

AA SCREENING REPORT

Royal Canal Greenway – Phase 3 Binns Bridge

Dublin City Council

PROJECT NO. D542/1

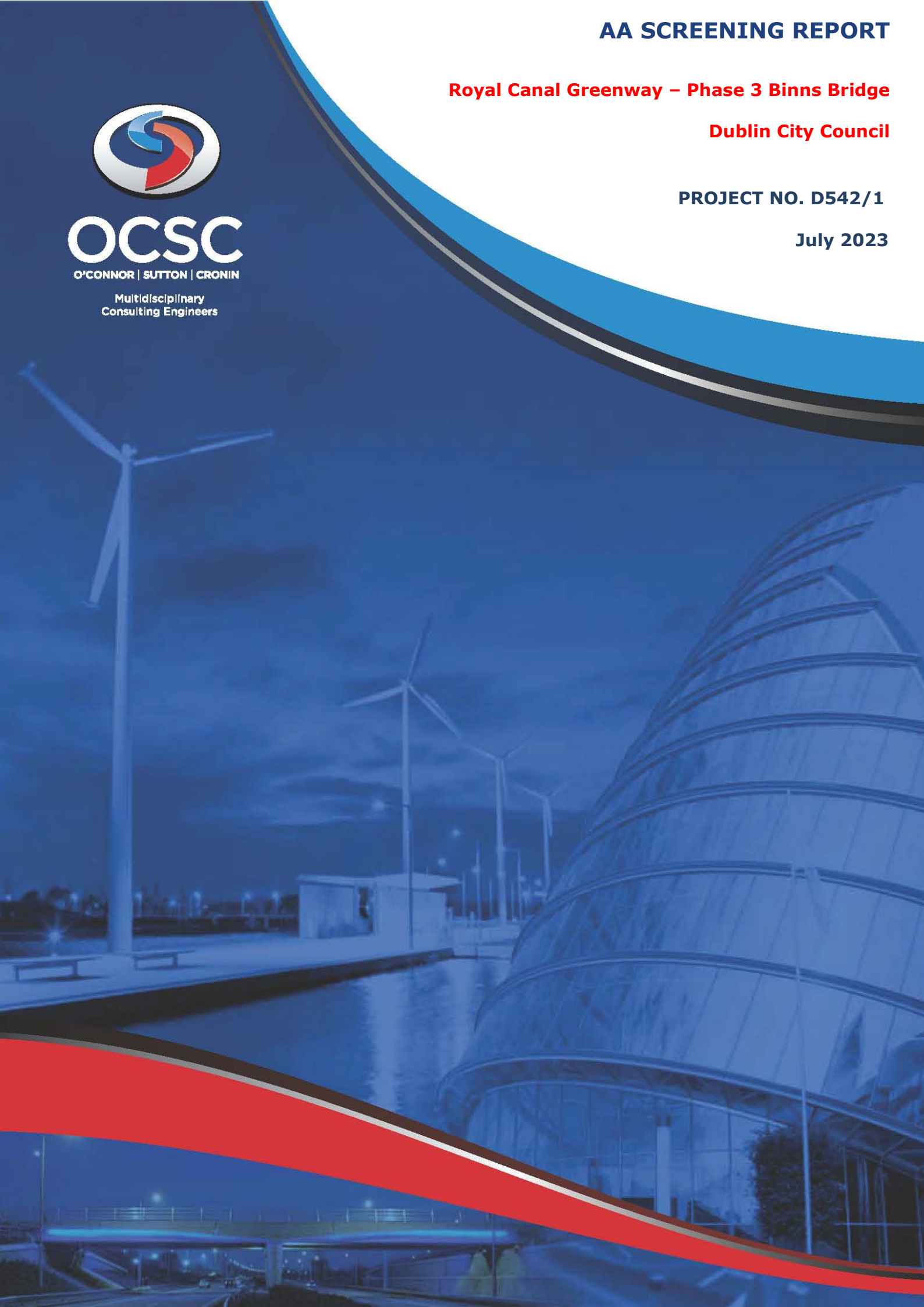
July 2023



OCSC

O'CONNOR | SUTTON | CRONIN

Multidisciplinary
Consulting Engineers



APPROPRIATE ASSESSMENT SCREENING REPORT

Royal Canal Greenway – Phase 3 Binns Bridge

for

Dublin City Council



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APPROPRIATE ASSESSMENT SCREENING REPORT

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1 INTRODUCTION

1.1 Project Contractual Basis & Parties Involved

This report has been prepared by O'Connor Sutton Cronin & Associates Ltd. (OCSC) at the request of their Client, Dublin City Council. The proposal is for a revised layout of a section of the previously approved Royal Canal Greenway Phase 3 located near Binns Bridge. The Royal Canal Greenway Phase 3 consists of a proposed walking/cycling route between Ossory Road, North Strand to Westmoreland Bridge, Phibsborough. The project will be constructed under a Part 8 Application. The regulatory authority for the site is Dublin City Council.

The report was completed by Glenda Barry, BSc, MSc, PGeo, Eurgeol, Principal Consultant with OCSC along with Dr Luis Iemma, BSc, MSc, Ph. D, Chartered Ecologist (CEcol), MCIEEM, Principal Ecologist with OCSC, and reviewed and approved by Eleanor Burke, BSc, MSc, DAS, MEnvSc, CSci, 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).

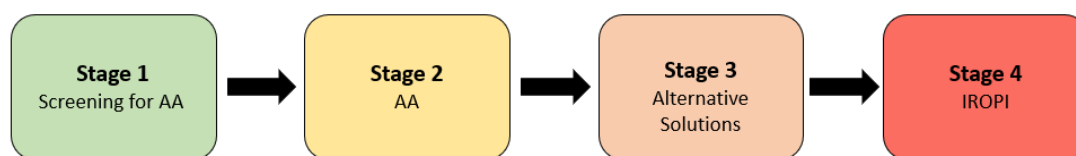
This AA screening is based on the best scientific knowledge and has utilised ecological and hydrological expertise. In addition, a detailed online review of published scientific literature and ‘grey’ literature was conducted. This included a detailed review of the National Parks and Wildlife Service (NPWS) website, including mapping and available reports for relevant sites and, in particular, sensitive qualifying interests/ special conservation interests described and their conservation objectives. The EPA EnVision map viewer (EPA 2023) and available reports were also reviewed, as was the NPWS (2019) publication “*The Status of Protected EU Habitats and Species in Ireland*”.

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

- Identification of European sites with 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 identifies the likely impacts upon a European site of a project, 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, either alone or in combination with other projects or plans, concerning the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment is made 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 significant impacts remains, then the process must proceed to Stage Three.

Stage Three: Assessment of Alternative Solutions

The process 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 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 all three elements of this mechanism must be in place for an effect to be established. The absence or removal of one of the elements of

the mechanism is sufficient to conclude that a potential effect is of any relevance or significance. The elements of this model consist of the following:

- Source(s) – e.g. pollutant run-off from proposed works;
- Pathway(s) – e.g. groundwater connecting 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/or cumulative adverse effects could arise from the proposed development.

1.3 Methodology and Approach

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

- *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 Habitats Directive 92/43/EEC.* European 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 or not 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 Dublin City Council (“the Client”). 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 the 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 March and April 2023 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 a 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 Report has been prepared as part of a Part 8 permission application for a change to the previously approved 2.1km Royal Canal Greenway Phase 3 project. The study area consists of an area of 1,063.64m².

The works includes the following elements:

- Demolition of a section of the existing tow path which ramps up to Binns Bridge;
- Construction of a new tow path ramp in accordance with the National Cycle Manual requirements to form part of the permitted Royal Canal Greenway Phase 3 project (Planning Register Reference: 2870/15). The new path will involve sheet piling and retaining structures to widen the existing towpath.
- Provision of shared and segregated pedestrian and cycle facilities;
- Provision of appropriate cladding and railings designed specifically to compliment Binns Bridge;
- Provision of soft and hard landscaping features including public realm improvements to the Second Lock below Binns Bridge along with revisions to the access arrangements for same;
- Relocation of the existing canal jetty at this location;
- All associated site works including the potential relocation of existing services and the provision of new services including public lighting, CCTV etc.

2.2 Site Setting and Location

The previously approved Royal Canal Greenway Phase 3 project is located between Ossory Road, North Strand and Westmoreland Bridge, Phibsborough. The particular study area for this report consists of an area of 1,063.64m² and is located to the east of Binns Bridge as shown in Figures 2.1 and 2.2.

The dominant habitat along the length of the greenway is the man-made structure of the Royal Canal and its towpaths and banks which are included in the boundary of a proposed Natural Heritage Area (pNHA). Within the canal, there are small stands of reed and sedges, while the banks of the canal are dominated by either built surfaces or mown amenity grassland and planted treelines. The areas of stonework adjoining bridges and lock gates support limited flora. Some sections of the northern bank of the canal near Croke Park remain unmanaged and support areas of dry meadows and grassy verges.

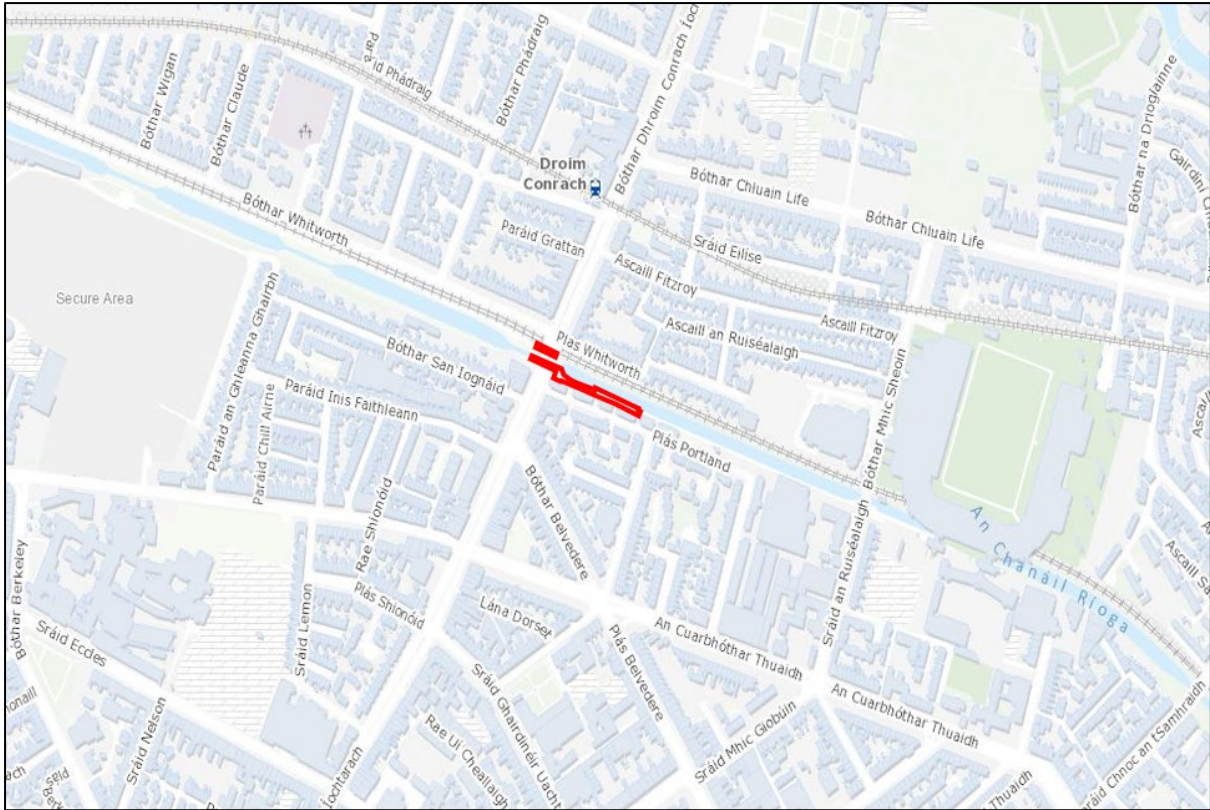


Figure 2.1: Site Location (Geohive Map Viewer, 2023).



Figure 2.2: Study Area (Geological Survey Ireland, 2023).

2.3 Surrounding Land Use

The immediately surrounding area is in residential, commercial, recreational, and community use as shown in Figure 2.2. The site is bounded by two rail lines owned by Irish Rail, a treeline, Whitworth Place, and commercial and residential structures to the north. To the south are commercial and residential structures. To the east are the Royal Canal, residential premises, and community space including Croke Park. To the west are the Royal Canal and residential and commercial structures. Refer to Table 2.1 for a list of adjacent land uses.

Table 2.1 – Adjacent Land Uses

BOUNDARY	LAND USE
North	Rail lines
South	Residential areas
East	The Royal Canal
West	The Royal Canal

2.4 Hydrology

The site area comprises a section of the Royal Canal Main Line (Liffey and Dublin Bay) and its banks located downstream of Binns Bridge. The Royal Canal flows from northwest to southeast into the Liffey River and then Dublin Bay. Based on the most recent water quality information (2016-2021), the Royal Canal has an overall Water Framework Directive (WFD) status of 'Good' as shown in Figure 2.3. The EPA spatial dataset shows that the risk of the Royal Canal failing to meet its WFD objectives by 2027 is 'Under Review' (EPA 2023) as shown in Figure 2.4.

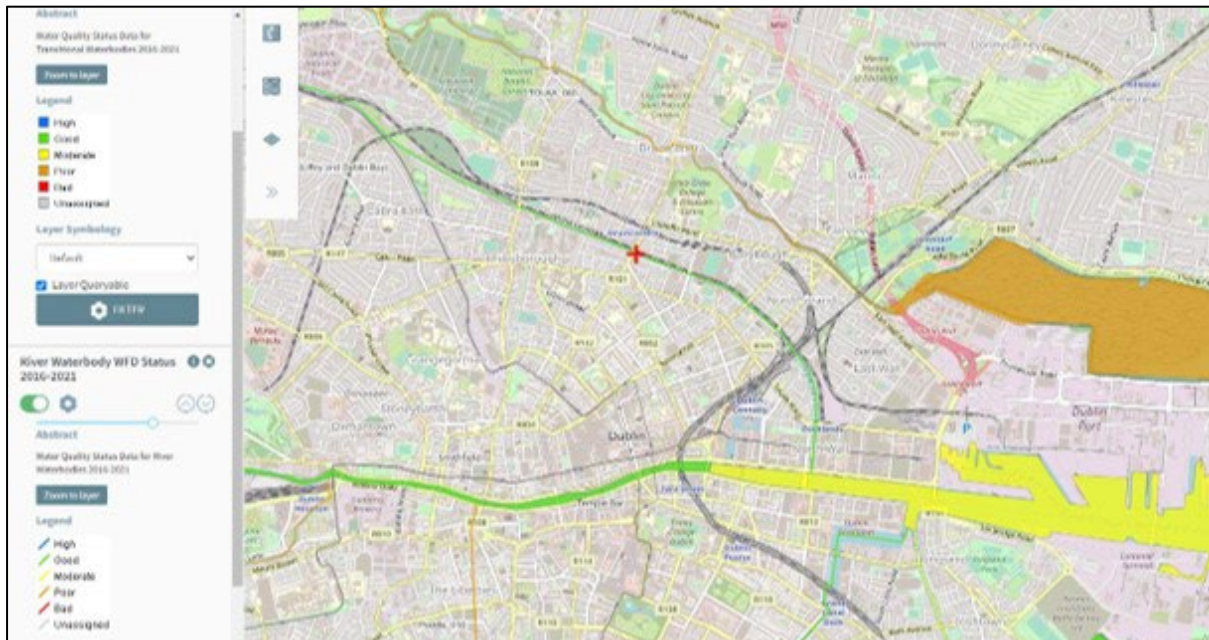


Figure 2.3: River Waterbody WFD Status; approximate site location indicated by red cross (EPA Maps, 2023)

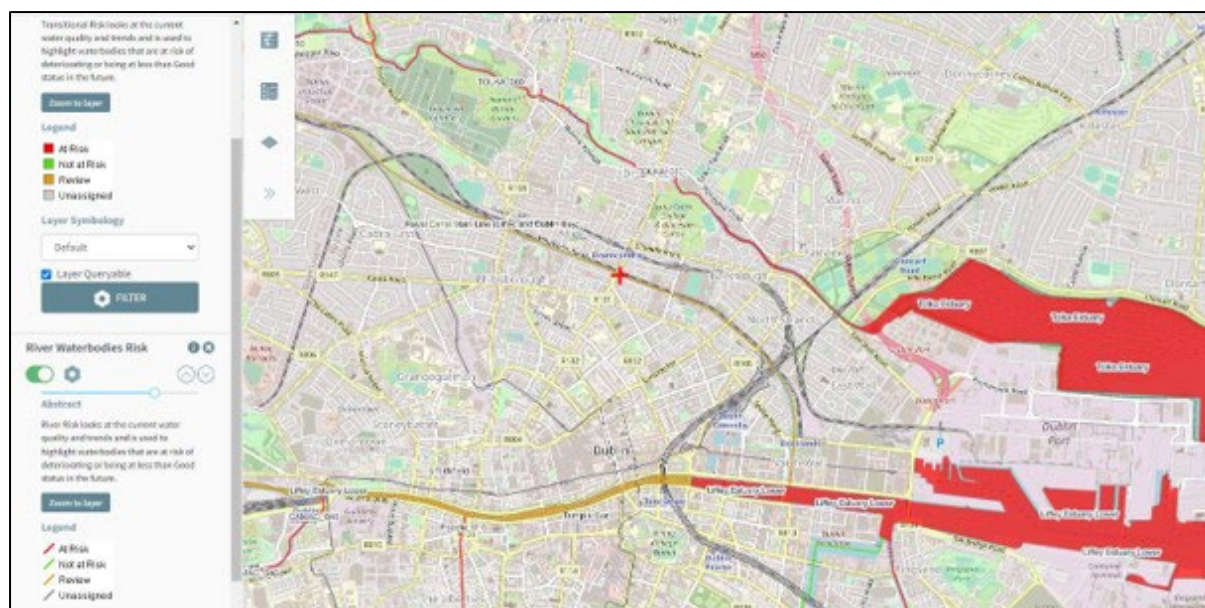


Figure 2.4: River Waterbodies Risk; approximate site location indicated by red cross (EPA Maps, 2023)

The River Liffey is located 1.5km south of the site at its nearest point and flows east into Dublin Bay. The EPA classifies this portion of the River Liffey as within the Liffey Estuary Lower as it is a transitional waterbody. However, the portion of the river upgradient of Talbot Memorial Bridge is classified for waterbody status and risk purposes as separate from the estuary downgradient of this point. Upgradient of Talbot Memorial Bridge the River Liffey has an overall WFD status of 'Good' as shown in Figure 2.3. The EPA spatial dataset shows that the risk of this portion of the River Liffey failing to meet its WFD objectives by 2027 is 'Under Review' (EPA 2023) as shown in Figure 2.4.

The Liffey Estuary Lower downgradient of Talbot Memorial Bridge is located 1.6km southeast of the site and flows from west to east into Dublin Bay. This portion of the Liffey Estuary Lower has an overall WFD status of 'Moderate' and is 'At Risk' of failing to meet its WFD objectives by 2027 (EPA 2023) as shown in Figures 2.3 and 2.4, respectively.

Dublin Bay is located approximately 4.3km southeast of the site at its nearest point and has an overall WFD status of 'Good'. The EPA spatial dataset indicates that Dublin Bay is 'Not at Risk' of failing to meet its WFD objectives by 2027 (EPA 2023) as shown in Figure 2.5.

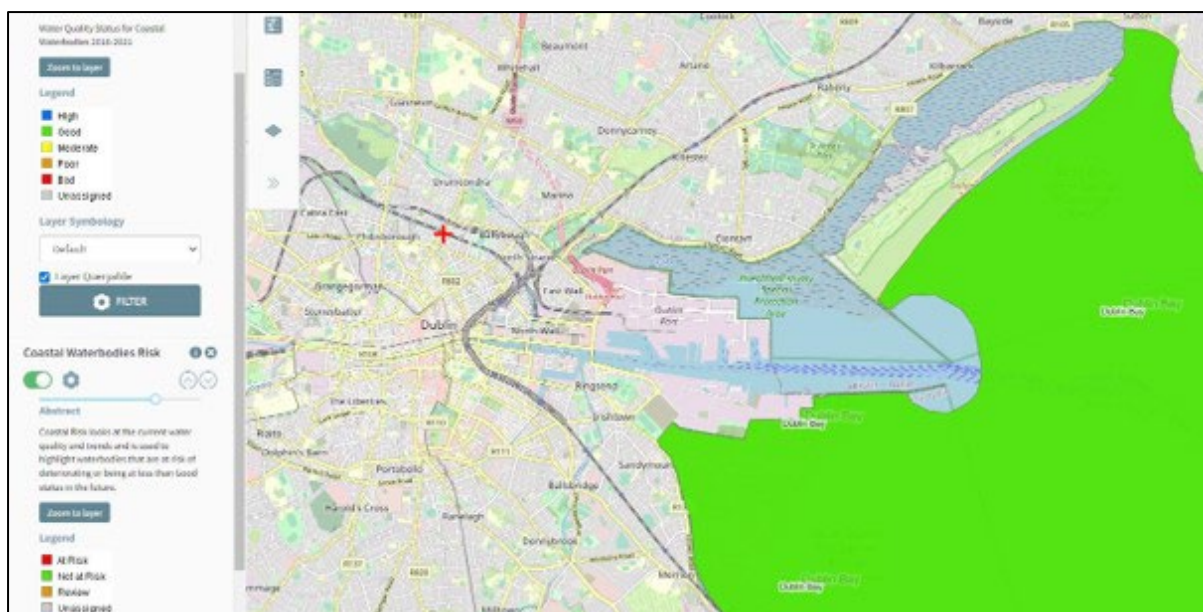


Figure 2.5: Coastal Waterbodies Status and Risk (approximate site location indicated by red cross) (EPA Maps, 2023)

Table 2.2 - WFD Summary Information

Name	Royal Canal	Liffey River	Liffey Estuary Lower	Dublin Bay
Waterbody Code	IE_09_AWB_RCMLE	IE_EA_090_0400	IE_EA_090_0300	IE_EA_090_0000
Waterbody Name	Royal Canal Main Line (Liffey and Dublin Bay)	Liffey Estuary Lower	Liffey Estuary Lower	Dublin Bay
Waterbody Type	Canal	Transitional	Transitional	Coastal
Iteration	SW 2016-2021	SW 2016-2021	SW 2016-2021	SW 2016-2021
Status	Good	Good	Moderate	Good
Risk	Under Review	Under Review	At Risk	Not at risk

3 SCREENING FOR APPROPRIATE ASSESSMENT

3.1 Screening Process

This stage of the process identifies any likely significant effects to 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. Paragraph 4.6(3) of the European Commission interpretation document ‘Managing Natura 2000 sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC’ 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 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 located 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. Natura sites located within 15km of the site are shown in Figure 3.1, 3.2, and 3.3.

To determine the potential for effects from the proposed works, information on the qualifying features, known vulnerabilities, and threats pertaining to any potentially affected European sites were reviewed. Background information on threats to individual sites and vulnerability of habitats and species that were 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, 2021);
- 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. QIs/SCIs for Natura sites within 15km of the site are detailed in Table 3.1.

- Conservation objectives that have been considered by the assessment are included in the following NPWS documents:
 - Conservation Objectives for South Dublin Bay and River Tolka SPA [004024]. Version 1.0 – Department of Housing, Local Government and Heritage (March 2015).
 - Conservation Objectives for South Dublin Bay SAC [000210]. Version 1.0 - Department of Housing, Local Government and Heritage (August 2013).
 - Conservation Objectives for Baldoyle Bay SPA [004016]. Version 1.0 - Department of Housing, Local Government and Heritage (February 2013).
 - Conservation Objectives for Malahide Estuary SPA [004025]. Version 1.0 - Department of Housing, Local Government and Heritage (August 2013).
 - Conservation Objectives for Malahide Estuary SAC [000205]. Version 1.0 - Department of Housing, Local Government and Heritage (May 2013).
 - Conservation Objectives for Ireland's Eye SPA [004117]. Version 1.0 - Department of Housing, Local Government and Heritage (October 2022).
 - Conservation Objectives for Ireland's Eye SAC [000193]. Version 1.0 - Department of Housing, Local Government and Heritage (January 2017).
 - Conservation Objectives for Baldoyle Bay SAC [000199]. Version 1.0 - Department of Housing, Local Government and Heritage (November 2012).
 - Conservation objectives for Wicklow Mountains SAC [002122]. Version 1.0 – Department of Housing, Local Government and Heritage (July 2017).
 - Conservation Objectives for Wicklow Mountains SPA [004040]. Version 8.0 – Department of Housing, Local Government and Heritage (March 2021).
 - Conservation Objectives for Glenasmole SAC [001209]. Version 8.0 - Department of Housing, Local Government and Heritage (March 2021).
 - Conservation objectives for Dalkey Islands SPA [004172]. Generic Version 8.0. Department of Housing, Local Government and Heritage (March 2021).

- Conservation Objectives for Rockabill to Dalkey Island SAC [003000]. Version 1.0 - Department of Housing, Local Government and Heritage (May 2013).
- Conservation Objectives for North Bull Island SPA [004006]. Version 1.0 - Department of Housing, Local Government and Heritage (March 2015).
- Conservation Objectives for North Dublin Bay SAC [000713]. Version 1.0 - Department of Housing, Local Government and Heritage (November 2013).
- Conservation Objectives for Howth Head Coast SPA [004113]. Version 8.0 - Department of Housing, Local Government and Heritage (March 2021).
- Conservation Objectives for Howth Head SAC [000202]. Version 1.0 - Department of Housing, Local Government and Heritage (December 2016).

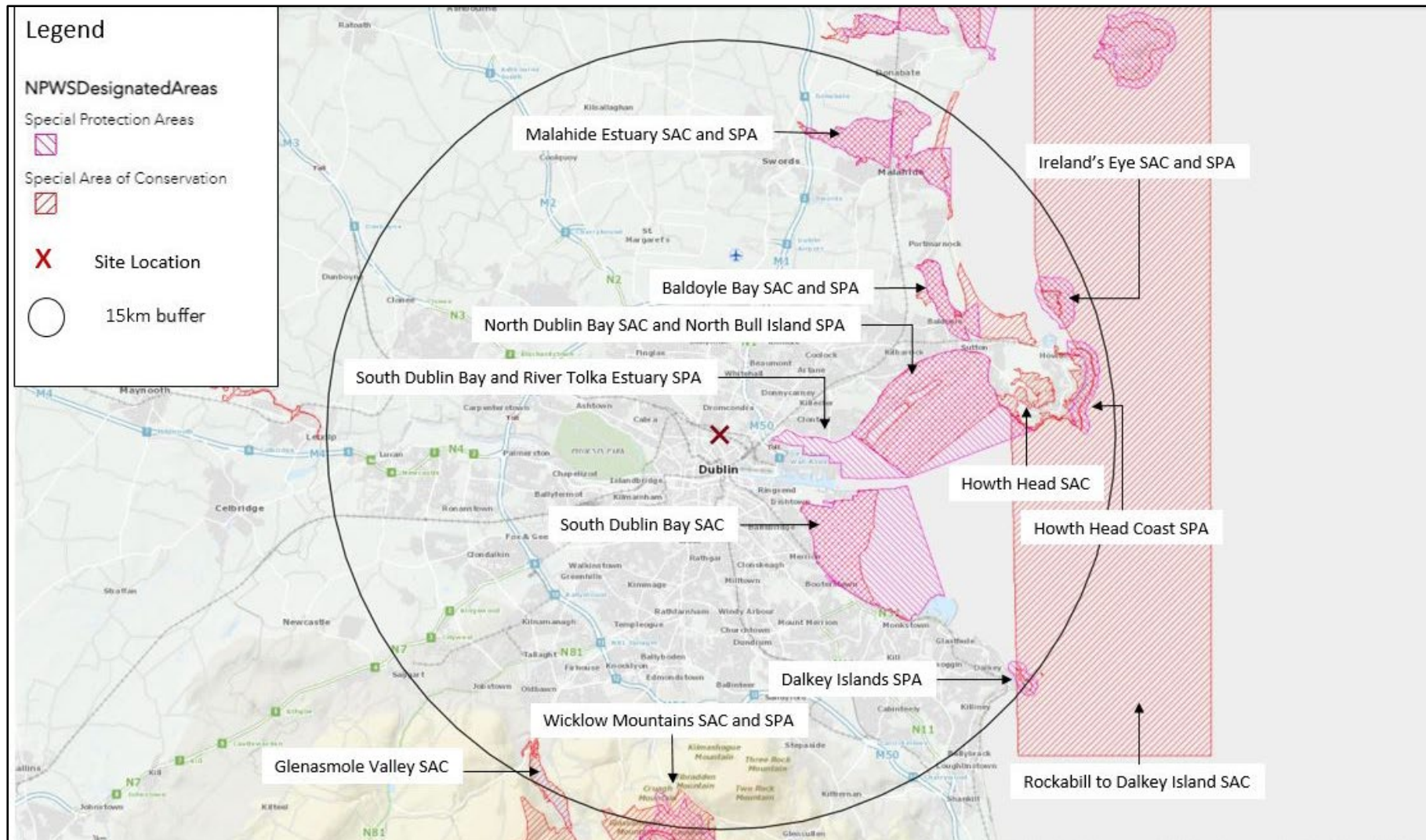


Figure 3.1: Designated Sites within 15km of the site; site location indicated by red “x” (NPWS maps, 2023).



Figure 3.2: European Sites and EPA Rivers near the study area; site location indicated by the red cross. (EPA maps, 2023).

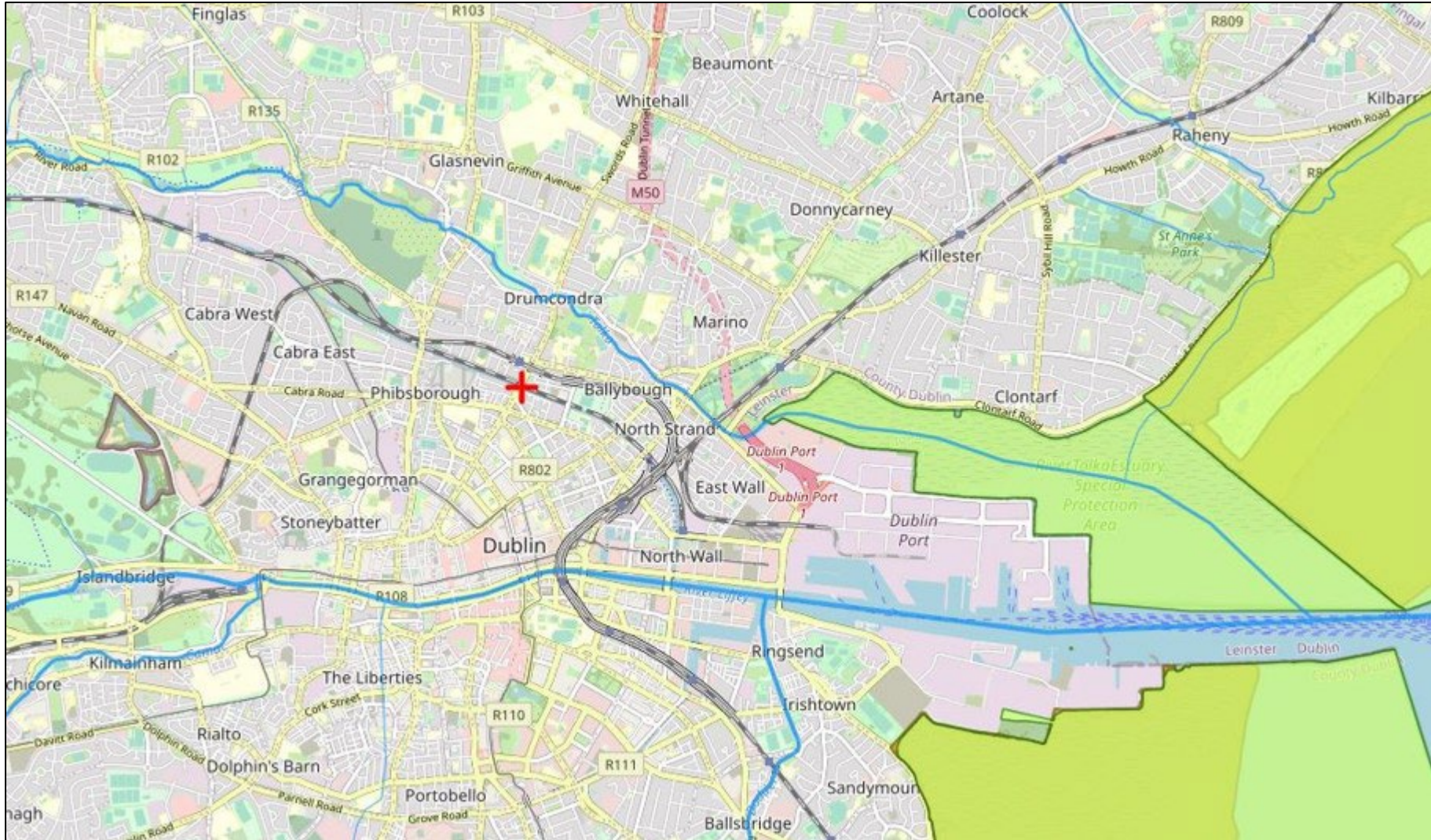


Figure 3.3: Nearest European Sites and EPA Rivers relative to the study area; site location indicated by the red cross. (EPA maps, 2023).

Table 3.1. European sites that occur within 15 km of the proposed works

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
004024	South Dublin Bay and Tolka Estuary SPA	2 E	<p>[A046] Light-bellied Brent Goose <i>Branta bernicla hrota</i> [A130] Oystercatcher <i>Haematopus ostralegus</i> [A137] Ringed Plover <i>Charadrius hiaticula</i> [A141] Grey Plover <i>Pluvialis squatarola</i> [A143] Knot <i>Calidris canutus</i> [A144] Sanderling <i>Calidris alba</i> [A149] Dunlin <i>Calidris alpina alpina</i> [A157] Bar-tailed Godwit <i>Limosa lapponica</i> [A162] Redshank <i>Tringa totanus</i> [A179] Black-headed Gull <i>Chroicocephalus ridibundus</i> [A192] Roseate Tern <i>Sterna dougallii</i> [A193] Common Tern <i>Sterna hirundo</i> [A194] Arctic Tern <i>Sterna paradisaea</i> [A999] Wetlands</p>	<p>The South Dublin Bay and River Tolka Estuary SPA comprise a substantial part of Dublin Bay. It includes the intertidal area between the River Liffey and Dun Laoghaire and the estuary of the River Tolka to the north of the River Liffey as well as Booterstown Marsh. A portion of the shallow marine waters of the bay is also included.</p> <p>The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Light-bellied Brent Goose, Oystercatcher, Ringed Plover, Grey Plover, Knot, Sanderling, Dunlin, Bar-tailed Godwit, Redshank, Black-headed Gull, Roseate Tern, Common Tern and Arctic Tern. The E.U. Birds Directive pays particular attention to wetlands, and as these form part of the SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.</p> <p>The South Dublin Bay and River Tolka Estuary SPA is of ornithological importance as it supports an internationally important population of Light-bellied Brent Goose and nationally important populations of a further nine wintering species. Furthermore, the site supports a nationally important colony of breeding Common Tern and is an internationally important passage/staging site for three tern species. It is of note that four of the species that regularly occur at this site are listed on Annex I of the E.U. Birds Directive, i.e. Bar-tailed Godwit, Common Tern, Arctic Tern and Roseate Tern. Sandymount Strand/Tolka Estuary is also a Ramsar Convention site.</p>

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
000210	South Dublin Bay SAC	4 SE	<p>[1140] Tidal Mudflats and Sandflats [1210] Annual vegetation of drift lines [1310] Salicornia and other annuals colonising mud and sand [2110] Embryonic shifting dunes</p>	<p>This site lies south of the River Liffey in Co. Dublin and extends from the South Wall to the west pier at Dun Laoghaire. It is an intertidal site with extensive areas of sand and mudflats. The sediments are predominantly sands but grade to sandy muds near the shore at Merrion Gates. The main channel which drains the area is Cockle Lake.</p> <p>South Dublin Bay is an important site for waterfowl. Although birds regularly commute between the south bay and the north bay, recent studies have shown that certain populations which occur in the south bay spend most of their time there. The principal species are Oystercatcher (1215), Ringed Plover (120), Sanderling (344), Dunlin (2628) and Redshank (356) (average winter peaks 1996/97 and 1997/98). Up to 100 Turnstones are usual in the south bay during winter. Brent Goose regularly occurs in numbers of international importance (average peak 299). Bar-tailed Godwit (565), a species listed on Annex I of the E.U. Birds Directive, also occur.</p> <p>Large numbers of gulls' roost in South Dublin Bay, e.g., 4,500 Black-headed Gulls in February 1990; 500 Common Gulls in February 1991. It is also an important tern roost in the autumn, regularly holding 2000-3000 terns including Roseate Terns, a species listed on Annex I of the E.U. Birds Directive. South Dublin Bay is largely protected as a Special Protection Area. At low tide, the inner parts of the south bay area are used for amenity purposes. Bait digging is a regular activity on the sandy flats. At high tide, some areas have windsurfing and jet-skiing. This site is a fine example of a coastal system, with extensive sand and mudflats, and incipient dune formations. South Dublin Bay is also an internationally important bird site.</p>

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
000206	North Dublin Bay SAC	5 E	<p>[1140] Tidal Mudflats and Sandflats [1210] Annual Vegetation of Drift Lines [1310] Salicornia Mud [1330] Atlantic Salt Meadows [1410] Mediterranean Salt Meadows [2110] Embryonic Shifting Dunes [2120] Marram Dunes (White Dunes) [2130] Fixed Dunes (Grey Dunes)* [2190] Humid Dune Slacks [1395] Petalwort (Petalophyllum ralfsii)</p>	<p>This site covers the inner part of north Dublin Bay, the seaward boundary extending from the Bull Wall lighthouse across to the Martello Tower at Howth Head. The North Bull Island is the focal point of this site.</p> <p>The main land uses of this site are amenity activities and nature conservation. The North Bull Island is the main recreational beach in Co. Dublin and is used throughout the year. Much of the land surface of the island is taken up by two golf courses. Two separate Statutory Nature Reserves cover much of the island east of the Bull Wall and the surrounding intertidal flats. The site is used regularly for educational purposes. North Bull Island has been designated a Special Protection Area under the E.U. Birds Directive and it is also a statutory Wildfowl Sanctuary, a Ramsar Convention site, a Biogenetic Reserve, a Biosphere Reserve and a Special Area Amenity Order site.</p> <p>This site is an excellent example of a coastal site with all the main habitats represented. The site holds good examples of nine habitats that are listed on Annex I of the E.U. Habitats Directive; one of these is listed with priority status. Several of the wintering bird species have populations of international importance, while some of the invertebrates are of national importance. The site contains a number of rare and scarce plants including some which are legally protected. Its proximity to the capital city makes North Dublin Bay an excellent site for educational studies and research.</p>

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
004006	North Bull Island SPA	5 E	<p>[A046] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A048] Shelduck (<i>Tadorna tadorna</i>) [A052] Teal (<i>Anas crecca</i>) [A054] Pintail (<i>Anas acuta</i>) [A056] Shoveler (<i>Anas clypeata</i>) [A130] Oystercatcher (<i>Haematopus ostralegus</i>) [A140] Golden Plover (<i>Pluvialis apricaria</i>) [A141] Grey Plover (<i>Pluvialis squatarola</i>) [A143] Knot (<i>Calidris canutus</i>) [A144] Sanderling (<i>Calidris alba</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>) [A162] Redshank (<i>Tringa totanus</i>) [A169] Turnstone (<i>Arenaria interpres</i>) [A179] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A999] Wetland and Waterbirds</p>	<p>This site covers all of the inner parts of North Dublin Bay, with the seaward boundary extending from the Bull Wall lighthouse across to Drumleck Point at Howth Head. The North Bull Island sand spit is a relatively recent depositional feature, formed as a result of improvements to Dublin Port during the 18th and 19th centuries. It is almost 5 km long and 1 km wide and runs parallel to the coast between Clontarf and Sutton. Part of the interior of the island has been converted to golf courses.</p> <p>The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Light-bellied Brent Goose, Shelduck, Teal, Pintail, Shoveler, Oystercatcher, Golden Plover, Grey Plover, Knot, Sanderling, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Curlew, Redshank, Turnstone and Black-headed Gull. 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.</p> <p>The North Bull Island SPA is an excellent example of an estuarine complex and is one of the top sites in Ireland for wintering waterfowl. It is of international importance on account of both the total number of waterfowl and the individual populations of Light-bellied Brent Goose, Black-tailed Godwit and Bar-tailed Godwit that use it. Also of significance is the regular presence of several species that are listed on Annex I of the E.U. Birds Directive, notably Golden Plover and Bar-tailed Godwit, but also Ruff and Short-eared Owl. North Bull Island is a Ramsar Convention site, and part of the North Bull Island SPA is a Statutory Nature Reserve and a Wildfowl Sanctuary.</p>

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
000199	Baldoyle Bay SAC	9.7 NE	[1140] Tidal Mudflats and Sandflats [1310] Salicornia Mud [1330] Atlantic Salt Meadows [1410] Mediterranean Salt Meadows	Baldoyle Bay SAC extends from just below Portmarnock village to the west pier at Howth in Co. Dublin. It is a tidal estuarine bay protected from the open sea by a large sand-dune system. Two small rivers, the Mayne and the Sluice, flow into the bay. The area surrounding Baldoyle Bay is densely populated, and so the main threats to the site include visitor pressure, disturbance to wildfowl and dumping. In particular, the dumping of spoil onto the foreshore presents a threat to the value of the site. Baldoyle Bay is a fine example of an estuarine system. It contains four habitats listed on Annex I of the E.U. Habitats Directive and supports two legally protected plant species. The site is also an important bird area and part of it is a Special Protection Area under the E.U. Birds Directive, as well as being a Statutory Nature Reserve. It supports internationally important numbers of Brent Goose and nationally important numbers of six other bird species, including two Annex I Birds Directive species.
004016	Baldoyle Bay SPA	9.8 NE	[A046] Brent Goose <i>Branta bernicla hrota</i> [A048] Shelduck <i>Tadorna tadorna</i> [A137] Ringed Plover <i>Charadrius hiaticula</i> [A140] Golden Plover <i>Pluvialis apricaria</i> [A141] Grey Plover <i>Pluvialis squatarola</i> [A157] Bar-tailed Godwit <i>Limosa lapponica</i> [A999] Wetlands	Baldoyle Bay, located to the north and east of Baldoyle and to the south of Portmarnock, Co. Dublin, is a relatively small, narrow estuary separated from the open sea by a large sand dune system. Two small rivers, the Mayne River and the Sluice River, flow into the inner part of the estuary. Regular breeding birds include Shelduck, Mallard and Ringed Plover. In autumn, passage migrants such as Curlew Sandpiper, Spotted Redshank and Green Sandpiper are regular in small numbers. Little Egret, a species that has recently colonised Ireland, also occurs at this site. Baldoyle Bay SPA is of high conservation importance, for supporting internationally important numbers of Light-bellied Brent Goose as well as nationally important populations of a further five species, including Golden Plover and Bar-tailed Godwit, both species that are listed on Annex I of the E.U. Birds Directive. The inner part of the site is a Statutory Nature Reserve and is also designated as a wetland of international importance under the Ramsar Convention.

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
003000	Rockabill to Dalkey Islands SAC	11.4 E	[1170] Reefs [1351] Harbour Porpoise (<i>Phocoena phocoena</i>)	<p>This site includes a range of dynamic inshore and coastal waters in the western Irish Sea. These include sandy and muddy seabed, reefs, sandbanks and islands. This site extends southwards, in a strip approximately 7 km wide and 40 km in length, from Rockabill, running adjacent to Howth Head, and crosses Dublin Bay to Frazer Bank in south Co. Dublin. The site encompasses Dalkey, Muggins and Rockabill islands.</p> <p>The area selected for designation represents a key habitat for the Annex II species Harbour Porpoise within the Irish Sea. Population survey data show that porpoise occurrence within the site boundary meets suitable reference values for other designated sites in Ireland. The species occurs year-round within the site and comparatively high group sizes have been recorded. Porpoises with young (i.e., calves) are observed at favourable, typical reference values for the species. Casual and effort-related sighting rates from coastal observation stations are significant for the east coast of Ireland and the latter appear to be relatively stable across all seasons. The selected site contains a wide array of habitats believed to be important for Harbour Porpoise including inshore shallow sand and mudbanks and rocky reefs scoured by strong current flow. The site also supports Common Seal and Grey Seal, for which terrestrial haul-out sites occur in immediate proximity to the site. Bottlenosed Dolphins has also occasionally been recorded in the area.</p> <p>A number of other marine mammals have been recorded in this area including Minke, Fin and Killer Whales and Risso's and Common Dolphins. The coastal environment of Co. Dublin is a very significant resource to birds with some nationally and internationally important populations. Of particular note in this site are the large number of terns (Arctic, Common and Roseate) known to use Dalkey Island as a staging area (approx. 2,000) after breeding. Other seabirds commonly seen include Kittiwake, Razorbill, Guillemot, Puffin, Fulmar, Shag, Cormorant, Manx Shearwater, Gannet and gulls.</p> <p>This site is of conservation importance for reefs, listed on Annex I, and Harbour Porpoise, listed on Annex II, of the E.U. Habitats Directive.</p>

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
000202	Howth Head SAC	10.5 E	[1230] Vegetated Sea cliffs of the Atlantic and Baltic coasts [4030] European dry heaths	<p>Howth Head is a rocky headland situated on the northern side of Dublin Bay. The peninsula is composed of Cambrian slates and quartzites, joined to the mainland by a post-glacial raised beach. Limestone occurs on the northwest side while glacial drift is deposited against the cliffs in places.</p> <p>A number of Red Data Book plant species, the latter five of which are legally protected under the Flora (Protection) Order, 1999, have been recorded at this site - Green-winged Orchid (<i>Orchis morio</i>), Bird's-foot (<i>Ornithopus perpusillus</i>), Hairy Violet (<i>Viola hirta</i>), Rough Poppy (<i>Papaver hybridum</i>), Pennyroyal (<i>Mentha pulegium</i>), Heath Cudweed (<i>Omalotheca sylvatica</i>) and Betony (<i>Stachys officinalis</i>). Curved Hard grass (<i>Parapholis incurva</i>), a species that had not previously been recognized as occurring in Ireland, was found at Red Rock in 1979. The site is of national importance for breeding seabirds. A census in 1985-87 recorded the following numbers: Fulmar (105 pairs), Shags (25 pairs), Herring Gulls (70 pairs), Kittiwake (c. 1,700 pairs), Guillemot (585 birds), Razorbill (280 birds). In 1990, 21 pairs of Black Guillemot were counted.</p> <p>Howth Head displays a fine range of natural habitats, including two Annex I habitats, within close proximity to Dublin city. The site is also of scientific importance for its seabird colonies, invertebrates and lichens. It also supports populations of at least two legally protected plant species and several other scarce plants.</p>
004113	Howth Head Coast SPA	13.5 E	[A188] Kittiwake (<i>Rissa tridactyla</i>)	<p>Howth Head is a rocky headland situated on the northern side of Dublin Bay. The peninsula is composed of Cambrian rock of the Bray Group, the most conspicuous component being quartzite. The site comprises the sea cliffs extending from just east of the Nose of Howth to the tip of the Bailey Lighthouse peninsula. The marine area to a distance of 500 m from the cliff base is included within the site.</p> <p>Howth Head Coast SPA is of high ornithological importance as it supports a nationally important population of Kittiwake. It is also a traditional nesting site for Peregrine Falcon, a species that is listed on Annex I of the E.U. Birds Directive. The site is easily accessible and has important amenities and educational value due to its proximity to Dublin City.</p>
000205	Malahide Estuary SAC	12 NE	[1140] Tidal Mudflats and Sandflats [1310] Salicornia Mud [1330] Atlantic Salt Meadows [1410] Mediterranean Salt Meadows [2120] Marram Dunes (White Dunes) [2130] Fixed Dunes (Grey Dunes)*	<p>Malahide Estuary is situated immediately north of Malahide and east of Swords in Co. Dublin. It is the estuary of the River Broadmeadow. The site is divided by a railway viaduct which was built in the 1800s.</p> <p>The inner part of the estuary is heavily used for water sports. A section of the outer estuary has recently been infilled for a marina and housing development. This site is a fine example of an estuarine system with all the main habitats represented. The site is important ornithologically, with a population of Brent Goose of international significance</p>

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
004025	Malahide Estuary SPA	12 NE	<p>[A005] Great Crested Grebe Podiceps cristatus [A046] Brent Goose Branta bernicla hrota [A048] Shelduck Tadorna tadorna [A054] Pintail Anas acuta [A067] Goldeneye Bucephala clangula [A069] Red-breasted Merganser Mergus serrator [A130] Oystercatcher Haematopus ostralegus [A140] Golden Plover Pluvialis apricaria [A141] Grey Plover Pluvialis squatarola [A143] Knot Calidris canutus [A149] Dunlin Calidris alpina alpina [A156] Black-tailed Godwit Limosa limosa [A157] Bar-tailed Godwit Limosa lapponica [A162] Redshank Tringa totanus [A999] Wetlands</p>	<p>Malahide Estuary is situated in north Co. Dublin between the towns of Malahide and Swords. The site encompasses the estuary, saltmarsh habitats and shallow subtidal areas at the mouth of the estuary. A railway viaduct, built in the 1800s, crosses the site and has led to the inner estuary becoming lagoonal in character and only partly tidal. Much of the outer part of the estuary is well-sheltered from the sea by a large sand spit, known as “The Island”. This spit is now mostly converted to a golf course. The outer part empties almost completely at low tide and there are extensive intertidal flats exposed.</p> <p>The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Great Crested Grebe, Light-bellied Brent Goose, Shelduck, Pintail, Goldeneye, Red-breasted Merganser, Oystercatcher, Golden Plover, Grey Plover, Knot, Dunlin, Black-tailed Godwit, Bar-tailed Godwit and Redshank. 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.</p> <p>Malahide Estuary SPA is a fine example of an estuarine system, providing both feeding and roosting areas for a range of wintering waterfowl. The lagoonal nature of the inner estuary is of particular value as it increases the diversity of birds that occur. The site is of high conservation importance, with internationally important populations of Light-bellied Brent Goose and Black-tailed Godwit, and nationally important populations of a further 12 species. Two of the species which occur regularly (Golden Plover and Bar-tailed Godwit) are listed on Annex I of the E.U. Birds Directive. Malahide Estuary (also known as Broadmeadow Estuary) is a Ramsar Convention site.</p>
004117	Ireland's Eye SPA	13.4 NE	<p>Cormorant (Phalacrocorax carbo) [A017] Herring Gull (Larus argentatus) [A184] Kittiwake (Rissa tridactyla) [A188] Guillemot (Uria aalge) [A199] Razorbill (Alca torda) [A200]</p>	<p>Ireland's Eye is an uninhabited island located about 1.5 km north of Howth in Co. Dublin. The site encompasses Ireland's Eye, Rowan Rocks, Thulla, Thulla Rocks, Carrageen Bay and a seaward extension of 200m in the west and 500m to the north and east. The island has an area of c. 24 ha above the high tide mark.</p> <p>Ireland's Eye SPA, though a relatively small island, is of high ornithological importance, with five seabird species having populations of national importance. The regular presence of a breeding pair of Peregrine, an Annex I species, is also of note.</p>

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002193	Ireland's Eye SAC	13.6 NE	[1220] Perennial Vegetation of Stony Banks [1230] Vegetated Sea Cliffs	Ireland's Eye is located about 1.5 km north of Howth in Co. Dublin. It is a Cambrian Island with quartzite which forms spectacular cliffs on the north-east side. Elsewhere much of the area is covered by drift. There is a Martello tower at the west end of the island and an ancient, ruined church in the middle. This uninhabited marine island has a well-developed maritime flora, with two habitats (sea cliffs and shingle) listed on Annex II of the E.U. Habitats Directive, and nationally important seabird colonies. Owing to its easy access and proximity to Dublin it has great educational and amenity value.
004172	Dalkey Islands SPA	14 SE	[A192] Roseate Tern (<i>Sterna dougallii</i>) [A193] Common Tern (<i>Sterna hirundo</i>) [A194] Arctic Tern (<i>Sterna paradisaea</i>)	mainland from which it is separated by a deep channel. The island is low-lying, the highest point of which (c. 15 m) is marked by a Martello Tower. Soil cover consists mainly of a thin peaty layer, though in a few places there are boulder clay deposits. Vegetation cover is low-growing and consists mainly of grasses. Dense patches of Bracken (<i>Pteridium aquilinum</i>) and Hogweed (<i>Heracleum sphondylium</i>) occur in places. Lamb Island lies to the north of Dalkey Island, and at low tide is connected by a line of rocks. It has a thin soil cover and some vegetation, mainly grasses, Nettles (<i>Urtica dioica</i>) and Hogweed. Further north lies Maiden Rock, a bare angular granite rock up to 5 m high that is devoid of higher plant vegetation. The site, along with other parts of south Dublin Bay, is used by the three tern species as a major post-breeding/pre-migration autumn roost area. The site is linked to another important post-breeding/pre-migration autumn tern roost area in Dublin Bay. Birds are present from about late July to September, with c. 2,000 terns, comprising individuals of all three species, recorded in 1998. The origin of the birds is likely to be the Dublin breeding sites (Rockabill and Dublin Docks) though the numbers recorded suggests that birds from other sites, perhaps outside the State, are also present. The site also has breeding Great Black-backed Gull (7 pairs in 2001), Shelduck (1-2 pairs) and Oystercatcher (1-2 pairs). Herring Gull bred in large numbers in the past but is now very scarce (14 pairs recorded in 1999). The site is known to be frequented in winter by Turnstone and Purple Sandpiper but recent count data are not available. Dalkey Islands SPA is of particular importance as a post-breeding/pre-migration autumn roost area for Roseate Tern, Common Tern and Arctic Tern. The recent nesting by Roseate Tern is highly significant. All three tern species using the site are listed on Annex I of the E.U. Birds Directive.

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
001209	Glenasmole Valley SAC	14 SW	[6210] Orchid-rich Calcareous Grassland* [6410] Molinia Meadows [7220] Petrifying Springs*	<p>Glenasmole Valley in south Co. Dublin lies on the edge of the Wicklow uplands, approximately 5 km from Tallaght. The River Dodder flows through the valley and has been impounded here to form two reservoirs that supply water to south Dublin. The non-calcareous bedrock of the Glenasmole Valley has been overlain by deep drift deposits which now line the valley sides. They are partly covered by scrub and woodland, and on the less precipitous parts, by herb-rich grassland. There is much seepage through the deposits, which brings to the surface water rich in bases, which induces local patches of calcareous fen and, in places, petrifying springs.</p> <p>The site provides excellent habitat for bats, with at least four species recorded: Pipistrelle, Leisler's, Daubenton's and Brown Long-eared. Otter occurs along the river and reservoirs.</p> <p>The site supports Kingfisher, an Annex I species under the E.U. Birds Directive. Glenasmole Valley contains a high diversity of habitats and plant communities, including three habitats listed on Annex I of the E.U. Habitats Directive. The presence of four Red Data Book plant species further adds to the value of the site, as does the presence of populations of several mammal and bird species of conservation interest.</p>

002122	Wicklow Mountains SAC	13.8 S	<p>[3110] Oligotrophic Waters containing very few minerals [3160] Dystrophic Lakes [4010] Wet Heath [4030] Dry Heath [4060] Alpine and Subalpine Heaths [6130] Calaminarian Grassland [6230] Species-rich Nardus Grassland* [7130] Blanket Bogs (Active)* [8110] Siliceous Scree [8210] Calcareous Rocky Slopes [8220] Siliceous Rocky Slopes [91A0] Old Oak Woodlands [1355] Otter (<i>Lutra lutra</i>)</p>	<p>Wicklow Mountains SAC is a complex of upland areas in Counties Wicklow and Dublin, flanked by the Blessington reservoir to the west and Vartry reservoir in the east, Cruagh Mountain in the north and Lybagh Mountain in the south. Most of the site is over 300 m, with much ground over 600 m. The highest peak is 925 m at Lugnaquilla. The Wicklow uplands comprise a core of granites flanked by Ordovician schists, mudstones and volcanics. The form of the Wicklow Glens is due to glacial erosion. The topography is typical of a mountain chain, showing the effects of more than one cycle of erosion. The massive granite has weathered characteristically into broad domes. Most of the western part of the site consists of an elevated moorland, covered by peat. The surrounding schists have assumed more diverse outlines, forming prominent peaks and rocky foothills with deep glens. The dominant topographical features are the products of glaciation. High corrie lakes, deep valleys and moraines are common features of this area. The substrate over much of the area is peat, usually less than 2 m deep. Poor mineral soil covers the slopes, and rock outcrops are frequent. The Wicklow Mountains are drained by several major rivers including the Dargle, Liffey, Dodder, Slaney and Avonmore. The river water in the mountain areas is often peaty, especially during floods.</p> <p>The site supports a range of rare plant species. Parsley Fern (<i>Cryptogramma crispa</i>), Marsh Clubmoss (<i>Lycopodiella inundata</i>), Lanceolate Spleenwort (<i>Asplenium billotii</i>), Small-white Orchid (<i>Pseudorchis albida</i>) and Bog Orchid (<i>Hammarbya paludosa</i>) are all legally protected under the Flora (Protection) Order, 2015. Greater Broomrape (<i>Orobanche rapum-genistae</i>), Alpine Saw-wort and Alpine Lady's-mantle are listed in the Irish Red Data Book. The rare Myxomycete fungus <i>Echinostelium colliculosum</i> has been recorded from the Military Road. The Red Data Book fish species Arctic Char has been recorded from Lough Dan, but this population may now have died out. Mammals and birds which occur are typical of the uplands. Deer are abundant, mainly hybrids between Red and Sika Deer. Other mammals include Hare, Badger and Otter, the latter being a species listed on Annex II of the E.U. Habitats Directive. Pine Marten has recently been confirmed as occurring within the site. Among the birds, Meadow Pipit, Skylark, Raven and Red Grouse are resident throughout the site. Wheatear, Whinchat and the scarce Ring Ouzel are summer visitors. Wood Warbler and Redstarts are rare breeding species of the woodlands. Dipper and Grey Wagtail are typical riparian species. Merlin and Peregrine, both Annex I species of the E.U. Birds Directive, breed within the site. Recently, Goosander has become established as a breeding species.</p> <p>Wicklow Mountains is important as a complex, extensive upland site. It shows great diversity from a geomorphological and a topographical point of view. The vegetation provides examples of the typical upland habitats with heath, blanket bog and upland grassland covering large, relatively undisturbed areas. In all, twelve habitats listed</p>
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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
				on Annex I of the E.U. Habitats Directive are found within the site. Several rare or protected plant and animal species occur, adding further to its value.
004040	Wicklow Mountains SPA	14.3 S	[A098] Merlin (<i>Falco columbarius</i>) [A103] Peregrine (<i>Falco peregrinus</i>)	This is an extensive upland site, comprising a substantial part of the Wicklow Mountains. Most of the site is in Co. Wicklow, but a small area lies in Co. Dublin. The underlying geology of the site is mainly of Leinster granites, flanked by Ordovician schists, mudstones and volcanic. The area was subject to glaciation and features fine examples of glacial lakes, deep valleys and moraines. Most of the site is over 300 m, with much ground being over 600 m; the highest peak is Lugnaquilla (925 m). The substrate over much of the site is peat, with poor mineral soil occurring on the slopes and lower ground. Exposed rock and scree are features of the site. The predominant habitats present are blanket bog, heaths and upland grassland. The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Merlin and Peregrine. A series of surveys of the Wicklow Mountains SPA indicates that up to 9 pairs of Merlin breed within the site in any one year. Traditionally a ground-nesting species, Merlin in the Wicklow Mountains are usually found nesting in old crows' nests in conifer plantations. The open peatlands provide excellent foraging habitat for Merlin with small birds such as Meadow Pipit being their main prey. The cliffs and crags within the site also provide ideal breeding locations for Peregrine (20 pairs in 2002). Other birds of the open peatlands and scree slopes that have been recorded within the site include Ring Ouzel and Red Grouse. The Wicklow Mountains SPA is of high ornithological importance as it supports nationally important populations of Merlin and Peregrine, both species that are listed on Annex I of the E.U. Birds Directive. Part of Wicklow Mountains SPA is a Statutory Nature Reserve.

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 revised ramp design on approach to Binns Bridge is neither necessary for nor directly connected with the management of a European Site. As such, the proposed development cannot be excluded from AA. It is considered that the operational phase elements of the proposed project will not introduce effects over and above those already existing as the site is located in an urban area adjacent to an existing railway.

3.3.2 Elements of the Works with the Potential to Give Rise to Effects

The construction phase of the proposed works has the potential to introduce effects such as disturbance due to noise and vibrations, 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 impact to have likely significant effects on any European Site, in view of the site's conservation objectives resulting from the proposed works. This assessment assumes the absence of any controls, conditions, or mitigation measures. In determining the potential for effects, a number of factors have been considered including the sensitivity and reported threats to the European Site and the individual elements of the proposed works and the potential effect they may cause to the site.

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/ or
- 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, the Environmental Protection Agency, and Transport Infrastructure Ireland/ National Roads Authority):

Direct and Indirect Impacts – An impact can be caused either as a direct or as an indirect consequence of 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 underwater).

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

- Temporary: the effects would take up to 1 year to be mitigated;
- 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.

The document '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 impact 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 likely significant effects on any European Site, in view of the site's conservation objectives 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 reference to each of the European sites identified within a 15km radius (Table 3.1).

3.4.1 Land Take/Habitat Loss

There is no anticipated impact on the land take or habitat loss posed to European sites from the proposed works.

3.4.2 Resource Requirements

There are no resource requirements (i.e., mineral/drinking water abstractions, etc.) of the proposed works that will be additional to existing requirements. Therefore, there will be no interactions with resources necessary and no likely significant effects on any European Site.

3.4.3 Duration of Works

The construction phase of the proposed works is anticipated to be short term. Given the relatively small-scale of these works, the duration of the works is extremely unlikely to impact on nearby European sites.

3.4.4 Emissions (Disposal to Land, Water or Air)

Construction Phase:

The Royal Canal flows through the site area linking it indirectly to European sites within and near Dublin Bay including the South Dublin Bay SAC, the South Dublin Bay and River Tolka Estuary SPA, the North Dublin Bay SAC, and the North Bull Island SPA. The closest European site is the South Dublin Bay and River Tolka Estuary SPA located 5.6km downstream.

Works undertaken during the construction phase may create potential localised impacts including noise, dust, and increased siltation, turbidity, and pollution due to accidental spillages of oils or fuels from machinery and runoff during construction works. However, due to the distance from the site to the nearest European sites, these impacts are predicted to be temporary, unlikely, and not significant.

Operational Phase:

Although no surface water drainage system is required for the site, no significant impacts are anticipated during the operational phase due to the distance between the site and the nearest European sites.

3.4.5 Excavation Requirements/ Erosion/Sedimentation

The proposed development does not require significant excavation works. Therefore, given the scale of the development and distance to European sites, the impacts arising from these works are considered to be temporary, unlikely, and not significant.

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 not significant with regard to European sites due to the small scale and short duration of the works and the distances observed.

3.4.7 Duration of Construction, Operation, Decommissioning

The construction phase of the proposed project is short term and will have no significant effects on European sites given the small scale and duration of the works and the distances observed. The new ramp will be permanent feature with no decommissioning phase and is predicted to have no significant effects on European sites due to the nature of its use and the distance to the nearest sites.

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 or qualifying habitat features is located 2 km direct from the site. As such, there will be no reduction of the habitat of European sites resulting from the proposed development.

3.4.9 Species Disturbance

The nearest European site is the South Dublin Bay and Tolka Estuary SPA which is located 2 km direct from the proposed development. As such, disturbance to species within the SPA due to project-related noise, vibrations, lighting, etc. is predicted to be extremely unlikely and not significant.

3.4.10 Habitat or Species Fragmentation

Given the scale and duration of the proposed project and the distance from the nearest European sites, the project is considered to have no potential effects on any European site with regard to habitat or species fragmentation.

3.4.11 Changes in Key Indicators of Conservation Value

The South Dublin Bay and Tolka Estuary SPA is the nearest European site and is located 2km direct from the proposed project. Given the scale and duration of the proposed works and the distance to the nearest European site, impacts to key indicators of conservation value at this site and other sites arising from the proposed works is expected to be extremely unlikely and not significant.

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

Consented planning applications pertaining to works of a significant scale are listed below. Other granted planning permissions in the vicinity of the site pertain primarily to small-scale extensions or alterations or to retention of works.

2935/20: Clonliffe Road, Drumcondra, Dublin 3 (Permission)

- Permission for a hotel development on lands off Clonliffe Road (formerly part of the Holy Cross College Lands) to consist of the construction of an 8.55m - 24.05m (above ground level) part -2 to part -7 storey 8,485 sq.m. hotel building and erection of a two-storey extension to St. Felim's National School.

Temple Street Children's Hospital, Temple Street, Dublin 1:

- **3156/17:** Development of a new single storey extension to the St. Gabriel's Department to contain a classroom.
- **3244/17:** Development of a new ground floor, single-storey extension to the Audiology Department within an adjacent hospital internal courtyard to contain an Audiology Clinic and Control Room. Associated works consist of partial demolition of an existing hospital wall and external works to provide a new accessible entrance to the department off St. Anthony's Place.
- **4430/17:** The provision of a single storey flat roofed extension of 21 m² to the front of the existing link over St. Anthony's Place to provide level access through the hospital between Surgical Flat to the north and St. Philomena's Ward to the south located either side of St. Anthony's Place at First Floor Level at the Children's University Hospital.
- **4165/19:** The provision of a 72sq.m. single-storey, flat roofed extension to comprise one single bed ward with en-suite bathroom and seating/rest area with 1 no. rooflight and a garden terrace enclosed with glazed wall to the rear of existing St Philomena's Ward at first floor level over existing radiology unit and connected by 2 no. covered link walkways to St Philomena's Ward.

Mater Misericordiae University Hospital, Eccles Street, Dublin 7:

- **3616/20:** Construction of a roof top extension to include a Coronary Care Unit, 18 bed expansion of the existing associated Outpatients Clinics, and support accommodation and other minor associated works including roof top plantroom. This has a total floor area of 1,201 m².
- **3617/20:** Construction of a single storey expansion to the existing Emergency Department and other minor associated works including roof top platform.
- **WEB1513/22:** Development on a 0.6087 ha site to include an amendment to a previously permitted scheme (Dublin City Council Register Reference 2219/17). The development will consist of the demolition of a plant room; extensions measuring c. 98 sq m, c. 95 sq m, and c. 1,369 sq m; a new floor of development onto the existing hospital building measuring c. 1,317 sq m; 2 no. new lifts; new facade treatment on the southern elevation of Level 05; a screened open air plant room; extension of 2 No. existing generator flues; relocation of 2 No. permitted exhaust flues; 2 No. new exhaust flues with all associated support; a new roof light to the stair extension to the roof of Level 04; the relocation of the atrium roof; 2 No. associated extract fans; guard rails; associated internal alterations; associated elevation changes; alterations to existing site services; changes in levels; and all other associated site development works above and below ground.
- **2900/19:** Construction of a hospital helicopter landing pad and associated siteworks.
- **3400/21:** The development of a seven- to nine-storey Covid emergency extension block (13,563 sqm) (plus pop-up tenth floor level stairs and lift access to rooftop) with a lower ground level below the street level of Eccles Street, a six storey facade directly onto Eccles Street, development and completion of the Covid emergency extension block connecting at each level to the existing circulation core of the hospital, and forming a new (south) entrance to the hospital campus at Eccles Street. The development includes all plant flues, tanks, services, landscaping, boundary treatment and ancillary site development works.

It is likely that a portion of the larger projects listed above have already been undertaken and will not pose a risk of cumulative impact with the proposed works. Despite the granted permissions in the vicinity of the site, the cumulative impact of the proposed works in conjunction with these committed developments is considered to be unlikely and not significant due to the small scale and short duration of the proposed project.

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
004024	South Dublin Bay/Tolka Estuary SPA	2km E and 5.6km downstream	<ul style="list-style-type: none"> • (A046) light- bellied Brent Goose Branta bernicla hrota • (A130) Oystercatcher Haematopus ostralegus • (A137) Ringed Plover Charadrius hiaticula • (A141) Grey Plover Pluvialis squatarola • (A143) Knot Calidris canutus • (A144) Sanderling Calidris alba • (A149) Dunlin Calidris alpina alpina • (A157) Bar-tailed Godwit Limosa lapponica • (A162) Redshank Tringa totanus • (A179) Black-headed Gull Chroicocephalus ridibundus • (A192) Roseate Tern Sterna dougallii • (A193) Common Tern Sterna hirundo • (A194) Arctic Tern Sterna paradisaea • (A999) Wetland 	<p>Threats to the site include: G01.01 (nautical sports); F02.03 (leisure fishing); F02.03.01 (bait digging/ collection); K02.03 (eutrophication (natural)); J02.01.02 (reclamation of land from sea, estuary or marsh); E01 (urbanised areas, human habitation); E02 (industrial or commercial areas); D01.02 (roads, motorways); E03 (discharges); G01.02 (walking, horse riding and non-motorised vehicles).</p> <p>No spatial overlap. No direct impacts on habitats. Indirect hydrological link not considered to pose a significant risk due to distance from the site. 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.</p>	Unlikely	Unlikely
000210	South Dublin Bay SAC	4km SE and 6.4km downstream	<ul style="list-style-type: none"> • [1140] Mudflats and sandflats not covered by seawater at low tide. • [1210] Annual vegetation of drift lines. • [1310] Salicornia and other annuals colonising mud and sand. • [2110] Embryonic shifting dunes 	<p>Threats to the site include G01.01 (nautical sports); D01.02 (roads, motorways); D01.01 (paths, tracks, cycling tracks); E03 (discharges); K02.02 (accumulation of organic material); H03 (marine water pollution); E01 (Urbanised areas, human habitation); F02.03.01 (bait digging/ collection); G01.01.02 (non-motorized nautical sports); E02 (industrial or commercial areas); G01.02 (walking, horse riding and non-motorised vehicles); J02.01.02 (reclamation of land from sea, estuary or marsh).</p> <p>No spatial overlap. No direct impacts on habitats. Indirect hydrological link not considered to pose a significant risk due to distance from the site. 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.</p>	Unlikely	Unlikely

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
000206	North Dublin Bay SAC	5km E and 7.6km downstream	<ul style="list-style-type: none"> (1140) Mudflats and sandflats not covered by seawater at low tide (1210) Annual vegetation of drift lines (1310) Salicornia and other annuals colonising mud and sand (1330) Atlantic salt meadows (<i>Glauco Puccinellietalia maritimae</i>) (1395) Petalwort <i>Petalophyllum ralfsii</i> (1410) Mediterranean salt meadows (<i>Juncetalia maritimi</i>) (2110) Embryonic shifting dunes (2120) Shifting dunes along the shoreline with <i>Ammophila areraria</i> (white dunes) (2130) Fixed coastal dunes with herbaceous vegetation (grey dunes) (2190) Humid dune slacks 	<p>Threats to the site include: E02 (industrial or commercial areas); E03 (discharges); F02.03.01 (bait digging/ collection); K03.06 (antagonism with domestic animals); F02.03 (leisure fishing); G01.01 (nautical sports); H01.09 (diffuse pollution to surface waters due to other sources not listed); J01.01 (activity burning down existing vegetation); G02.01 (golf course); E01 (urbanised areas, human habitation); G05.05 (intensive maintenance of public parks /cleaning of beaches); A04 (grazing); I01 (invasive non-native species); G01.02 (walking, horse riding, and non-motorised vehicles); H01.03 (other point source pollution to surface water).</p> <p>No spatial overlap. No direct impacts on habitats. Indirect hydrological link not considered to pose a significant risk due to distance from the site. 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.</p>	Unlikely	Unlikely

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
004006	North Bull Island SPA	5km E and 8.4km downstream	<ul style="list-style-type: none"> (A046) Light bellied Brent Goose <i>Branta bernicla hrota</i> (A048) Shelduck <i>Tadorna tadorna</i> (A052) Teal <i>Anas crecca</i> (A054) Pintail <i>Anas acuta</i> (A056) Shoveler <i>Anas clypeata</i> (A130) Oystercatcher <i>Haematopus ostralegus</i> (A140) Golden Plover <i>Pluvialis apricaria</i> (A141) Grey Plover <i>Pluvialis squatarola</i> (A143) Knot <i>Calidris canutus</i> (A144) Sanderling <i>Calidris alba</i> (A149) Dunlin <i>Calidris alpina alpina</i> (A156) Black-tailed Godwit <i>Limosa limosa</i> (A157) Bar-tailed Godwit <i>Limosa lapponica</i> (A160) Curlew <i>Numenius arquata</i> (A162) Redshank <i>Tringa totanus</i> (A169) Turnstone <i>Arenaria interpres</i> (A179) Black-headed Gull <i>Chroicocephalus ridibundus</i> (A999) Wetlands and Waterbirds 	<p>Threats to the site include: D03.02 (shipping lanes, includes canals); G01.02 (walking, horse riding and non-motorised vehicles); E02 (industrial or commercial areas); G01.01 (nautical sports); E01.01 (continuous urbanisation); E01.04 (other patterns of habitation); E03 (discharges); D01.05 (bridge, viaduct); D01.02 (roads, motorways); G02.01 (golf course); F02.03.01 (bait digging/ collection).</p> <p>No spatial overlap. No direct impacts on habitats. Indirect hydrological link not considered to pose a significant risk due to distance from the site. 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.</p>	Unlikely	Unlikely
000199	Baldoyle Bay SAC	9.7km NE	<ul style="list-style-type: none"> (1140) Mudflats and sandflats not covered by seawater at low tide (1310) <i>Salicornia</i> and other annuals colonizing mud and sand (1330) Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) (1410) Mediterranean salt meadows (<i>Juncetalia maritimi</i>) 	<p>Threats to the site include: G02.01 (golf course); I01 (invasive non-native species); F02.03.01 (bait digging/ collection); J02.01.02 (reclamation of land from sea, estuary or marsh); F03.01 (hunting); G01.01.02 (non-motorized nautical sports); D01.02 (roads, motorways); E01 (urbanised areas, human habitation); K02.03 (eutrophication (natural)); K03.06 (antagonism with domestic animals); E03 (discharges); G01.02 (walking, horse riding, and non-motorised vehicles).</p> <p>No spatial overlap. No direct impacts on habitats. Given distance, hydrological link unlikely. 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.</p>	Unlikely	Unlikely

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
004016	Baldoyle Bay SPA	9.8km NE	<ul style="list-style-type: none"> (A046) Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) (A048) Shelduck (<i>Tadorna tadorna</i>) (A137) Ringed Plover (<i>Charadrius hiaticula</i>) (A140) Golden Plover (<i>Pluvialis apricaria</i>) (A141) Grey Plover (<i>Pluvialis squatarola</i>) (A157) Bar-tailed Godwit (<i>Limosa lapponica</i>) (A999) Wetlands & Waterbirds 	<p>Threats to the site include: G02.01 (golf course); G01.02 (walking, horse riding, and non-motorised vehicles); F02.03.01 (bait digging/ collection); D01.02 (roads, motorways); J02.01.02 (reclamation of land from sea, estuary or marsh); E01 (Urbanised areas, human habitation); I01 (invasive non-native species); K02.03 (eutrophication (natural)); F03.01 (Hunting); A08 (Fertilisation).</p> <p>No spatial overlap. No direct impacts on habitats. Given distance, hydrological link unlikely. 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.</p>	Unlikely	Unlikely
003000	Rockabill to Dalkey Islands SAC	11.4km E	<ul style="list-style-type: none"> (1170) Reefs (1351) Harbour Porpoise (<i>Phocoena phocoena</i>) 	<p>Threats to the site include: J02.02 (Removal of sediments (mud...)); D03.02 (shipping lanes); E03 (discharges); D02 (utility and service lines); H06.01 (noise nuisance, noise pollution); F02.02 (professional active fishing); J02.11 (siltation rate changes, dumping, depositing of dredged deposits).</p> <p>No spatial overlap. No direct impacts on habitats. Given distance, hydrological link unlikely. 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.</p>	Unlikely	Unlikely

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
000202	Howth Head SAC	10.5km E	<ul style="list-style-type: none"> (1230) Vegetated Sea cliffs of the Atlantic and Baltic coasts (4030) European dry heaths 	<p>Threats to the site include I01 (invasive non-native species); C01.01.01 (sand and gravel quarries); A04.03 (abandonment of pastoral systems, lack of grazing); E01 (urbanised areas, human habitation); G01.02 (walking, horse riding, and non-motorised vehicles); J01.01 (actively burning down existing vegetation); D01.01 (paths, tracks, cycling tracks); G05.04 (vandalism); C01 (mining and quarrying).</p> <p>No spatial overlap. No direct impacts on habitats. Given distance, hydrological link unlikely. 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.</p>	Unlikely	Unlikely
004113	Howth Head Coast SPA	13.5km E	<ul style="list-style-type: none"> (A188) Kittiwake (<i>Rissa tridactyla</i>) 	<p>Threats to the site include J01 (fire and fire suppression); G01.02 (walking, horse riding and non-motorised vehicles).</p> <p>No spatial overlap. No direct impacts on habitats. Given distance, hydrological link is unlikely. 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.</p>	Unlikely	Unlikely
000205	Malahide Estuary SAC	12km NE	<ul style="list-style-type: none"> (1140) Mudflats and sandflats not covered by seawater at low tide (1310) <i>Salicornia</i> and other annuals colonizing mud and sand (1320) <i>Spartina</i> swards (<i>Spartinion maritimae</i>) (1330) Atlantic salt meadows (<i>Glauco Puccinellietalia maritimae</i>) (1410) Mediterranean salt meadows (<i>Juncetalia maritimi</i>) (2120) Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes") (2130) * Fixed coastal dunes with herbaceous vegetation ("grey dunes") 	<p>Threats to the site include: F03.01 (hunting); A08 (fertilisation); D01.02 (roads, motorways); D01.05 (bridge, viaduct); J02.01.02 (reclamation of land from sea, estuary or marsh); G02.01 (golf course); G01.02 (walking, horse riding and non-motorised vehicles); E01 (urbanised areas, human habitation); I01 (invasive non-native species); G01.01 (nautical sports); G01.03 (motorised vehicles).</p> <p>No spatial overlap. No direct impacts on habitats. Given distance, hydrological link unlikely. 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.</p>	Very Unlikely	Very Unlikely

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
004025	Malahide Estuary SPA	12km NE	<ul style="list-style-type: none"> (A005) Great Crested Grebe <i>Podiceps cristatus</i> (A046) Brent Goose <i>Branta bernicla hrota</i> (A048) Shelduck <i>Tadorna tadorna</i> (A054) Pintail <i>Anas acuta</i> (A067) Goldeneye <i>Bucephala clangula</i> (A069) Red-breasted Merganser <i>Mergus serrator</i> (A130) Oystercatcher <i>Haematopus ostralegus</i> (A140) Golden Plover <i>Pluvialis apricaria</i> (A141) Grey Plover <i>Pluvialis squatarola</i> (A143) Knot <i>Calidris canutus</i> (A149) Dunlin <i>Calidris alpina alpina</i> (A156) Black-tailed Godwit <i>Limosa limosa</i> (A157) Bar-tailed Godwit <i>Limosa lapponica</i> (A162) Redshank <i>Tringa totanus</i> (A999) Wetlands 	<p>Threats to the site include: E01 (urbanised areas, human habitation); J02.01.02 (reclamation of land from sea, estuary or marsh); D01.05 (bridge, viaduct); D01.04 (railway lines, TGV); D01.01 (paths, tracks, cycling tracks); E02 (Industrial or commercial areas); G01.02 (walking, horse riding and non-motorised vehicles); G01.01 (nautical sports); A08 (fertilisation); I01 (invasive non-native species).</p> <p>No spatial overlap. No direct impacts on habitats. Given distance, hydrological link unlikely. 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.</p>	Very Unlikely	Very Unlikely
004117	Ireland's Eye SPA	13.4km NE	<ul style="list-style-type: none"> (A017) Cormorant (<i>Phalacrocorax carbo</i>) (A184) Herring Gull (<i>Larus argentatus</i>) (A188) Kittiwake (<i>Rissa tridactyla</i>) (A199) Guillemot (<i>Uria aalge</i>) (A200) Razorbill (<i>Alca torda</i>) 	<p>Threats to the site include: G01.02 (walking, horse riding and non-motorised vehicles); F02.03 (leisure fishing).</p> <p>No spatial overlap. No direct impacts on habitats. Given distance, hydrological link unlikely. 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.</p>	Very Unlikely	Very Unlikely
002193	Ireland's Eye SAC	13.6km NE	<ul style="list-style-type: none"> Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] 	<p>Threats to the site include: G02.09 (wildlife watching); G01.02 (walking, horse riding and non-motorised vehicles); J01 (fire and fire suppression); G01.01 (nautical sports); A04.03 (abandonment of pastoral systems, lack of grazing); G05.01 (trampling, overuse).</p> <p>No spatial overlap. No direct impacts on habitats. Given distance, hydrological link unlikely. 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.</p>	Very Unlikely	Very Unlikely

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
004172	Dalkey Islands SPA	14km SE	<ul style="list-style-type: none"> Roseate Tern (<i>Sterna dougallii</i>) [A192] Common Tern (<i>Sterna hirundo</i>) [A193] Arctic Tern (<i>Sterna paradisaea</i>) [A194] 	<p>Threats to the site include: E01 (urbanised areas, human habitation); A04 (grazing); G01.01 (nautical sports); G01.02 (walking, horse riding and non-motorised vehicles).</p> <p>No spatial overlap. No direct impacts on habitats. Given distance, hydrological link unlikely. 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.</p>	Very Unlikely	Very Unlikely
001209	Glenasmole Valley SAC	14km SW	<ul style="list-style-type: none"> (6210) Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco Brometalia</i>) (*important orchid sites) (6410) <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) (7220) Petrifying springs with tufa formation (<i>Cratoneurion</i>) 	<p>Threats to the site include: C01.03 (peat extraction); B02.01.02 (forest replanting (non-native trees)); A04.02.02 (non-intensive sheep grazing); A03 (mowing/cutting of grassland); A04.02.03 (non-intensive horse grazing); D01 (roads, paths and railroads); H01.05 (diffuse pollution to surface waters due to agricultural and forestry activities); B02.02 (forestry clearance); H02.07 (diffuse groundwater pollution due to non-sewered population); J02 (human induced changes in hydraulic conditions); H01.08 (diffuse pollution to surface waters due to household sewage and waste waters); B01.01 (forest planting on open ground (native trees)); A03.03 (abandonment/ lack of mowing); A04 (grazing); A08 (fertilisation); F02.03 (leisure fishing); E01.02 (discontinuous urbanisation); I01 (invasive non-native species); A04.02.01 (non-intensive cattle grazing); B01.02 (artificial planting on open ground (non-native trees)); D01.03 (car parks and parking areas).</p> <p>There are no sources for effect to the terrestrial habitats of the SAC. There is no hydrological link given the site's location within a separate water catchment area from 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 localized.</p>	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
002122	Wicklow Mountains SAC	13.8km S	<ul style="list-style-type: none"> • (1355) Otter <i>Lutra lutra</i> • (3110) Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) • (3130) Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletalia uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i> • (3160) Natural dystrophic lakes and ponds • (4010) Northern Atlantic wet heaths with <i>Erica tetralix</i>. • (4030) European dry heaths • (4060) Alpine and Boreal heaths • (6130) Calaminarian grasslands of the <i>Violetalia calaminariae</i> • (6230) Species-rich 1DUGXV grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) • (7130) Blanket bogs (* if active bog) • (8110) Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>) • (8210) Calcareous rocky slopes with chasmophytic vegetation • (8220) Siliceous rocky slopes with chasmophytic vegetation • (91A0) Old sessile oak woods with <i>liex</i> and <i>Blechnum</i> in the British Isles 	<p>Threats to the site include: F04.02 (collection (fungi, lichen, berries, etc.)); A05.02 (stock feeding); G01.02 (walking, horse riding and non-motorised vehicles); A04 (grazing); G01.04 (mountaineering, rock climbing, speleology); G01 (outdoor sports and leisure activities, recreational activities); K04.05 (damage by herbivores (including game species)); G05.04 (vandalism); G04.01 (Military manouvres); G05.07 (missing or wrongly directed conservation measures); I01 (invasive non-native species); G05.06 (tree surgery, felling for public safety, removal of roadside trees); E03.01 (disposal of household/ recreational facility waste); C01.03 (peat extraction); G02.09 (wildlife watching); B06 (grazing in forests/ woodland); F03.02.02 (taking from nest (e.g. falcons)); D01.01 (paths, tracks, cycling tracks); J01.01 (actively burning down existing vegetation); E01 (urbanised areas, human habitation); G01.03.02 (off-road motorized driving); K01.01 (erosion); G05.01 (trampling, overuse); L05 (collapse of terrain, landslide); F03 (hunting and collection of wild animals (terrestrial))</p> <p>There are no sources for effect to the terrestrial habitats of the SAC. There is no hydrological link given the site's location within a separate water catchment area from 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 localized.</p>	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
004040	Wicklow Mountains SPA	14.3km S	<ul style="list-style-type: none"> (A098) Merlin Falco columbarius (A103) Peregrine Falco peregrinus 	<p>Threats to the site include: G01.02 (walking, horse riding and non-motorised vehicles); A04 (grazing); C01.03 (Peat extraction); D01.01 (paths, tracks, cycling tracks)</p> <p>There are no sources for effect to the terrestrial habitats of the SPA. There is no hydrological link given the site's location within a separate water catchment area from 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 localized.</p>	No	No

4 SUMMARY AND CONCLUSION

4.1 Summary

The Habitats Directive provides legal protection for habitats and species of European importance and establishes the requirement for AA. This AA screening is based on 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.

This AA has been prepared for a proposed alteration to the previously approved 2.1km Royal Canal Greenway Phase 3 project. The alterations relate to a revised ramp design to accommodate a shallower gradient on the approach to Binns Bridge, to assist access for residents' vehicles, and improve access for maintenance vehicles.

The site area comprises a section of the Royal Canal Main Line (Liffey and Dublin Bay) and its banks located downstream of the Binns Bridge and lie within a pNHA. The Royal Canal flows from northwest to southeast and enters the River Liffey which is located 1.5km south of the site at its nearest point and then Dublin Bay which is located approximately 6km east-southeast of the site.

The nearest downstream European designated site is the South Dublin Bay and River Tolka Estuary SPA. There is no overlap between the site and this SPA. However, there is an indirect hydrological link between the proposed development to the protected area. Due to the scale and duration of the proposed works and the distance to this site, both direct (2km) and via the Royal Canal and River Liffey (5.6km), impact to this and other European sites within the ZOI is considered to be unlikely and not significant.

No likely significant effects on any European Site are predicted to occur with regard to the following:

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

4.2 Conclusions

There are no Natura 2000 sites located either within or directly adjacent to the site. The Royal Canal has an indirect hydrological link via the River Liffey to Dublin Bay where several Natura 2000 sites are located. However, given the nature of the development, its scale, and the localised and temporary nature of the construction effects identified as potential sources, it is concluded that the proposed 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.

In addition, no account was taken of any controls, conditions or mitigation measures intended to wholly or partly avoid or reduce impacts on any European Site.

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.

