hedgerow to the north is considered mature and of good structural and physical condition (category B). The majority of this hedgerow will be retained and protected. All other boundary trees and hedgerows will be retained also. Scrub, woodland areas and all other vegetation along the Kilbrogan watercourse will be retained and protected within a 10m buffer either side of the watercourse. An Arboricultural Impact Assessment and Tree Protection Plan (BS5837:2012) has been prepared as part of this development to protect retained trees and hedgerows.

A Landscape Plan has been prepared by Gannon & Associates Landscape Architecture. The landscape plan will be comprised mostly of native species. Some non-native non-invasive species as listed within the All-Ireland Pollinator Plan have also been incorporated to account for seasonality. The landscape strategy will *“reinforce the riparian corridor as the main ecological spine of the site from which a series of bio-corridors extend”*. This will overall strengthen the existing and proposed wildlife corridors for local fauna. The landscape plan will include new tree planting, areas of amenity grassland, riparian woodland, native woodlands, trees, ornamental planting and wildflower meadows throughout. In addition to this, this landscape plan will incorporate areas of planting as part of SuDS to manage surface water onsite. This includes tree pits, permeable paving and rain gardens. The proposed planting will create a more integrated network of habitats than what currently exists onsite.

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Works will be required within the watercourse to facilitate the surface water and foul water drainage network as stated above.

In addition, two new bridges, a pedestrian and vehicular bridge will be constructed over the Kilbrogan watercourse to facilitate vehicular access to the north of the site. Both bridges will be comprised of precast concrete as per the accompanying Bridge Construction Method Statement (Ref: 25072-MMS-XX-XX-RP-C-0003). The pedestrian bridge will be designed as per the Banagher Precast Beam Design Manual and is subject to change due to design from bridge specialist. It will be a composite deck build up supported by two 457x152UB60. The vehicular bridge will be installed at a setback distance of approximately 10m either side of the watercourse while the pedestrian bridge will be installed at a setback distance of 5m to the north and 7.4m to the south of the watercourse. The height of the vehicular bridge will be 3.3m above the river and 3m above the river for the pedestrian bridge. This will protect the integrity of the Kilbrogan watercourse and maintain the ecological riparian corridor from west to east and prevent habitat fragmentation.

A lighting plan has been prepared by Electric Skyline as part of this development as has been revised as per Cork County Council opinion. Three types of luminaires are proposed, most being 6m high and three luminaires at 8m high. There is no proposed lighting along the 10m buffer with lighting directed to where it is required. Furthermore, there will be no proposed trees within 10 of public lighting (Refer to soft landscape plan drawing 25133GA_LA_PA_DR_200_R08) as per Cork County Council opinion.

The estimated construction duration including landscaping works will be 3 years. Construction works will be confined to the proposed development footprint. During excavation works, soils would be temporarily stored onsite. Any excess soils would be used for landscaping or exported offsite via a licenced contractor. All exported materials will be removed to a licensed waste facility where relevant. The development will not require the importation of any materials likely to contain invasive species. See Appendix C for site plans and layouts.

The closest Natura 2000 site is the Courtmacsherry Bay SPA (Site Code: 004219) located approximately 10.7km to the south-east and the Bandon River SAC (Site Code: 002171) located approximately 22km to the west of the proposed development as shown in Figure 4.2 below.

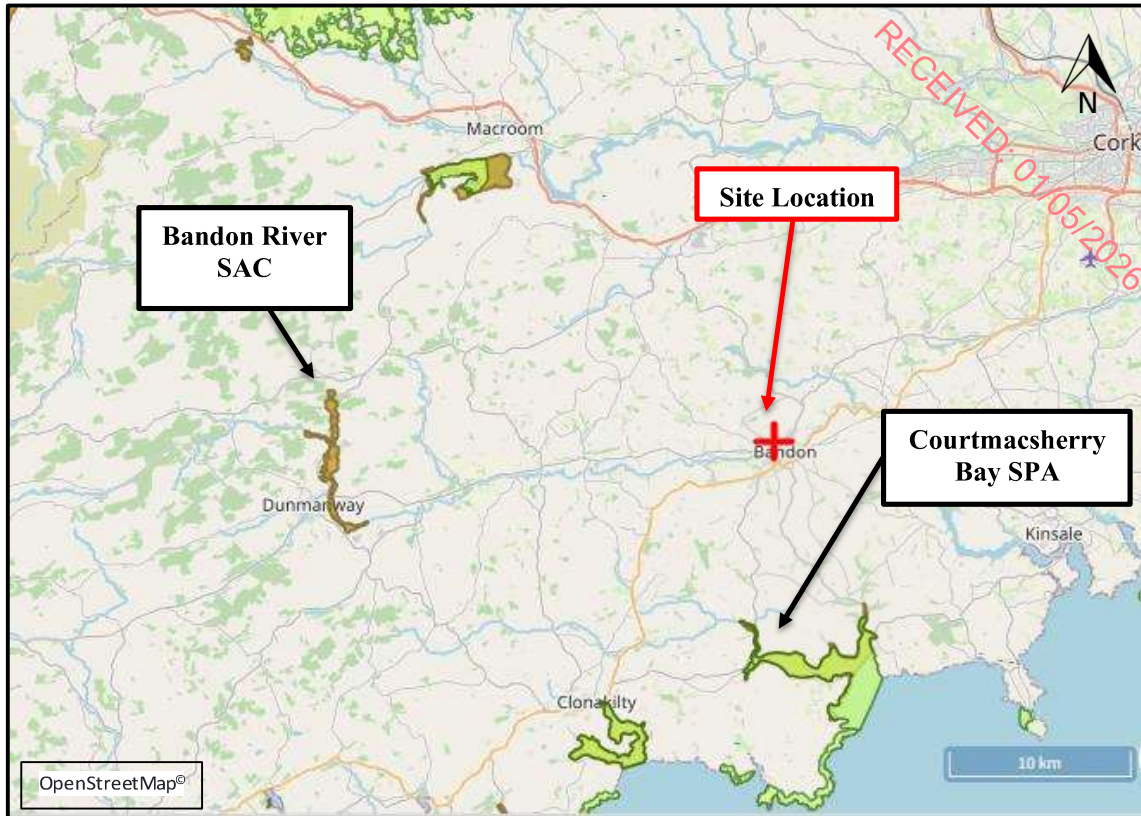


Figure 4.2: Location of Proposed Development and Natura 2000 Sites

The following project elements of the proposed development have been examined for relevance to possible effects on the Natura 2000 sites;

- Earthworks & Excavation
- Sediment & Hydrocarbon Runoff
- Stormwater & Waste Water
- Disturbance to Protected Species
- Impact on Protected Habitats
- Dust and Noise
- Invasive Species

6.0 ECOLOGICAL BASELINE

6.1 DESKTOP SURVEYS

6.1.1 NBDC Desktop Records

Flora and fauna records were reviewed on the National Biodiversity Data Centre (NBDC) website for the proposed development site and vicinity. There are no protected flora species under the Flora Protection Order 2022 (S.I. No. 235 of 2022) recorded for the 10km square (W45) in which the development site is located.

Eight invasive plant species listed in the Third Schedule of the European Communities Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011) as amended 2015 (S.I. No. 355 of 2015) was recorded within the 10km square (Tetrad – W45); *Fallopia japonica x sachalinensis* = *F. x bohemica*, Giant Knotweed (*Fallopia sachalinensis*), Himalayan Balsam

(*Impatiens glandulifera*), Himalayan Knotweed (*Persicaria wallichii*), Japanese Knotweed (*Fallopia japonica*), Rhododendron ponticum, Three-cornered Garlic (*Alium triquetrum*) and Water Fern (*Azolla filiculoides*).

Threatened flora recorded within the 10km square include: Irish Whitebeam (*Sorbus hibernica*).

Fauna records for the previous thirty years were reviewed on the NBDC website for the 10km square (Tetrad – W45) in which the proposed development is located. Protected Fauna of note include; Common Frog (*Rana temporaria*), Marsh Fritillary (*Euphydryas aurinia*), Common Lizard (*Zootoca vivipara*), Badger (*Meles meles*), Brown Long-eared Bat (*Plecotus auritus*), Common Pipistrelle (*Pipistrellus pipistrellus sensu stricto*), Daubenton's Bat (*Myotis daubentonii*), Hedgehog (*Erinaceus europaeus*), Lesser Horseshoe Bat (*Rhinolophus hipposideros*), Eurasian Red Squirrel (*Sciurus vulgaris*), Otter (*Lutra lutra*), Lesser Noctule (*Nyctalus leisleri*), Pipistrelle (*Pipistrellus pipistrellus sensu lato*), Soprano Pipistrelle (*Pipistrellus pygmaeus*) and Whiskered Bat (*Myotis mystacinus*).

Invasive Fauna of note include; Harlequin Ladybird (*Harmonia axyridis*), American Mink (*Mustela vison*), Fallow Deer (*Dama dama*) and Sika Deer (*Cervus nippon*).

Bird species of note recorded within the 10km square include: Barn Owl (*Tyto alba*), Black-headed Gull (*Larus ridibundus*), Black-tailed Godwit (*Limosa limosa*), Coot (*Fulica atra*), Cormorant (*Phalacrocorax carbo*), Corncrake (*Crex crex*), Curlew (*Numenius arquata*), Gadwall (*Mareca strepera*), Goldcrest (*Regulus regulus*), Great Black-backed Gull (*Larus marinus*), Great Spotted Woodpecker (*Dendrocopos major*), Greenfinch (*Chloris chloris*), Grey Partridge (*Perdix perdix*), Grey Wagtail (*Motacilla cinerea*), Herring Gull (*Larus argentatus*), House Martin (*Delichon urbicum*), House Sparrow (*Passer domesticus*), Jack Snipe (*Limnecryptes minimus*), Kestrel (*Falco tinnunculus*), Kingfisher (*Alcedo atthis*), Knot (*Calidris canutus*), Lapwing (*Vanellus vanellus*), Lesser Black-backed Gull (*Larus fuscus*), Linnet (*Carduelis cannabina*), Little Egret (*Egretta garzetta*), Little Grebe (*Tachybaptus ruficollis*), Meadow Pipit (*Anthus pratensis*), Merlin (*Falco columbarius*), Mute Swan (*Cygnus olor*), Oystercatcher (*Haematopus ostralegus*), Peregrine Falcon (*Falco peregrinus*), Pochard (*Aythya ferina*), Redshank (*Tringa totanus*), Rock Dove (*Columba livia*), Sand Martin (*Riparia riparia*), Shoveler (*Spatula clypeata*), Sky Lark (*Alauda arvensis*), Snipe (*Gallinago gallinago*), Spotted Flycatcher (*Muscicapa striata*), Starling (*Sturnus vulgaris*), Stock Pigeon (*Columba oenas*), Swallow (*Hirundo rustica*), Swift (*Apus apus*), Teal (*Anas crecca*), Tufted Duck (*Aythya fuligula*), Turtle Dove (*Streptopelia turtur*), Whooper Swan (*Cygnus cygnus*), Wigeon (*Mareca penelope*), Woodcock (*Scolopax rusticola*) and Yellowhammer (*Emberiza citrinella*).

6.1.2 Flora Protection Order (2022) online records

The following plant species have been recorded within the 10km square W45: Meadow Saxifrage (*Saxifraga granulata*).

No protected flora recorded within the 10km tetrad W45 was noted within the boundary of the proposed development.

6.1.3 Water Environment

Surface Water

The development site is located within the Bandon sub-catchment (Bandon_SC_050) which is part of the Bandon-Ilen Catchment (ID_20). The closest mapped watercourse to the proposed development site is the Kilbrogan (EPA Code – 20K77 – Order 1) that flows through the centre of the proposed development. The Kilbrogan flows in a south-easterly direction for approximately 961m (hydrologically) where it joins the Bandon (EPA Code: 20B02 – Order 6) confluence. The Bandon continues to flow in a south-easterly direction for approximately 25km (hydrologically) where it enters Kinsale Harbour.

Other watercourses within the area includes the Lovell's Cross Roads (EPA Code: 20L65 – Order) located approximately 530m to the north-west of the site and the Shinagh (EPA Code 20S50 – Order 1) located approximately 1.1km to the south-west of the site. The Bridewell (EPA Code: 20B06 – Order 3) is located approximately 761m to the south-east of the proposed development. All watercourses flow directly into the Bandon River.

The Bandon River SAC is located upstream on the River Bandon. Water Quality targets have been set for Freshwater Pearl Mussel, a Qualifying Interest (QI) of the Bandon River SAC. This includes a target to restore water quality with an EQR of Q4-5 or Q5.

It is designated for a number of water sensitive habitats and species which includes restoring water quality and EQR greater than 0.90 (Q4-5 or Q5); phytobenthos: EQR greater than 0.93 for Freshwater Pearl Mussel. The Conservation Objectives document for the Courtmacsherry SPA does not include any water quality objectives for any of the listed Qualifying Interests. However, a deterioration in water quality can have a negative impact on qualifying interests by impacting prey.

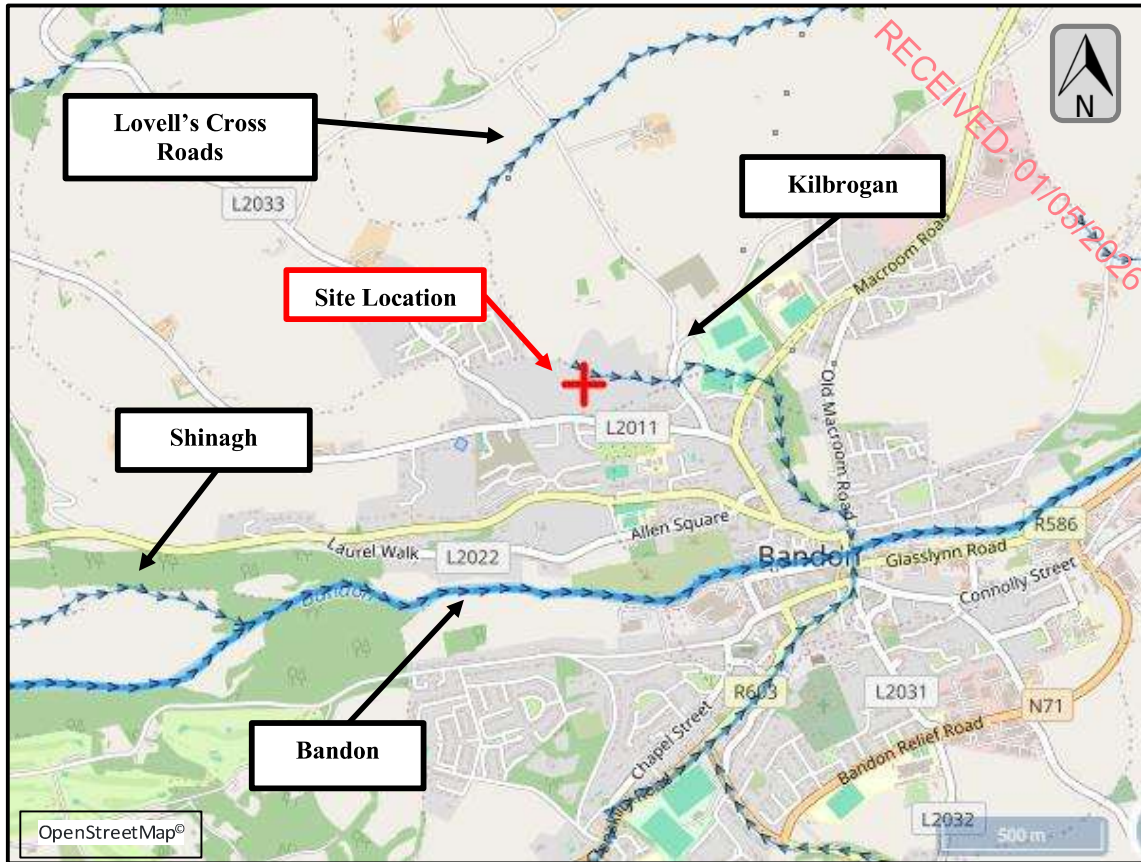


Figure 5.1: Watercourses surrounding the proposed development site

The Environmental Protection Agency (EPA) does not undertake water quality monitoring along the Kilbrogan watercourse however, surface water monitoring is undertaken along the Bandon watercourse. The results for the nearest monitoring stations with available information (as per Table 5) for the period 2006 – 2024 are summarised in Figure 5.2 below for indicative purposes.

Table 5.1: Active Monitoring Stations on the Bandon River

STATION NO.	STATION LOCATION	EASTING	NORTHING	APPROX. LOCATION
RS20B020700	Baxter's Br	144122.49	54612.53	6.36km Upstream
RS20B020800	1.5km d/s Bandon Br	150362.57	55674.19	2.3km Downstream
RS20B020900	Inishannon Br	154115	57086.9	7.6km Downstream

As can be seen in Figure 5.2 below, the Bandon River is mainly achieving a water quality status of between Q3-4 (Moderate) and Q4 (Good) in recent years.

EPA comments on the most recent monitoring results for the Bandon River are as follows: *“Continuing largely satisfactory with six out of the nine sites surveyed at good or high ecological quality. The ecological quality at Keenrath bridge (0050) continues with High. Moderate status was maintained at Ardcahan Bridge (0150) and Bealboy bridge (0300) as per the previous survey. The lowermost site at Innishannon Bridge (0900) has also declined to moderate from good. All other sampled sites were at good status.”*

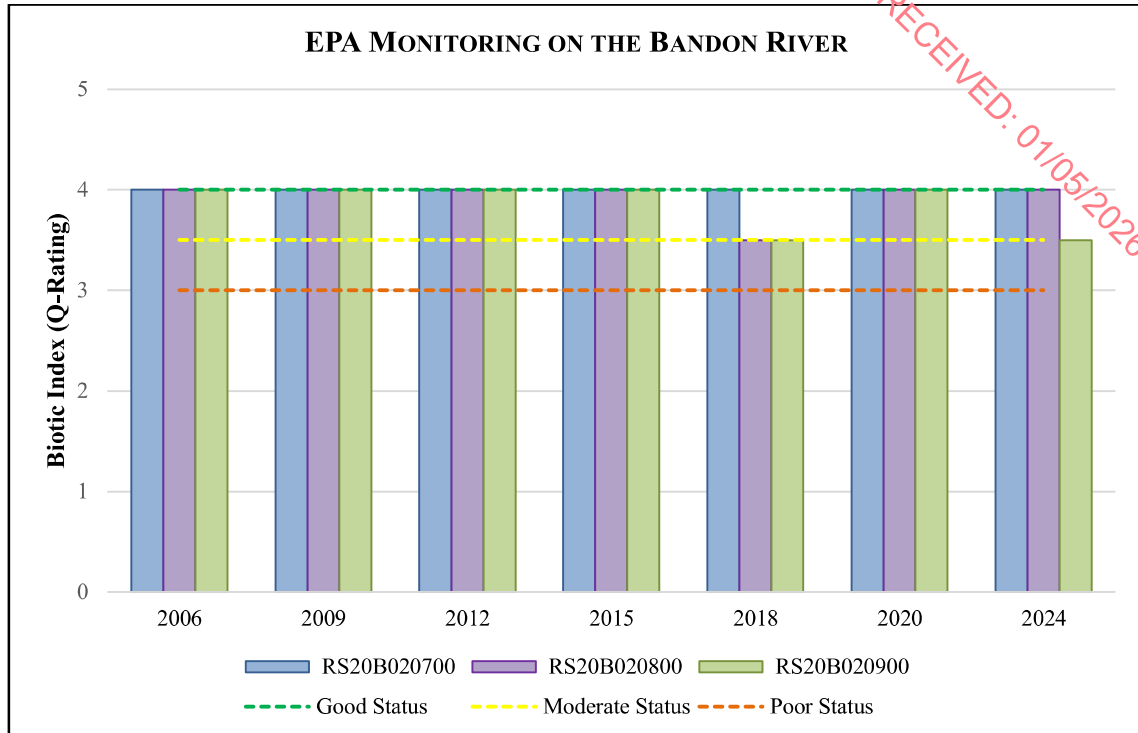


Figure 5.2: EPA Ecological Monitoring of the Bandon River from 2006– 2024

Ground water

The proposed development is located within the Bandon groundwater body which is a locally important aquifer – bedrock that is moderately productive only in local zones. The subsoil is described as till derived from devonian and carboniferous sandstones and shales. Groundwater vulnerability is high to extreme. The ground waterbody is not at risk. There are no karst features that have been identified within the immediate vicinity according to the GSI groundwater data viewer maps (Assessed September 2025). According to the online EPA maps, groundwater quality at the proposed development has a status of Good according to the most recent data (2016-2021).

6.1.4 Flood Risk Assessment (FRA)

A site-specific Flood Risk Assessment has been undertaken by JBA Consulting as part of this development. According to the report, the proposed development is partly located within flood zone A and B however, these areas are mainly confined to the lower elevations adjacent the Kilbrogan watercourse. Proposed site entrances are located within flood zone C. The report notes that *“highly vulnerable parts of the development are located in Flood Zone C. The development follows the sequential approach and therefore the Justification Test has not been applied.”*

6.2 FIELD SURVEYS

6.2.1 Habitats

The site is located on the periphery of an urban environment with residential dwellings, residential developments and commercial/amenity businesses within proximity. Agricultural lands dominate the wider environs.

Site characterisation assessments were undertaken on the 25th February 3rd March and 19th June 2025 to examine the ecological context of the development site, by systematically walking the site and boundaries and determining the habitats present. During the site assessment the following habitats were observed.

The areas south-west of the watercourse and farthest east are akin to **dry calcareous and neutral grassland (GS1)** comprised of Yorkshire Fog (*Holcus lanatus*), Meadow Foxtail (*Alopecurus pratensis*), Creeping Buttercup (*Ranunculus repens*), Ryegrasses (*Lolium* spp.), Ragwort (*Jacobaea vulgaris*), Dock (*Rumex* spp.), Creeping Thistle (*Cirsium arvense*), White Clover (*Trifolium repens*), Lesser Stitchwort (*Stellaria graminea*), Field Speedwell (*Veronica persica*), Nettle (*Urtica dioica*) and Common Mouse-ear (*Cerastium fontanum*). The grassland was being grazed by horses during the site assessment. The flora recorded indicate a neutral grassland.

Wet grassland (GS4) is the dominant grassland north-east of the watercourse that divides the lands. It was wet underfoot with areas of standing stagnant water observed during the initial site visits. In June, the grassland was drier in part but still contained some areas of standing water and saturated soil. This indicated poor draining soil. Rushes were the dominant component of this grassland north of the watercourse however, they did not dominate south of the watercourse. Flora species of dry habitats were commonly found throughout this habitat also. Plants recorded include Creeping Buttercup (*Ranunculus repens*), Compact Rush (*Juncus conglomeratus*), Soft Rush (*Juncus effusus*), Yorkshire Fog (*Holcus lanatus*), Creeping Thistle (*Cirsium arvense*), Dock (*Rumex* spp.), Lesser Trefoil (*Trifolium dubium*), Greater Bird's-foot Trefoil (*Lotus pedunculatus*), Lesser Spearwort (*Ranunculus flammula*), Brooklime (*Veronica beccabunga*), Common Spike Rush (*Eleocharis palustris*), Marsh Bedstraw (*Galium palustre*), Common Chickweed (*Stellaria media*), Water Figwort (*Scrophularia auriculata*), Cuckoo Flower (*Cardamine pratensis*), Ragged Robin (*Silene flos-cuculi*), Creeping Bent (*Agrostis stolonifera*), Silverweed (*Potentilla anserina*) Common Centaury (*Centaureum erythraea*) and Bent Grasses (*Agrostis* spp.). Additional species recorded south of the watercourse include Oval Sedge (*Carex leporina*), Clover (*Trifolium* spp.), Lesser Stitchwort (*Stellaria graminea*), Meadow Buttercup (*Ranunculus acris*), Dock (*Rumex* spp.), Marsh Cudweed (*Gnaphalium uglinosum*), Bent Grasses (*Agrostis* spp.), Daisy (*Bellis perennis*), Spear Thistle (*Cirsium vulgare*), Common Mouse-ear (*Cerastium fontanum*) and Ragwort (*Jacobaea vulgaris*). Sections of this grassland to the north-east appeared grazed from Rabbits,

Scrub (WS1) occurs along the watercourse and predominantly to the east of the site. Stagnant water was observed in some areas, particularly to the north of the watercourse. Most of this habitat was species poor and had a poor field layer. Greater species diversity was noted where this habitat merged with wet grassland. The dominant plant species were Grey Willow (*Salix cinerea*) and Gorse (*Ulex europaeus*). Buddleia (*Buddleja davidii*) was also abundant in areas to the east. Other plants recorded include Cotoneaster, False-oat Grass (*Arrhenatherum elatius*), Sweet Vernal Grass (*Anthoxanthum odoratum*), Yorkshire Fog (*Holcus lanatus*),

Nettle (*Urtica dioica*), Bindweed (*Convolvulus* spp.), Lesser Stitchwort (*Stellaria graminea*), Ribwort Plantain (*Plantago lanceolata*), Creeping Buttercup (*Ranunculus repens*) Creeping Thistle (*Cirsium arvense*), Silverweed (*Potentilla anserina*), Meadow Vetchling (*Lathyrus pratensis*), Greater Bird's-foot Trefoil (*Lotus pedunculatus*), Tutsan (*Hypericum* spp.), Foxglove (*Digitalis purpurea*), Dock (*Rumex* spp.), Himalayan Honeysuckle (*Lonicera periclymenum*), and Cocks-foot Grass (*Dactylis glomerata*).

Two areas of Willow along the north-eastern boundary held stagnant water during the first site assessments. Some areas were knee deep in muddy water. Water appeared to be trickling through a soil mound that divides the proposed development from agricultural lands to the north. During the third follow up ecological site assessment in June, these woodlands had dried significantly with only stagnant water present in the west portion. Additional species include Mosses (Bryophyta), Creeping Buttercup (*Ranunculus repens*), Water Forget-me-knot (*Myosotis scorpioides*), Fools water-cress (*Apium nodiflorum*), Lesser Spearwort (*Ranunculus flammula*), Marsh Bedstraw (*Galium palustre*), Rushes (*Juncus* spp.), Water Figwort (*Scrophularia auriculata*), Red Water Fern (*Azolla filiculoides*) and Ragged Robin (*Silene flos-cuculi*). It is probable that surface water drains from the agricultural lands to the north and is held in these wet willow areas. Past activities identified from satellite imagery shows vegetation and soil clearance had taken place as is evident by mounds of soil. This is potentially also contributing to the presence of stagnant water onsite. The trees to the forefront of these areas were young while some trees to the back were $\pm$ 4m in height. These areas of Willow appear to be transitional between **Scrub (WS1)** and a woodland akin to **Wet willow-alder-ash woodland (WN6)** although the field layer is absent of species associated with this woodland habitat according to Fossitt 2000. This woodland type has links with alluvial forests [91E0] however, it has only one target species and few positive indicators.

Due to over-grazing and poaching in the past, **Recolonising bare ground (ED3)** dominates certain areas of the site, particularly under scrub along an access route within the centre and to the east. The plant species composition is comprised of Red Clover (*Trifolium pratense*), Cock's-foot Grass (*Dactylis glomerata*), Daisy (*Bellis perennis*), Common Bent (*Agrostis capillaris*), Dandelion (*Taraxacum* agg.), Ribwort Plantain (*Plantago lanceolata*), Greater Bird's-foot Trefoil (*Lotus pedunculatus*), Two-spine Acaena (*Acaena ovalifolia*), Lesser Stitchwort (*Stellaria graminea*), Ragwort (*Jacobaea vulgaris*), Great Willowherb (*Epilobium hirsutum*), Hoary Willowherb (*Epilobium parviflorum*), Soft Rush (*Juncus effusus*), Common Spike Rush (*Eleocharis palustris*), Sharp/Jointed Rush (*Juncus* spp.), Bohemian Knotweed (*Fallopia x bohemica*), Scarlet Pimpernel (*Anagallis arvensis*), Creeping Buttercup (*Ranunculus repens*), White Clover (*Trifolium repens*), Red Clover (*Trifolium pratense*), Silverweed (*Potentilla anserina*), Sweet Vernal Grass (*Anthoxanthum odoratum*), Compact Rush (*Juncus conglomeratus*), Yorkshire Fog (*Holcus lanatus*), Annual Meadow-grass (*Poa annua*), Toad Rush (*Juncus bufonis*), Marsh Cudweed (*Gnaphalium uglinosum*), Meadow Buttercup (*Ranunculus acris*), Fumitory (*Fumaria* spp.), Pill Sedge (*Carex pilulifera*), Cut-leaved Crane's-bill (*Geranium dissectum*), Common Spike-rush (*Eleocharis palustris*) and Oval Sedge (*Carex leporine*).

Immature woodland (WS2) occurs on some rocky areas to the south-east boundary of the site. Species recorded include Willow (*Salix* spp.), Birch (*Betula* spp.), Sycamore (*Acer pseudoplatanus*) with some areas dominated by Buddleia (*Buddleja davidii*) and Gorse (*Ulex europaeus*). Some young Rhododendron were also found within this habitat.

The watercourse running through the site has been classified as **eroding/upland rivers (FW1)**. Some areas of sediment were observed further east but were not a common feature. The substrate was rocky with cobbles and large rocks within. The water was clear and fast flowing in an easterly direction. The majority of this watercourse was inaccessible. The height of the banks varied from <0.5m to >1m in height. It is culverted as it enters and leaves the development site boundaries. Species along the margins of the watercourse included Opposite-leaved Golden-saxifrage (*Chrysosplenium oppositifolium*), Lesser Celandine (*Ficaria verna*), Bramble (*Rubus fruticosus* agg.), Lords-and-Ladies (*Arum maculatum*), Hart's-tongue Fern (*Asplenium scolopendrium*), Herb Robert (*Geranium robertianum*), Watercress (*Nasturtium officinale*) and Water Figwort (*Scrophularia auriculata*). Flooding was evident in only one location during the initial site assessment that could be accessed where deposited silt was observed. The river banks here are also lower.

Broadleaved Woodland (WD1) is present along the watercourse with areas of Grey Willow (*Salix cinerea*) and Alder (*Alnus glutinosa*). The full extent of this habitat along the watercourse is unknown due to very dense scrub along the eastern end which limited surveying. The canopy reached heights greater than 5m. Scrub comprised of Willow and Gorse also occur as a mosaic. Some sections of this habitat were inaccessible. Although this habitat is located within a known flood zone as per the OPW Floodmaps, there was no evidence to suggest flooding although minor evidence of flooding was noted within a grassland adjacent. The understory of this habitat is comprised of Brambles (*Rubus fruticosus* agg.) and Hawthorn (*Crataegus monogyna*).

In close proximity to the wet Willow scrub/transitional woodland to the north-west of the site is a small area classified as **Reed and large sedge swamps (FS1)**. Water from the transitional woodland appears to drain into this swampy area. This habitat was much drier during the site visit in June although there were still some areas of stagnant water. A second area akin to this habitat is found to the east of the site where water pools from the north-eastern wet willow area. Standing water reached a depth of 30cm in parts. This habitat covers a very small area in comparison to the entire site. Species recorded include Bullrush (*Typha* spp.) with Red Waterfern (*Azolla filliculoides*), Creeping Buttercup (*Ranunculus repens*), Brookline (*Veronica beccabunga*), Water Forget-me-knot (*Myosotis scorpioides*), Moss (Bryophyta), Marsh Bedstraw (*Galium palustre*), Soft Rush (*Juncus effusus*), Willow (*Salix* spp.) saplings, Cuckoo Flower (*Cardamine pratensis*), Lesser Spearwort (*Ranunculus flammula*) and Ragged Robin (*Silene flos-cuculi*).

A **hedgerow (WL1)** occurs along the northern boundary of the site with the agricultural grassland. It is dominated by Hawthorn (*Crataegus monogyna*). Linear scrub also occurs to the south-west of the site in proximity of the existing site entrance and extends along the western boundary. It is comprised of Brambles (*Rubus fruticosus* agg.), Gorse (*Ulex europaeus*), Grey Willow (*Salix cinerea*), Buddleia (*Buddleja davidii*), Traveller's Joy (*Clematis vitalba*), Lesser Stitchwort (*Stellaria graminea*) and Rough Meadow-grass (*Poa trivialis*). Scattered trees intersperse this scrub hedgerow and include Hawthorn (*Crataegus monogyna*), Ash (*Fraxinus excelsior*) and Sycamore (*Acer pseudoplatanus*).

Areas of **Spoil and bare ground (ED2)** due to trampling and disturbance occur in adjacent to recolonising areas and at the site entrance. Plant species recorded within this habitat include Moss (Bryophyta), Annual Meadow-grass (*Poa annua*), Nettle (*Urtica dioica*), Ribwort Plantain (*Plantago lanceolata*), Creeping Buttercup (*Ranunculus repens*), Cat's-ear (*Hypochaeris radicata*), Scarlet Pimpernel (*Anagallis arvensis*), Bramble (*Rubus fruticosus*

agg.), Prickly Sowthistle (*Sonchus asper*), Daisy (*Bellis perennis*), Spear Thistle (*Cirsium vulgare*), Fumitory (*Fumaria* spp.), Cleavers (*Galium aparine*) and Cock's-foot Grass (*Dactylis glomerata*).

Buildings and Artificial surfaces (BL3) encompass old trailers, sheds, a mobile home onsite and artificial surfaces comprised of gravel.

A **treeline (WL1)** habitat occurs to the north-west corner of the site on the far side of the watercourse. This is within the red line boundary but outside the development area. It includes a number of mature trees such as Pedunculate Oak (*Quercus robur*), Willow (*Salix* spp.), Poplar (*Populus* spp.) and Alder (*Alnus* spp.).

Habitats of note outside the red line boundary

Amenity grassland (GA2) is found within the park to the east of the red line boundary of the site. The sward height is a mixture of short and some taller grasses. Some areas are more frequently mowed than others. Plant species recorded include Creeping Buttercup (*Ranunculus repens*), Bent Grasses (*Agrostis* spp.), Yarrow (*Achillea millefolium*), Lesser Stitchwort (*Stellaria graminea*), Yorkshire Fog (*Holcus lanatus*), Ryegrasses (*Lolium* spp.) and Clover (*Trifolium* spp.).

Areas of tall grasses occurring along the margins of the park to the east of the site are classified as **Dry Meadows and Grassy Verges (GS2)**. They are located along a wall adjacent a local road. The composition is comprised of False-oat Grass (*Arrhenatherum elatius*), Creeping Buttercup (*Ranunculus repens*), Nettle (*Urtica dioica*), Bramble (*Rubus fruticosus* agg.), Hogweed (*Heracleum sphondylium*), Dock (*Rumex* spp.), Elder (*Sambucus nigra*) and Cleavers (*Galium aparine*).

Buildings and artificial surfaces (BL3) comprises the local road network and bridges to the east and west over the mapped watercourse. Flora were recorded growing on the walls and includes Ornamental Rose (*Rosa* spp.) and Navelwort (*Umbilicus rupestris*).

A **treeline (WL2)** comprising of Hornbeam (*Carpinus* spp.) borders the GAA pitch from a residential development.

A number of third schedule invasive flora were recorded within and adjacent the site boundary. This includes Three-cornered Garlic (*Allium triquetrum*), Rhododendron, Bohemian Knotweed (*Fallopia x bohemica*), Spanish Bluebell (*Hyacinthoides hispanica*) and Red Waterfern (*Azolla filliculoides*).

The proposed development does not contain any habitats associated with the Bandon River SAC has been designated.

See Table 5.2 for summary for habitats located at and adjacent the proposed development. See Appendix D for Photo Log of the main habitats observed during the site assessment.

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Table 6.1: Summary of Habitats Identified at and Adjacent the Proposed Development Site

HABITAT CLASSIFICATION HIERARCHY		
LEVEL 1	LEVEL 2	LEVEL 3
B – Cultivated and built land	BL – Built Land	BL3 – Buildings and artificial surfaces
E – Exposed rock and disturbed ground	ED – Disturbed ground	ED2 – Spoil and bare ground
		ED3 – Recolonising bare ground
W – Woodland and scrub	WL – Linear woodland/scrub	WL1 - Hedgerows
	WS – Scrub/transitional woodland	WL2 - Treelines
		WS1 - Scrub
	WD – Highly modified/non-native woodland	WS2 – Immature Woodland
F - Freshwater	FS - Swamps	WD1 – Broadleaved woodland
	FW - Watercourses	FS1 – Reed and large sedge swamps
G – Grassland and marsh	GS - Semi-natural grassland	FW1 – Eroding/upland Rivers
		GS1 – Dry calcareous and neutral grassland
		GS2 – Dry meadows and grassy verges
	GA – Improved grassland	GS4 – Wet grassland
		GA2 – Amenity grassland (improved)

6.2.2 Fauna

Bird species noted during the site walkovers on the 25th February, 3rd March and 19th June 2025 include Jackdaw (*Coloeus monedula*), Rook (*Corvus frugilegus*), Blue Tit (*Cyanistes caeruleus*), Wren (*Troglodytes troglodytes*), Goldfinch (*Carduelis carduelis*), Dunnock (*Prunella modularis*), Goldcrest (*Regulus regulus*), Robin (*Erithacus rubecula*), Blackbird (*Turdus merula*), Greenfinch (*Chloris chloris*), Great Tit (*Parus major*), Buzzard (*Buteo buteo*), Magpie (*Pica pica*), Chiffchaff (*Phylloscopus collybita*), Bullfinch (*Pyrrhula pyrrhula*), Chaffinch (*Fringilla coelebs*), Snipe (*Gallinago gallinago*) and Blackcap (*Sylvia atricapilla*).

Snipe are red listed under the BoCCI classification (Stanbury & Lewis, 2021) while Goldcrest and Greenfinch are amber listed. None of the bird species recorded are listed under Annex I of the E.U. Birds Directive.

Common Frog were confirmed breeding onsite within the lands to the north of the watercourse while a dead Hedgehog was observed also to the north. Fox footprints were noted south of the watercourse. In addition to this, a local was observed walking dogs onsite. There was no evidence of any other protected mammal. Within the areas of the Kilbrogan watercourse that were accessible, no evidence of Otter (including holts, couches, scat or footprints) were observed onsite or adjacent the proposed development. Otter could potentially commute along or use the Kilbrogan for foraging.

Freshwater Pearl Mussel, a qualifying interest of the Bandon River SAC favour fast flowing watercourses with high oxygen content, low nutrient and a gravel substrate with no silt or algae. There are no records of this species in proximity of the proposed development and no evidence to suggest that they occur within the Kilbrogan. The Kilbrogan does not contain significant areas of silt or sand and therefore is unsuitable for Brook Lamprey.

The proposed development does not contain the following habitats associated with qualifying interests of the Courtmacsherry Bay SPA: areas of coastal habitats, large lakes, large rivers, moorland, peatlands, acidic grasslands, machair, mudflats, estuaries, areas of heather, arable crops, cliffs, shingle banks, significant areas of marshes or lagoons. The proposed development does contain areas of grassland, wet grassland that could potentially support some avifauna. This would however be limited given ongoing management (grazing by horses) and disturbances where locals walk dogs onsite. None of the QI bird species associated with this SPA were recorded onsite.

6.2.3 Soils

Mounds of soil were observed onsite through previous site assessments. The origin of such soils is unknown but is presumed to have been part of past construction works onsite. A soil assessment was undertaken by Ground Investigations Ireland (Ref: 15208-12-25) as per Cork County Council opinion to assess the soils onsite in terms of waste disposal outlets.

No materials containing asbestos was detected onsite. The report concludes that “*material sampled across the site if being considered a waste can be classified as non-hazardous. The most applicable waste category for each of the samples if being considered a waste to be disposed of at Landfill have been presented in Appendix 4.*”

Any materials containing invasive species will be treated and appropriately disposed of as per the accompanying Invasive Species Management Plan.

7.0 EUROPEAN SITES (NATURA 2000 SITES)

In assessing the zone of influence of this project upon European sites, the following factors must be considered:

- Potential impacts arising from the project;
- The location and nature of European sites;
- Pathways between the development and European sites.

There is no standard radius that can be used to select which European sites are to be analysed. This can only be determined by looking at the zone of influence (ZoI) of the project at hand.

Four Special Protection Area (SPA) sites occur within the zone of influence of the proposed development (refer to Table 7.1). Three Special Area of Conservation (SAC) sites occur within the zone of influence of the development site and are shown in the following table.

Maps detailing European sites within Zone of Influence (ZoI) of the proposed site are included as Appendix C below.

For this assessment, the sites considered to be within the zone of influence of the development site is the Courtmacsherry Bay SPA (Site Code: 004219) due to proximity to the proposed development.

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TABLE 7.1: NATURA 2000 SITES POTENTIAL WITHIN THE ZONE OF INFLUENCE			
SITE CODE	DISTANCE	SITE NAME	PATHWAY/COMMENTS
001230	10.7km SE	Courtmacsherry Estuary SAC	[1130] Estuaries [1140] Mudflats and sandflats not covered by seawater at low tide [1210] Annual vegetation of drift lines [1220] Perennial vegetation of stony banks [1310] Salicornia and other annuals colonising mud and sand [1330] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1410] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [2110] Embryonic shifting dunes [2120] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2130] Fixed coastal dunes with herbaceous vegetation (grey dunes) Absence of designated habitats within the boundary of the site. No direct hydrological connection. Screened out.
004219	10.7km SE	Courtmacsherry Bay SPA	[A003] Great Northern Diver (<i>Gavia immer</i>) [A048] Shelduck (<i>Tadorna tadorna</i>) [A069] Red-breasted Merganser (<i>Mergus serrator</i>) [A140] Golden Plover (<i>Pluvialis apricaria</i>) [A142] Lapwing (<i>Vanellus vanellus</i>) [A149] Dunlin (<i>Calidris alpina</i>) [A156] Black-tailed Godwit (<i>Limosa limosa</i>) [A157] Bar-tailed Godwit (<i>Limosa lapponica</i>) [A160] Curlew (<i>Numenius arquata</i>) [A179] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A182] Common Gull (<i>Larus canus</i>) [A855] Wigeon (<i>Mareca penelope</i>) [A999] Wetland and waterbirds No direct hydrological connection. Land/air pathway. Screened in for further assessment due to closer proximity.
000091	16.8km SW	Clonakilty Bay SPA	[A048] Shelduck (<i>Tadorna tadorna</i>) [A149] Dunlin (<i>Calidris alpina</i>) [A156] Black-tailed Godwit (<i>Limosa limosa</i>) [A160] Curlew (<i>Numenius arquata</i>) [A999] Wetland and waterbirds No direct hydrological connection. Land/air pathway. Significant terrestrial distance from site.

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004081	16.8km SW	Clonakilty Bay SAC	[1140] Mudflats and sandflats not covered by seawater at low tide [1210] Annual vegetation of drift lines [2110] Embryonic shifting dunes [2120] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2130] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2150] Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>)	No suitable associated habitats onsite. Screened out. Absence of designated habitats within the boundary of the site. No direct hydrological connection.
004021	19.8km SE	Old Head of Kinsale SPA	[A188] Kittiwake (<i>Rissa tridactyla</i>) [A199] Guillemot (<i>Uria algae</i>)	Screened out. No direct hydrological connection. Land/air pathway. Significant terrestrial distance from site. No suitable associated habitats onsite.
004124	21.6km SE	Sovereign Islands SPA	[A017] Cormorant (<i>Phalacrocorax carbo</i>)	Screened out. No direct hydrological connection. Land/air pathway. Significant terrestrial distance from site. No suitable associated habitats onsite. Screened out.

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002171	22km W	Bandon River SAC	[3260] Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation [91E0] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> [1029] <i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1096] <i>Lampetra planeri</i> (Brook Lamprey)	Absence of designated habitats within the boundary of the site. Located upstream on the River Bandon. No records of listed species downstream of site however, Salmonoids downstream. Further assessment is required. Screened in.
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7.1 COURTMACSHERRY BAY SPA (SITE CODE: 004219)

Courtmacsherry Bay SPA is located approximately 12 km south of Bandon and immediately east of the village of Timoleague in west Co. Cork. The site, which is largely estuarine in nature, consists of the drowned valley of the Argideen River which is now filled with sediments, resulting in extensive mudflats and areas of saltmarsh. The estuary of the Kilbrittain River in the north-east of the site holds an area of well-developed saltmarsh. The seaward boundary for the site stretches from Coolmain Point to Barry Point, and includes Coolmain Bay and Broadstrand Bay

The site is a Special protection Area (SPA) selected for the following species;

Table 7.2: Qualifying Interests

TABLE 7.2: QUALIFYING INTERESTS		
CODE	COMMON NAME	SCIENTIFIC NAME
A003	Great Northern Diver	<i>Gavia immer</i>
A048	Shelduck	<i>Tadorna tadorna</i>
A069	Red-breasted Merganser	<i>Mergus serrator</i>
A140	Golden Plover	<i>Pluvialis apricaria</i>
A142	Lapwing	<i>Vanellus vanellus</i>
A149	Dunlin	<i>Calidris alpina</i>
A156	Black-tailed Godwit	<i>Limosa limosa</i>
A157	Bar-tailed Godwit	<i>Limosa lapponica</i>
A160	Curlew	<i>Numenius arquata</i>
A179	Black-headed Gull	<i>Chroicocephalus ridibundus</i>
A182	Common Gull	<i>Larus canus</i>
A855	Wigeon	<i>Mareca penelope</i>
A999	Wetland and waterbirds	

An excerpt from the site's Site Synopsis (NPWS, 2010):

“Most of the mudflats are unvegetated, although in places Cord-grass (*Spartina anglica*) occurs. Saltmarsh has developed in a number of areas, the abundant species mostly being Sea Club-rush (*Scirpus maritimus*), Common Scurvygrass (*Cochlearia officinalis*), Sea Arrowgrass (*Triglochin maritima*), Sea Plantain (*Plantago maritima*), Thrift (*Armeria maritima*) and Saltmarsh Rush (*Juncus gerardi*).

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Great Northern Diver, Shelduck, Wigeon, Red-breasted Merganser, Golden Plover, Lapwing, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Curlew, Black-headed Gull and Common Gull. The E.U. Birds Directive pays particular attention to wetlands, and as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.

The site is of ornithological importance for the wintering waders and wildfowl that feed on the mudflats. It supports internationally important numbers of Black-tailed Godwit (506 - figures given here and below are mean peaks for the five winters in the period 1995/96 to 1999/00), as well as nationally important numbers of a further eleven species, i.e. Great Northern Diver

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(27), Shelduck (175), Wigeon (934), Red breasted Merganser (63), Golden Plover (5,759), Lapwing (2,713), Dunlin (1,353), Bar-tailed Godwit (182), Curlew (1,357), Black-headed Gull (2,727) and Common Gull (2,226). Other species which occur include Oystercatcher (610), Redshank (227) and Greenshank (26).

Courtmacsherry Bay SPA is an important site for wintering birds. It holds internationally important numbers of Black-tailed Godwit and nationally important numbers of a further eleven species, including three that are listed on Annex I of the E.U. Birds Directive, i.e. Great Northern Diver, Golden Plover and Bar-tailed Godwit.”

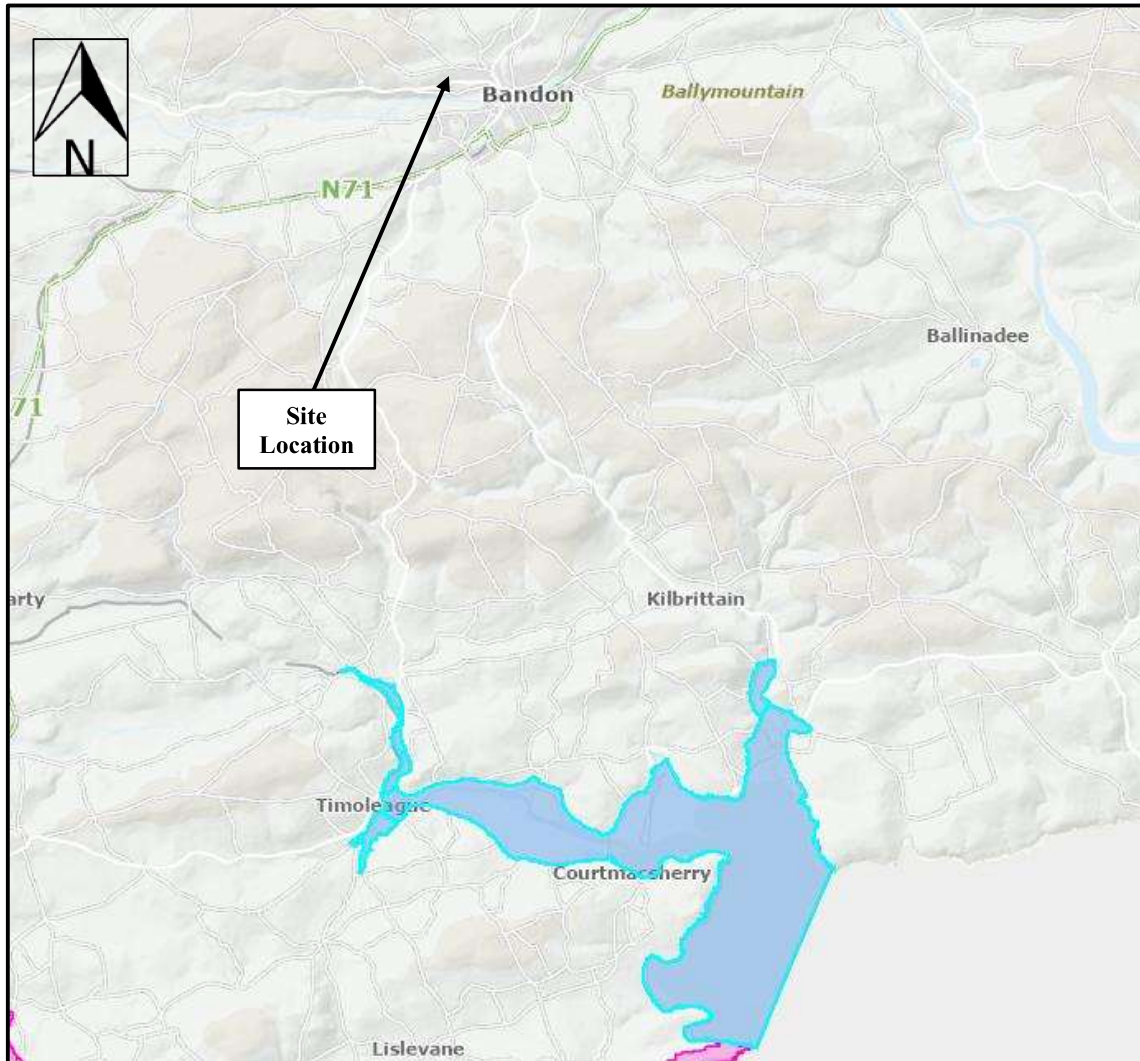


Figure 7.1: Courtmacsherry Bay SPA (NPWS Map Viewer)

Courtmacsherry Bay SPA Conservation Objectives

Site specific conservation objectives (SSCOs) for the qualifying interests of the Courtmacsherry Bay SPA are provided in the table below, where available from the NPWS document “*Conservation Objectives: Courtmacsherry Bay SPA 004219*” (NPWS, 2014).

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TABLE 7.3: COURTMACHERRY BAY SPA CONSERVATION OBJECTIVES

ATTRIBUTE	MEASURE	TARGET	SELECTED NOTES
[A003] Great Northern Diver <i>Gavia immer</i>			
Population trend	Percentage change	Long term population trend stable or increasing	-
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by this species, other than occurring from natural patterns of variation.	
[A048] Shelduck <i>tadorna tadorna</i>			
Population trend	Percentage change	Long term population trend stable or increasing	-
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by this species, other than occurring from natural patterns of variation.	
A050 Wigeon <i>Anas penelope</i>			
Population trend	Percentage change	Long term population trend stable or increasing	-
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by this species, other than occurring from natural patterns of variation.	-
A069 Red-breasted Merganser <i>Mergus serrator</i>			
Population trend	Percentage change	Long term population trend stable or increasing	-
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by this species, other than occurring from natural patterns of variation.	-
A140 Golden Plover <i>Pluvialis apricaria</i>			

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TABLE 7.3: COURTMACSHERRY BAY SPA CONSERVATION OBJECTIVES

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ATTRIBUTE	MEASURE	TARGET	SELECTED NOTES
Population trend	Percentage change	Long term population trend stable or increasing	-
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by this species, other than occurring from natural patterns of variation.	-
A142 Lapwing <i>Vanellus vanellus</i>			
Population trend	Percentage change	Long term population trend stable or increasing	-
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by this species, other than occurring from natural patterns of variation.	-
A149 Dunlin <i>Calidris alpina alpina</i>			
Population trend	Percentage change	Long term population trend stable or increasing	
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by this species, other than occurring from natural patterns of variation.	
A156 Black-tailed Godwit <i>Limosa limosa</i>			
Population trend	Percentage change	Long term population trend stable or increasing	-
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by this species, other than occurring from natural patterns of variation.	-
A157 Bar-tailed Godwit <i>Limosa lapponica</i>			

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TABLE 7.3: COURTMACSHERRY BAY SPA CONSERVATION OBJECTIVES

TABLE 7.3: COURTMACSHERRY BAY SPA CONSERVATION OBJECTIVES			
ATTRIBUTE	MEASURE	TARGET	SELECTED NOTES
Population trend	Percentage change	Long term population trend stable or increasing	-
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by this species, other than occurring from natural patterns of variation.	-
A160 Curlew <i>Numenius arquata</i>			
Population trend	Percentage change	Long term population trend stable or increasing	-
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by this species, other than occurring from natural patterns of variation.	-
A179 Black-headed Gull <i>Chroicocephalus ridibundus</i>			
Population trend	Percentage change	Long term population trend stable or increasing	-
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by this species, other than occurring from natural patterns of variation.	-
A182 Common Gull <i>Larus canus</i>			
Population trend	Percentage change	Long term population trend stable or increasing	-
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by this species, other than occurring from natural patterns of variation.	-
A999 Wetlands			

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TABLE 7.3: COURTMACSHERRY BAY SPA CONSERVATION OBJECTIVES

ATTRIBUTE	MEASURE	TARGET	SELECTED NOTES
Habitat area	Hectares	The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 1,299 hectares, other than that occurring from natural patterns of variation.	Estimated habitat is 1,299ha.

Courtmacsherry Bay SPA Conservation Status

According to the Habitat's Directive, favourable conservation status of a species is achieved when:

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

Table 7.4: Courtmacsherry Bay SPA – Conservation Status

CODE	SPECIAL CONSERVATION INTEREST	NATIONAL CONSERVATION STATUS*
A003	Great Northern Diver	Amber List
A048	Shelduck	Amber List
A069	Red-breasted Merganser	Amber List
A140	Golden Plover	Red List
A142	Lapwing	Red List
A149	Dunlin	Red List
A156	Black-tailed Godwit	Red List
A157	Bar-tailed Godwit	Red List
A160	Curlew	Red List
A179	Black-headed Gull	Amber List
A182	Common Gull	Amber List
A855	Wigeon	Amber List
A999	Wetland and waterbirds	

* *Birds of Conservation Concern in Ireland 2020-2026 (Gilbert et al, 2021) and Bird Atlas 2007 – 2011*

7.2 Bandon River SAC (Site Code: 002171)

The Bandon River SAC consists of relatively short adjoining stretches of the Bandon and Caha Rivers. These rivers flow in a southerly direction to the east of Dunmanway, Co. Cork. Towards the southern end of the site the Bandon River takes an easterly course.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

TABLE 7.5: ANNEX I HABITATS	
CODE	DESCRIPTION
3260	Floating River Vegetation
91E0	Alluvial Forests*

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TABLE 7.6: ANNEX II SPECIES		
CODE	COMMON NAME	SCIENTIFIC NAME
1029	Freshwater Pearl Mussel	<i>Margaritifera margaritifera</i>
1096	Brook Lamprey	<i>Lampetra planeri</i>

An excerpt from the site synopsis for Bandon River SAC (2013) is included below;

Wet broadleaved semi-natural woodland is found in an undisturbed area of braided river channels and islands below Dunmanway. The river channels are well defined and the islands appear solid. Canopy dominants are Hazel (*Corylus avellana*) and Sessile Oak (*Quercus petraea*), with scattered Downy Birch (*Betula pubescens*), Ash (*Fraxinus excelsior*), Rusty Willow (*Salix cinerea* subsp. *oleifolia*) and Alder (*Alnus glutinosa*). There is a very sparse understorey composed of Hawthorn (*Crataegus monogyna*), Holly (*Ilex aquifolium*) and saplings of Hazel and Sessile Oak. Epiphytes are abundant on trees, including species such as Ivy (*Hedera helix*), Honeysuckle (*Lonicera periclymenum*) and bryophytes such as *Isohetecium myosuroides*. The ground flora is dominated by Ramsons (*Allium ursinum*), Wood Anemone (*Anemone nemorosa*) and Ivy, along with Lesser Celandine (*Ranunculus ficaria*) and Irish Spurge (*Euphorbia hyberna*). Goldilocks Buttercup (*Ranunculus auricomus*), a very rare plant in Co. Cork, has been recorded from this woodland.

Floating river vegetation is found along the length of the river and is dominated by water-crowfoots (*Ranunculus* spp). Other aquatic plants found include Alternate Water-milfoil (*Myriophyllum alterniflorum*), Broad-leaved Pondweed (*Potamogeton natans*) and at least four water-starwort species (*Callitriche* spp.). Mosses present on rocks and attached to tree roots include *Fontinalis antipyretica* in slack flow areas, and *Fontinalis squamosa*, *Rhynchostegium riparioides* and *Amblystegium riparium* in moderate flows. The landward fringe of deep pools supports Yellow Water-lily (*Nuphar lutea*), Bogbean (*Menyanthes trifoliata*), Marsh-marigold (*Caltha palustris*), Water Mint (*Mentha aquatica*) and Fool's Water-cress (*Apium nodiflorum*). Shoreweed (*Littorella uniflora*) and Six-stamened Waterwort (*Elatine hexandra*) are two species of local importance which are found in the river. In moderate current flow below the Long Bridge, the larger stones are covered by the moss *Brachythecium rivulare* and the liverwort *Chiloscyphus polyanthos* var. *polyanthos*. Boulders covered in Nostoc algae are probably of local occurrence in Ireland. The liverwort *Riccardia chamaedryfolia* and the moss *Fissidens crassipes* found under the Long Bridge are considered to be rare in Ireland.

Heath in mosaic with wet grassland, exposed rock, scrub and improved grassland covers up to 30% of the site north of Long Bridge. Typical heath plants growing in association with the rocks are abundant Western Gorse (*Ulex gallii*), Heather (*Calluna vulgaris*), Bell Heather (*Erica cinerea*), Cross-leaved Heath (*Erica tetralix*), Tormentil (*Potentilla erecta*), Heath-grass (*Danthonia decumbens*), stonecrops (*Sedum* spp.), small amounts of St Patrick's-cabbage (*Saxifraga spathularis*) and many lichen species.

The river below Long Bridge is an important inland site in Cork for Mute Swan and approximately 20 individuals are present throughout the year along this stretch. Several hundred Snipe use the site during the winter. Other birds seen regularly within the site are Grey Heron, Cormorant and Mallard, while low numbers of Lapwing and Teal visit during the winter. The Kingfisher, listed under Annex I of the E.U. Birds Directive, breeds along the river. A population of Freshwater Pearl Mussel is found in the river. This species is listed on Annex II of the E.U. Habitats Directive. The river also supports populations of protected fish species,

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notably Brook Lamprey and Salmon (*Salmo salar*), both of which are also listed on Annex II of the E.U. Habitats Directive.

This site contains good examples of two habitats listed on Annex I of the E.U. Habitats Directive - alluvial forest and floating river vegetation - and supports populations of four Annex II species - Otter, Salmon, Brook Lamprey and Freshwater Pearl Mussel. The presence of a number of Red Data Book plant and animal species adds further interest to the site.



Figure 7.2: Bandon River SAC (NPWS Map Viewer)

The conservation objectives for the SAC site are to maintain or restore the favourable conservation condition of the qualifying interests. Site specific conservation objectives (SSCOs) for the qualifying interests of the Bandon River SAC are provided in the table below, where available from the NPWS document “Conservation Objectives: Bandon River SAC 002171” (NPWS, 2019).

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TABLE 7.7 CONSERVATION OBJECTIVES (2025): BANDON RIVER SAC				
ATTRIBUTE	MEASURE	TARGET	SELECTED NOTES	
[3260] Floating River Vegetation				
Habitat area	Occurrence	No decline, subject to natural processes.	Conservation objectives concentrate on the high conservation value sub-types of the habitat. Selection of Bandon River SAC used a broad interpretation and the habitat's full distribution and sub-types are not yet documented, but bryophyte assemblages are known to occur. Ranunculus sp. is excessively abundant in the Bandon and Cahra, and indicative of hydromorphological and water quality impacts. Note: rooted macrophytes should be absent or trace (<5%) in freshwater pearl mussel (Margaritifera margaritifera) habitat. The SAC covers part of the Bandon freshwater pearl mussel population. The freshwater pearl mussel (species code 1029) conservation objective takes precedence over the conservation objective for this habitat (habitat code 3260) in the SAC because the mussel requires environmental conditions closer to natural background levels. Excessive rooted macrophyte growth is significantly impacting the mussel habitat in the Bandon system.	
Habitat area	Kilometres	Area stable or increasing, subject to natural processes.		
Hydrological regime: river flow	Metres per second	Maintain/restore appropriate hydrological regimes.		
Hydrological regime: groundwater discharge	Metres per second	Maintain/restore appropriate hydrological regimes.		
Substratum composition: particle size range	Millimetres	Maintain/restore appropriate substratum particle size range, quantity and quality, subject to natural process.		
Water quality	Various	Restore appropriate water quality to support the natural structure and functioning of the habitat.		
Typical species	Occurrence	Typical species of the relevant habitat sub-type should be present and in good condition.		
Floodplain connectivity: area	Hectares	The area of active floodplain at and upstream of the habitat should be maintained/restored.		
Riparian habitat: area and condition	Hectares	Restore the area and condition of fringing habitats necessary to support the habitat and its sub-types.	Further study of Irish rivers is needed to interpret the broad description of habitat 3260 which covers from upland bryophyte/macroalgal dominated to lowland depositing rivers with pondweeds and starworts.	
			Riparian habitats (e.g. woodlands and wetlands) are integral to the structure and	

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TABLE 7.7 CONSERVATION OBJECTIVES (2025): BANDON RIVER SAC			
ATTRIBUTE	MEASURE	TARGET	SELECTED NOTES
			functioning of rivers, even where not part of a floodplain.
[91E0] Alluvial Forests			
Habitat area	Hectares	Area stable or increasing, subject to natural processes, at least 27.7ha for sites surveyed.	Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padus), <i>Alnion incanae</i> , <i>Salicion albae</i> * occur in an area of braided river channels and islands downstream of the Long Bridge in Bandon River SAC. Estimated area is 27.7 hectares.
Habitat distribution	Occurrence	No decline subject to natural processes.	
Woodland size	Hectares	Area stable or increasing. Where topographically possible, "large" woods at least 25ha in size and "small" woods at least 3ha in size.	
Woodland structure: cover and height	Percentage and metres	Total canopy cover at least 30%; median canopy height at least 7m; native shrub layer cover 10-75%; native herb/dwarf shrub layer cover at least 20% and height at least 20cm; bryophyte cover at least 4%.	
Woodland structure: community diversity and extent	Hectares	Maintain diversity and extent of community types.	
Woodland structure: natural regeneration	Seedling:sapling:pole ratio	Seedlings, saplings and pole age-classes of target species for 91E0* woodlands and other native tree species occur in adequate proportions to ensure survival of woodland canopy.	
Hydrological regime: Flooding depth/height of water table	Metres	Appropriate hydrological regime necessary for maintenance of alluvial vegetation.	
Woodland structure: dead wood	Number per hectare	At least 19 stems/ha of dead wood of at least 20cm diameter.	
Woodland structure: veteran trees	Number per hectare	No decline	
Woodland structure: indicators of local distinctiveness	Occurrence	No decline	
Vegetation composition: native tree cover	Percentage	No decline. Native tree cover not less than 95%	
Vegetation composition: typical species	Occurrence	At least 1 target species for 91E0* woodlands present; at least 6 positive indicator species for 91E0* woodlands present.	

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TABLE 7.7 CONSERVATION OBJECTIVES (2025): BANDON RIVER SAC			
ATTRIBUTE	MEASURE	TARGET	SELECTED NOTES
Vegetation composition: negative indicator species	Occurrence	Negative indicator species cover not greater than 10%; regeneration of negative indicator species absent.	The conservation objective applies to the Bandon freshwater pearl mussel population. The braided channels downstream of the Long Bridge are unique in Ireland having high mussel density in a wet woodland. Mussels are widespread in the Bandon catchment (from the upper Bandon downstream of Cullenagh Lake to above Inishannon and in the Caha, Blackwater and other smaller tributaries); however, only part of the population and habitat is within the SAC. Full baseline distribution and abundance mapping has not been completed in the Bandon catchment.
Vegetation composition: problematic native species	Percentage	Cover of common nettle (<i>Urtica dioica</i>) less than 75%.	
[1029] Freshwater Pearl Mussel			
Distribution	Kilometres	Restore distribution at 12.21km..	
Population size	Number of adult mussels	Restore population to at least 50,000 adult mussels.	The population in 2017 was estimated to be <14,332 adult mussels.
Population structure: recruitment	Percentage per size class	Restore to at least 20% of population no more than 65mm in length; and at least 5% of population no more than 30mm in length.	No juveniles were found in 10 search quadrats in 2017 and few young (smallest=36.8mm) (Ross, 2017).
Population structure: adult mortality. Nore	Percentage	No more than 5% decline from previous number of live adults counted; dead shells less than 1% of the adult population and scattered in distribution.	-
Suitable habitat: extent	Kilometres	Maintain habitat extent at 12.2km in the Bandon, and any additional stretches necessary for salmonoid spawning.	-
Suitable habitat: condition	Kilometres	Restore condition of suitable habitat	-

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TABLE 7.7 CONSERVATION OBJECTIVES (2025): BANDON RIVER SAC			
ATTRIBUTE	MEASURE	TARGET	SELECTED NOTES
Water quality: macroinvertebrates and phytobenthos (diatoms)	Ecological quality ratio (EQR)	Restore water quality- macroinvertebrates: EQR greater than 0.90 (Q4-5 or Q5); phytobenthos: EQR greater than 0.93	
Substratum quality: filamentous algae (macroalgae); macrophytes (rooted higher plants)	Percentage	Restore substratum quality- filamentous algae: absent or trace (less than 5%); macrophytes: absent or trace (less than 5%).	-
Substratum quality: sediment	Occurrence	Restore substratum quality- stable cobble and gravel substrate with very little fine material; no artificially elevated levels of fine sediment.	-
Substratum quality: oxygen availability	Redox potential	Restore to no more than 20% decline from water column to 5cm depth in substrate.	-
Hydrological regime: flow variability	Metres per second	Restore appropriate hydrological regime.	-
Host Fish	Number	Maintain sufficient juvenile salmonids to host glochidial larvae.	-
Fringing habitat: area and condition	Hectares	Restore the area and condition of fringing habitats necessary to support the population.	-
[1096] Brook Lamprey			
Distribution	% of river accessible	Access to all water courses down to first order streams.	Artificial barriers can block lampreys' upstream migration, thereby limiting species to lower stretches and restricting access to spawning areas. It is impossible to distinguish between brook and river lamprey juveniles in the field. Juveniles burrow in areas of fine sediment in still water. Lampreys spawn in clean gravels.
Population structure of juveniles	Number of age/size groups	At least three age/size groups of brook/river lamprey present.	
Juvenile density in fine sediment	Juveniles/m ²	Mean catchment juvenile density of brook/river lamprey at least 2/m ² .	
Extent and distribution of spawning habitat	m ² and occurrence	No decline in extent and distribution of spawning beds.	
Availability of juvenile habitat	Number of positive sites in 2nd order channels (and greater), downstream of spawning areas	More than 50% of sample sites positive.	

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Bandon River SAC Conservation Status

According to the Habitat's Directive, favourable conservation status of a habitat is achieved when:

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

According to the Habitat's Directive, favourable conservation status of a species is achieved when:

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

Table 7.8: The conservation statuses for the qualifying interests of the Bandon River SAC site are outlined below.

CODE	QUALIFYING INTEREST	NATIONAL CONSERVATION STATUS*
3260	Floating River Vegetation	Inadequate
91E0	Alluvial Forests	Bad
1029	Freshwater Pearl Mussel	Bad
1096	Brook Lamprey	Favourable

**Sourced from the Status of EU Protected Habitats and Species in Ireland (NPWS, 2025)*

8.0 ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS (LSE)

8.1 DISTURBANCE TO PROTECTED HABITATS AND SPECIES

The proposed development does not directly impinge on any part of a European site, and as such would not be expected to have any in-situ effects upon a protected site through loss or destruction of habitat, fragmentation of habitat, disturbance of habitat or direct reduction in species density. The proposed development is located approximately 10.7km from the Courtmacsherry Bay SPA and 22km from the Bandon River Bay SAC (Site Code: 002171). There is no direct downstream hydrological connection between the proposed development and the Courtmacsherry Bay SPA however, the Bandon River SAC is located upstream of the proposed development on the Bandon River. Therefore, ex-situ effects must be considered.

The proposed development site does not contain the habitats for which the Bandon River SAC has been designated.

Some areas of woodland consisting of wet willow and broadleaved woodland occur within the development site boundary. The broadleaved woodland has no affinity to any designated site. Wet willow-alder-ash woodland (WN6) type has links to Alluvial forests [91E0] however, the scrub/transitional woodland that occurs onsite is species poor and absent of the positive indicators for the annexed habitat. According to O'Neill & Barron (2013), to be included within this habitat type, there should be at least 1 target species and > 6 positive indicator species. The closest mapped example of Alluvial woodland is located approximately 23.9km to the west of the site. There will be no construction works within this habitat or within the boundary of the SAC, therefore no direct significant effects are predicted. Given the upstream hydrological connection and absence of water quality attributes other than maintaining the hydrological regime, the potential for indirect significant effects is not predicted.

According to the Conservation Objectives (CO) report for the Bandon River SAC, the full distribution of the protected habitat Watercourses of plain to montane levels [3260], is not documented. The report notes that *Ranunculus* species are “*excessively abundant in the Bandon and Caha*” which are “*indicative of water quality impacts*.” Of the areas accessible along the Kilbrogan, there was no evidence of this habitat occurring with no records of it onsite. Therefore, the potential for direct significant effects to occur is not likely. The Conservation Objectives report includes water quality attributes and notes that “*small groundwater contributions can significantly alter hydrochemistry*.” As noted within section 8.3, groundwater impacts are not expected. Water quality for the Freshwater Pearl Mussel takes precedence over this habitat.

The CO report notes that Freshwater Pearl Mussel (*Margaritifera margaritifera*) populations are widespread within the Bandon catchment. The release of sediments could have an impact on filter feeding freshwater species such as Freshwater Pearl Mussel [1029]. In addition, changes to the hydrological conditions or physical alteration of riverbeds has the potential to cause significant effects to this species. Freshwater Pearl Mussel are at risk of morphological and hydrological changes caused by sedimentation and enrichment. Riverbeds that have become clogged with silt and vegetation are unsuitable for the survival of young mussels (NPWS, 2025c). There are no records of this species within the boundary of the proposed development or downstream of the site. The closest mapped populations of Pearl Mussel are located a significant distance upstream on the River Bandon. Therefore, direct significant

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effects are not anticipated. The proposed development has the potential to cause indirect significant effects due to the release of sediments during the proposed construction phase as the larvae use a temporary salmonid host such as Atlantic Salmon.

No suitable habitat for Brook Lamprey (*Lampetra planeri*) [1096] occurs within the areas of the proposed development that were accessible. There are also no known records of this species onsite or downstream and therefore it is highly unlikely to occur within the Kilbrogan. A deterioration in water quality has the potential to cause indirect significant effects should this species occur downstream of the site.

Developments can have a significant impact on avifauna due to a deterioration in water quality, direct loss of habitats or fragmentation of habitats, disturbance due to increased human presence, noise, dust and lighting.

The Courtmacsherry Bay SPA is designated for a range of waterbirds mostly associated with tidal and coastal habitats. According to the Conservation Objectives Supporting Document “*The wetland habitats contained within Courtmacsherry Bay SPA are identified of conservation importance for non-breeding (wintering) migratory waterbirds. Therefore the wetland habitats are considered to be an additional Special Conservation Interest.*” There are no lagoons, mudflats, coastal habitat, estuaries, lakes or large rivers that would support a majority of the wintering populations potential foraging habitat within the development site. Curlew and Golden Plover forage on invertebrates in a variety of habitats including grasslands. There is little information regarding the foraging distances of Golden Plover and Curlew during the winter season however, known foraging distances during the breeding period include a 3km core range and 11km maximum range for Golden Plover and 1km core range, 2km maximum range for Curlew (Scottish Natural Heritage, 2016). A record for Lapwing in 1984 was noted within the 10km NBDC square W45. In addition, Black-tailed Godwit, Curlew, Black-headed Gull and Wigeon were recorded within the 10km square. Only Curlew was recorded within the 1km square W4855 in which the development site is located however, no records of these specifically onsite. Given that the proposed development is located approximately 10.7km from the Courtmacsherry Bay SPA, it is unlikely that the proposed development would reduce significant areas of foraging habitat for these species. The avifauna of this SPA would find more suitable habitat within and in proximity of the SPA boundaries. Therefore, direct significant effects due to loss of habitat and disturbance are not predicted. In addition, no indirect significant effects due to a deterioration in water quality is expected given the absence of a direct hydrological connection.

It is therefore considered that the proposed development would not have the potential to have likely significant effects on these species or on the conservation status and objectives of the Courtmacsherry Bay SPA.

Artificial lighting during the construction phase has the potential to result in both direct and indirect impacts on fauna. However, as construction works are not expected to occur outside of standard daylight hours and given the distance to the SPA and SAC, the risk of likely significant effects on qualifying interests (QI's) is considered to be negligible. Lighting during the operational phase will be directed to where it is required which would be away from the watercourse and sensitive receptors. Lighting will be of low level (<8m). Additional impacts to local fauna are assessed within the accompanying EcIA (Document Ref: PE_EcIA_10432).

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The potential disturbance on protected species due to noise during the operational phase would not be considered significant, given the nature and scale of the proposed development (residential) and the distances to European sites (approximately 10.7km). Given the site's location within an urban area, it is likely that any fauna in the area would be accustomed to an urban noise environment. While there would be increased noise emissions during the construction phase of the development, these would not be considered to pose a significant risk to the QI's owing to the transient nature of construction works, the scale of proposed works and the distances between the development site and designated sites (approximately 10.7km).

The potential disturbance on protected habitats and species of the SAC or SPA due to dust during the construction phase would not be considered significant, given the transient nature of construction works, the scale of the proposed development and distances. It is considered that the operational phase of the development would not have the potential to have any likely significant effects upon designated sites due to a deterioration in air quality given the proposed low air emission heating system, air to water heat pumps.

The landscape plan proposes to incorporate native and non-native non-invasive species within its design. The proposed development aims to retain a majority of the existing boundary hedgerows and trees (Refer to Landscape Design Rationale) while incorporating new areas of grassland and woodland. In addition, the riparian zone along the Kilbrogan watercourse will be maintained to protect the integrity of the watercourse with a 10m buffer proposed either side. The removal works will adhere to legislation in terms of the birds nesting season.

The proposed development is not directly connected to the Courtmacsherry Bay SPA or necessary for the management of this Natura 2000 sites. It is considered that the proposed development would not result in any significant risk either directly or indirectly to the protected species of the Courtmacsherry Bay SPA due to habitat fragmentation or loss, disturbance or reduction in species density. While the Bandon River SAC is located a significant distance upstream of the site, there is potential for indirect significant effects to occur due to a deterioration in water quality during the construction phase. While the risk is low, the precautionary principle will be applied.

8.2 INVASIVE SPECIES

Under Regulation 49(2) of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011) as Amended 2015 (S.I. No. 355 of 2015), save in accordance with a licence granted under paragraph (7), any person who plants, disperses, allows or causes to disperse, spreads or otherwise causes to grow in any place specified in relation to any plant which is included in Part 1 of the Third Schedule shall be guilty of an offence. Materials containing invasive species such as Japanese Knotweed are considered "controlled waste", and, as such, there are legal restrictions on their handling and disposal. Under Regulation 49(7) of the European Communities (Birds and Natural Habitats) Regulations 2011, it is a legal requirement to obtain a license to move "vector materials" listed in the Third Schedule, Part 3.

Table 8.1: National Biodiversity Data Centre records of high impact third schedule invasive species within 10km square (Tetrad-W45) of the proposed development.

THIRD SCHEDULE INVASIVE FLORA	
Giant Knotweed (<i>Fallopia sachalinensis</i>),	Water Fern (<i>Azolla filiculoides</i>)
Three-cornered Garlic (<i>Allium triquetrum</i>)	Rhododendron ponticum
Japanese Knotweed (<i>Fallopia japonica</i>),	Himalayan Balsam (<i>Impatiens glandulifera</i>)
<i>Fallopia japonica x sachalinensis</i> = <i>F. x bohemica</i>	Himalayan Knotweed (<i>Persicaria wallichii</i>)

The spread of invasive plant and animal species can negatively impact on the conservation objectives of certain supporting habitats associated with qualifying interests of SPA's.

Spanish Bluebell, Bohemian Knotweed, Rhododendron, Three-cornered Garlic and Red Water Fern were recorded within and adjacent the red line boundary of the site. There is no potential for these species to spread to any designated SAC or SPA given the absence of a direct hydrological connection or ecological pathway. A site-specific Invasive Species Management Plan has been prepared by INVAS Biosecurity to accompany the application and to prevent the spread of these invasives within the site boundary.

Any exported materials containing these species will be treated as a hazardous waste and directed to a licensed waste facility.

The risk of invasive species being introduced onto the site during the construction and operational phase of the project is considered to be low. The landscape plan includes a mix of native and non-native non-invasive plant species within its design. There will be no importation of soils or materials with the potential to contain invasive species.

Therefore, it is considered that there would be no significant risk to protected habitats and species as a result of invasive species from the site.

8.3 POTENTIAL IMPACTS ON WATER QUALITY

The proposed development is located within the Bandon sub-catchment (Bandon_SC_050) which is part of the Bandon-Ilen Catchment (ID_20). The closest mapped watercourse to the proposed development site is the Kilbrogan which flows through the development site.

There is no direct hydrological connection between the proposed development and the Courtmacsherry Bay SPA or any other Natura 2000 site. The Bandon River SAC is located upstream of the site on the Bandon River.

During the construction phase of projects, a deterioration in water quality can arise through the release of suspended solids during soil disturbance works, the release of uncured concrete and the release of hydrocarbons (fuels and oils). The proposed development will require works within the Kilbrogan watercourse to facilitate the proposed surface and foul water drainage network. This includes the installation of two new headwalls within the bank of the watercourse for surface water discharge. In addition, a new foul water connection will be installed beneath

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the Kilbrogan to connect to the existing foul water network east of the site. This will require works within the bed of the watercourse to lay the pipe. A new vehicular bridge will be constructed across the Kilbrogan to provide access to the north of the site. Furthermore, given the steepness of the proposed development, there is potential for suspended solids to become entrained in surface water run-off if undertaken during periods of high rainfall. Such works have the potential to cause a deterioration in water quality via the release of suspended solids, hydrocarbons and other pollutants that could have significant effects on protected species or habitats of the Bandon Bay SAC. While the risks are considered low, the precautionary principle should be applied for the construction phase.

During the operational phase, surface water will be directed via the new proposed internal drainage network and will be discharged to ground via soakaway and attenuation tanks. Overflow will discharge to the Kilbrogan watercourse. Prior to leaving the site, surface water will pass through a petrol interceptor.

Domestic foul water will be directed to the existing foul water network and will be treated at Bandon WWTP.

The majority of the site is located outside of Flood zones A and B with flooding mostly confined to the riparian zone. The report notes that *“The development has no impact on flood extents, and we can confirm that there is no increase to flood risk as a result of the proposed development. The two proposed site entrances are within Flood Zone C under all conditions. Risk associated with culvert blockage was considered through a series of blockage scenarios which confirm site entrances remain in Flood Zone C, however, flooding on L2033 and Kilbrogan Road poses an indirect residual risk to site access. Routine monitoring of these culverts for accumulation of debris should be implemented to mitigate the risk arising from blockage.”* SuDS features such as permeable paving, tree pits, bio-retention raingardens and swales will manage surface water and potential pluvial flood risk at the site during the operational phase. Therefore, the proposed development is not expected to have the potential to alter the hydrological regime downstream of the site during the operational phase. Given the time of the year for proposed construction works, there is potential for a deterioration in water quality to occur via the release of suspended solids and pollutants during the construction phase however, a deterioration in groundwater quality is not expected. In terms of ground water, there will be no re-fuelling or storage of hydrocarbons/chemicals onsite. In addition, there will be limited deep excavation works. According to the FRA, *“Permeability generally decreases rapidly with depth and due to the poor productivity, interaction between surface water and groundwater is unlikely to be significant.”* Therefore, it is considered that the proposed development would not have any likely significant effects on ground water hydrologically connected to a Natura 2000.

For the reasons outlined above, there is potential for indirect significant effects to occur due to a deterioration in water quality during the construction phase. Therefore, mitigation measures will be required during the construction phase of this development.

8.4 SCREENING CONCLUSION

In order for an effect to occur, there must be a pathway between the source and the receptor (the SAC / SPA). Where a pathway does not exist, an impact cannot occur.

In the absence of mitigation measures, the proposed development has the potential to have significant effects upon the qualifying interests / special conservation interests of the Bandon River SAC (Site Code: 002171) due to a potential deterioration in water quality during the construction phase. Therefore, a Natura Impact Statement is required.

9.0 ASSESSMENT OF ADVERSE EFFECTS: STAGE 2 APPROPRIATE ASSESSMENT

Describe the significant effects, if any, on the relevant European site which have occurred, which are occurring or which can reasonably be expected to occur as a result of the project or plan (alone or in combination).

The proposed development has the potential to impact upon the qualifying interests of the Courtmacsherry Bay SPA and the Bandon River SAC due to a potential deterioration in water quality during the construction phase phases.

During the in-stream works and soil disturbing works, there is potential for water quality deterioration through the release of suspended solids during soil disturbance works. Suspended solids could become entrained in surface water run-off and could affect aquatic qualifying interests / special conservation interests through deposition. Nutrients can be bound in suspended solids, therefore, a significant increase in suspended solids can result in excessive eutrophication, leading to the deoxygenation of waters and subsequent asphyxia of aquatic species. An increase in sediments has the potential to impact upon fish species by damaging gravel beds required for spawning, smothering fish eggs and in extreme cases, by interfering with the gills of fish. An increase in suspended solids also has the potential to reduce water clarity, which can impact the light penetration of water and may also affect certain behaviours of aquatic fauna such as foraging success.

A potential source of chemical contamination would be from the release of hydrocarbons (oils, fuels) from construction plant and equipment during the proposed in-stream works. Hydrocarbons can affect water quality, potentially resulting in toxic conditions for aquatic flora and fauna. Oil films on the water surface can disrupt oxygen diffusion from the atmosphere, resulting in de-oxygen of waters.

Another potential source of contamination would be the release of uncured concrete. In the event of uncured concrete entering a waterbody, the pH would be altered locally, potentially leading to the death of aquatic flora and fauna and an alteration to the waterbody substrate.

The tables below briefly outline the occurrence of the qualifying interests of the Courtmacsherry Bay SPA and the Bandon River SAC relation to the proposed development site, taking cognisance of the NPWS “*Conservation Objectives: Courtmacsherry Bay SPA 004219*” and “*Conservation Objectives: Bandon River SAC 002171*” in addition to Volumes 1, 2 and 3 of the 2019 NPWS Reports, “*The Status of EU Protected Habitats and Species in Ireland*”.

The following tables also outline which of the qualifying interests and special conservation interests may be impacted upon by a potential deterioration in water quality from the proposed development.

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TABLE 9.1: SUMMARY OF POTENTIAL IMPACTS TO QI'S OF THE COURTMACSHERRY BAY SPA		
QUALIFYING INTEREST	OCCURRENCE / ASSESSMENT	POTENTIAL FOR IMPACTS
[A003] Great Northern Diver (<i>Gavia immer</i>)	Winter visitor to coastal areas. Its diet consists mainly of fish but also crustaceans, molluscs, insects, annelids and amphibians. This species does not breed in Ireland. Winters along the coasts in bays, inlets and sandy shores. Water quality deterioration could have an indirect effect on this species. There is no direct hydrological connection between the proposed development and this SPA.	No
[A048] Shelduck (<i>Tadorna tadorna</i>)	Wintering species frequents mudflats and muddy or sandy estuaries in coastal regions. Its diet consists predominantly of salt-water molluscs, aquatic invertebrates, small fish, fish spawn and plant material. Water quality deterioration could have an indirect effect on this species. There is no direct hydrological connection between the proposed development and this SPA.	
[A855] Wigeon (<i>Anas Penelope</i>)	Wintering species shows a preference for coastal saltmarshes, freshwater, brackish and saline lagoons, flooded grasslands, estuaries, intertidal mudflats and other sheltered marine habitats. Its diet is leaves, seeds, stems and root bulbs of pond weeds and fine grasses. Water quality deterioration could have an indirect effect on this species. There is no direct hydrological connection between the proposed development and this SPA.	
[A069] Red-breasted Merganser (<i>Mergus serrator</i>)	Wintering species at sea, frequenting both inshore and offshore waters, estuaries, bays and brackish lagoons. Its diet consists predominantly of small, shoaling marine or freshwater fish, as well as small amounts of plant material and aquatic invertebrates such as crustaceans (e.g. shrimps and crayfish), worms and insects. Water quality deterioration could have an indirect effect on this species. There is no direct hydrological connection between the proposed development and this SPA.	
[A140] Golden Plover (<i>Pluvialis apricaria</i>)	Wintering species frequents freshwater wetlands, moist grasslands, pastures, agricultural land and highland steppe also foraging on tidal shores, coastal rocky outcrops, intertidal flats and saltmarshes, shallow bays and estuaries. Its diet consists predominantly of insects, crustaceans and some plant material. Water quality deterioration could have an indirect effect on this species. There is no direct hydrological connection between the proposed development and this SPA.	

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[A142] Lapwing (<i>Vanellus vanellus</i>)	Wintering species found on riverbanks, lake shores, fresh and saline marshes, drainage ditches, estuaries and mudflats. Its diet consists of adult and larval insects, spiders, snails, earthworms, frogs. Water quality deterioration could have an indirect effect on this species. There is no direct hydrological connection between the proposed development and this SPA.
[A149] Dunlin (<i>Calidris alpina</i>)	Wintering species mainly prefer estuarine mudflats, but also frequent a wide variety of freshwater and brackish wetlands both coastal and inland, including lagoons, muddy freshwater shores, tidal rivers and sandy coasts. Its diet is consuming mostly polychaete worms and small gastropods, as well as insects, crustaceans, bivalves, plant matter and occasionally small fish. Water quality deterioration could have an indirect effect on this species. There is no direct hydrological connection between the proposed development and this SPA.
[A156] Black-tailed Godwit (<i>Limosa limosa</i>)	Wintering species in sheltered estuaries and lagoons with large intertidal mudflats, sandy beaches, saltmarshes and salt-flats. Its diet consists of adult and larval insects (especially beetles), annelid and polychaete worms, molluscs, ragworms, crustaceans, spiders, fish eggs, and the spawn and tadpoles of frogs. Water quality deterioration could have an indirect effect on this species. There is no direct hydrological connection between the proposed development and this SPA.
[A157] Bar-tailed Godwit (<i>Limosa lapponica</i>)	Wintering species it is more common in intertidal areas along muddy coastlines, estuaries, inlets. Its diet consists in intertidal areas of annelids (e.g. <i>Nereis spp.</i> and <i>Arenicola spp.</i>), bivalves and crustaceans, although it will also take crane fly larvae and earthworms on grasslands and occasionally larval amphibians (tadpoles) and small fish. Water quality deterioration could have an indirect effect on this species. There is no direct hydrological connection between the proposed development and this SPA.
[A160] Curlew (<i>Numenius arquata</i>)	Wintering species frequents muddy coasts, bays and estuaries, tidal mudflats and sandflats, rocky and sandy beaches with many pools, saltmarshes, coastal meadows and pasture and muddy shores of coastal lagoons, inland lakes and rivers. It also utilises wet grassland and arable fields during migration. Its diet consists chiefly of annelid worms and terrestrial insects especially during the summer, although it will also take crustaceans, molluscs, polychaete worms, spiders, berries and seeds, as well as occasionally small fish, amphibians, lizards, young birds and small rodents. Water quality deterioration could have an indirect effect on this species. There is no direct hydrological connection between the proposed development and this SPA.
[A179] Black-headed Gull (<i>Chroicocephalus ridibundus</i>)	Wintering species is most common in coastal habitats and tidal inshore waters, showing a preference for inlets or estuaries with sandy or muddy beaches, and generally avoiding rocky or exposed coastlines. It may also occur inland during this season, frequenting ploughed fields, moist grasslands, urban parks, sewage farms, refuse tips, reservoirs, ponds and ornamental waters. Its diet consists predominantly of aquatic and terrestrial insects, earthworms and marine invertebrates (e.g. molluscs, crustaceans and marine worms) although it may also take fish (usually dead or sick), rodents, and

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	agricultural grain. During the non-breeding season, the species may rely heavily on artificial food sources provided by man, especially in Western Europe and often scavenges from refuse tips during this period. Water quality deterioration could have an indirect effect on this species. There is no direct hydrological connection between the proposed development and this SPA.	
[A182] Common Gull (<i>Larus canus</i>)	Winter visitor along Irish coasts. Feeds on invertebrates, fish and aquatic insects. It nests on the ground on cliffs, and shingle banks. Water quality deterioration could have an indirect effect on this species. There is no direct hydrological connection between the proposed development and this SPA.	

TABLE 9.2: SUMMARY OF POTENTIAL IMPACTS TO QI'S OF THE BANDON RIVER SAC		
QUALIFYING INTEREST	LOCATION IN THE NATURA 2000 SITE RELATIVE TO APPLICATION SITE	POTENTIAL FOR IMPACTS
[3260] Floating River Vegetation	The proposed development site is located within the current distribution and current range of this qualifying interest (NPWS, 2025b). The full distribution of this habitat is unknown and could occur downstream of the site. The Conservation Objectives for this qualifying interest include water quality attributes. This habitat is unlikely to occur onsite, therefore no direct adverse effects are predicted. Indirect adverse effects can occur due to a deterioration in water quality.	Yes
[91E0] Alluvial Forests*	The proposed development is located outside the current distribution and current range of this qualifying interest (NPWS, 2025b). This habitat does not occur within the boundary of the site, therefore, no direct adverse effects are predicted. According to the SAC Conservation Objectives report, alluvial forests are located approximately 23.9km to the west of the development site. Given the significant distance, a potential deterioration in water quality would not be anticipated to significantly affect this qualifying interest. Therefore, there is no potential for indirect adverse effects on this qualifying interest.	No
[1029] Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>)	Freshwater pearl mussels (<i>Margaritifera margaritifera</i>) are long-lived, bivalve molluscs found in clean, fast-flowing rivers. <i>M. margaritifera</i> is widespread in Ireland, however, the population has been in decline for a long time, with the current decline attributed to a combination of hydrological and morphological changes, sedimentation and enrichment of its habitat (NPWS, 2025a). The species has an unusual life cycle. Eggs develop into the larval stage (glochidia), which are brooded in the female gills before being released into open water. A small number are inhaled by passing salmonid fish, which act as the mussels' temporary hosts. Once mature enough to exist independently, they fall off their hosts and bury into gravel where they filter feed (Moorkens, 2000).	Yes

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TABLE 9.2: SUMMARY OF POTENTIAL IMPACTS TO QI'S OF THE BANDON RIVER SAC		
QUALIFYING INTEREST	LOCATION IN THE NATURA 2000 SITE RELATIVE TO APPLICATION SITE	POTENTIAL FOR IMPACTS
	Freshwater Pearl Mussel are sensitive to sedimentation and nutrient enrichment. Furthermore, as the larval stages rely on salmonid fish hosts, any potential impact on salmonid fish can have an impact upon the Pearl Mussel. The proposed development is not located within the current distribution and current range of this qualifying interest (NPWS, 2025c). There are no mapped records of this species within the development site or downstream, but they are known to occur within the Bandon River SAC 22km to the west. Therefore, a direct adverse effect on this species is not predicted. A deterioration in water quality could impact on Salmonid fish thereby indirectly impacting on Freshwater Pearl Mussel. The release of sediments also has the potential to have an indirect adverse effect on Salmonoids.	
[1096] Brook Lamprey (<i>Lampetra planeri</i>)	The brook lamprey is the smallest of the three lampreys native to Ireland and is the only species that is non-parasitic and spends all its life in freshwater. Adults spawn in spring, excavating shallow nests in gravel areas of reduced flow. Adult fish die after spawning. After hatching, larvae drift/swim downstream to areas with a fine silt composition. They burrow into this bed material and live as filter feeders for years before transforming into young adult fish. The young adults overwinter before migrating short distances upstream to gravelled areas where they spawn. The proposed development is located within the current known distribution, current range and favourable reference range of brook lamprey (NPWS, 2019c). Lamprey species have been recorded throughout the Barrow Catchment, upstream of the proposed activity area (IFI, 2020). The closest NBDC record for Lamprey is at Saint Mullins, located approximately 5km to the north-west. There are no known records of Lamprey within the Kilbrogan River or downstream of the proposed works area. The SAC Conservation Objectives report notes that diffuse source pollution maybe having localised impacts on populations of <i>L. fluviatilis</i>. Water quality impacts from runoff have the potential to impact on the populations of both species. This species is unlikely to occur within the Kilbrogan watercourse, therefore no direct adverse effects are predicted. Indirect adverse effects could occur due to a potential deterioration in water quality during the construction phase.	Yes

Bandon River SAC Conservation Objectives

The relevant site-specific conservation objectives for the qualifying interests which have been identified as being potentially impacted upon by the development are outlined below.

Bandon River SAC

Freshwater Pearl Mussel (*Margaritifera margaritifera*)

Restore substratum quality, stable cobble and gravel substrate with very little fine material. No artificially elevated levels of fine sediment. Restore water quality for macroinvertebrates to EQR greater than 0.90 (Q4-5 or Q5) for phytobenthos to EQR greater than 0.93. A potential deterioration in water quality has the potential to affect fish (Salmon) populations therefore, an indirect adverse effect may occur.

Brook Lamprey (*Lampetra planeri*)

No water quality objectives set. There is potential for an indirect adverse effect due to a deterioration in water quality.

Floating River Vegetation [3260]

Restore appropriate water quality to support the natural structure and functioning of the habitat. The release of suspended solids and a deterioration in water quality could cause an indirect adverse effect on this habitat.

10.0 MITIGATION MEASURES

This assessment has determined that the proposed development has the potential to impact upon the Bandon River SAC due to a potential deterioration in water quality during the construction phase. As discussed in Section 8, it is considered that the proposed development has the potential to impact upon the following qualifying interests / special conservation interests of the SAC:

- [3260] Floating River Vegetation
- [1029] Freshwater Pearl Mussel
- [1096] Brook Lamprey

10.1 WATER QUALITY MITIGATION MEASURES

The risk of the proposed development causing adverse impacts to species of the SAC due to a deterioration in water quality during the construction phase of this proposed development is considered low. However, given the proposed in-stream works including the installation of three pre-cast concrete headwalls, works within the banks of the watercourse and riverbed, the construction of two new bridges, removal of a culvert and slope of the site, there is potential for a deterioration in water quality to occur. Measures that will be implemented to ensure that there will be no adverse impacts to the listed habitats or species, as listed above, of the Bandon River SAC due to a potential deterioration in water quality during the construction phase include the following.

Mitigation measures prior to commencement of the proposed development

- Construction works will not be undertaken during periods of heavy rainfall, high river flows or orange/yellow/red rainfall warnings issued by Met Eireann;
- Construction works along the banks of the Kilbrogan watercourse will only be undertaken during the period 1st July to 30th September for the protection of aquatic fauna downstream;
- The contractor will schedule the proposed works during a period of dry weather;
- A toolbox talk will be given at the proposed works area by an ecologist to all relevant personnel on the monitoring and mitigation measure requirements to be implemented prior to commencement of the construction phase;
- The contractor will maintain effective communication through the toolbox talk with the operating foremen to ensure there will be no risk of water pollution and all measures are enacted during the proposed works;
- The contractor will effectively communicate the tasks to be completed prior to commencement of the proposed works through the toolbox talk;
- Records of all visual inspections are to be kept on file and available for review by relevant authorities;
- An Ecological Clerk of Works (ECoW) should be commissioned to supervise the construction phase of this development. The ecologist will undertake a preliminary survey of the development to confirm no protected species are located within the proposed in-stream works area. Should a protected species be encountered, the ECoW will liaise with Inland Fisheries Ireland (IFI) and the National Parks & Wildlife Service (NPWS) to establish appropriate measures and licenses required;
- Sand used within sandbags will be washed prior to any proposed works and will be free of any contaminants;
- A buffer zone of 10m will be maintained either side of the Kilbrogan watercourse from the top of the banks where no construction works other than those outlined will take place. This buffer zone will be clearly marked to prevent machinery access where not permitted.

BIOSECURITY MEASURES

During all phases of the proposed development, biosecurity protocols must be followed to ensure non-native invasive species and diseases such as crayfish plague are not introduced to the proposed development area and to prevent the spread of invasive species;

- All personnel must implement the 'Clean – Check – Dry' principles, ensuring that all personal protective equipment (PPE), and equipment and machinery is clean and dry upon arrival at the proposed activity area. This will include the power washing and steam cleaning of equipment and machinery with water >65°C prior to arrival onsite;
- Upon completion of the proposed works, the contractor must check and clean all PPE, contact with the water for evidence of attached plant or animal material, or adherent mud or debris. This should be done before leaving the proposed activity area. Remove any attached or adherent material (vegetation and debris) before leaving the development area of operation;
- High-pressure steam cleaning, with water > 65°C, is recommended for machinery that will be moved from one watercourse to another. Many roadside garages provide these

facilities. After cleaning, visually inspect the equipment to ensure that all adherent material and debris has been removed;

- It is recommended to apply disinfectant to the undercarriage and wheels of the vehicle/machine after steam cleaning or power hosing;
- Wet or live wells and other water retaining compartments in machinery must be cleaned, rinsed or flushed with a 1% solution of Virkon Aquatic or another proprietary disinfection product. Alternatively, a 5% solution (100 ml / 20 litre solution) of chlorine bleach should be used. Rinse thoroughly with clean water;
- Prior to commencement of any new activity, the contractor must ensure that all PPE, equipment and machinery are dry.
- If drying out of PPE, equipment and machinery is not feasible, disinfection using Virkon Aquatic must be carried out, as per the manufacturer's instructions.

Measures for the installation of new headwalls

The dry cut open method may be used for such developmental works where minor works within the banks of a watercourse are required. Prior to any works, the site is prepared by stripping topsoil from the banks at the location of the proposed headwalls. Works will then begin on the installation of the precast concrete headwalls including excavation where necessary to fit the headwall. The water flow will be dammed using sandbags to create the seal / dam across the watercourse as per design. Pumps would be set up to take the flow from upstream to downstream of the location of the proposed headwalls. The water will be filtered to limit silt carry over and reduce disturbance to the bed before pumped water is released back into the watercourse. Once completed, all materials used within the construction phase will be removed from site and bank profile reinstated. It should be noted that this method may be altered to suit site-specification requirements. Mitigation measures have been included below:

- A filter will be provided at the pump inlet to prevent the entry of aquatic fauna into the pump, and to limit the potential disturbance to the watercourse bed due to sediments;
- Sandbags will be placed in-situ to create a working dry zone around the proposed works area;
- Excavation of the bank of the watercourse will then proceed, with the excavated material stockpiled for later reinstatement.
- The precast concrete headwalls will be installed in-situ and the banks will be reinstated;
- Following the completion of reinstatement works, including any required riverbank reinstatement works, the sandbags will be removed;
- Vegetation clearance works will only be undertaken when works are required to prevent leaving exposed ground for long periods of time;
- Any vegetation cuttings will not be stored near the banks of the watercourse;
- In the unlikely event of a suspected deterioration in water quality within the Kilbrogan due to in-stream works at the development site, works will immediately cease, an investigation into the cause undertaken and the relevant NPWS and Inland Fisheries Ireland personnel informed;
- Where spoil is generated, this will only be stored temporarily. A designated spoil area will be established by the construction works contractor within the site footprint. This will be located away from the watercourse.

Measures for installation of a new foul water pipe

This method is similar to the previous method with some adaptations.

- The appointed ECoW will undertake a preliminary survey of the section of the watercourse in which the foul pipe is proposed prior to any construction works for potentially protected freshwater species.
- Excavations for the pipe installation will be isolated from the Kilbrogan using sand bags wrapped in a geo-textile membrane upstream and downstream of the works;
- The Kilbrogan watercourse will be diverted from upstream to downstream bypassing the works area via a pump;
- Once the ecologist has given the all clear for construction works to proceed, a trench will be dug using suitable appropriate machinery;
- Excavated materials will be laid out within a designated area >10m from the Kilbrogan watercourse. The ECoW will search the materials for any protected species. Where protected species are found, these will be returned to the Kilbrogan watercourse in a safe location;
- Once the pipe is laid in-situ, the trench will be backfilled;
- The suitable machinery will keep a distance from the Kilbrogan watercourse to allow the hydraulic arm to reach;
- Where required, any additional water that enters the dry area will be pumped to a designated area approximately >10m from the banks of the Kilbrogan watercourse retaining sediments onsite;
- Excavated materials will not be allowed to fall into the watercourse and will not be stored or placed near the top of the bank of the Kilbrogan.

Measures for the construction of the new vehicular and pedestrian bridges

Works will be required in proximity and over the Kilbrogan watercourse for the construction of the bridges. There is potential for sediments, hydrocarbons and pollutants such as cement to enter the watercourse, causing a deterioration in water quality. Measures that will be implemented to ensure no potential deterioration in water quality are as follows:

- The installation of the bridges will follow the Guidelines on Protection of Fisheries during construction works in and adjacent to water (Inland Fisheries Ireland, 2016) guideline document. The most appropriate temporary bridge to be installed will be assessed based on weight, location, duration and access constraints to ensure adequate safety;
- The onsite contractor will follow the proposed method and method statement for the construction of the new bridges as outlined within the accompanying report by MMOS.
- Sandbags wrapped in a geotextile membrane will be placed adjacent to the watercourse outside of the construction access routes to prevent any suspended solids from entering the Kilbrogan;
- A silt curtain and silt fence will be placed between the works area and the watercourse to prevent materials falling into the Kilbrogan. This will remain in place for the duration of the works e.g., for the temporary and permanent bridge installations;
- There will be no construction works within the banks or bed of the Kilbrogan as part of the construction of the bridges;

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- A temporary bridge will be laid across the Kilbrogan to facilitate site access until the permanent bridge has been constructed.
- Works for the installation of the permanent bridge will include the removal of the temporary bridge. Associated bridge materials will be stored >20m from the banks of the Kilbrogan watercourse until taken offsite to a licensed waste facility;
- To begin construction of the new permanent bridges, excavation of the location for the bridge foundations will be undertaken;
- Appropriate machinery will construct the remainder of the bridge and will operate the maximum distance the hydraulic arms will allow from the banks of the watercourse;
- Shuttering will be used around the bridge supports for the pouring of concrete and to ensure no concrete reaches the watercourse;
- A minimum setback distance of 5m from the top of the bank of the Kilbrogan watercourse will be implemented for the installation of the pedestrian bridge while the vehicular bridge will have a setback distance of 10m to protect the integrity of the watercourse;
- Once installed, all bridge associated construction materials will be removed from the site, the silt blanket/fence and sandbags will be removed.

Construction measures for the removal of an existing culvert

There is an existing pipe culvert within the Kilbrogan watercourse onsite. This will be removed as part of the proposed works. The following mitigation measures will be implemented to ensure no deterioration in water quality during the construction phase.

- The appointed ECoW will undertake a preliminary survey of the section of the watercourse in which the culvert is to be removed for potentially protected freshwater species;
- The onsite contractor will begin works once the onsite ECoW has given the go ahead;
- Sandbags will be placed in-situ downstream of the culvert to create a working dry zone and prevent sediments being carried downstream;
- The Kilbrogan watercourse will be diverted from upstream to downstream bypassing the works area via a pump;
- A filter will be provided at the pump inlet to prevent the entry of aquatic fauna into the pump, and to limit the potential disturbance to the watercourse bed due to sediments;
- Using suitable machinery by a skilled operator, the culvert will be removed from the watercourse;
- The suitable machinery will keep a distance from the Kilbrogan watercourse to allow the hydraulic arm to reach;
- Where required, any additional water that enters the dry area will be pumped to a designated area approximately >10m from the banks of the Kilbrogan watercourse retaining sediments onsite;
- All materials associated with the proposed culvert removal will be disposed of appropriately and not stored near the banks of the watercourse.

Water quality mitigation measures for the remainder of the construction phase

Given that the land slopes towards the Kilbrogan watercourse, additional mitigation measures will be implemented to prevent any deterioration in water quality and prevent silt-laden run-off from flowing downhill and as standard good practice. This will include the following:

- The construction works contractor would adhere to standard construction best practice, taking cognisance of the Construction Industry Research and Information Association (CIRIA) guidelines “*Control of Water Pollution from Construction Sites; guidance for consultants and contractors*” 2001 and “*Control of Water Pollution from Construction Sites – Guide to Good Practice*”, 2002;
- Where feasible, temporary swales will be constructed at varying elevations parallel to the Kilbrogan watercourse during soil disturbance works to capture suspended solids. Silt fences will be installed on the furthest side of the temporary swales to limit movement of sediments. These will be located outside the 10m buffer zone. The temporary swales will only be infilled when works are completed and there is no risk of surface water run-off;
- Stockpiling of loose materials will be kept a minimum of 20m from watercourses;
- Excavations and earth-moving activities will be planned outside periods of heavy rainfall, to limit the potential for suspended solids to become entrained within surface water run-off;
- Regular visual inspections will be undertaken of the site access road to ensure no silt-laden surface water runoff leaves the site, with the potential to either join with any adjacent surface water drainage systems within the vicinity or travel along the road network;
- Where spoil is generated, this will only be stored temporarily. A designated spoil area will be established by the construction works contractor within the site footprint. This will be located away from any watercourse;
- Silt fencing will be placed around spoil areas until such time as the excavated soil has been used in landscaping / re-instatement works or removed offsite by a licenced waste contractor;
- Where possible, spoil will be covered or alternatively, graded to avoid ponding or water saturation;
- Manhole covers and stormwater gullies will be protected by silt blankets and additional measures such as sandbags to be incorporated on steeper gradients if required;
- Sandbags will be placed beneath any steep gradient where required to prevent surface water from entering a watercourse;
- Should water be encountered during excavation works, water will be pumped to a silt control feature, such as a lagoon/infiltration area used for settlement;
- This lagoon/infiltration area must have adequate capacity and water must be filtered before discharging. Water must not be directly discharged to a watercourse;
- The lagoon/infiltration area will be located away from any steep sloping ground;
- Pumping operations will be supervised at all times;
- All construction plant machinery and equipment will be maintained in good working order and regularly inspected;
- Any fuels, oils or chemicals will be stored in accordance with the EPA guidance on the storage of materials, in designated bunded areas at the site compound, with adequate bund provision to contain 110% of the largest drum volume or 25% of the total volume of containers;

- All small plants such as generators and pumps will be stood in drip trays capable of holding 110% of their tank contents;
- The construction works contractor will ensure the relevant site personnel are trained in spillage control;
- Where construction plant shows signs of hydrocarbon leakage, site personnel will cease the operation of the item in question. Any defective construction machinery will be kept out of service until the necessary repairs are undertaken;
- Vehicle and wheel washing facilities will be provided at site exit, at an area isolated from any drainage network.
- Spill kits, adequately stocked with spill clean-up materials such as booms and absorbent pads, will be readily available onsite;
- Material storage areas will be appropriately labelled and marked;
- If weed control is required then herbicide application will only be carried out by suitably qualified contractors or operators with strict reference to the product label, local land use, health and safety considerations and any pertinent regulations. All herbicide treatment must comply with the pesticide regulations S.I. No. 155/2012 - European Communities (Sustainable Use of Pesticides) Regulations 2012 or any amended or current regulations at the time of use;
- The onsite contractor will implement all additional mitigation measures as outlined within the accompanying Construction Environmental Management Plan (Ref: RES_CEMP_22616), Operational Waste Management Plan (Ref: PES_OWMP_ and Resource Waste Management Plan (Ref: PES_RWMP_22616).

Mitigation measures once all construction works have ceased

- The onsite contractor will ensure all materials associated with the construction of the proposed development are removed from the site and disposed of appropriately.

It is therefore considered that due to the proposed mitigation measures, there will be no adverse effect to water quality and the protected habitats and species of the Bandon River SAC as a result of the proposed development.

11.0 IN COMBINATION EFFECTS

The following plans and projects were reviewed and considered for in-combination effects with the proposed development:

- Cork County Development Plan 2022-2028;
- Proposed and permitted developments in the area available on Cork County Council planning system.

According to the Cork County Development Plan 2022-2028, Bandon is considered a main town in Co. Cork. It is included within the Greater Cork Ring Strategic Planning Area where it sees town growth in excess of 1,500 people. The plan notes *“Establish an appropriate balance in the spatial distribution of future population growth, in line with this Core Strategy, so that Bandon, Fermoy, Kinsale, Macroom and Youghal can accelerate their rate of growth and achieve a critical mass of population to enable them to maximise their potential to attract*

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new investment in employment, services and public transport.” The proposed development would aid in achieving this goal.

The site will be accessed via two new entrances, one to the west on the L2033 and to the east on Kilbrogan Street. The N71 is located approximately 1.1km to the south of the proposed development. It provides connectivity to the greater Cork area. The following plans and projects were reviewed and considered for in-combination effects with the proposed development.

Table 11: Recent planning applications close to the proposed site

Application No.	Development Type	Date	Approximate Distance
224960	The construction of 42 no. dwelling houses, a two storey crèche and all ancillary site development works. The proposed development consists of the construction of 20 no. 3 bedroom townhouses and 22 no. 2 bedroom townhouses. The proposed development is a change of plan from that previously permitted by Pl.Ref.No. 19/5749 (as amended by Pl.Ref.No. 21/4026) and will result in the loss of 2 no. residential units from that currently permitted. (...)	20/09/2022	Adjacent south
234231	The construction of 3 no. dwelling houses comprising of 2 no. 3-bedroom townhouses and 1 no. 2-bedroom townhouse, and a two-storey creche with ancillary bicycle and bin stores and all other ancillary site development works. The proposed dwelling houses to the west of the site will replace a creche facility previously permitted by reference 08/7515 (as extended by reference 14/4105 & 18/6460) with vehicular access to the proposed dwelling houses being provided via the existing estate entrance from Convent Hill (L-2011) to the north. The proposed creche facility to the east of the site is a change of plan from the creche previously permitted by reference 19/5749 (as amended by reference 22/4960) with vehicular access to the proposed creche being provided via a separate estate entrance permitted by reference 19/5749 (as amended by reference 22/4960), also from Convent Hill.	26/7/2023	Adjacent south
254019	Permission to:- 1) demolish existing single storey extension and out buildings at rear (north elevation) of existing dwelling house. 2) construct a two storey extension at the rear (north elevation) of existing dwelling house, and sub divide existing dwelling house to create 2 no. dwelling houses. 3) Alterations to south and eastern elevations with all associated site works.	29/5/2025	c. 42m south
214026	The construction of 43 no. residential units and all ancillary site development works. The proposed development consists of the construction of 5 no. 4 bedroom detached dwelling houses, 12 no. 4 bedroom semi-detached dwelling houses, 10 no. 3 bedroom semi-detached dwelling houses, 8 no. 2 bedroom duplex apartment units and 8 no. 1 bedroom apartment units with ancillary bicycle racks and bin stores. The proposed development is a change of plan from that previously permitted under Cork County Council	22/06/2021	c. 60m south

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Application No.	Development Type	Date	Approximate Distance
	Planning Reference 19/5749 and will result in the construction of an additional 25 no. residential units. (...)		
234423	Full planning permission to construct 25 no. new dwelling houses and all ancillary site development works at site known as 'Tanners Field' at lands at Coolfadda, Bandon, Co. Cork. The proposed development consists of the construction of 10 no. 3 bedroom 2-storey townhouses, 2 no. 3 bedroom 2-storey semi-detached houses and 13 no. 2 bedroom 2-storey townhouses. The proposed development is a change of plans from that previously permitted by planning reference 08/7515 (as extended by reference 14/4105 & 18/6460) and will consist of an increase of 9 no. residential units. (...)	4/7/2023	c. 80m south
224047	The construction of a single storey, rear extension to an existing dwelling house, together with minor alterations and associated siteworks. The extension would comprise 2 additional bedrooms and a kitchenette-living room, to facilitate not more than 6 residents and 2 carers within residential care dwelling house.	3/11/2022	c. 85m west
226426	The construction of 24 no. residential units comprising of 12 no. 2 bedroom duplex/apartment units and 12 no 1 bedroom apartment units to be provided in 6 no. 2-3 storey buildings and all ancillary site development works. Ancillary works include the provision of bicycle and bin stores. The proposed development is a change of plan from that previously permitted by planning reference 19/5749 (as amended by planning reference 21/4026) and will result in an increase of 12 no. residential units from that currently permitted. (...)	27/02/2023	c. 105m south
205604	The construction of 18 no. 3 bedroom semi-detached dwelling houses, relocation of permitted play area, modifications to permitted estate road layout and associated infrastructure services and all ancillary site works. The proposed development is a change of plan from that previously permitted under Cork County Council Planning Reference 08/7515 [as extended under Cork County Council Planning References 14/4105 and 18/6460] and subsequently amended by under Cork County Council Planning Reference 19/4187 and will result in the construction of an additional 10 no. residential units.	2/12/2020	c. 175m south
235039	Permission for retention of rear first floor extension to dwelling.	11/10/2023	c. 120m south-east
206541	(a) Retention and completion of existing house 3, (b) Completion of house 2, (c) Demolition of existing unfinished house 4, (d) Construction of 2 no. new detached dwelling-houses and garages with separate on-site sewage treatment units and siteworks, (e) Completion of all other associated ancillary siteworks to those granted under Planning Ref: 042631.	20/8/2021	c. 170m north-east
224620	(A) demolish existing domestic shed, (B) modify and extend existing dwelling house, (C) new vehicular entrance to site and all associated site works	6/7/2022	c. 170m south

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Application No.	Development Type	Date	Approximate Distance
246218	Permission to i) construct a two-storey side extension, ii) carry out alterations to elevations and iii) associated site works, all to their dwelling	23/1/2025	c. 170m south
216472	The replacement of two existing 10m high support poles carrying associated antennae for a 24 metre high free standing communications structure with its associated antennae, communication dish, ground equipment and all associated site development works within an existing fenced compound. The development will continue to form part of existing 3G and 4G Broadband network.	3/3/2022	190m south-west
236443	Permission for retention and completion of building works comprising extension to rear/north of existing dwelling, parking platform with basement to underside as constructed, vehicular entrance, modification to site boundary and all ancillary site works as previously permitted Pl.Reg.No. 05/8713 & extension for duration Pl.Reg.No. 11/4418.	11/4/2024	c. 240m south
214812	A new 20 meter long and 5 meter high hurling wall to the North of the existing school, along with all associated site works within the site curtilage of the existing school, also within the curtilage of existing protected structures together at Hamilton High School.	18/8/2021	c. 290m south
244067	Permission for the construction of a 539.14sq.m stand-alone school sports hall (incl 35.04sqm first floor mezzanine storage space) to serve the existing secondary school, connection to existing services, and all ancillary works. The development for which permission is sought is located within the curtilage of protected structures (ref no. 955 and 962)	4/7/2024	c. 290m south
234787	A) The existing all-weather playing surface measuring 60.00m. x 22.50m. B) The existing 2.40m. high mesh perimeter fencing with high level sports netting serving the all-weather playing surface. C) The existing concrete access path serving the all-weather playing surface. D) All ancillary works. The development for which permission for retention is sought is located within the curtilage of protected structures (REF No. 955 and 962).	16/6/2023	c. 290m south
25/5336	Permission for the construction of a residential development comprising of 69 no. residential units and all ancillary site development works. The proposed development consists of the construction of 8 no. 4 bedroom semi-detached dwelling houses, 48 no. 3 bedroom semi-detached/townhouse dwelling houses, 9 no. 2-bedroom semi-detached/townhouse dwelling houses and 4 no. 1 bedroom simplex units located within a 2 storey building. Vehicular and pedestrian access to the proposed development will be provided via the estate entrance, internal road network and pedestrian infrastructure permitted by Cork County Council planning reference 20/6697, serving the 'Cúl na Gréine' residential development which is currently under construction.	N/A	c. 633m SW

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The most recent planning applications available online relate to residential dwellings and residential developments that have all been granted subject to conditions. Development 25/5336 is awaiting a decision.

The proposed primary heating system is air to water heat pumps. Air emissions from the proposed development would be typical of a residential building with the main source of emissions coming from heating and therefore low impact in-and-of-itself. In-combination residential impacts would be controlled by national energy policies, grant schemes and motor fuel emission targets.

Continued implementation of the Water Framework Directive would result in achieving, or maintaining improvements to water quality in the Bandon-Ilen Catchment. Developments such as this proposed development could act in combination with existing environmental pressures on the Bandon-Ilen Catchment, including agriculture, anthropogenic, domestic and urban wastewater, urban run-off, industry and forestry.

One of the biodiversity objectives (BER 15-2) of the Cork County Development Plan 2022 is to *“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.”* As noted in Section 8.3, it is considered that the development would not have the potential to pose a significant risk upon any Natura 2000 site due to a deleterious effect on water quality during the operational phase.

During the operational phase, surface water will be maintained onsite with overflow directed to the Kilbrogan watercourse. Domestic foul water will also be directed to mains via a new connection for treatment at the Bandon Waste Water Treatment Plant (WWTP) (D0136-01). The WWTP discharge was compliant with the ELV's set in the wastewater discharge licence. A deterioration in water quality has been identified, however it is not known if it or is not caused by the WWTP. Other causes of deterioration in water quality in the area are unknown. The discharge from the wastewater treatment plant does not have an observable negative impact on the Water Framework Directive status (Uisce Eireann, 2024). The Bandon WWTP currently has capacity (March 2026).

There is potential for cumulative effects to occur due to a deterioration in water quality during the construction phase of the proposed development. Mitigation measures described in section 10 will ensure no in-combination deterioration in water quality.

In terms of noise, fauna would be accustomed to agricultural, residential and commercial noise commonly audible within the area.

An impact due to lighting on the QI's of the Courtmacsherry Bay SPA and Bandon River SAC is not predicted given the significant distance to any Natura 2000 site.

As discussed in Sections 8.1 – 8.3 above, it is considered that there would be no significant in-combination risk to any European site owing to the development. As there are no anticipated significant risks from the development and proposed works given the scale and nature of recent nearby developments, the type of development, the distances of other

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developments in the area, it is considered that there would be no cumulative water, noise or air impacts which would pose a significant risk to designated sites or species.

12.0 CONCLUSION

It is not anticipated that the proposed development, subject to mitigation measures, by itself or in combination with other developments, would impact negatively upon the Natura 2000 network during the construction phase.

The Courtmacsherry Bay SPA (Site Code: 004219) is located approximately 10.7km to the south-east and the Bandon River SAC (Site Code: 002171) is located approximately 22km to the west of the proposed development. No direct adverse effects are predicted due to the absence of associated species and habitats onsite and distance to the nearest Natura 2000 sites. Given the proposed instream works to be undertaken and slope of the site, the precautionary principle will be applied to prevent any indirect adverse effects due to a deterioration in water quality should any designated habitats or species occur downstream of the site.

It is considered that there would be no potential risk of an adverse effect upon the qualifying interests / special conservation interests of the Courtmacsherry Bay SPA or the Bandon River SAC due to the proposed mitigation measures that will be implemented as outlined within section 10 of this report.

It is the conclusion of this Natura Impact Statement that, subject to mitigation measures to be implemented, there would be no potential for an adverse effect on European sites as a result of the proposed development. This conclusion refers to the project by itself or in combination with other projects and developments.

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APPENDIX A

PROTECTED SITES

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APPENDIX B

SITE MAPS

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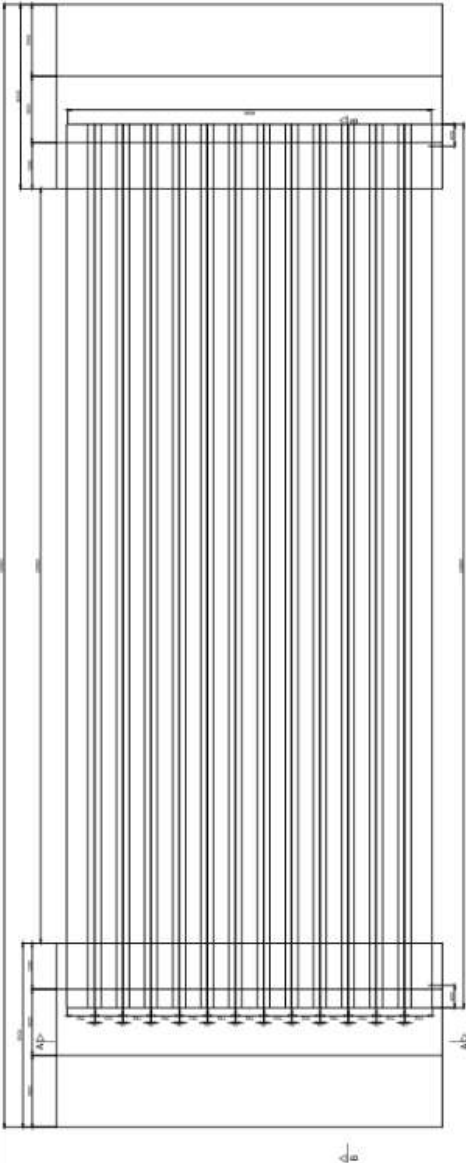


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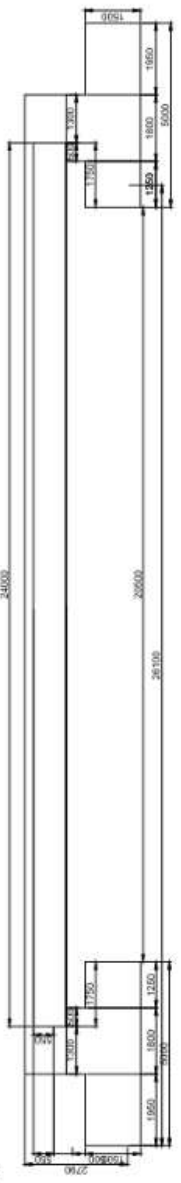
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NATURA IMPACT STATEMENT REPORT
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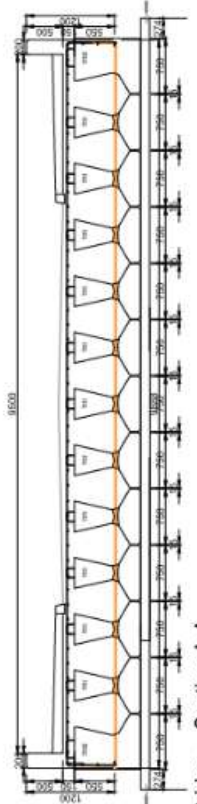
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Proposed Bridge - Plan
Scale 1:300



Proposed Bridge - Section B-B
Scale 1:300



Proposed Bridge - Section A-A
Scale 1:50

NOTES:
BRIDGE DESIGN IS BASED ON BANNAHER
CONCRETE DESIGN MANUAL AND IS
SUBJECT TO CHANGE BASED ON
SPECIALT DESIGN

NO.	DATE	DESCRIPTION
1	14/01/2024	ISSUED FOR TENDERS
2	14/01/2024	ISSUED FOR TENDERS
3	14/01/2024	ISSUED FOR TENDERS
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MURPHY & MURPHY
ENGINEERING & ARCHITECTURE
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APPENDIX C

PHOTO LOG

NATURA IMPACT STATEMENT REPORT
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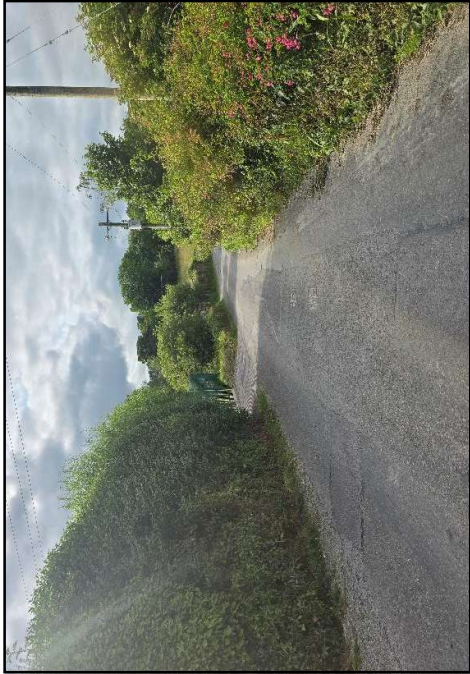


Plate 1: Site entrance on Kilbrogan street



Plate 2: Scrub (WS1)

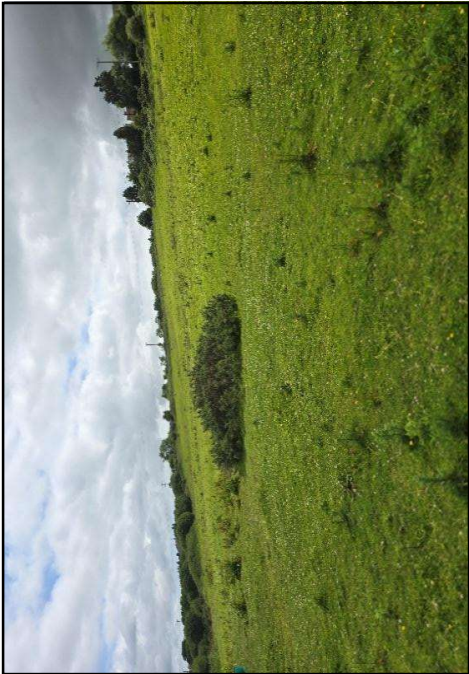


Plate 3: Dry calcareous and neutral grassland (GS1)

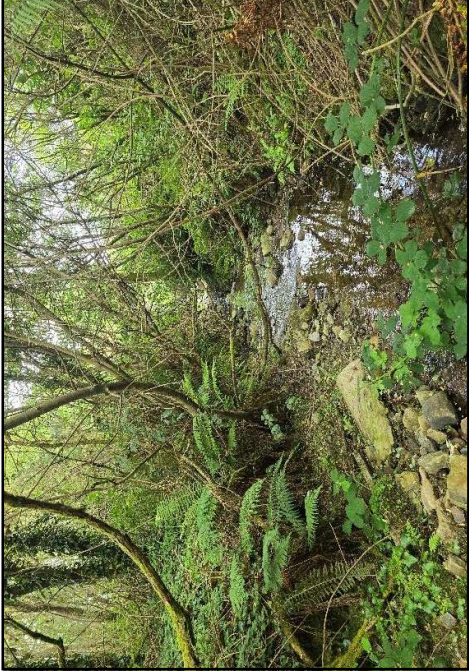


Plate 4: Eroding/upland rivers

Notes:

APPENDIX D
PHOTO LOG



UNITS 3 & 4
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GREEN ROAD
CARLOW

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file	location:	scale:	N/A	A4
drawing status:	REPORT	datum:	N/A	
drawing no.	rev	drawn:	PE	
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		date:	2025	

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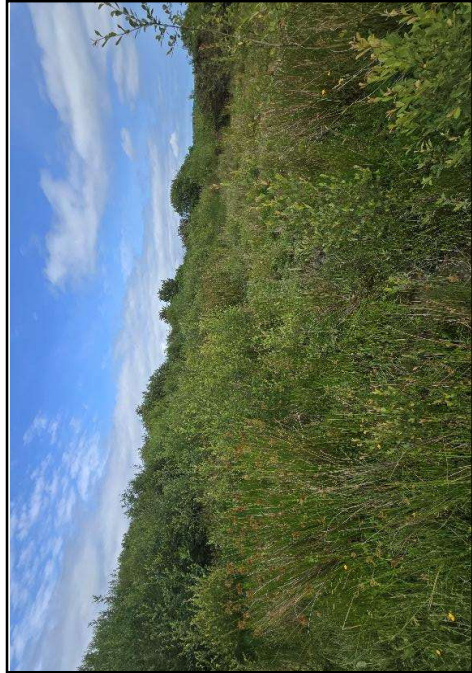


Plate 5: Wet grassland (GS4)



Plate 6: Linear scrub hedgerow (WL1) west boundary



Plate 7: Buildings and artificial surfaces (BL3)

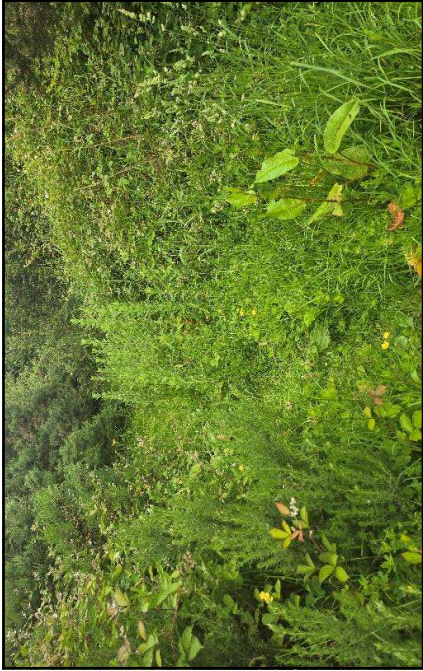


Plate 6: Recolonising bare ground (ED2)

Notes:

APPENDIX D
PHOTO LOG



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file	scale:	N/A	A4
location:	drawing:	N/A	
drawing status:	REPORT	drawn:	PE
	rev	checked:	MF
NIS_10432	A	approved:	2025
		date:	

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APPENDIX D

SILT FENCING SPECIFICATIONS

SILT FENCING SPECIFICATIONS

Silt fencing consists of porous filter fabric which detains sediment and the support posts. The fabric must be trenched-in and backfilled, and the soil compacted around it. The posts are sunk into the ground and can be either steel or wood. How much is required will be determined by the location, size and topography of the site with some sites requiring more than others. Silt fencing works by blocking runoff water and creating a pond behind it. This dissipates the energy in running water and allows for sediments to sink while the water can either pass through, percolate to ground or evaporate.

Silt fencing installation should have posts anywhere from 1m to 2m apart as the silt fencing has to withstand the force of water building up behind it. The fabric must be secured to the posts using plastic cable ties, wire twists or construction grade staples. It is important that there is no gap between the silt fencing and the ground. Trenching-in the fabric will ensure a solid anchor in the ground and ensures runoff water does not get past. Silt fencing fabric must be able to withstand all weather conditions and made of special material that's high quality, permeable, technical filter fabric and can prevent runoff from a storm event. The material used in silt fencing will determine how durable and efficient it is as stopping sediment from reaching a protected area. Material can be geotextile fabric, produced from high-tenacity polypropylene silt-film

The building contractor will determine the most appropriate type of silt fencing to use and ensure its correct installation and maintenance throughout the construction phase. Silt fencing must remain in place until there is no risk of sediments from entering a protected habitat or watercourse. Silt fences must be inspected daily and after a heavy rainfall event with repairs carried out if required. When sediment accumulation reaches one third the height of the exposed fence either remove the sediments or install a second silt fence as directed by the construction site manager/engineer.

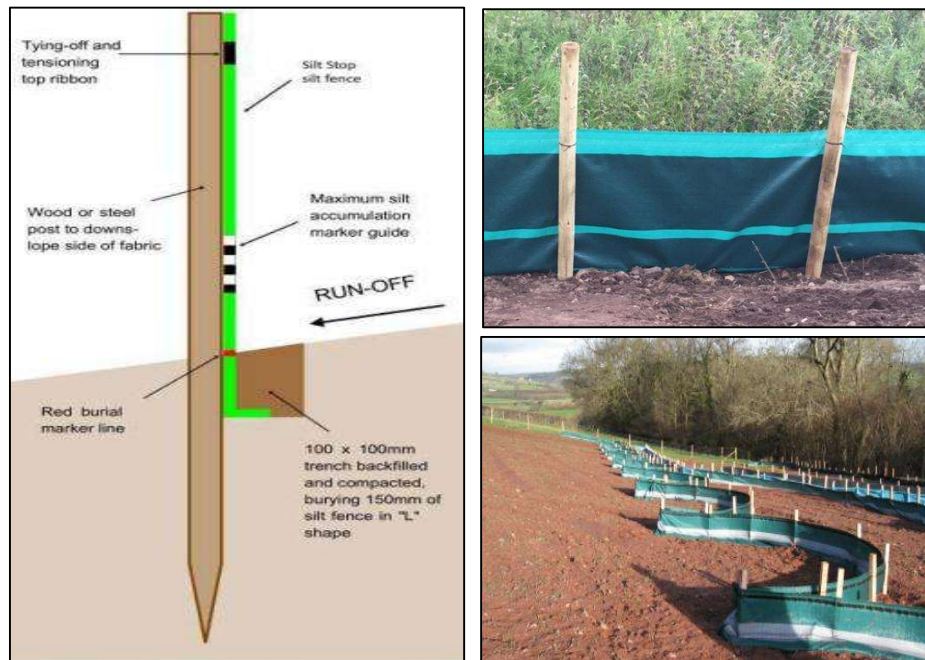


Figure Appendix D1: Example of Silt Fencing and Installation

NATURA IMPACT STATEMENT REPORT
COOLFADDA & KILBROGAN, BANDON, CO. CORK

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