AA SCREENING REPORT

Glanmire to City Cycle Route (Phase 1)

Cork City Council

PROJECT NO. C1001

June 2022

OCSC
O'CONNOR | SUTTON | CRONIN
Multidisciplinary
Consulting Engineers

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for

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NOTICE

DOCUMENT CONTROL & HISTORY

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APPROPRIATE ASSESSMENT SCREENING REPORT

TABLE OF CONTENTS PAGE

1 INTRODUCTION

1.1 Project Contractual Basis & Parties Involved

This Appropriate Assessment (AA) Report has been prepared by O'Connor Sutton Cronin & Associates Ltd. (OCSC) at the request of their Client, Cork City Council. The site for assessment comprises an area of road alongside the Glashaboy River between Glanmire village and the junction of the R639 and N8 roundabout (Figure 1.1). The client wishes to install a cycle track along this route, which would include the addition of street lighting, a public realm space and a boardwalk. The regulatory authority for the site is Cork City Council.

Figure 1.1.1: Area in red showing the boundaries of the site (Source: EPA Maps, 2022).

The report was completed by Sinéad Doran BSc, Environmental Consultant, reviewed and approved by Eleanor Burke, BSc, MSc, DAS, MIEnvSc, CSci, Technical Principal, and the OCSC Environmental Division Manager.

1.2 Legislative Context

The Habitats Directive provides legal protection for habitats and species of European importance. The overall aim of the Habitats Directive is to maintain or restore the "favourable conservation status" of habitats and species of European Community Interest. These habitats and species are listed in the Habitats and Birds Directives (Habitats Directive as above and Directive 2009/147/EC on the conservation of wild birds) with Special Areas of Conservation

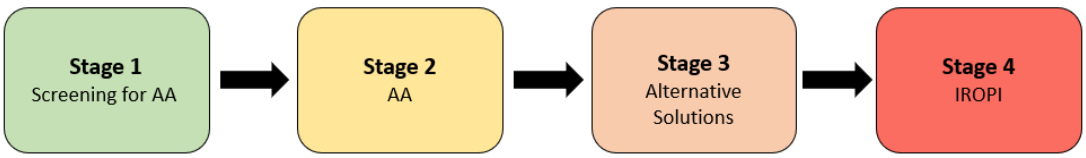
(SACs) and Special Protection Areas (SPAs) designated to afford protection to the most vulnerable of them. These two designations are collectively known as European Sites. Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect such sites. Article 6(3) establishes the requirement for AA. These requirements are implemented in the Republic of Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) and the Planning Development Act 2000 (as amended).

This AA screening is based on best scientific knowedge and has utilised ecological and hydrological expertise. In addition, a detailed online review of published scientific literature and 'grey' literature was conducted. This included a detailed review of the National Parks and Wildlife Service (NPWS) website which contains mapping and available reports for relevant sites and describes sensitive qualifying interests/ special conservation interests and their conservation objectives. The EPA EnVision map viewer (EPA 2022) and available reports were also reviewed, as was the NPWS (2013) publication "*The Status of Protected EU Habitats and Species in Ireland"*.

The ecological desktop study completed for the AA screening of the proposed development comprised of the following elements:

- Identification of European sites within 15 km of the proposed project boundary with identification of potential pathway links for specific sites (if relevant) greater than 15 km from the proposed project boundary;
- Review of the NPWS site synopses and conservation objectives for European sites within 15 km and for which potential pathways from the proposed site have been identified; and
- Examination of available information on protected species.

There are four main stages in the AA process as follows:



IROPI: imperative reasons of overriding public interest (IROPI),

Stage One: Screening

The process that identifies the likely impacts upon a European site of a project of plan, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant.

Stage Two: Appropriate Assessment

The consideration of the impact on the integrity of the European site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts. If adequate mitigation is proposed to ensure no significant adverse impacts on European sites, then the process may end at this stage. However, if the likelihood of signifcant impacts remains, then the process must proceed to Stage Three.

Stage Three: Assessment of Alternative Solutions

The process that examines alternative ways of achieving the objectives of the project or plan that avoids adverse impacts on the integrity of the European site.

Stage Four: Assessment where no alternative solutions exist and where adverse impacts remain

An assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project of plan should proceed.

The Habitats Directive promotes a hierarchy of avoidance, mitigation, and compensatory measures. This approach aims to avoid any impacts on European sites by identifying possible impacts early in the plan or project making process and avoiding such impacts. Secondly, the approach involves the application of mitigation measures, if necessary, during the AA process to the point where no adverse impacts on the site(s) remain. If potential impacts on European sites remain and no further practicable mitigation is possible, the approach requires the consideration of alternative solutions. If no alternative solutions are identified and the plan or project is required for imperative reasons of overriding public interest, then compensation measures are required for any remaining adverse effects.

Ecological impact assessment of potential effects on European sites is conducted following a standard source-pathway-receptor model where, in order for an effect to be established, all three elements of this mechanism must be in place. The absence or removal of one of the elements of the mechanism is sufficient to conclude that a potential effect is not of any relevance or significance.

- Source(s) – e.g. pollutant run-off from proposed works;
- Pathway(s) – e.g. groundwater connecting proposed works to nearby qualifying wetland habitats; and
- Receptor(s) – qualifying aquatic habitats and species of European sites.

In relation to this report, receptors are the ecological features that are known to be utilised by the qualifying interests or special conservation interests of a European site. A source is any identifiable element of the proposed development that is known to interact with ecological processes. The pathways are any connections or links between the source and the receptor. This report provides information on whether direct, indirect, and cumulative adverse effects could arise from the proposed development.

1.3 Methodology and Approach

The AA Screening has been prepared taking into account legislation including the aforementioned legislation and guidance including the following:

- *Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities*, Department of the Environment, Heritage and Local Government, 2009; 11 February 2010 revision.
- *Commission Notice: Managing Natura 2000 sites – The provisions of Article 6 of the Habitats Directive 92/43/EEC*, European Commission, 2018.

- *Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habiats Directive 92/43/EEC*, Euopean Commission Environment DG, 2002.
- *Managing Natura 2000 sites: the Provisions of Article 6 of the Habitats Directive 92/43/EEC,* European Commission, 2000.
- *Appropriate Assessment Screening for Development Management*. Office of the Planning Regulator, March 2021.

The above documents have been used to carry out a desktop AA Screening based on the best available guidance and operating within the applicable legislation.

1.4 Scope of Works

To meet the project objectives the following scope of works were completed:

- Present a discussion of the proposed development and its potential effects on its receiving environment;
- Present a discussion of the current site status and key environmental influences around the site;
- Undertake and present a review of European sites in the region of the proposed development;
- Conduct and present a discussion on the screening of the identified European sites in relation to the potential effects arising from the project; and
- Provide a conclusion as to whether the proposed development is likely to, either alone or in combination with other plans or projects, have a significant effect on any European site.

1.5 Limitations

This Appropriate Assessment Screening Report has been prepared for the sole use of Cork City Council ("the Client") for the Glanmire to City Cycle Route (Phase 1). No other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by OCSC.

This assessment is based on a review of available historical information, environmental records, consultations, relevant guidance information, and reports from third parties. All information received has been taken in good faith as being true and representative.

This report has been prepared in line with best industry standards. The methodology adopted and the sources of information used by OCSC in providing its services are outlined in this Report. The assessment undertaken by OCSC and described was undertaken in May 2022 and is based on the information available during that period. The scope of this Report and the services are accordingly factually limited by these circumstances.

OCSC disclaim any undertaking or obligation to advise any person of any change in any matter affecting the Report, which may come or be brought to OCSC's attention after the date of the Report.

The conclusions presented in this report represent OCSC's best professional judgement based on review of the relevant information available at the time of writing. The opinions and conclusions presented are valid only to the extent that the information provided was accurate and complete.

2 DESCRIPTION OF THE EXISTING ENVIRONMENT

2.1 Project Description

This Appropriate Assessment (AA) Screening report is prepared for the Glanmire to City Cycle Route (Phase 1), Cork on behalf of Cork City Council. The purpose of the scheme is; to provide dedicated cycle tracks and improved pedestrian footpaths along the Glashaboy River from Glanmire Village to the Dunkettle/Tivoli Roundabout, the addition of a public realm space and a boardwalk. The proposed cycle route will be the first phase in the provision of a continuous cycle route from Glanmire to the City Centre. This route will provide a safe and much needed connection for cyclists wishing to travel from Glanmire to the recently constructed cycle facilities through the Dunkettle Interchange which in turn connects with the Carrigtwohill to Dunkettle Greenway, the Youghal to Midleton Greenway and the planned Dunkettle to City Centre Cycle Scheme.

The scheme will include design measures to transform the 1.4km stretch of road from an existing relatively high-speed regional road with no public lighting to traffic-calmed street environment with lower traffic speeds, enhanced pedestrian and cycling facilities and public lighting. The scheme will extend from the Dunkettle/Tivoli Roundabout to the Church Hill Junction.

2.2 Site Location

The site for assessment is located just south of Glanmire Village. The study area location is identified in Figure 2.1.

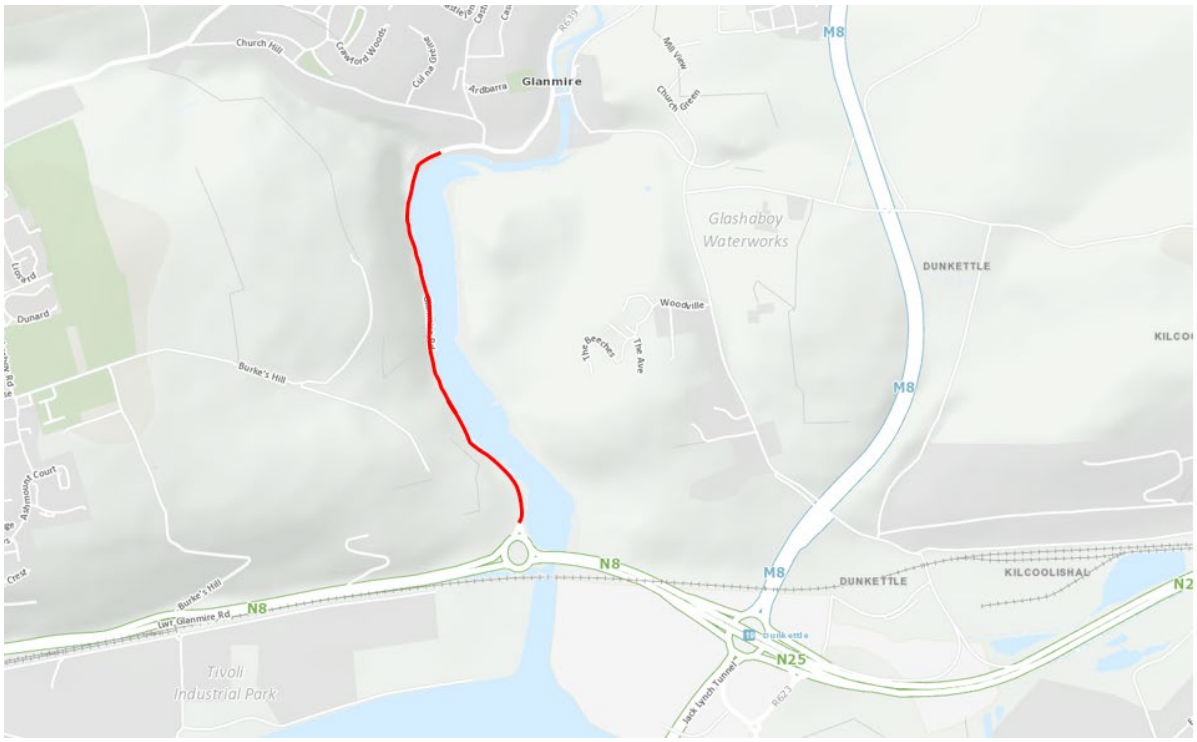


Figure 2.2.1: Regional Location; approximate site location is shown in red (Source: OSI, 2022).

2.3 Study area

The study area comprises an area of road alongside the Glashaboy river between Glanmire village and the N8 roundabout, Co. Cork. It is approximately 1.4 km in length and is bounded by the R639 to the west and the Glashaboy River to the east.

Figure 2.2: Study Area; approximate site location is shown in red (Source: Google Earth, 2022)

2.4 Surrounding Land Use

The immediate surrounding area is comprised of agricultural, recreational, commercial/retail and residential land uses. North of the study area is Glanmire village. South of the study is made up of the Tivoli Docks, an Industrial Estate and the River Lee. East is the Glashaboy River and agricultural land and immediately west of the site is Cork's Vienna Woods Hotel and Holiday Homes and further west is agricultural land and Cork City. Refer to Table 2.1 for a full list of adjacent land uses.

Table 2.1 – Adjacent Land Uses

BOUNDARY	LAND USE
North	Glanmire Village and residential housing
South	The N8, the Tivoli Docks, the River Lee, Lota Park
East	Glashaboy River, Agricultural land, a petrol station residential housing and the M8
West	Hotel lodgings, agricultural land

Figure 2.3: Study Area; approximate site location is shown in red (Source: Google Maps, 2022)

2.5 Hydrology

There are no surface water features within the site boundary however there is one located immediately adjacent to the study area. The closest surface water feature is the Glashaboy River (IE_SW_060_0800) which is located immediately east of and parallel to the proposed cycle track (Figure 1.1). The Glashaboy River flows from north to south where it enters the River Lee (IE_SW_060_0750), Lough Mahon the Transitional Waterbody. The River Lee flows southeast to Cork Harbour and discharges into the sea.

The EPA designated the transitional waterbody of Glashaboy Estuary (Code IE_SW_060_0800) as having an overall Water Framework Directive (WFD) Status of 'Good' based on the most recent water quality information from 2013-2018. Lough Mahon Transitional Waterbody (Code IE_SW_060_0750) has an overall Water Framework Directive (WFD) Status of 'Moderate'; according to the 2013-2018 information. See Figure 2.4.

The EPA spatial dataset shows that the WFD Transitional Waterbody Risk associated with the Glashaboy Estuary and the Lough Mahon, are both 'At Risk' of not meeting its 2027 WFD objectives (EPA 2022) as shown in Figure 2.5. WFD summary information for this river is summarised in Table 2.2.

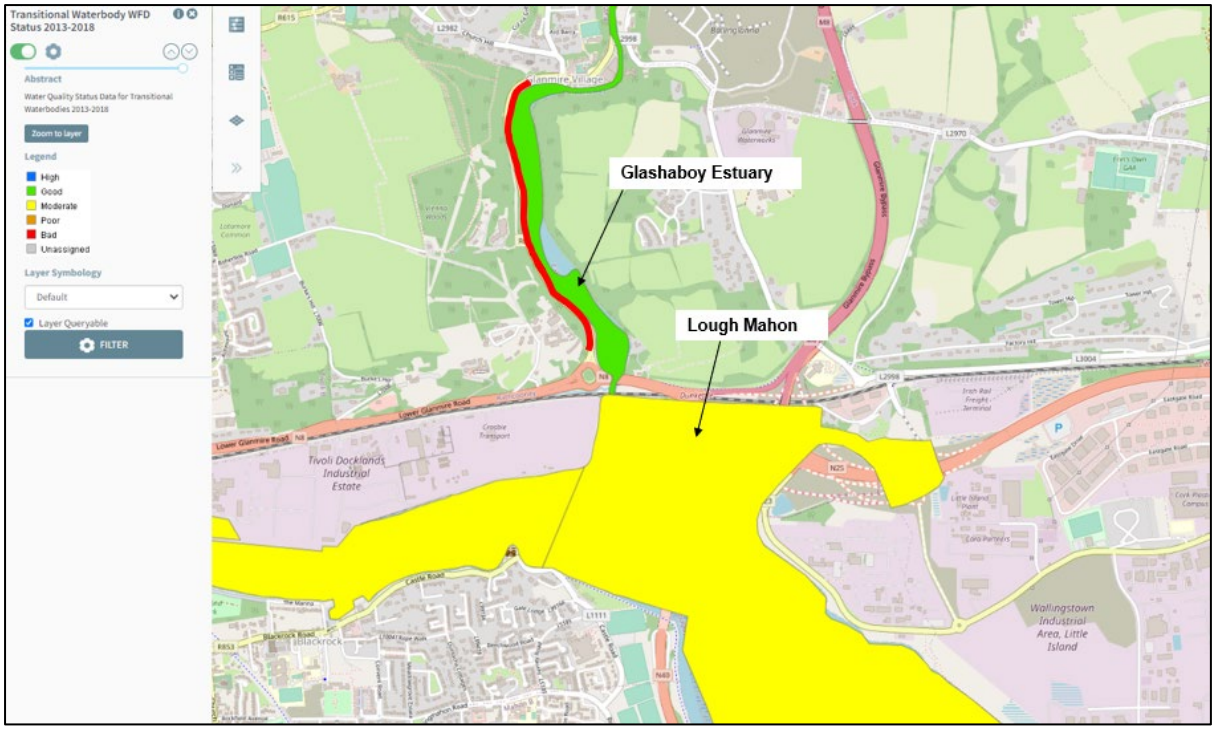


Figure 2.4: Transitional Waterbody WFD Status (approximate site location indicated by the red line) (Source: EPA Maps, 2022).

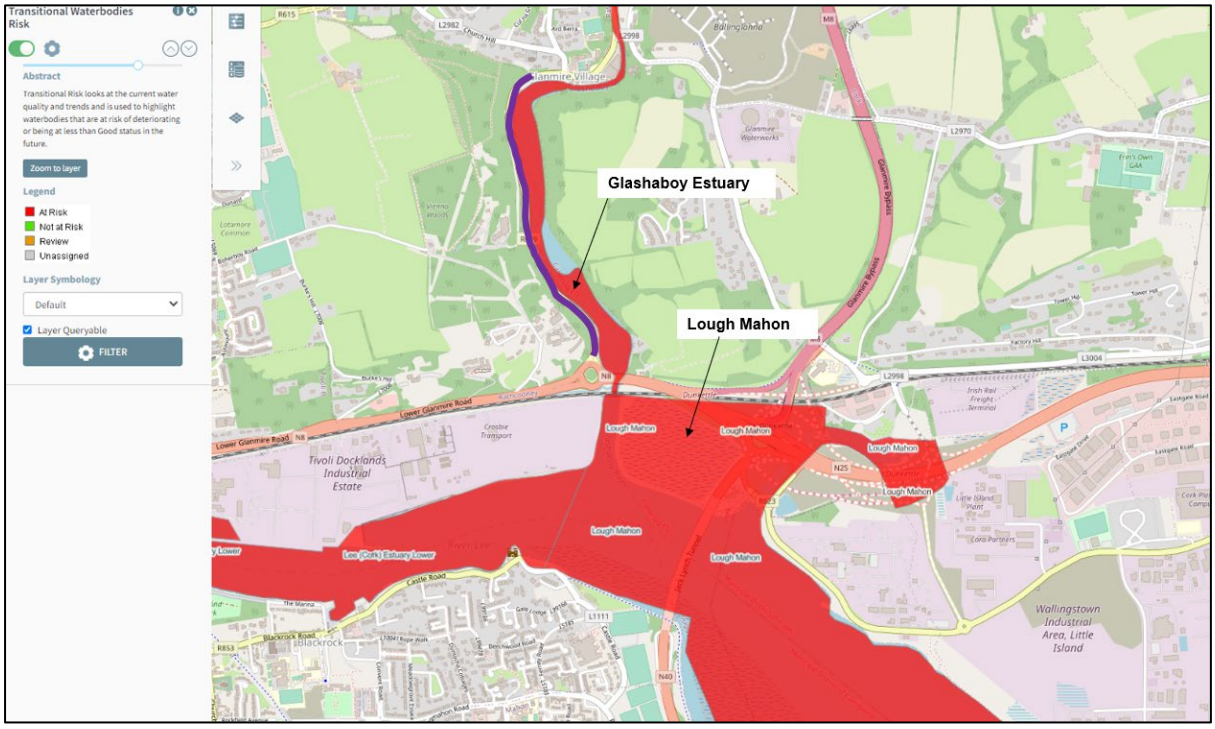


Figure 2.5: Transitional Waterbodies Risk (approximate site location indicated by the purple line) (Source: EPA Maps, 2022).

Table 2.2 - WFD Summary Information – Glashaboy Estuary & Lough Mahon.

Waterbody Code	IE_SW_060_0800	IE_SW_060_0750
Waterbody Name	Glashaboy Estuary	Lough Mahon
Waterbody Type	Transitional	Transitional
Iteration	SW 2013-2018	SW 2013-2018
Status	Good	Moderate
Risk	At-Risk	At-Risk

3 SCREENING FOR APPROPRIATE ASSESSMENT

3.1 Screening Process

This stage of the process identifies any likely significant effects on European sites from a project or plan, either alone or in combination with other projects or plans. The screening phase was progressed in stages during which a series of questions were asked to determine:

- Whether a plan or project can be excluded from AA requirements because it is directly connected with or necessary to the management of a European Site.
- Whether the project will have a potentially significant effect on a European Site, either alone or in combination with other projects or plans, in view of the site's conservation objectives or if residual uncertainty exists regarding potential impacts.

An important element of the AA process is the identification of the "'conservation objectives", "Qualifying Interests" (QIs), and/ or "Special Conservation Interests" (SCIs) of European sites requiring assessment. QIs are the habitat features and species listed in Annexes I and II of the Habitats Directive for which each European Site has been designated and afforded protection. SCIs are wetland habitats and bird species listed within Annexes I and II of the Birds Directive. It is also vital that the threats to the ecological / environmental conditions that are required to support QIs and SCIs are considered as part of the assessment.

Site-Specific Conservation Objectives (SSCOs) have been designed to define favourable conservation status for a particular habitat or species at that site. According to the European Commission interpretation document 'Managing Natura 2000 sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC', paragraph 4.6(3) states:

"The integrity of a site involves its ecological functions. The decision as to whether it is adversely affected should focus on and be limited to the site's conservation objectives."

Favourable conservation status of a habitat is achieved when:

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

The favourable conservation status of a species is achieved when:

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

3.2 Identification of relevant European Sites

This section of the screening process describes the European sites which exist within the Zone of Influence (ZOI) of the site. The Department of the Environment (2010 revised) Guidance on AA recommends a 15 km buffer zone to be considered for Natura 2000 sites, but projects are

evaluated on a case-by-case basis. A review of all sites within the ZOI has allowed a determination to be made that in the absence of significant hydrological links the characteristics of the proposed works will not impose effects beyond the 15 km ZOI.

European sites that occur within 15 km of the proposed works are listed in Table 3.1 and illustrated in Figures 3.1, 3.2, and 3.3. Details on the specific QIs and SCIs of each European Site are also identified in Table 3.1 as well as site-specific threats and vulnerabilities of each of the sites.

To determine the potential for effects from the proposed works, information on the qualifying features, known vulnerabilities, and threats to site integrity pertaining to any potentially affected European sites was reviewed. Background information on threats to individual sites and vulnerability of habitats and species that was used during this assessment included the following:

- Ireland's Article 17 Report to the European Commission "*Status of EU Protected Habitats and Species in Ireland*" (NPWS, 2019);
- Site Synopses (NPWS 2019a); and
- NATURA 2000 Standard Data Forms (NPWS 2019b).

The assessment takes consideration of the SSCOs of each of the sites within the ZOI. Since the conservation objectives for the European sites focus on maintaining the favourable conservation condition of the QIs/SCIs of each site, the screening process focused on assessing the potential effects of the proposed works against the QIs/SCIs of each site. The conservation objectives for each site were consulted throughout the assessment process.

- Conservation objectives that have been considered by the assessment are included in the following NPWS documents:

    - Conservation objectives for Cork Harbour SPA [Site Code 004030]. Version 1.0 – Department of Arts, Heritage and the Gaeltacht (Dec 2014).
    - Conservation objectives for Great Island Channel SAC [Site Code 001058]. Version 1.0 – Department of Arts, Heritage and the Gaeltacht (June 2014).
    - Conservation objectives for Blackwater River (Cork/Waterford) SAC [Site Code 002170]. Version 1.0 – Department of Arts, Heritage and the Gaeltacht (July 2012).

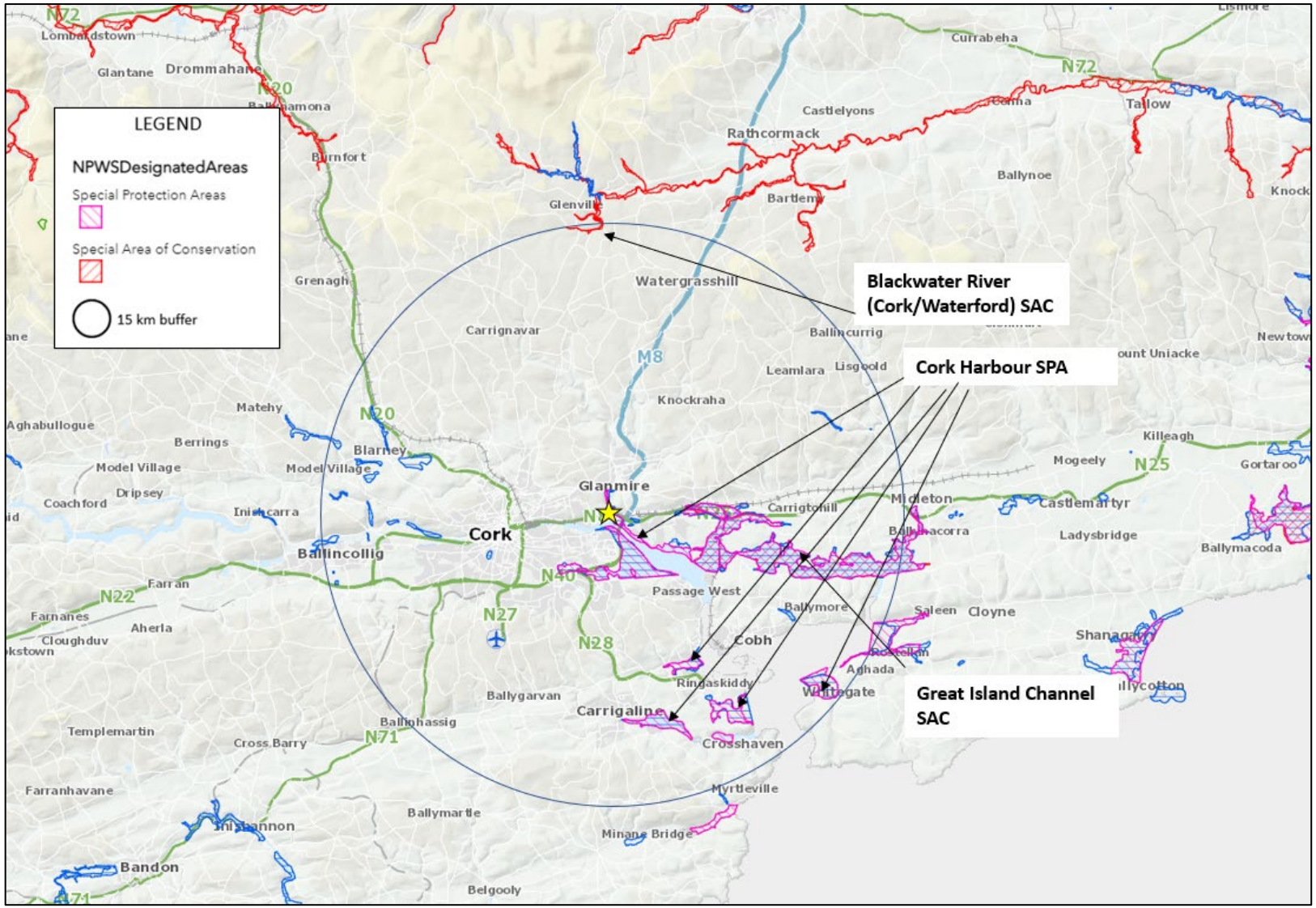


Figure 3.1: Designated Sites within a 15km radius. The site location is shown as a yellow star (Source: NPWS Maps, 2022).

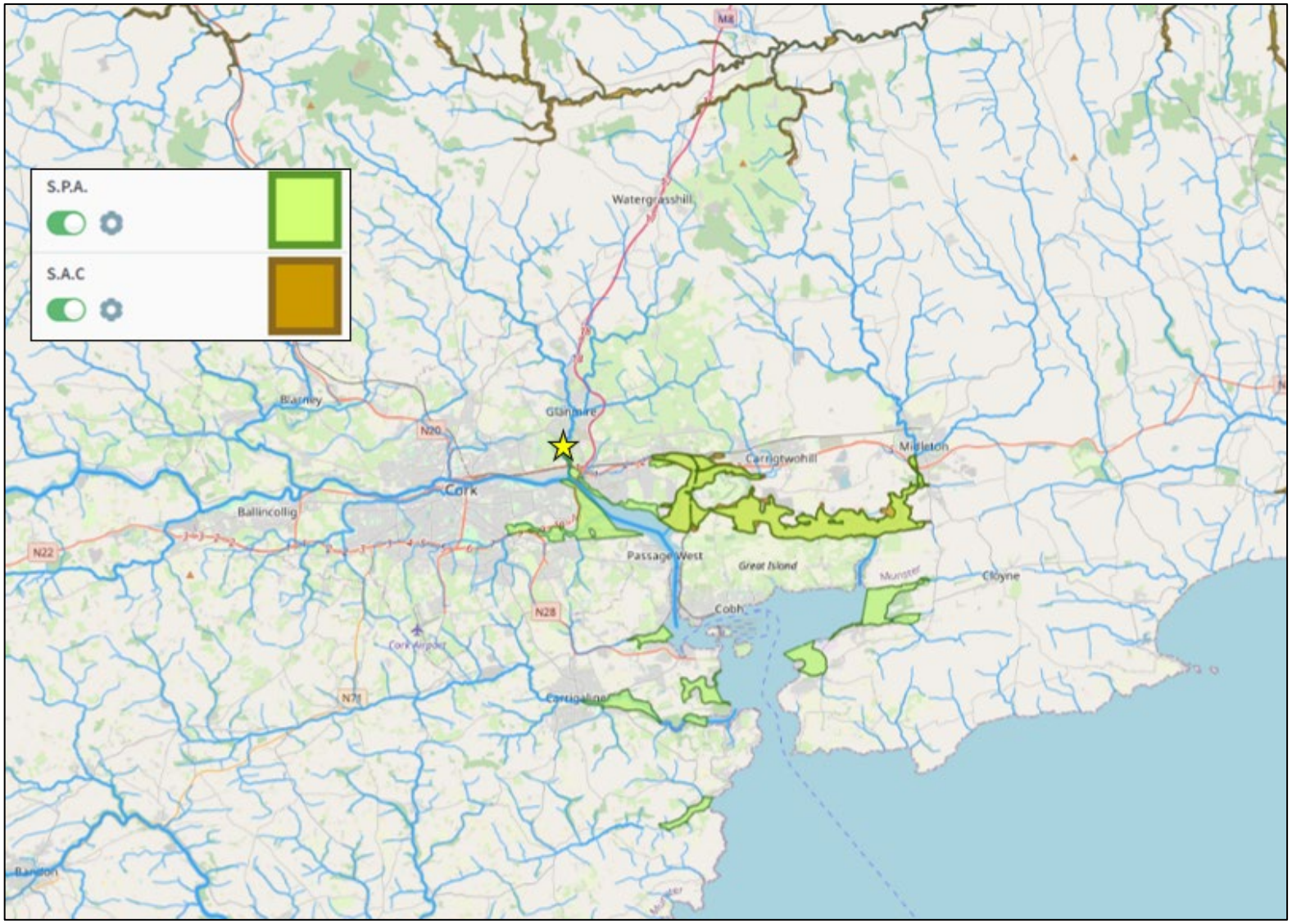


Figure 3.2: European Sites and EPA Rivers (approx. site location is indicated by the yellow star. (Source: EPA Maps, 2022).

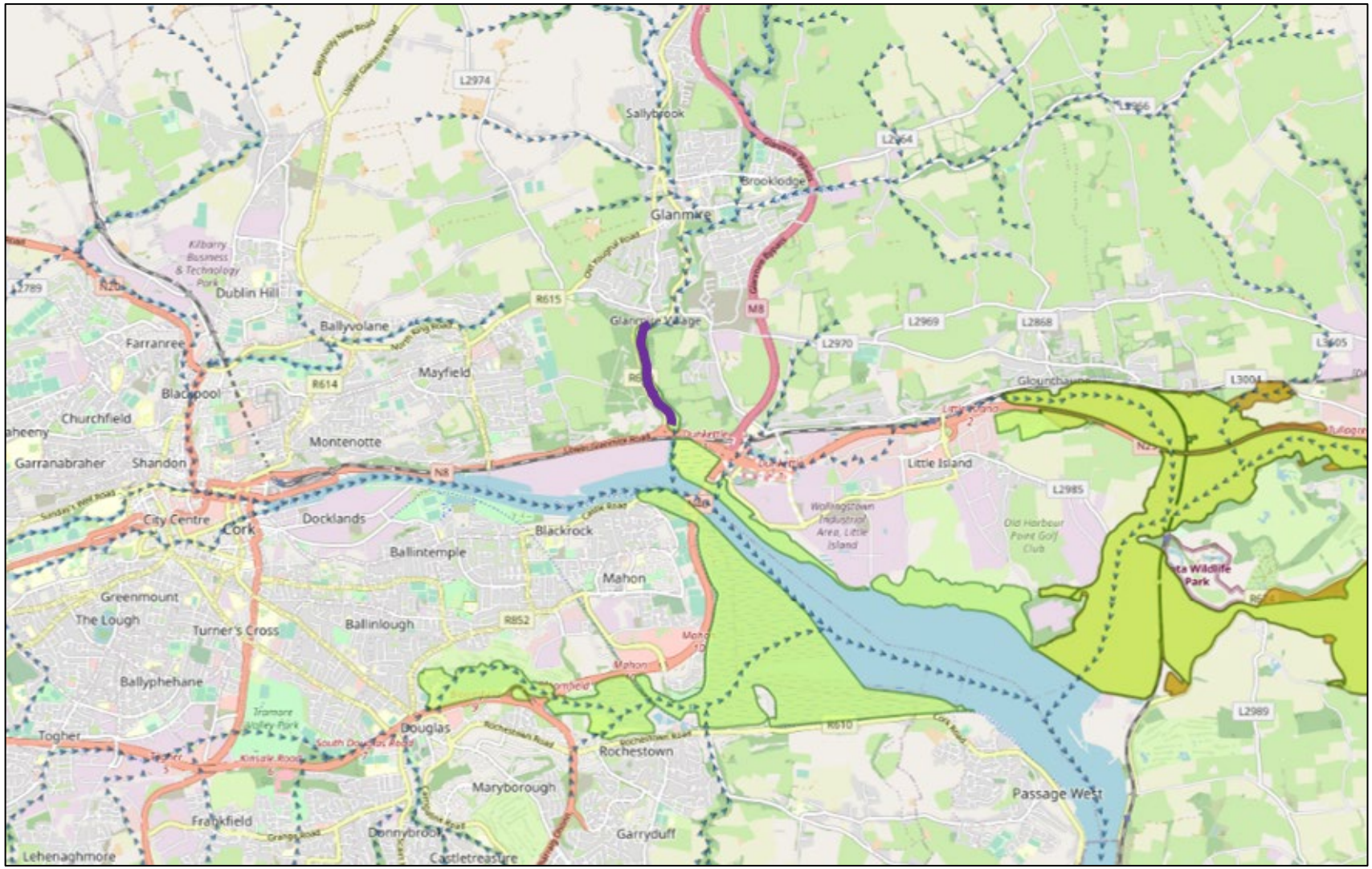


Figure 3.3: Nearest European Sites and EPA Rivers relative to the study area (site location indicated by the purple line). (Source: EPA Maps, 2022).

Table 3.1 European Sites within 15 kilometres (ZOI) of the proposed site.

Site Code	Site Name	Distance (km)	Sensitive Receptors (Qualifying Interest & Special Conservation Interests) [including the relevant code for the qualifying feature]	Site Synopsis and Existing threats or Sensitivities
004030	Cork Harbour SPA	0.01 E	[A004] Little Grebe (Tachybaptus ruficollis) [A005] Great Crested Grebe (Podiceps cristatus) [A017] Cormorant (Phalacrocorax carbo) [A028] Grey Heron (Ardea cinerea) [A048] Shelduck (Tadorna tadorna) [A050] Wigeon (Anas penelope) [A052] Teal (Anas crecca) [A054] Pintail (Anas acuta) [A056] Shoveler (Anas clypeata) [A069] Red-breasted Merganser (Mergus serrator) [A130] Oystercatcher (Haematopus ostralegus) [A140] Golden Plover (Pluvialis apricaria) [A141] Grey Plover (Pluvialis squatarola) [A142] Lapwing (Vanellus vanellus) [A149] Dunlin (Calidris alpina) [A156] Black-tailed Godwit (Limosa limosa) [A157] Bar-tailed Godwit (Limosa lapponica) [A160] Curlew (Numenius arquata) [A162] Redshank (Tringa totanus) [A179] Black-headed Gull (Chroicocephalus ridibundus) [A182] Common Gull (Larus canus) [A183] Lesser Black-backed Gull (Larus fuscus) [A193] Common Tern (Sterna hirundo) [A999] Wetland and Waterbirds	Cork Harbour is a large, sheltered bay system, with several river estuaries - principally those of the Rivers Lee, Douglas, Owenboy, and Owennacurra. The SPA site comprises most of the main intertidal areas of Cork Harbour, including all of the North Channel, the Douglas River Estuary, inner Lough Mahon, Monkstown Creek, Lough Beg, the Owenboy River Estuary, Whitegate Bay, Ringabella Creek, and the Rostellan and Poulnabibe inlets. The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Little Grebe, Great Crested Grebe, Cormorant, Grey Heron, Shelduck, Wigeon, Teal, Mallard, Pintail, Shoveler, Red-breasted Merganser, Oystercatcher, Golden Plover, Grey Plover, Lapwing, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Curlew, Redshank, Greenshank, Blackheaded Gull, Common Gull, Lesser Black-backed Gull, and Common Tern. The site is also of special conservation interest for holding an assemblage of over 20,000 wintering waterbirds. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds. A range of passage waders occurs regularly in autumn, including such species as Ruff (5-10), Spotted Redshank (1-5), and Green Sandpiper (1-5). Numbers vary between years and usually a few of each of these species over-winter. Cork Harbour has a nationally important breeding colony of Common Tern (102 pairs in 1995). The birds have nested in Cork Harbour since about 1970, and since 1983 on various artificial structures, notably derelict steel barges and the roof of a Martello Tower. The birds are monitored annually and the chicks are ringed. Cork Harbour is of major ornithological significance, being of international importance both for the total numbers of wintering birds (i.e. > 20,000) and also for its populations of Black-tailed Godwit and Redshank. In addition, it supports nationally important wintering populations of 22 species, as well as a nationally important breeding colony of

Site Code	Site Name	Distance (km)	Sensitive Receptors (Qualifying Interest & Special Conservation Interests) [including the relevant code for the qualifying feature]	Site Synopsis and Existing threats or Sensitivities
				Common Tern. Several of the species which occur regularly are listed on Annex I of the E.U. Birds Directive, i.e. Whooper Swan, Little Egret, Golden Plover, Bar-tailed Godwit, Ruff, Mediterranean Gull, and Common Tern. The site provides both feeding and roosting sites for the various bird species that use it. Cork Harbour is also a Ramsar Convention site and part of Cork Harbour SPA is a Wildfowl Sanctuary.
001058	Great Island Channel SAC	3.7 E	[1140] Mudflats and sandflats not covered by seawater at low tide [1330] Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	The Great Island Channel stretches from Little Island to Midleton, with its southern boundary being formed by Great Island. It is an integral part of Cork Harbour which contains several other sites of conservation interest. Geologically, Cork Harbour consists of two large areas of open water in a limestone basin, separated from each other and the open sea by ridges of Old Red Sandstone. Within this system, Great Island Channel forms the eastern stretch of the river basin and, compared to the rest of Cork Harbour, is relatively undisturbed. Within the site is the estuary of the Owennacurra and Dungourney Rivers. These rivers, which flow through Midleton, provide the main source of freshwater to the North Channel. The main habitats of conservation interest in Great Island Channel SAC are the sheltered tidal sand and mudflats and the Atlantic salt meadows. Owing to the sheltered conditions, the intertidal flats are composed mainly of soft mud. The salt marshes are scattered through the site and are all of the estuarine type on mud substrate. The site is extremely important for wintering waterfowl and is considered to contain three of the top five areas within Cork Harbour, namely North Channel, Harper's Island, and Belvelly-Marino Point. Shelduck is the most frequent duck species with 800-1,000 birds centred on the Fota/Marino Point area. There are also large flocks of Teal and Wigeon, especially at the eastern end. The site is an integral part of Cork Harbour which is a wetland of international importance for the birds it supports. Overall, Cork Harbour regularly holds over 20,000 waterfowl and contains internationally important numbers of Black-tailed Godwit (1,181) and Redshank (1,896), along with nationally important numbers of nineteen other species. Furthermore, it contains large Dunlin (12,019) and Lapwing (12,528) flocks. All counts are average peaks, 1994/95 –

Site Code	Site Name	Distance (km)	Sensitive Receptors (Qualifying Interest & Special Conservation Interests) [including the relevant code for the qualifying feature]	Site Synopsis and Existing threats or Sensitivities
				1996/97. Much of the site falls within Cork Harbour Special Protection Area, an important bird area designated under the E.U. Birds Directive. The site is of major importance for the two habitats listed on Annex I of the E.U. Habitats Directive, as well as for its important numbers of wintering waders and wildfowl. It also supports a good invertebrate fauna.
002170	Blackwater River (Cork/Waterford) SAC	12.8 N	[1130] Estuaries [1140] Tidal Mudflats and Sandflats [1220] Perennial Vegetation of Stony Banks [1310] Salicornia Mud [1330] Atlantic Salt Meadows [1410] Mediterranean Salt Meadows [3260] Floating River Vegetation [91A0] Old Oak Woodlands [91E0] Alluvial Forests* [1029] Freshwater Pearl Mussel (Margaritifera margaritifera) [1092] White-clawed Crayfish (Austropotamobius pallipes) [1095] Sea Lamprey (Petromyzon marinus) [1096] Brook Lamprey (Lampetra planeri) [1099] River Lamprey (Lampetra fluviatilis) [1103] Twaite Shad (Alosa fallax) [1106] Atlantic Salmon (Salmo salar) [1355] Otter (Lutra lutra) [1421] Killarney Fern (Trichomanes speciosum)	The River Blackwater is one of the largest rivers in Ireland, draining a major part of Co. Cork and five ranges of mountains. In times of heavy rainfall, the levels can fluctuate widely by more than 12 feet on the gauge at Careysville. The peaty nature of the terrain in the upper reaches and of some of the tributaries gives the water a pronounced dark colour. The site consists of the freshwater stretches of the River Blackwater as far upstream as Ballydesmond, the tidal stretches as far as Youghal Harbour, and many tributaries, the larger of which include the Licky, Bride, Flesk, Chimneyfield, Finisk, Araglin, Awbeg (Buttevant), Clyda, Glen, Allow, Dalua, Brogeen, Rathcool, Finnow, Owentaraglin, and Awnaskirtaun. The portions of the Blackwater and its tributaries that fall within this SAC flow through the counties of Kerry, Cork, Limerick, Tipperary, and Waterford. Nearby towns include Rathmore, Millstreet, Kanturk, Banteer, Mallow, Buttevant, Doneraile, Castletownroche, Fermoy, Ballyduff, Rathcormac, Tallow, Lismore, Cappoquin, and Youghal.

3.3 Assessment Criteria

3.3.1 Exclusion from Appropriate Assessment

As set out in the provisions of the Habitats Directive, Plans or Projects that are directly connected with or necessary to the management of a European Site do not require AA. For this exception to apply, management is required to be interpreted narrowly as nature conservation management in the sense of Article 6(1) of the Habitats Directive. This refers to specific measures to address the ecological requirements of annexed habitats and species (and their habitats) present on a site(s). The relationship should be shown to be direct and not a by-product of the plan, even if this might result in positive or beneficial effects for a site(s).

In this case however, the proposed Glanmire to City Cycle Route (Phase 1) is neither necessary for, nor directly connected with the management of a European Site. As such, the development cannot be excluded from AA.

3.3.2 Elements of the works with the potential to give risk to Effects

The construction and operational phases of the Glanmire to City Cycle Route (Phase 1) have the potential to introduce effects such as indirect disturbance due to noise/vibrations and surface water run-off and sedimentation. These effects are examined in detail in relation to the sensitive receptors of each of the European sites identified with regard to the conservation objectives and the potential pathways for effects.

3.3.3 Identification of Potential Effects and Screening of Sites

This section documents the final stage of the screening process. It uses the information collected on the sensitivity of each European Site and describes any potential effects on the integrity of European sites resulting from the proposed works. This assumes the absence of any controls, conditions, or mitigation measures. In determining the potential for effects, a number of factors have been taken into account. Firstly, the sensitivity and reported threats to the European Site and secondly, the individual elements of the proposed works and the potential effect they may cause to the site were considered.

Sites are screened out based on one or a combination of the following criteria:

- Where it can be shown that there are no significant pathways such as hydrological links between activities of the proposed works and the site to be screened;
- Where the site is located at such a distance from proposed works that effects are not foreseen; and
- Where it is that known threats or vulnerabilities at a site cannot be linked to potential impacts that may arise from the proposed works.

3.4 Assessment of Significance of Potential Effects

Assessment is the process of evaluating the importance or significance of project/plan effects (whether negative or positive). The following parameters are described when characterising impacts (following guidance from the Chartered Institute of Ecology and Environmental Management, Environmental Protection Agency, and National Roads Authority):

Direct and Indirect Impacts – An impact can be caused either as a direct or as an indirect consequence of a proposed development;

Magnitude - Magnitude refers to size, amount, intensity, and volume. It should be quantified if possible and expressed in absolute or relative terms (e.g. the amount of habitat lost, percentage change to habitat area, percentage decline in a species population). Magnitude measures the size of an impact, which is described as high, medium, low, very low, or negligible.

Extent - The extent is the spatial or geographical area over which the impact/effect may occur under a suitably representative range of conditions (e.g. noise transmission under water);

Duration - The time for which the effect is expected to last prior to recovery or replacement of the resource or feature.

- Temporary: Up to 1 Year;
- Short Term: The effects would take 1-7 years to be mitigated;
- Medium Term: The effects would take 7-15 years to be mitigated;
- Long Term: The effects would take 15-60 years to be mitigated; and
- Permanent: The effects would take 60+ years to be mitigated.

Likelihood – The probability of an impact/effect occurring taking into account all available information.

- Certain/Near Certain: >95% chance of occurring as predicted;
- Probable: 50-95% chance as occurring as predicted;
- Unlikely: 5-50% chance as occurring as predicted; and
- Extremely Unlikely: <5% chance as occurring as predicted.

EC identified in '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 Environment DG, 2001' outlines the types of effects that may affect European sites. These include effects from the following activities:

- Land take
- Resource Requirements (Drinking Water Abstraction, Etc.)
- Emissions (Disposal to Land, Water or Air)
- Excavation Requirements
- Transportation Requirements
- Duration of Construction, Operation, Decommissioning

In addition, the guidance outlines the following likely changes that may occur at a designated site, which may result in effects on the integrity and function of that site:

- Reduction of Habitat Area
- Disturbance to Key Species

- Habitat or Species Fragmentation
- Reduction in Species Density
- Changes in Key Indicators of Conservation Value (Water Quality, Etc.)
- Climate Change

The elements detailed above were considered with specific reference to each of the European sites identified within a 15km radius.

3.4.1 Land Take/Habitat Loss

The Glanmire to City Cycle Route (Phase 1) project will not require land take from any European Site nor will it result in any habitat loss.

3.4.2 Resource Requirements

There are no resource requirements (i.e. mineral/drinking water abstractions, etc.) for the proposed development which will be added to existing requirements. Therefore, there will be no interactions with resources necessary for the maintenance of the ecological integrity of any European sites.

3.4.3 Duration of Works

The construction phase of the proposed works is anticipated to be short-term in nature. Given the relatively small-scale and short-term nature of the construction works, the duration of the works will not have a significant impact on nearby European sites.

3.4.4 Emissions (Disposal to Land, Water or Air)

Construction Phase:

Construction phase elements of the plan may give rise to increased temporary side effects such as noise or contamination due to dust. The closest surface water feature (Glashaboy River runs along the length of the proposed route. Although this site is in the immediate proximity to the Glashaboy River (Figures 3.2 and 3.3), the scale of the works is small, and there are no anticipated in-stream works.

The proposed project involves road upgrade works, public realm provision and the construction of a cantilevered walkway. Although no instream works are proposed and the works are overall relatively small in scale there is a potential risk of immediate water quality impacts resulting from the works during construction via the indirect discharge of surface water to the existing surface water infrastructure. These impacts could then be transferred to the designated SPA via the hydrological pathway. However, through the application of a well thought out and thorough Construction Environmental Management Plan for this project, the potential for excessive suspended solids getting into the existing surface water infrastructure would become very unlikely. Note: a site specific CEMP is not considered 'mitigation' as per the OPR Practice Note PN1 Guidance (2021). Therefore, taking into consideration the above it is unlikely that impacts such as increased siltation and turbidity as well as pollution from

surface run-off would cause significant effects on designated water-dependent qualifying interests.

Operational Phase:

For the drainage system, new outlets will be designed to join existing drainage in accordance with the Glashaboy River (Glanmire/Sallybrook) Drainage Scheme, and CIRIA C753 The SuDS Manual. The surface water design should be carried out so that all rainfall runoff is restricted to a maximum that is equal to, or less than, the natural greenfield runoff equivalent. The magnitude of discharge is likely to be small and will not contribute to additional surface water discharge to rivers. Even when considering the distance to the adjacent European site (Cork Harbour SPA) and the indirect hydrological connectivity, it is considered that the surface water drainage from the proposed works will not give rise to any significant impacts on nearby European sites.

3.4.5 Excavation Requirements/ Erosion/Sedimentation

The proposed development does not require major excavation works. Some small-scale works will be completed; therefore, there is a potential for erosion of bare ground and/or sediment movement resulting from surface run-off during the construction phase. However, given the relatively small-scale and short-term nature of the works, even when considering the location of the nearest European Site adjacent to the site, there will be no significant effects to the European Site anticipated as a result of erosion and/or sedimentation. In addition, through the application of a well thought out and thorough Construction Environmental Management Plan for this project, the potential for excessive suspended solids getting into the existing surface water infrastructure would become very unlikely. Note: a site specific CEMP is not considered 'mitigation' as per the OPR Practice Note PN1 Guidance (2021). Therefore, taking into consideration the above it is unlikely that impacts such as increased siltation and turbidity as well as pollution from surface run-off would cause significant effects on designated water-dependent qualifying interests. Therefore, given the scale of the development and distance to European sites, the effects arising from these works will be negligible.

3.4.6 Transportation Requirements

There will be a minor, temporary increase in construction traffic during the construction phase. However, these effects are considered to be negligible with regard to European sites due to the small-scale nature of the works, and the indirect pathways.

3.4.7 Duration of Construction, Operation, Decommissioning

The proposed project duration is short-term. The construction will result in a new cycle route with additional street lighting as well as a public realm space and a boardwalk. The duration of the construction will have no effect on European sites given the small-scale nature of the works.

3.4.8 Habitat Reduction

There are no supporting habitats identified within the site footprint for any Annex I or Annex II species. The nearest European site is located immediately adjacent to the site and beyond the site boundary. As such, there will be no reduction of the habitat of European sites resulting from the proposed development.

3.4.9 Species Disturbance

Of the protected species and habitats identified, the nearest designated site is Cork Harbour SPA located immediately to the east of the study area. Despite the distance, disturbance from noise, vibrations, lighting, will not result in species disturbance. In addition, through the application of a well thought out and thorough Construction Environmental Management Plan for this project, the potential for species disturbance is future removed. Note: a site specific CEMP is not considered 'mitigation' as per the OPR Practice Note PN1 Guidance (2021).

3.4.10 Habitat or species fragmentation

The proposal is considered to have no potential effects on any European site.

3.4.11 Changes in Key indicators of Conservation Value

There is a surface water feature located immediately adjacent to the site area (Glashaboy Estuary transitional river) that flows from north to south and is a designated SPA which eventually flows into Lough Mahon which shares borders with Cork Harbour SPA and Great Channel Island SAC. Given the scale and timeline of the development, even when combined with the short distance and indirect pathways identified, effects arising from these works will be negligible.

3.4.12 Climate Change

Due to the nature and scale of the proposed work, the effects of the proposed development on climate and Ireland's obligations under the Kyoto Protocol are not anticipated to be significant.

3.4.13 Combination Effects with Other Projects

A review of Cork City planning records for the area was undertaken. The review covered projects which are in receipt of a grant of planning within the last 7 years. None of these are to the scale and nature of this application and generally relate to construction of or amendments to individual properties.

The proposed development is short term by its very nature and improves the pedestrian and cycle access. Based on a review of planning applications, it is considered unlikely that any of the committed developments in the immediate vicinity will result in a significant potential for cumulative environmental impacts (including potential cumulative traffic impacts, surface water quality, etc) with the proposed development during either the construction or operational phases.

The adopted Cork City Development Plan 2022-2028 will replace the current Cork City Development Plan 2015-2021. The draft Cork City Development Plan 2022-2028 identifies the area of 'landscape preservation area'.

No effects are foreseen to occur as the result of the in-combination works to the proposed cycle route at Glanmire, or any other local planning projects.

Table 3.2 Screening assessment of the potential effects arising from the proposed works

Site Code	Site Name	Distance (km)	Sensitive Receptors (Qualifying Interest & Special Conservation Interests) [including the relevant code for the qualifying feature]	Characterisation of Potential Effects	Potential Significant Effects	Potential In-combination Effects
004030	Cork Harbour SPA	0.01 E	[A004] Little Grebe (Tachybaptus ruficollis) [A005] Great Crested Grebe (Podiceps cristatus) [A017] Cormorant (Phalacrocorax carbo) [A028] Grey Heron (Ardea cinerea) [A048] Shelduck (Tadorna tadorna) [A050] Wigeon (Anas penelope) [A052] Teal (Anas crecca) [A054] Pintail (Anas acuta) [A056] Shoveler (Anas clypeata) [A069] Red-breasted Merganser (Mergus serrator) [A130] Oystercatcher (Haematopus ostralegus) [A140] Golden Plover (Pluvialis apricaria) [A141] Grey Plover (Pluvialis squatarola) [A142] Lapwing (Vanellus vanellus) [A149] Dunlin (Calidris alpina) [A156] Black-tailed Godwit (Limosa limosa) [A157] Bar-tailed Godwit (Limosa lapponica) [A160] Curlew (Numenius arquata) [A162] Redshank (Tringa totanus) [A179] Black-headed Gull (Chroicocephalus ridibundus) [A182] Common Gull (Larus canus) [A183] Lesser Black-backed Gull (Larus fuscus) [A193] Common Tern (Sterna hirundo) [A999] Wetland and Waterbirds	Threats to the site include D03.01 (port areas); E02 (Industrial or commercial areas); E01.03 (dispersed habitation); G01.02 (walking, horseriding and non-motorised vehicles); E01 (Urbanised areas, human habitation); F02.03 (Leisure fishing); D01.02 (roads, motorways); F01 (Marine and Freshwater Aquaculture); G01.01 (nautical sports); G01.06 (skiing, off-piste); D03.02 (Shipping lanes); A08 (Fertilisation). There is a negligible risk of significant effect on the SPA. There is no spatial overlap; however, there is an indirect hydrological link between the site and the protected area. Construction phase effects such as dust are known to persist over a short distance (less than 250 meters); all other effects from the sites are identified to be localised.	No	No
001058	Great Island Channel SAC	3.7 E	[1140] Mudflats and sandflats not covered by seawater at low tide [1330] Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	Threats to the site include: F01 (Marine and Freshwater Aquaculture); D01.02 (roads, motorways); I01 (invasive non-native species); A04 (grazing); J02.01.02 (reclamation of land from sea, estuary or marsh); A08 (Fertilisation); E01 (Urbanised areas, human habitation); K02.03 (eutrophication (natural)).	No	No

Site Code	Site Name	Distance (km)	Sensitive Receptors (Qualifying Interest & Special Conservation Interests) [including the relevant code for the qualifying feature]	Characterisation of Potential Effects	Potential Significant Effects	Potential In-combination Effects
				There is a negligible risk of significant effect on the SAC. There is no spatial overlap; however, there is a direct hydrological link between the site and the protected area via the River Lee and Lough Mahon. Construction phase effects such as dust are known to persist over a short distance (less than 250 meters); all other effects from the sites are identified to be localised.		
002170	Blackwater River (Cork/Waterford) SAC	12.8 N	[1130] Estuaries [1140] Tidal Mudflats and Sandflats [1220] Perennial Vegetation of Stony Banks [1310] Salicornia Mud [1330] Atlantic Salt Meadows [1410] Mediterranean Salt Meadows [3260] Floating River Vegetation [91A0] Old Oak Woodlands [91E0] Alluvial Forests* [1029] Freshwater Pearl Mussel (Margaritifera margaritifera) [1092] White-clawed Crayfish (Austropotamobius pallipes) [1095] Sea Lamprey (Petromyzon marinus) [1096] Brook Lamprey (Lampetra planeri) [1099] River Lamprey (Lampetra fluviatilis) [1103] Twaite Shad (Alosa fallax) [1106] Atlantic Salmon (Salmo salar) [1355] Otter (Lutra lutra) [1421] Killarney Fern (Trichomanes speciosum)	Threats to the site include: J02.01 (Landfill, land reclamation and drying out, general); D01.04 (railway lines, TGV); I01 (invasive non-native species); B (Sylviculture, forestry); E03.01 (disposal of household / recreational facility waste); A04 (grazing); G02 (Sport and leisure structures); A08 (Fertilisation); C01.01 (Sand and gravel extraction); G01.01 (nautical sports); E02 (Industrial or commercial areas); E01 (Urbanised areas, human habitation); J02.01 (Landfill, land reclamation and drying out, general); K01.01 (Erosion); A03 (mowing / cutting of grassland); D01.02 (roads, motorways); F02.03 (Leisure fishing). There are no sources for effect to the terrestrial habitats of the SAC. There is no spatial overlap or direct hydrological link between the site and the protected area. Construction phase effects such as dust are known to persist over a short distance (less than 250 meters); all other effects from the sites are identified to be localised.	No	No

4 SUMMARY & CONCLUSION

4.1 Summary

The Habitats Directive provides legal protection for habitats and species of European importance. This AA screening has been prepared for the proposed repurposing and upgrades of the proposed Glanmire Cycle Route, Glanmire, Co. Cork and is based on the best scientific knowledge and has utilised ecological and hydrological expertise. In addition, a detailed online review of published scientific literature and 'grey' literature was conducted.

Although there is a surface water feature mapped within a short distance of the site area, the Glashaboy River, site works are not anticipated to cause any discharge to the river, and due to the small scale of the project, there is no risk of water quality impacts resulting from the works.

There will be no:

- reduction in habitat area
- disturbance to key species
- habitat or species fragmentation
- reduction in species density
- changes in key indicators of conservation value
- climate change

4.2 Conclusion

This stage 1 screening for AA of the proposed works on the Glanmire Cycle Route in Cork City shows that implementation of the proposed project is not foreseen to have any likely significant effects on any European sites.

The Cork Harbour SPA is the nearest European site or qualifying habitat, and is located immediately adjacent to the proposed development site. The distance to the downstream SAC is 4.7km direct to The Great Island Channel SAC. The AA screening process has considered potential effects which may arise during the construction and operational phases as a result of the implementation of the project.

Through an assessment of the pathways for effects and an evaluation of the project characteristics, taking into account the processes involved and the distance of separation from European sites, it has been evaluated that there are no likely significant adverse effects on the qualifying interests, special conservation interests, or the conservation objectives of any designated European site. The ecological integrity of the European sites is not foreseen to be significantly affected by the project.

Given the nature of the development, its scale, and the existing localised and temporary nature of the construction effects identified as potential sources, the proposed development will not lead to a significant in-combination effect with any other plans or projects.

It is concluded that the project is not foreseen to give rise to any significant adverse effects on any designated European sites, alone or in combination with other plans or projects. This evaluation is made in view of the conservation objectives of the habitats or species for which these sites have been designated. Consequently, a Stage Two Appropriate Assessment is not required for the project.