Bray to City Centre Core Bus Corridor Scheme August 2023

Natura Impact Statement

**Main Report** 





# **Table of Contents**

1		Introduction	1
2		Legislative Context	2
3		Description of the Proposed Scheme	3
	3.1	Overview	3
	3.2	Structural Works	4
	3.3	Surface Water Drainage Infrastructure	5
	3.4	Construction Compounds	6
	3.5	Estimated Project Duration	8
	3.6	Operational Phase	8
4		Methodology	8
	4.1	Scientific and Technical Competence Relied Upon	8
	4.2	Guidance and Approach	9
	4.3	Assessment Methodology	10
	4.4	Desk Study	12
	4.5	Consultations	13
	4.6	Baseline Surveys	14
5		Overview of the Receiving Environment	16
	5.1	European Sites	16
	5.2	Habitats	25
	5.3	Flora and Fauna Species	25
	5.4	Hydrology	29
	5.5	Hydrogeology	32
	5.6	Soils & Geology	33
	5.7	Air Quality	33
6		Potential Impacts, Zone of Influence and Identifying European Sites at Risk of Effects	34
	6.1	Habitat Loss and Fragmentation	35
	6.2	Habitat Degradation / Effects on QI / SCI Species as a Result of Hydrological Impacts	35
	6.3	Habitat Degradation Effects as a Result of Hydrogeological Impacts	37
	6.4	Habitat Degradation as a Result of Introducing / Spreading Non-Native Invasive Species	37
	6.5	Habitat Degradation as a Result of Air Quality Impacts	38
	6.6	Disturbance and Displacement Impacts	38
	6.7	Summary	40
7		Assessment of Potential Effects on European Sites	41
	7.1	North Dublin Bay SAC [000206] and South Dublin Bay SAC [000210]	42
	7.2	Howth Head SAC [000202] and Bray Head SAC [000714]	62
	7.3	Rockabill to Dalkey Island SAC [003000] and Lambay Island SAC [000204]	69

i

	7.4	Wicklow Mountains SAC [002122]	75
	7.5	Howth Head Coast SPA [004113], Dalkey Islands SPA [004172] and Rockabill SPA [004014]	81
	7.6	North Bull Island SPA [004006]	88
	7.7	South Dublin Bay and River Tolka Estuary SPA [004024]	95
	7.8	Malahide Estuary SPA [004025]	.103
	7.9	Baldoyle Bay SPA [004016]	.108
	7.10	Rogerstown Estuary SPA [004015]	.112
	7.11	Skerries Islands SPA [004122]	.117
	7.12	Ireland's Eye SPA [004117] and Lambay Island SPA [004069]	.121
	7.13	The Murrough SPA [004186]	.127
	7.14	Wicklow Mountains SPA [004040]	.131
8	Sui	mmary of Mitigation Measures and Residual Impacts	.134
	8.1	Summary of Mitigation Measures	.134
	8.2	Summary of Residual Impacts	.140
9	In (	Combination Assessment	.140
	9.1	Analysis of Potential In Combination Effects	.140
	9.2	Plan Level Environmental Protection Policies and Objectives	.260
	9.3	Conclusion of In Combination Assessment	.263
10	NIS	Conclusion	.263
11	Re	ferences	.264

## List of Images:

Image 1 – Location and Extent of Construction Compound BR1 (Image from EIAR Chapter 5 Construction – report BCIDE-JAC-ENV\_UC-0013\_XX\_00-RP-ES-0005)

Image 2 – Location and Extent of Construction Compound BR2 (Image from EIAR Chapter 5 Construction – report BCIDE-JAC-ENV\_UC-0013\_XX\_00-RP-ES-0005)

# List of Figures:

Figure 1 – Proposed Scheme Location

Figure 2 – Wintering Bird Survey Sites

Figure 3 – Hydrological Connectivity to the Proposed Scheme

Figure 4 – European Sites in the Vicinity of the Proposed Scheme

Figure 5 – Wintering Bird Survey Results

## List of Appendices:

Appendix I – General Arrangement Drawings

Appendix II – Desk Study

Appendix III – Construction Environmental Management Plan (CEMP)

Appendix IV – Proposed Surface Water Drainage Drawings

Appendix V – Water Framework Directive (WFD) Assessment



### 1 Introduction

- This Natura Impact Statement (NIS) has been prepared by Scott Cawley Ltd., on behalf of the National Transport Authority (NTA) in respect of the Bray to City Centre Core Bus Corridor Scheme (hereafter referred to as the Proposed Scheme). The Proposed Scheme aims to provide enhanced walking, cycling and bus infrastructure on this key access corridor in the Dublin region, which will enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor.
- This NIS has been prepared in accordance with the provisions of Part XAB of the Planning and Development Act, 2000 (as amended) ("the 2000 Act") and in accordance with the requirements of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive).
- It considers the implications of the Proposed Scheme, on its own and in combination with other plans or projects, for European sites<sup>1</sup> in view of the conservation objectives of those sites. It includes a scientific examination of evidence and data to identify and assess the implications of the Proposed Scheme for any European sites in view of the conservation objectives of those sites. The NIS considers whether the Proposed Scheme, by itself and in combination with other plans or projects, would adversely affect the integrity of any European sites. In reaching a conclusion in this regard consideration is given to any mitigation measures necessary to avoid or reduce any potential negative impacts.
- 4 This NIS has been prepared following an assessment in view of best scientific knowledge of the potential for, the Proposed Scheme to have significant effects, either individually or in combination with other plans or projects on European sites, set out in an Appropriate Assessment (AA) Screening Report.
- A Screening for AA was undertaken and a determination was prepared by the NTA (both published on the NTA website). The AA Screening concluded that "there is the possibility for significant effects on the following European sites, in the absence of mitigation, either arising from the project alone, or in combination with other plans and projects, as a result of hydrological impacts, hydrogeological impacts, invasive species and disturbance and displacement impacts: South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA."
- Since the publication of the AA Screening Report, there have been minor design updates and updates to land plans used in the overall assessment of the Proposed Scheme (Section 4.4 Desk Study, Section 5.1 European sites updates to National Parks and Wildlife Service (NPWS) spatial data and Conservation Objectives version and Section 9 In Combination Assessment where some land plans have been adopted). However, the conclusions of the AA Screening Report and determination remain unchanged. This NIS assesses the final Proposed Scheme design.
- 7 Following an examination, analysis and evaluation of all relevant information and in view of best scientific knowledge, and applying the precautionary principle, the AA Screening Report concluded that

(d) a special area of conservation, (e)a candidate special protection area, or (f) a special protection area." They are commonly referred to in Ireland as candidate Special Areas of Conservation (cSACs) and Special Protection Areas (SPAs).

<sup>&</sup>lt;sup>1</sup> The Natura 2000 network of sites are defined under the Habitats Directive (Article 3) as a European ecological network of special areas of conservation, composed of sites hosting the natural habitat types listed in Annex I and species listed in Annex II, and special protection areas classified pursuant to the Birds Directive (2009/147/EC). The aim of the network is to aid the long-term survival of Europe's most valuable and threatened species and habitats. In Ireland, these sites are designated as European sites – as defined under the Planning and Development Acts and / or Birds and Habitats Regulations as "(a) a candidate site of Community importance, (b) a site of Community importance, (c) a candidate special area of conservation,



there is the possibility for significant effects on European sites, either from the Proposed Scheme alone or in combination with other plans and projects.

- Accordingly, a Stage Two Appropriate Assessment of the Proposed Scheme is required in this instance as, in the professional opinion of Scott Cawley Ltd, it cannot be excluded, in view of best scientific knowledge and on the basis of objective information, that the Proposed Scheme, either individually or in combination with other plans or projects, will not have a significant effect on some European site(s) in view of their conservation objectives.
- Thus, the purpose of this NIS is to provide an examination, analysis and evaluation of the potential impacts of the Proposed Scheme on European sites and to present findings and conclusions with respect to the Proposed Scheme in light of the best scientific knowledge in the field. This NIS will inform and assist the competent authority, An Bord Pleanála, in carrying out its Appropriate Assessment as to whether or not the Proposed Scheme will adversely affect the integrity of any European sites, either alone or in combination with other plans and projects, taking into account their conservation objectives.
- 10 The Proposed Scheme is neither connected with nor necessary to the management of any European sites.
- 11 It is the considered view of the authors of this NIS (Scott Cawley Ltd.) that, following the effective implementation of the mitigation measures proposed in Sections 7.1.4 and 7.4.4, and summarised in Section 8.1, the Proposed Scheme will not, individually or in combination with other plans or projects, have any adverse effect on the integrity of any European sites in view of their conservation objectives.

## 2 Legislative Context

12 Article 6(3) of the Habitats Directive states that:

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

For the purposes of this application for approval, which is made pursuant to the provisions of section 51 of the Roads Act 1993, as amended, the obligations under Article 6(3) are transposed into Irish law by Part XAB of the Planning and Development Act 2000 as amended ("the 2000 Act"). Subsection 177U(4) of the 2000 Act provides for screening for Appropriate Assessment as follows:

'The competent authority shall determine that an appropriate assessment of [...] a proposed development [...] is required if it cannot be excluded, on the basis of objective information, that the [...] proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site.'

- 14 For the reasons set out in detail in the AA Screening Report included in the application documentation, a Stage Two Appropriate Assessment of the Proposed Scheme is required to be undertaken by the Board pursuant to Article 6(3) of the Habitats Directive and section 177V of the 2000 Act.
- 15 In the latter context, subsections 177T(1) and (2) provide that:

'A Natura Impact Statement means 'a statement, for the purposes of Article 6 of the Habitats Directive, of the implications of a proposed development, on its own or in combination with other plans or projects, for one or more than one European site, in view of the conservation objectives of the site or sites' a Natura impact statement... 'shall include a report of a scientific examination of evidence and data, carried out by competent persons to identify and classify any implications for one or more than one European site in view of the conservation objectives of the site or sites'.



16 Consideration has been given in the preparation of this report, to the evolution in interpretation and application of provisions of European Union (EU) Directives and national Irish legislation arising from jurisprudence of the European and Irish courts, in respect of Article 6 of the Habitats Directive, in particular.

# 3 Description of the Proposed Scheme

- 17 The following sections provide information to facilitate the Appropriate Assessment of the Proposed Scheme to be undertaken by the competent authority.
- A description of the Proposed Scheme and the receiving environment is provided to identify the potential ecological impacts. The environmental baseline conditions are discussed, as relevant to the assessment of ecological impacts where they may highlight potential pathways for impacts associated with the Proposed Scheme to affect the receiving ecological environment (e.g., geological, hydrogeological and hydrological data, etc.).
- 19 The potential impacts are examined in order to define the potential zone of influence (ZoI) of the Proposed Scheme on the receiving environment. This then informs the assessment of whether the Proposed Scheme will result in significant effects on any European sites; i.e. affect the conservation objectives supporting the favourable conservation condition of the European site's Qualifying Interests (QIs) or Special Conservation Interests (SCIs).

### 3.1 Overview

- The Proposed Scheme is approximately 18.5km long from end to end and will commence at the junction of Leeson Street Lower and St. Stephen's Green. The Proposed Scheme will run along Leeson Street Lower and Upper including the existing one-way system on Sussex Road. It will continue on Morehampton Road and Donnybrook Road through Donnybrook Village, and on to the Stillorgan Road. It will intersect with the Belfield / Blackrock to City Centre Core Bus Corridor Scheme at Nutley Lane and include the University College Dublin (UCD) Bus Interchange at the entrance to UCD. It will continue south on Stillorgan / Bray Road as far as the Loughlinstown Roundabout. The route will then proceed along the old Dublin Road through Shankill and onto Bray through the Wilford Roundabout (M11 Access Roundabout), Dublin Road, and Castle Street. The Proposed Scheme will finish north of the Dargle River Crossing (Fran O'Toole Bridge).
- 21 The Proposed Scheme includes an upgrade of the existing bus priority and cycle facilities. The Proposed Scheme includes a substantial increase in the level of bus priority provided along the corridor, including the provision of additional lengths of bus lane resulting in improved journey time reliability. Throughout the Proposed Scheme bus stops will be enhanced to improve the overall journey experience for bus passengers and cycle facilities will be substantially improved with segregated cycle tracks provided along the links and protected junctions with enhanced signalling for cyclists provided at junctions.
- 22 Moreover, pedestrian facilities will be upgraded and additional signalised crossings will be provided. In addition, urban realm works will be undertaken at key locations with higher quality materials, planting and street furniture provided to enhance the pedestrians experience, an example of this can be seen in Donnybrook at Mulberry Lane.
- 23 For the purposes of describing the Proposed Scheme it has been split into four sections as follows:
  - Section 1: Leeson Street to Donnybrook (Anglesea Road Junction);
  - Section 2: Donnybrook (Anglesea Road Junction) to Loughlinstown Roundabout;
  - Section 3: Loughlinstown Roundabout to Bray North (Wilford Roundabout); and,
  - Section 4: Bray North (Wilford Roundabout) to Bray South (Fran O'Toole Bridge).
- 24 The main characteristics of the Construction Phase of the Proposed Scheme that have potential for ecological impact are:



- Site preparation and clearance;
- Removal of existing boundaries, pavements, lighting columns, bus stops, and signage;
- Protection and / or diversion of buried services;
- Road widening, pavement reconstruction, and kerb improvements;
- Reconfiguration of traffic lanes throughout;
- Installation of new bus stops and junction / roundabout modification;
- Property boundary reinstatement, signage replacement; relocation of and / or installation of lighting columns; and,
- Landscaping and tree planting, and reinstatement of temporary land acquisitions.

### 3.2 Structural Works

The Proposed Scheme requires the construction / remodelling of existing structures. Retaining walls that have a retained height less than 1.5m are classified as minor retaining walls and are not considered further. The same applies for earth embankments. However, retaining walls with a retained height greater than 1.5m are classed as principal structures. There are ten principal retaining walls along the Proposed Scheme, as detailed in Table 1.

**Table 1: Principal Retaining Walls** 

Wall Reference	Structure Type	Retained Height (m)		Chainage Start	Chainage End	Length (m)	
R13-RW043	Existing Wall at Loughlinstown Roundabout	Varies	3.6	Max	A14050	A14140	110
R13-RW023	Cast In Situ Reinforced Concrete Wall	Varies	2.5	Max	E10	A14770	40
R13-RW024	Precast Reinforced Concrete Wall	N/A	1.5m	Max	A14770	A14800	30
R13-RW036	Precast Reinforced Concrete Wall	N/A	0.5m	Max	A14800	A14980	Maxim um 180
R13-RW045	Existing Masonry Wall at St Anne's Roundabout	Varies	1.5	Max	A15175	A15025	135
R13-RW046	Existing Masonry Wall at St Anne's Roundabout	Varies	3.2	Max	A15175	A15025	120
R13-RW038	Precast Reinforced Concrete Wall	Varies	1.8	Max	A17040	A17080	40
R13-RW013	Precast Reinforced Concrete Wall	Varies	1.5	Max	A17190	A17290	100
R13-RW016	Cast In Situ Reinforced Concrete Wall	Varies	2.5	Max	A18085	A18130	45
R13-RW017	Cast In Situ Reinforced Concrete Wall	N/A	2.0m	Max	A18150	A18190	40

Retaining walls are typically installed to cater for level differences between the road and adjoining lands or where the narrowing of the existing corridor by way of space requirements does not allow for less constructed solution Retaining walls will generally be constructed of reinforced concrete, with railing and cladding as required, with suitable materials depending on the local environs. Retaining walls will generally be constructed by first isolating the site of the retaining wall using fencing, as appropriate, to the location. The existing ground will then be stripped to formation level. Existing services will be diverted as required to enable wall construction. A side slope will be battered back to enable construction. Blinding will be installed at formation level. Formwork and reinforcing steel for the wall will be fixed in place for *in situ* concrete casting. Then concrete will be poured in sections and formwork removed after initial curing of concrete. After a sufficient curing period the area behind the



wall will be backfilled. Elsewhere precast concrete walls are specified and these will be lifted in to place on previously prepared ground, and then secured before backfilling as appropriate.

- 27 Asides from key retaining walls listed above, a number of principal structures are included in the Proposed Scheme. These include:
  - The provision of 'Island and Plaza' type bus shelter structures at the UCD Bus Interchange facility Bus stop reference #768 at chainage A4000;
  - The widening of the existing pedestrian subway (on its eastern side) at Patrician Villas / St Laurence's in Stillorgan to accommodate new footpaths and cycle tracks will run parallel to the N11 mainline in both directions; and
  - The demolition and reconstruction (set back further from the Proposed Scheme of the Woodbrook Side Lodge including its boundary wall and pedestrian / vehicle gated entry along the Dublin Road near Wilford Roundabout towards Bray.

## 3.3 Surface Water Drainage Infrastructure

- The surface water drainage system for the Proposed Scheme will discharge into the existing surface water drainage system. There are eight existing surface water catchments and one wastewater treatment plant (WwTP) to which the drainage system for the Proposed Scheme will discharge. Surface waters will drain to the River Dodder (Dodder\_050), Elm Park Stream, Booterstown Stream, Priory Stream and Brewery Stream (all within the Brewery Stream\_010 catchment), Kill of the Grange Stream (Kill of The Grange Stream\_010), Cabinteely Stream and Carrickmines Stream (both within the Carrickmines Stream\_010 catchment), Shanganagh River (Shanganagh\_010), Rathmichael Stream and the River Dargle (both within the Dargle\_040 catchment) and Ringsend WwTP, and ultimately via these receptors to the Irish Sea. The Proposed Scheme crosses the River Dodder at Donnybrook, the Elm Park Stream (Brewery Stream\_010) at UCD (likely culverted), the Brewery Stream at St. John of God Hospital, the Shanganagh River at Loughlinstown and the Rathmichael Stream on R119 Dublin Road.
- 29 The drainage system for the Proposed Scheme, and therefore the runoff, will continue to discharge to the above receptors through existing surface water outfalls. All drainage outfall discharges to surface waters represent point discharges.
- The Proposed Scheme will result in a decrease in impermeable area of 8m² in the catchment area draining to the Dodder\_050. This will equate to a 0.07% reduction in impermeable area, and will result in a decrease in the volume and rate of runoff of the Dodder\_050 as a result. There will be a net increase in impermeable area draining to Brewery Stream\_010 of 11,471m², which equates to a 3.28% increase. There will also be a net increase in impermeable area draining to the Kill of The Grange Stream\_010 of 2,552m², which equates to a 2.1% increase and the Carrickmines Stream\_010 of 883m² which equates to a 1.63% increase. There will be a net increase in impermeable area draining to the Shanganagh River (Shanganagh\_010) of 2,792m² which equates to a 5.44% increase and the Dargle\_040 of 11,650m² which equates to a 14% increase. Overall, the small increases in impermeable areas for the catchments draining to the Irish Sea will have no measurable impact on this water body during the Operational Phase of the Proposed Scheme.
- Notwithstanding this, the drainage design principles ensure that there will be no net increase in the surface water flow discharged to these receptors.
- The Proposed Scheme will increase the amount of impermeable surface area through widening of carriageways. Drainage of these newly paved areas will include Sustainable Drainage System (SuDS) measures to treat and attenuate any additional runoff. These measures will ensure that there is no increase in existing runoff rates from newly paved areas and appropriate treatment to ensure runoff quality. SuDS measures recommended for this Proposed Scheme include relocation and addition of drainage gullies, pavement capping layer attenuation (under the UCD Bus Interchange), filter drains, attenuation tanks, oversized pipes, swales, attenuation ponds and tree pits which will be installed in suitable locations along the Proposed Scheme (e.g., in the central median and along road verges).



Table 2: Proposed SuDS and Impermeable Area Changes

Water Body	Approx. Impermeable Surface Area (m²)			SuDS Measures Proposed	
	Existing	Additional	Percentage Change		
Ringsend WwTP	94,582	-535	-0.57%	None	
Dodder_050	12,144	-8	-0.07%	None	
Brewery Stream_010	349,311	11,471	3.28%	Tree pits, Filter drains, Attenuation tanks, Oversized pipes	
Kill of The Grange Stream_010	118,997	2,552	2.14%	Tree pits, Filter drains, Oversized pipes	
Carrickmines Stream_010	54,185	883	1.63%	Oversized pipes	
Shanganagh_010	51,544	2,792	5.42%	Filter drains, Attenuation tanks, Oversized pipes	
Dargle_040	83,204	11,650	14%	Tree pits, Filter drains, Attenuation tanks, Oversized pipes	
South-western Irish Sea	2,737	116	4.24%	None	

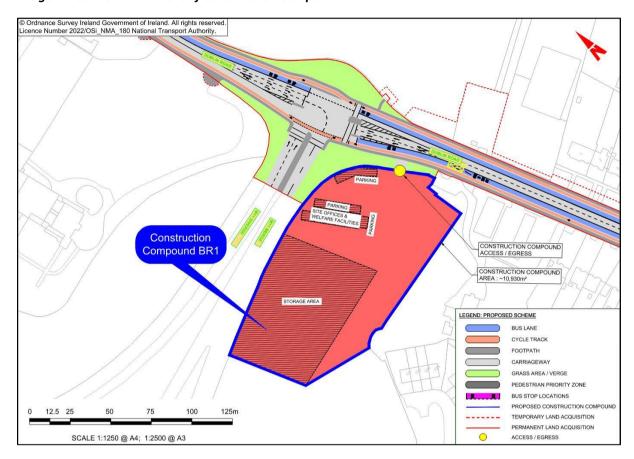
## 3.4 Construction Compounds

- 33 The locations of the Construction Compounds in relation to the Proposed Scheme have been selected due to the amount of available space, its location near the majority of the Proposed Scheme major works and its access to the National and Regional Road network. Two Construction Compounds will be required along the length of the Proposed Scheme to facilitate construction. They will be located at:
  - Construction Compound BR1: located in an area of derelict land characterized by Scrub and revegetating ground at Wilford Roundabout at the turnoff from the Dublin Road onto the Shankill Bypass flyover (M11 Junction 5 Bray North); and,
  - **Construction Compound BR2:** located in an area of managed grassland at Fosterbrook, off the Stillorgan Road in fronting the grounds of the Radisson St. Helens Hotel.
- 34 These two Construction Compounds will be used to store materials, plant and equipment, to manage the activities from, and to provide welfare facilities for construction personnel. The Construction Compounds will be in place for the duration of the Construction Phase of the Proposed Scheme.
- The locations of the Construction Compounds are shown in Images 1 and 2. These Construction Compounds will contain a site office, and welfare facilities for NTA personnel and contractor personnel. Limited car parking will be allowed at the Construction Compounds. Materials such as topsoil, subsoil, concrete, rock etc., will be stored at the Construction Compounds for reuse as necessary. Items of plant and equipment will also be stored within the Construction Compounds.
- The Construction Compounds will be engineered with appropriate services. Water, wastewater, power, and communications connections will be organised by the appointed contractor. At work areas along the Proposed Scheme, where permanent provisions (for the duration of the construction programme) are not practicable, appropriate temporary provisions will be made including the use of generators if required. Temporary welfare facilities will need to be used, for example, portable toilets in the vicinity of works. Wastewater from temporary welfare facilities will be collected and disposed of to a suitably licensed facility.
- 37 The Construction Compounds will be in place for the duration of the Construction Phase of the Proposed Scheme estimated at approximately 30 months.



Following completion of the Construction Phase, the Construction Compounds will be dismantled and the sites reinstated to match pre-existing conditions.

Image 1: Location and Extent of Construction Compound BR1



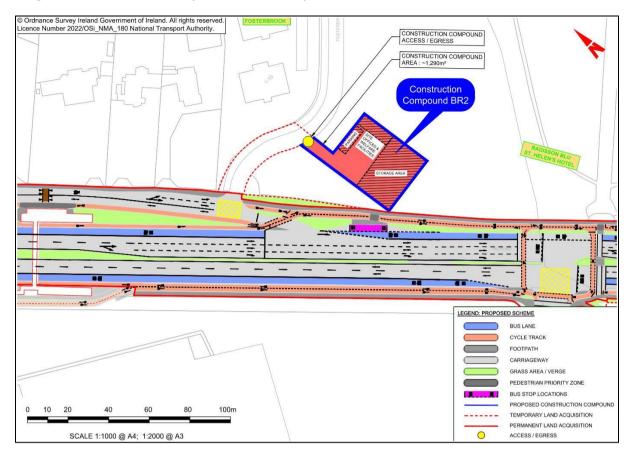


Image 2: Location and Extent of Construction Compound BR2

# 3.5 Estimated Project Duration

39 The duration of the Construction Phase is estimated to be of the duration of 30 months.

## 3.6 Operational Phase

- 40 The main characteristics of the Operational Phase of the Proposed Scheme that have potential for likely significant effects on European sites and their QI / SCI include:
  - The presence and operation (traffic) of the road;
  - The presence of additional lighting; and,
  - Routine maintenance.

# 4 Methodology

## 4.1 Scientific and Technical Competence Relied Upon

41 This NIS was authored by Emmi Virkki and reviewed by Tim Ryle, Suvi Harris and Aebhin Cawley of Scott Cawley Ltd. The background and experience of the author and contributors to this report are set out below.

### Emmi Virkki

42 Emmi Virkki is a Senior Ecologist with Scott Cawley Ltd., with over six years of experience. She obtained an honours degree in Environmental Biology, from University College Dublin and a Masters degree in Environmental Science from the same institution, and is a Full Member of the Chartered Institute of Ecology and Environmental Management (CIEEM). Her professional experience comprises work with clients at both government and private levels. Emmi's specialism is ornithology, but she is also skilled in an extensive range of surveys, including terrestrial surveys for flora, fauna and non-native invasive



species in all key Irish habitats. Her experience also comprises work on monitoring projects for national surveys of Annex I habitats in sand dune and saltmarsh habitats. She has considerable experience in designing, undertaking and managing a wide range of ecological surveys, assessing impacts and designing mitigation measures and biodiversity enhancements. Emmi's experience includes a significant number of small to large scale projects in which she was actively involved to inform impact assessment for planning purposes. She has authored and assisted in the preparation of numerous Ecological Impact Assessment (EcIA), Preliminary Ecological Appraisal (PEA) and Appropriate Assessment (AA) reports, as well as Biodiversity Chapters of Environmental Impact Assessment (EIA) reports, for linear infrastructure, residential, commercial, educational and industrial projects.

### Tim Ryle

43 Tim Ryle is a Principal Ecologist with Scott Cawley Ltd. He holds an honours degree in Botany from University College Dublin and was later awarded a Ph.D. from the same institution. He is a full Member of the Institute of Environmental Scientists. Tim is an experienced ecological consultant with twenty years' experience in private consultancy in designing, undertaking and managing a wide range of ecological surveys and in assessing impacts and designing mitigation measures and biodiversity enhancements, in particular for protected species including badgers, otters, bats, birds, amphibians as well as habitats of conservation importance. He is also experienced in undertaking Appropriate Assessment for small-scale development projects and larger infrastructural projects, land plans as well as national/government plans.

### Suvi Harris

44 Suvi Harris is a Senior Environmental Project Manager at Scott Cawley Ltd. Suvi holds an honours degree BSc. in Botany from University College Dublin and a PhD. in Environmental Risk Assessment from University College Dublin. Suvi is a Full Member of the Chartered Institute of Ecology and Environmental Management (CIEEM). Suvi has over 8 years' experience in environmental consultancy and over 12 years' experience in the environmental field with a particular focus on aquatics. Suvi has worked on national and international multidisciplinary teams developing environmental and ecological solutions for engineering challenges. Suvi leads, coordinates and assists on a range of areas including EIA, AA, Water Framework Directive (WFD) Compliance Assessment, Surface Water Impact Assessment, Sustainability Appraisal, Planning, Licensing etc. Suvi holds a deep technical understanding of the relevant National and European Legislation which govern environmental protection and planning in Ireland.

## Aebhín Cawley

Aebhín Cawley is the Chief Executive Officer with Scott Cawley Ltd. She holds an honours degree in Zoology from Trinity College, Dublin and a postgraduate diploma in Physical Planning from Trinity. She is a Chartered Environmentalist (CEnv) with the Society for the Environment (Soc Env) and a Full Member of the CIEEM. Aebhín Cawley is an experienced ecological consultant with extensive experience in public and private sector projects including complex development types including infrastructure, renewable energy and ports. Aebhín has delivered lectures and training on Appropriate Assessment to a range of organisations and professional institutes and regularly provides Appropriate Assessment training to local authorities and other public sector organisations. She authored guidelines on Appropriate Assessment for the Environmental Protection Agency (EPA) and delivered training on its application to its inspectorate.

### 4.2 Guidance and Approach

46 This NIS has been prepared having regard to the following documents.

## European Commission (EC) Guidance

Commission Notice – Assessment of Plans and Projects in Relation to Natura 2000 sites:
 Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (European Commission, 2021);



- Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC (European Commission, 2019);
- Communication from the Commission on the Precautionary Principle (European Commission, 2000)<sup>2</sup>;
- Nature and Biodiversity Cases Ruling of the European Court of Justice (European Commission, 2006);
- Interpretation Manual of European Union Habitats. Version EUR 28. (European Commission, 2013); and,
- Article 6 of the Habitats Directive Rulings of the European Court of Justice (European Commission Final Draft September 2014).

## Irish Guidance

- Appropriate Assessment Screening for Development Management: OPR Practice Note PN01 (Office of the Planning Regulator (OPR), 2021);
- Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities (Department of Environment, Heritage and Local Government 2010 revision); and,
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPW 1/10 & PSSP 2/10 (NPWS, 2010).
- 47 In addition, regard has been had to guidance in characterising impacts, including determining magnitude and significance of impacts, as relevant in the application to Appropriate Assessment and European sites:
  - Guidelines for Ecological Impact Assessment in the UK and Ireland (Chartered Institute of Ecology and Environmental Assessment, 2018).

## 4.3 Assessment Methodology

- 48 As per Section 1, this NIS assesses the final Proposed Scheme (Section 3). To account for the changes in data and desktop surveys were completed to ensure the most up to date data informed this assessment. The assessment presented in this NIS has been undertaken with respect to the requirements of Article 6(3) of the Habitats Directive and in consideration of all potential impact sources and pathways connecting the Proposed Scheme to European sites, in view of the conservation objectives supporting the conservation condition of all European sites' QIs / SCIs, as detailed below.
- 49 The Proposed Scheme (including the proposed design, construction methodologies and operational effects) was analysed and assessed to identify the potential impacts associated with the Proposed Scheme that could affect the ecological environment.
- From this, the ecological ZoI of the Proposed Scheme was defined. Based on the identified impacts, and their ZoI, the European sites potentially at risk of any direct or indirect impacts were identified.

This guidance document notes that the precautionary principle "covers those specific circumstances where scientific evidence is insufficient, inconclusive or uncertain and there are indications through preliminary objective scientific evaluation that there are reasonable grounds for concern that the potentially dangerous effects on the environment, human, animal or plant health may be inconsistent with the chosen level of protection".

Applying the precautionary principle in the context of screening for appropriate assessment requires that where there is uncertainty or doubt about the risk of significant effects on a European site(s), it should be assumed that significant effects are likely and AA must be carried out.

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 $<sup>^2</sup>$  The precautionary principle is a guiding principle that derives from Article 191 of the Treaty on the Functioning of the European Union and has been developed in the case law of the European Court of Justice (e.g., ECJ case C-127/02 – Waddenzee, Netherlands).

- A source-pathway-receptor approach has been applied. In order for an impact to occur, there must be a risk enabled by having a source (e.g., water abstraction or construction works), a receptor (e.g., a European site or its QI or SCI species), and a pathway between the source and the receptor (e.g., pathway by air for air borne pollution, or a pathway by a watercourse for mobilisation of pollution). For an impact to occur, all three elements must exist; the absence or removal of one of the elements means there is no possibility for the impact to occur.
- The identification of source-pathway-receptor connection(s) between the Proposed Scheme and European sites essentially is the process of identifying which European sites are within the ZoI of the Proposed Scheme, and therefore potentially at risk of significant effects. The ZoI is defined as the area within which the Proposed Scheme could affect the receiving environment such that it could potentially have significant effects on the QI habitats or QI / SCI species of a European site, or on the achievement of their conservation objectives (as defined in CIEEM, 2018).
- The identification of a source-pathway-receptor risk does not mean that significant effects will arise. Rather the likelihood of significant effects will depend upon the characteristics of the source (e.g., extent and duration of construction works), the characteristics of the pathway (e.g., direction and strength of prevailing winds for air borne pollution) and the characteristics of the receptor (e.g., the sensitivities of the European site and its QIs / SCIs). However, identification of the risk does mean that there is a possibility of an effect on the environment, with the significance of the effect depending upon the nature and exposure to the risk and the characteristics of the receptor. In this case. Where there is any uncertainty, the precautionary principle has been applied.
- This assessment has been undertaken in consideration of all potential impact sources and pathways connecting the Proposed Scheme to European sites, in view of the conservation objectives supporting the conservation condition of the sites' QIs / SCIs.
- 55 The conservation objectives relating to each European site and its Qls / SCIs are expressed generally for SACs as "to maintain or restore the favourable conservation condition of the Annex I habitat(s) and / or the Annex II species for which the Csac has been selected", and for SPAs "to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA".
- Following on from this, and as defined in the Habitats Directive, favourable conservation status (or condition, at a site level) of a habitat is achieved when:
  - Its natural range, and area it covers within that range, are stable or increasing;
  - The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future; and,
  - The conservation status of its typical species is favourable.
- 57 The favourable conservation status (or condition, at a site level) 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.
- Where site-specific conservation objectives have been prepared for the individual European sites, these include a series of specific attributes and targets against which effects on conservation condition, or integrity, can be measured, i.e. an impact which affects the achievement of favourable conservation condition, as measured by the attributes and targets, is an impact on site integrity.
- In the case of some European sites (e.g., Rockabill SPA) site-specific conservation objectives are not available, or have not been published. Where that is the case, sample site specific attributes and targets for a given QI / SCI have been compiled, based on those from other relevant European sites, as



- a guide in assessing how the conservation condition of these sites could potentially be affected by the Proposed Scheme.
- 60 In the case of some QIs / SCIs in certain European sites, the conservation objective is to restore rather than maintain conservation condition and this distinction is taken into account in the assessment; as is any legacy damage to European sites that has occurred since their designation, insofar as possible.
- To the extent that the assessment carried out as part of the preparation the NIS has found that the Proposed Scheme has the potential to impact on European sites, avoidance and mitigation measures have been included as part of the Proposed Scheme to ensure that, in view of the European sites' conservation objectives, the Proposed Scheme will not adversely affect the integrity of the sites concerned.

### 4.4 Desk Study

- The data sources used to inform the assessment presented in this NIS are as follows (accessed in October 2020 and updated in April 2023), the results of which are shown in Appendix II:
  - Online data available on European sites and on Natural Heritage Areas (NHAs) or proposed Natural Heritage Areas (pNHAs) from <a href="www.npws.ie">www.npws.ie</a><sup>3</sup>, including conservation objectives documents;
  - Online data records available on National Biodiversity Data Centre Database (2023) (see Appendix II);
  - Ordnance Survey Ireland (OSI) orthophotography for the Proposed Scheme study area available from <a href="https://www.osi.ie">www.osi.ie</a>;
  - Records of rare and / or protected species for the 10km grid squares O12, O13, O21 and O22, held by the NPWS (NPWS, 2022);
  - Habitat and species Geographic Information System (GIS) datasets provided by the NPWS, including Article 12 and Article 17 data<sup>4</sup>;
  - Records from the Botanical Society of Britain and Ireland (BSBI);
  - Information contained within the Flora of County Dublin<sup>5</sup>;
  - Environmental information / data for the area available from the EPA website www.epa.ie;
  - Information on the status of EU protected habitats and species in Ireland<sup>6</sup>;
  - Information on light-bellied Brent goose inland feeding sites<sup>7</sup>;
  - The results of ecological surveys undertaken as part of the Environmental Impact Assessment (EIA) studies for the Proposed Scheme (see Section 5 for details);
  - Information on the location, nature and design of the Proposed Scheme supplied by the applicant's design team; and

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<sup>&</sup>lt;sup>3</sup>The following SAC and SPA GIS boundary datasets are the most recently available at the time of writing: SAC\_ITM\_2023\_02 and SPA\_ITM\_2021\_10.

<sup>&</sup>lt;sup>4</sup> Article 17 of the EU Directive on the Conservation of habitats, Floras and Fauna (Habitats Directive) requires that all member states report to the European Commission every six years on the status and on the implementation of the measures taken under the Habitats Directive. In a similar manner, there is an obligation to report on the status and trends of bird species required under Article 12 of the Bird's Directive.

<sup>&</sup>lt;sup>5</sup> Doogue, D., Nash, D., Parnell, J., Reynolds, S. & Wyse Jackson, P. (eds) (1998) *Flora of County Dublin*. The Dublin Naturalists' Field Club, Dublin

<sup>&</sup>lt;sup>6</sup> NPWS (2019e). *The Status of EU Protected Habitats and Species in Ireland*. Volume 1: Summary Overview. Unpublished NPWS report.

<sup>&</sup>lt;sup>7</sup> Scott Cawley Ltd. (2017). Natura Impact Statement – Information for Stage 2 Appropriate Assessment for the Proposed Residential Development St. Paul's College, Sybill Hill, Raheny, Dublin



• Bus Connects Drone Imagery, surveyed November 2020.

# 4.5 Consultations

63 Table 3 outlines the AA issues raised during consultation.

Table 3: Principal AA Issues Raised During Consultation

Consultee	Phase / Date of Consultation	Issues Raised	Relevant Section of the NIS Where the Issues Raised in Consultation are Addressed						
Department of Housing, Local Government and Heritage (formerly Department of Culture, Heritage and the Gaeltacht)	30 <sup>th</sup> July 2019 Ref. G Pre00165/2019	<ul> <li>The Department recommend identification, description, and assessment of direct and indirect impacts of the Proposed Scheme on the following features:</li> <li>Biodiversity in general and with specific attention to Natura 2000 sites.</li> <li>Habitats and species protected under the Habitats Directive, such as Annex I habitats, Annex II species and their habitats, and Annex IV species and their breeding sites and resting places (wherever they occur), bird species protected under the Birds Directive, such as Annex I species and other regularly occurring migratory species, and their habitats (wherever they occur).</li> <li>species and / or habitats listed in the Habitats Directive inside or outside of Natura 2000 sites be recorded.</li> <li>Species protected under the Wildlife Act, including protected flora.</li> <li>Important bird areas such as those identified by Birdwatch Ireland.</li> <li>Features of the landscape which are of major importance as biodiversity corridors to wild flora or fauna, as referenced in Article 10 of the Habitats Directive</li> </ul>	Section 5.1 European Sites, Section 4.6 Baseline Surveys, Section 5 Overview of the Receiving Environment, and Section 7 Assessment of Effects on European Sites						
							ti	Detailed bird surveys should be undertaken at all times of the year to establish areas of the Proposed Scheme used by birds should be included in the AA.	Section 4.6 Baseline Surveys
		The Department requires that the Appropriate Assessment addresses the issue of invasive alien plant and animal species and include detailed methods to ensure accidental introduction or spreading does not occur. The Department recommended that an Invasive Species Action Plan should form part of the planning application.	Section 6.4 Habitat Degradation as a Result of Introducing / Spreading Non- Native Invasive Species. A non-native Invasive Species Management Plan has been prepared in respect of the Proposed Scheme as an Appendix to the Construction Environmental Management Plan (CEMP) (Appendix III of this NIS).						



Consultee	Phase / Date of Consultation	Issues Raised	Relevant Section of the NIS Where the Issues Raised in Consultation are Addressed
		Department recommended that the Cumulative impacts of the Proposed Scheme be considered, to include interaction between different and / or approved plans and projects in the same area as the Proposed Scheme.	Section 1 Introduction, Section 2 Legislative Context, Section 6.6 Disturbance and Displacement Impacts and Section 9 In Combination Assessment
		The Department recommended that the Proposed Scheme be subject to Appropriate Assessment in respect of potential to impact Natura 2000 sites either alone or in combination with other plans or projects, and must contain complete (contain no lacunae), precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the works proposed on the protected site concerned.  To assess mitigations, the following tasks must be completed:  List each of the measures to be introduced (e.g., noise bunds, tree planting).  Explain how the measures will avoid the adverse impacts on the site.  Explain how the measures will reduce the adverse impacts on the site.  Then, for each of the listed mitigation measures:  Provide evidence of how they will be secured and implemented and by whom.  Provide evidence of the degree of confidence in their likely success.  Provide a timescale, relative to the project or plan, when they will be implemented.  Where residual impacts remain, further mitigation measures may be required:  Evidence should be provided of how mitigation measures will be monitored.  Monitoring should take place immediately down-stream of the Proposed Scheme.  The applicant should not use any proposed post construction monitoring as mitigation to supplement inadequate information in the assessment.	The Proposed Scheme has been subject to Screening for AA and the production of a Natura Impact Statement, which accompanies the planning submission.  Section 6 Potential Impacts, Zone of Influence and Identifying European Sites at Risk of Effects

# 4.6 Baseline Surveys

Baseline ecological surveys were undertaken as necessary to inform environmental assessments of the Proposed Scheme. This section describes those ecological surveys which are relevant to and have informed the assessment of likely significant effects on European sites, presented in this NIS.



### 4.6.1 Habitats and Flora

65 Habitat surveys were carried out by Scott Cawley Ltd., between June and August 2018 along the then Proposed Scheme alignment (See Figure 1). Confirmatory surveys were subsequently undertaken on the Proposed Scheme again in August 2020 and May and August 2022 to check and update the presence and extent of habitats found in the 2018 habitat surveys. Additional habitat surveys were carried out along any new route sections added since 2018 including proposed changes to the proposed red line boundary across the Proposed Scheme in 2022 and 2023. All habitats located within or immediately adjacent to the Proposed Scheme footprint were surveyed and mapped to level three of the Heritage Council's habitat codes, after Fossitt<sup>8</sup> and in accordance with Best Practice Guidance for Habitat Survey and Mapping<sup>9</sup>. The level of field data quality was also recorded. Plant species present that were either representative of a habitat or considered to be of conservation interest (i.e., those listed on the Flora (Protection) Order 2022 or listed in the 'threatened' category or higher on the Red List for vascular plants and bryophytes) were recorded, along with their relative abundances. Nonnative invasive plant species listed on the Third Schedule of the 2011 Birds and Habitats Regulations were also recorded. The habitat's extent was mapped onto an aerial photograph, with Global Positioning System (GPS) points taken where a habitat's extent could not be clearly identified from the aerial photograph. Vascular plant nomenclature follows that of the New Flora of the British Isles 4th Edition<sup>10</sup>.

A desk study was carried out to identify all hydrological crossing points within the footprint of the Proposed Scheme. No instream works are proposed and the desk study identified no sites where water bodies may be subject to significant disturbance as a consequence of the Proposed Scheme. As such, instream aquatic habitat surveys were not necessary.

### 4.6.2 Fauna Surveys

67 Ecological surveys relevant to the proposed scheme include habitat surveys, surveys for the presence or signs of terrestrial, mobile Annex II species (i.e., otter *Lutra lutra*), and surveys for SCI bird species. Dedicated fisheries or aquatic surveys were not required for this assessment as the Proposed Scheme is not hydrologically connected to any European site designated for Annex II fish species or white-clawed crayfish *Austropotamobius pallipes*. The nearest known European site designated for Atlantic salmon *Salmo salar*, river lamprey *Lampetra fluviatilis* and brook lamprey *L. planeri* is the River Boyne and River Blackwater SAC, located approximately 39.6km north-west of the Proposed Scheme in the Boyne River catchment. The nearest known European site designated for white-clawed crayfish is the River Barrow and River Nore SAC, which is located approximately 54.8km south-west of the Proposed Scheme in the River Barrow catchment, River Nore catchment and River Ballyteigue-Bannow river catchment.

## 4.6.2.1 Otter

The footprint of the Proposed Scheme and suitable lands (e.g., greenfield sites) immediately adjacent were surveyed for otter activity as part of the multi-disciplinary walkover survey, undertaken between June and August 2018, August 2020 and April 2022. The presence / absence of these species was surveyed through the detection of field signs such as tracks, markings, feeding signs, and droppings as well as by direct observation. In addition, the study area was surveyed for the presence of otter holts. Where present, any evidence of use was recorded.

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<sup>&</sup>lt;sup>8</sup> Fossitt, J.A. (2000) *A Guide to Habitats in Ireland*. Heritage Council, Kilkenny.

<sup>&</sup>lt;sup>9</sup> Smith, G.F., O'Donoghue, P., O'Hora, K. & Delaney, E. (2011) *Best Practice Guidance for Habitat Survey and Mapping*. The Heritage Council Church Lane, Kilkenny, Ireland.

<sup>&</sup>lt;sup>10</sup> Stace, C. (2019) New Flora of the British Isles. 4th Edition. C&M Floristics.



### 4.6.2.2 Kingfisher

69 A desk study was carried out to identify all hydrological crossing points within the footprint of the Proposed Scheme. No instream works are proposed and the desk study identified no sites where water bodies may be subject to significant disturbance as a consequence of the Proposed Scheme. As such, kingfisher *Alcedo atthis* habitat suitability assessment surveys were not necessary.

### 4.6.2.3 Other Birds

- 70 The results of the desk study have informed the assessment of potential impacts on breeding bird species arising from the Proposed Scheme.
- 71 A desk study was carried out to identify any potential suitable inland feeding and / or roosting sites for winter birds located within or directly adjacent to the Proposed Scheme. This included a review of recent aerial photography and known inland feeding sites for the SCI bird species light-bellied Brent goose *Branta bernicla hrota*<sup>8</sup> (Scott Cawley Ltd., 2017). A habitat suitability assessment was carried out in October 2020 to verify the suitability of potential inland feeding / roosting sites identified during the desk study.
- The desk study identified two sites adjacent to the Proposed Scheme with potential for wintering birds that would be subject to direct habitat loss. These sites are located along the Allies River Road, off R119 Dublin Road, referred to as CBC0013WB001, and within the Shanganagh Park on R119 Dublin Road referred to as CBC0013WB002. Both sites were surveyed nine times in total during the wintering bird survey season 2020/21. In addition, CBC0013WB002 was surveyed twice a month (total of 12 surveys) between October 2021 and March 2022. CBC0013WB001 was not surveyed during the 2021/22 survey season due to a change to the Proposed Scheme and it no longer forming part of the land take. Additional wintering bird surveys were not carried out at the above listed transects, owing to the absence of any direct impact by virtue of lack of land take and also, by virtue of the results that were recorded over the two year survey periods across the years 2020 to 2022. The results of the desk study and field surveys have informed the assessment of potential impacts on wintering bird species arising from the Proposed Scheme.
- 73 In general, the approach was a 'look-see' methodology (based on Gilbert *et al.*, 1998). All birds present within a site were identified with reference to Collins Bird Guide (Svensson *et al.*, 2010) to confirm identification (where necessary), and were recorded using the British Trust for Ornithology (BTO) species codes. The total flock size of birds present, their general location within the site and any activity exhibited were also recorded. Evidence of bird droppings were recorded at pre-defined transect lines. The length of the transect line varied per site. Transect lines were only completed at sites where no bird species were present, to avoid any potential disturbance.

# 5 Overview of the Receiving Environment

# 5.1 European Sites

- The Proposed Scheme does not overlap with any European site. The nearest European site to the Proposed Scheme is South Dublin Bay and River Tolka Estuary SPA, which is located approximately 900m away. The nearest European sites with a direct hydrological connection to the Proposed Scheme are South Dublin Bay and River Tolka Estuary SPA and South Dublin Bay SAC, which is located approximately 1.38km downstream of the Proposed Scheme, via the Elm Park Stream (Brewery Stream\_010) at UCD.
- There are nineteen (19) European sites located in Dublin Bay and beyond that are hydrologically connected to the Proposed Scheme. These European sites are South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA. European



- sites will be hydrologically connected to the Proposed Scheme via six watercourses i.e., Grand Canal, River Dodder, Brewery Stream, Shanganagh River, Rathmichael Stream and River Dargle, and the Ringsend WwTP.
- There are nine SPAs designated for SCI species that are known to forage and / or roost at inland sites across Dublin City. These are South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA.
- 77 There are two European sites containing marine mammals which are known to frequent Dublin Bay and the Liffey Estuary Lower namely; Rockabill to Dalkey Island SAC and Lambay Island SAC.
- 78 The European sites present in the vicinity of the Proposed Scheme are listed in Table 4 along with their Qls / SCIs and proximity to the Proposed Scheme. Their locations are shown on Figure 4.

Table 4: European Sites in the Vicinity of the Proposed Scheme

European Site Name [Code] and its  Qualifying interests / Special Conservation Interests  (*Priority Annex I Habitats)	Location Relative to the Proposed Scheme Site (as the Crow Flies)
Special Area of Conservation (SAC)	
South Dublin Bay SAC [000210]  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	Approximately 1.1km east of the Proposed Scheme
S.I. No. 525/2019 – European Union Habitats (South Dublin Bay Special Area of Conservation 000210) Regulations 2019  NPWS (2013a) Conservation Objectives: South Dublin Bay SAC 000210. Version 1.  National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
Bray Head SAC [000714] 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts 4030 European dry heaths	Approximately 1.7km south of the Proposed Scheme
S.I. No. 620/2017 – European Union Habitats (Bray Head Special Area of Conservation 000714) Regulations 2017  NPWS (2017a) Conservation Objectives: Bray Head SAC 000714. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	
Ballyman Glen SAC [000713] 7220 Petrifying springs with tufa formation (Cratoneurion)* 7230 Alkaline fens	Approximately 1.9km south of Proposed Scheme
S.I. No. 92/2019 – European Union Habitats (Ballyman Glen Special Area Of Conservation 000713) Regulations 2019  NPWS (2019a) Conservation Objectives: Ballyman Glen SAC 000713. Version 1.  National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.	
Rockabill to Dalkey Island SAC [003000] 1170 Reefs 1351 Harbour porpoise <i>Phocoena phocoena</i>	Approximately 2.6km east of the Proposed Scheme
S.I. No. 94/2019 – European Union Habitats (Rockabill To Dalkey Island Special Area Of Conservation 003000) Regulations 2019	



European Site Name [Code] and its  Qualifying interests / Special Conservation Interests  (*Priority Annex I Habitats)	Location Relative to the Proposed Scheme Site (as the Crow Flies)
NPWS (2013b) Conservation Objectives: Rockabill to Dalkey Island SAC 003000. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
Knocksink Wood SAC [000725] 7220 Petrifying springs with tufa formation (Cratoneurion)* 91A0 Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	Approximately 3.9km south of the Proposed Scheme.
91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae)*	
S.I. No. 93/2019 – European Union Habitats (Knocksink Wood Special Area of Conservation 000725) Regulations 2019  NPWS (2021a) Conservation Objectives: Knocksink Wood SAC 000725. Version 1.0., Department Housing, Local Government and Heritage.	
North Dublin Bay SAC [000206]  1140 Mudflats and sandflats not covered by seawater at low tide	Approximately 5.6km north of the Proposed Scheme
1210 Annual vegetation of drift lines 1310 Salicornia and other annuals colonising mud and sand	
1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) 1395 Petalwort <i>Petalophyllum ralfsii</i>	
1410 Mediterranean salt meadows (Juncetalia maritimi) 2110 Embryonic shifting dunes	
2120 Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)* 2190 Humid dune slacks	
S.I. No. 524/2019 – European Union Habitats (North Dublin Bay Special Area of Conservation 000206) Regulations 2019	
NPWS (2013c) Conservation Objectives: North Dublin Bay SAC 000206. Version 1.  National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
Wicklow Mountains SAC [002122] 3110 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	Approximately 7km south- west of the Proposed Scheme
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 Violetalia calaminariae 6230 Species-rich <i>Nardus</i> 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 (Androsacetalia alpinae and Galeopsietalia ladani)	
8210 Calcareous rocky slopes with chasmophytic vegetation 8220 Siliceous rocky slopes with chasmophytic vegetation 91A0 Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	
1355 Otter Lutra lutra	



European Site Name [Code] and its Qualifying interests / Special Conservation Interests	Location Relative to the Proposed Scheme Site (as the
(*Priority Annex I Habitats)	Crow Flies)
NPWS (2017b) <i>Conservation Objectives: Wicklow Mountains SAC 002122.</i> Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	
Glen of the Downs SAC [000719] 91A0 Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	Approximately 6.9km south of the Proposed Scheme
S.I. No. 178/1980 – Nature Reserve (Glen of the Downs) Establishment Order, 1980.  NPWS (2020a) Conservation Objectives: Glen of the Downs SAC 000719. Version 1.  National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.	
Howth Head SAC [000202]	Approximately 10.4km north
1230 Vegetated sea cliffs of the Atlantic and Baltic coasts	of the Proposed Scheme
4030 European dry heaths	
S.I. No. 524/2021 – European Union Habitats (Howth Head Special Area of Conservation 000202) Regulations 2021  NPWS (2016) Conservation Objectives: Howth Head SAC 000202. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	
Baldoyle Bay SAC [000199]	Approximately 10.9km north
1140 Mudflats and sandflats not covered by seawater at low tide	of Proposed Scheme
1310 Salicornia and other annuals colonizing mud and sand	
1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	
1410 Mediterranean salt meadows (Juncetalia maritimi)	
S.I. No. 472/2021 — European Union Habitats (Baldoyle Bay Special Area of Conservation 000199) Regulations 2021	
NPWS (2012a) Conservation Objectives: Baldoyle Bay SAC 000199. Version 1.0.  National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
Glenasmole Valley SAC [001209]	Approximately 11.1km south-
6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	west of the Proposed Scheme
6410 <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	
7220 Petrifying springs with tufa formation (Cratoneurion)*	
S.I. No. 345/2021 — European Union Habitats (Glenasmole Valley Special Area of Conservation 001209) Regulations 2021	
NPWS (2021b) Conservation Objectives: Glenasmole Valley SAC 001209. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.	
Carriggower Bog SAC [000716]	Approximately 11.3km south
7140 Transition mire and quaking bogs	of the Proposed Scheme
S.I. No. 293/2018 – European Union Habitats (Carriggower Bog Special Area of Conservation 000716) Regulations 2018	
NPWS (2019b) Conservation Objectives: Carriggower Bog SAC 000716. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.	



European Site Name [Code] and its Qualifying interests / Special Conservation Interests	Location Relative to the Proposed Scheme Site (as the Crow Flies)
(*Priority Annex I Habitats)	Clow Files)
Malahide Estuary SAC [000205]	Approximately 14km north of
1140 Mudflats and sandflats not covered by seawater at low tide	the Proposed Scheme
1310 Salicornia and other annuals colonising mud and sand	
1320 Spartina swards (Spartinion maritimae)	
1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	
1410 Mediterranean salt meadows (Juncetalia maritimi)	
2120 Shifting dunes along the shoreline with Ammophila arenaria (white dunes)	
2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)*	
S.I. No. 91/2019 — European Union Habitats (Malahide Estuary Special Area of	
Conservation 000205) Regulations 2019	
NPWS (2013d) Conservation Objectives: Malahide Estuary SAC 000205. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
Ireland's Eye SAC [002193]	Approximately 14.3km north
1220 Perennial vegetation of stony banks	of the Proposed Scheme
1230 Vegetated sea cliffs of the Atlantic and Baltic coasts	
S.I. No. 501/2017 — European Union Habitats (Ireland's Eye Special Area of Conservation 002193) Regulations 2017	
NPWS (2017c) <i>Conservation Objectives: Ireland's Eye SAC 002193.</i> Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	
Rye Water Valley/Carton SAC [001398]	Approximately 15.7km north-
7220 Petrifying springs with tufa formation (Cratoneurion)*	west of the Proposed Scheme
1014 Narrow-mouthed Whorl Snail <i>Vertigo angustior</i>	
1016 Desmoulin's Whorl Snail <i>Vertigo moulinsiana</i>	
S.I. No. 494/2018 – European Union Habitats (Rye Water Valley/Carton Special Area of Conservation 001398) Regulations 2018	
NPWS (2021c) Conservation objectives for Rye Water Valley/Carton SAC [001398]. Version 1.0. Department of Housing, Local Government and Heritage.	
Rogerstown Estuary SAC [000208]	Approximately 18.5km north
1130 Estuaries	of the Proposed Scheme
1140 Mudflats and sandflats not covered by seawater at low tide	
1310 Salicornia and other annuals colonising mud and sand	
1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	
1410 Mediterranean salt meadows (Juncetalia maritimi)	
2120 Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)*	
S.I. No. 286/2018 — European Union Habitats (Rogerstown Estuary Special Area of Conservation 000208) Regulations 2018	
NPWS (2013i) Conservation Objectives: Rogerstown Estuary SAC 000208. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
Lambay Island SAC [000204]	Approximately 22.4km north-
1170 Reefs	east of Proposed Scheme
1230 Vegetated sea cliffs of the Atlantic and Baltic coasts	
1364 Grey seal Halichoerus grypus	
1365 Harbour seal <i>Phoca vitulina</i>	



European Site Name [Code] and its Qualifying interests / Special Conservation Interests	Location Relative to the Proposed Scheme Site (as the
(*Priority Annex I Habitats)	Crow Flies)
S.I. No. 294/2019 – European Union Habitats (Lambay Island Special Area of Conservation 000204) Regulations 2019	
NPWS (2013e) Conservation Objectives: Lambay Island SAC 000204. Version 1.  National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
Special Protection Area (SPA)	
South Dublin Bay and River Tolka Estuary SPA [004024]	Approximately 975m east of
A046 Light-bellied Brent Goose <i>Branta bernicla hrota</i>	the Proposed Scheme
A130 Oystercatcher Haematopus ostralegus	
A137 Ringed Plover Charadrius hiaticula	
A141 Grey Plover Pluvialis squatarola	
A143 Knot Calidris canutus	
A144 Sanderling <i>Calidris alba</i>	
A149 Dunlin Calidris alpina	
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 Sterna dougallii	
A193 Common Tern Sterna hirundo	
A194 Arctic Tern <i>Sterna paradisaea</i>	
A999 Wetland and Waterbirds	
S.I. No. 212/2010 – European Communities (Conservation of Wild Birds (South Dublin Bay and River Tolka Estuary Special Protection Area 004024)) Regulations 2010.	
NPWS (2015a) Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA	
004024. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
Dalkey Islands SPA [004172]	Approximately 3.9km east of
A192 Roseate Tern Sterna dougallii	the Proposed Scheme
A193 Common Tern Sterna hirundo	
A194 Arctic Tern Sterna paradisaea	
S.I. No. 238/2010 – European Communities (Conservation of Wild Birds (Dalkey Islands Special Protection Area 004172)) Regulations 2010	
NPWS (2022a) Conservation objectives for Dalkey Islands SPA [004172]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.	
North Bull Island SPA [004006]	Approximately 5.5km north-
A046 Light-bellied Brent Goose <i>Branta bernicla hrota</i>	east of the Proposed Scheme
A048 Shelduck <i>Tadorna tadorna</i>	- F
A052 Teal <i>Anas crecca</i>	
A054 Pintail <i>Anas acuta</i>	
A056 Shoveler <i>Anas clypeata</i>	
A130 Oystercatcher Haematopus ostralegus	
A140 Golden Plover <i>Pluvialis apricaria</i>	
A141 Grey Plover <i>Pluvialis apricuriu</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>	
- 1207 But tailed Godwit Elmost Tappoined	_



European Site Name [Code] and its Qualifying interests / Special Conservation Interests (*Priority Annex I Habitats)	Location Relative to the Proposed Scheme Site (as the Crow Flies)
A160 Curlew Numenius arquata	
A162 Redshank <i>Tringa totanus</i>	
A169 Turnstone <i>Arenaria interpres</i>	
A179 Black-headed Gull <i>Chroicocephalus ridibundus</i>	
A999 Wetlands & Waterbirds	
S.I. No. 211/2010 – European Communities (Conservation of Wild Birds (North Bull Island Special Protection Area 004006)) Regulations 2010.	
NPWS (2015b) Conservation Objectives: North Bull Island SPA 004006. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
Wicklow Mountains SPA [004040]	Approximately 7.4km east of
A098 Merlin <i>Falco columbarius</i>	the Proposed Scheme
A103 Peregrine Falco peregrinus	
S.I. No. 586/2012 – European Communities (Conservation of Wild Birds (Wicklow Mountains Special Protection Area 004040)) Regulations 2012.	
NPWS (2022b) Conservation objectives for Wicklow Mountains SPA [004040]. First Order Site-specific Conservation Objectives. Version 1.0. Department of Housing, Local	
Government and Heritage.	
Baldoyle Bay SPA [004016]	Approximately 11km north of
A046 Light-bellied Brent Goose <i>Branta bernicla hrota</i>	Proposed Scheme
A048 Shelduck <i>Tadorna tadorna</i>	
A137 Ringed Plover Charadrius hiaticula	
A140 Golden Plover <i>Pluvialis apricaria</i>	
A141 Grey Plover Pluvialis squatarola	
A157 Bar-tailed Godwit <i>Limosa lapponica</i>	
A999 Wetland and Waterbirds	
S.I. No. 275/2010 – European Communities (Conservation of Wild Birds (Baldoyle Bay Special Protection Area 004016)) Regulations 2010.	
NPWS (2013f) Conservation Objectives: Baldoyle Bay SPA 004016. Version 1. National	
Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
The Murrough SPA [004186]	Approximately 12km south of
A001 Red-throated Diver <i>Gavia stellata</i>	Proposed Scheme
A043 Greylag Goose Anser anser	
A046 Light-bellied Brent Goose <i>Branta bernicla hrota</i>	
A050 Wigeon Anas penelope	
A052 Teal Anas crecca	
A179 Black-headed Gull Chroicocephalus ridibundus	
A184 Herring Gull <i>Larus argentatus</i>	
A195 Little Tern Sterna albifrons	
S.I. No. 298/2011 – European Communities (Conservation of Wild Birds (The Murrough Special Protection Area 004186)) Regulations 2011.	
NPWS (2022c) Conservation objectives for The Murrough SPA [004186]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.	



European Site Name [Code] and its	Location Relative to the Proposed Scheme Site (as the
Qualifying interests / Special Conservation Interests	Crow Flies)
(*Priority Annex I Habitats)	,
Howth Head Coast SPA [004113]	Approximately 12.2km north
A188 Kittiwake Rissa tridactyla	of the Proposed Scheme
S.I. No. 185/2012 – European Communities (Conservation of Wild Birds (Howth Head Coast Special Protection Area 004113)) Regulations 2012.	
NPWS (2022d) Conservation objectives for Howth Head Coast SPA [004113]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.	
Ireland's Eye SPA [004117]	Approximately 14.1km north
A017 Cormorant <i>Phalacrocorax carbo</i>	of the Proposed Scheme
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>	
7.200 (4.200 (4.10) (4.10)	
S.I. No. 240/2010 – European Communities (Conservation of Wild Birds (Ireland's Eye Special Protection Area 004117)) Regulations 2010.	
NPWS (2022e) <i>Conservation objectives for Ireland's Eye SPA [004117]</i> . First Order Sitespecific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.	
Malahide Estuary SPA [004025]	Approximately 14.1km north
A005 Great Crested Grebe <i>Podiceps cristatus</i>	of the Proposed Scheme
A046 Light-bellied 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 Mergus serrator	
A130 Oystercatcher <i>Haematopus ostralegus</i>	
A140 Golden Plover <i>Pluvialis apricaria</i>	
A141 Grey Plover Pluvialis squatarola	
A143 Knot <i>Calidris canutus</i>	
A149 Dunlin <i>Calidris alpina</i>	
A156 Black-tailed Godwit <i>Limosa limosa</i>	
A157 Bar-tailed Godwit <i>Limosa Iapponica</i>	
A162 Redshank <i>Tringa totanus</i>	
A999 Wetland and Waterbirds	
S.I. No. 285/2011 – European Communities (Conservation of Wild Birds (Malahide Estuary Special Protection Area 004025)) Regulations 2011.	
NPWS (2013g) Conservation Objectives: Malahide Estuary SPA 004025. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
Rogerstown Estuary SPA [004015]	Approximately 18.7km north
A043 Greylag Goose <i>Anser anser</i>	of the Proposed Scheme
A046 Brent Goose Branta bernicla hrota	
A048 Shelduck <i>Tadorna tadorna</i>	
A056 Shoveler <i>Anas clypeata</i>	
A130 Oystercatcher Haematopus ostralegus	
A137 Ringed Plover Charadrius hiaticula	
A141 Grey Plover <i>Pluvialis squatarola</i>	
A143 Knot Calidris canutus	



European Site Name [Code] and its	Location Relative to the
Qualifying interests / Special Conservation Interests	Proposed Scheme Site (as the Crow Flies)
(*Priority Annex I Habitats)	Clow Files)
A149 Dunlin Calidris alpina	
A156 Black-tailed Godwit <i>Limosa limosa</i>	
A162 Redshank <i>Tringa totanus</i>	
A999 Wetlands	
S.I. No. 271/2010 – European Communities (Conservation of Wild Birds (Rogerstown Estuary Special Protection Area 004015) Regulations 2010.	
NPWS (2013h) Conservation Objectives: Rogerstown Estuary SPA 004015. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
Lambay Island SPA [004069]	Approximately 22.2km north-
A009 Fulmar Fulmarus glacialis	east of Proposed Scheme
A017 Cormorant Phalacrocorax carbo	
A018 Shag Phalacrocorax aristotelis	
A043 Greylag Goose Anser anser	
A183 Lesser Black-backed Gull Larus fuscus	
A184 Herring Gull Larus argentatus	
A188 Kittiwake <i>Rissa tridactyla</i>	
A199 Guillemot <i>Uria aalge</i>	
A200 Razorbill <i>Alca torda</i>	
A204 Puffin Fratercula arctica	
S.I. No. 242/2010 – European Communities (Conservation of Wild Birds (Lambay Island Special Protection Area 004069)) Regulations 2010.	
NPWS (2022f) Conservation objectives for Lambay Island SPA [004069]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.	
Skerries Islands SPA [004122]	Approximately 28.1km north
A017 Cormorant <i>Phalacrocorax carbo</i>	of the Proposed Scheme
A018 Shag Phalacrocorax aristotelis	
A046 Brent Goose <i>Branta bernicla hrota</i>	
A148 Purple Sandpiper <i>Calidris maritima</i>	
A169 Turnstone <i>Arenaria interpres</i>	
A184 Herring Gull <i>Larus argentatus</i>	
<u> </u>	
S.I. No. 245/2010 – European Communities (Conservation of Wild Birds (Skerries Islands Special Protection Area 004122)) Regulations 2010.	
NPWS (2022g) Conservation objectives for Skerries Islands SPA [004122]. First Order	
Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and <i>Heritage</i> .	
Rockabill SPA [004014]	Approximately 28.7km north
A148 Purple Sandpiper <i>Calidris maritima</i>	of the Proposed Scheme
A192 Roseate Tern Sterna dougallii	
A193 Common Tern Sterna hirundo	
A194 Arctic Tern Sterna paradisaea	
S.I. No. 94/2012 – European Communities (Conservation of Wild Birds (Rockabill Special Protection Area 004014)) Regulations 2012.	
NPWS (2013j) Conservation Objectives: Rockabill SPA 004014. Version 1. National	
Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	

### 5.2 Habitats

- 79 The Proposed Scheme is located in a highly urbanised environment. Habitats present in the footprint of the Proposed Scheme include the following:
  - Arable crops (BC1);
  - Flower beds and borders (BC4);
  - Buildings and artificial surfaces (BL3);
  - Tidal rivers (CW2);
  - Spoil and bare ground (ED2);
  - Recolonising bare ground (ED3);
  - Depositing/ lowland rivers (FW2);
  - Canals (FW3);
  - Reed and large sedge swamps (FS1);
  - Amenity grassland (improved) (GA2);
  - Dry meadows and grassy verges (GS2);
  - Residential;
  - (Mixed) broadleaved woodland (WD1);
  - Scattered trees and parkland (WD5);
  - Hedgerows (WL1);
  - Treelines (WL2);
  - Wet willow-alder-ash woodland (WN6);
  - Scrub (WS1);
  - Immature Woodland (WS2); and
  - Ornamental / non-native shrub (WS3).
- The habitat type tidal rivers (CW2) corresponds with the Annex I habitat 'Estuaries [1130]' and is present in the Liffey Estuary Lower, downstream of the Proposed Scheme. The dry meadows and grassy verges (GS2) habitats located within the Proposed Scheme does not correspond with the Annex I habitat 'lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*) [6510]'. The wet willow-alder-ash woodland (WN6) which corresponds with the Annex I priority habitat '\*alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-padion, Alnion incanae, Salicion albae) (91E0)' is located approximately 5m (at its closest point) east and downgradient of the Proposed Scheme at the Loughlinstown Woods pNHA.

## 5.3 Flora and Fauna Species

# 5.3.1 Flora

- 81 No records of any Annex II plant species were recorded within the footprint of the Proposed Scheme during field surveys.
- The desk study returned records of a total of 22 terrestrial or freshwater flora species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 across the wider study area (i.e. grid squares O12, O13, O21 and O22). Records within close proximity to the Proposed Scheme include American skunk-cabbage Lysichiton americanus, floating pennywort Hydrocotyle ranunculoides, giant hogweed Heracleum mantegazzianum, Himalayan balsam Impatiens glandulifera, Japanese knotweed Reynoutria japonica, Nuttall's waterweed Elodea nuttallii, parrot'sfeather Myriophyllum aquaticum, Spanish bluebell Hyacinthoides hispanica and three-cornered garlic Allium triquetrum.



- 83 Canadian waterweed *Elodea canadensis*, which was also documented within 1km of the Proposed Scheme, has been delisted as a Third Schedule species, with the introduction of the European Communities (Birds and Natural Habitats) (Amendment) Regulations 2015, S.I. No. 355/2015.
- 84 There were 18 areas of the non-native invasive plant species comprising Japanese knotweed, Himalayan balsam and giant hogweed listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 identified along or adjacent to the Proposed Scheme. These locations are summarised below in Table 5.

Table 5: Non-Native Invasive Plant Species Listed in the Third Schedule of the Birds and Natural Habitats Regulations 2011 Recorded Along or Adjacent to the Proposed Scheme

Reference	Species	Description
CBC0013IAPS01	Japanese knotweed Reynoutria japonica	Small stand on the northern bank of the River Dodder, adjacent to the eastern side of the Donnybrook Road bridge
CBC0013IAPS02	Himalayan balsam Impatiens glandulifera	Small stand on the northern bank of the River Dodder, adjacent to the eastern side of the Donnybrook Road bridge
CBC0013IAPS03	Japanese knotweed Reynoutria japonica	Treated stand on the southern bank of the River Dodder, adjacent to the western side of the Donnybrook Road bridge
CBC0013IAPS04	Japanese knotweed Reynoutria japonica	Small stand adjacent to the New RTE Entrance on the Donnybrook Road.
CBC0013IAPS05	Giant hogweed  Heracleum mantegazzianum	Patchily distributed stand on the eastern bank of the Carrickmines Stream, adjacent to the N11 / Wyattville Link Road Junction
CBC0013APS06	Giant hogweed  Heracleum mantegazzianum	Patchily distributed stand on the eastern bank of the Carrickmines Stream, adjacent to the N11 / Wyattville Link Road Junction
CBC0013APS07	Giant hogweed Heracleum mantegazzianum	Patchily distributed stand on the western bank of the Carrickmines Stream, south of the N11 / Wyattville Link Road Junction
CBC0013APS08	Giant hogweed  Heracleum mantegazzianum	Patchily distributed stand on the eastern bank of the Carrickmines Stream, south of the N11 / Wyattville Link Road Junction
CBC0013APS09	Giant hogweed  Heracleum mantegazzianum	Patchily distributed stand on the eastern bank of the Carrickmines Stream, south of the N11 / Wyattville Link Road Junction
CBC0013APS10	Giant hogweed  Heracleum mantegazzianum	Patchily distributed stand on the eastern bank of the Carrickmines Stream, south of the N11 / Wyattville Link Road Junction
CBC0013APS11	Giant hogweed  Heracleum mantegazzianum	Patchily distributed stand on the eastern bank of the Carrickmines Stream, south of the N11 / Wyattville Link Road Junction
CBC0013APS12	Giant hogweed  Heracleum mantegazzianum	Patchily distributed stand on the eastern bank of the Carrickmines Stream, south of the N11 / Wyattville Link Road Junction
CBC0013APS13	Giant hogweed  Heracleum mantegazzianum	Patchily distributed stand on the eastern bank of the Carrickmines Stream, south of the N11 / Wyattville Link Road Junction
CBC0013APS14	Giant hogweed  Heracleum mantegazzianum	Patchily distributed stand on the eastern bank of the Carrickmines Stream, south of the N11 / Wyattville Link Road Junction
CBC0013APS15	Giant hogweed  Heracleum mantegazzianum	Stand on the northern bank of the Shanganagh River, in the northwestern section of Loughlinstown Woods.
CBC0013APS16	Japanese knotweed Reynoutria japonica	Stand on the northern bank of the Shanganagh River, west of the Loughlinstown Road
CBC0013APS17	Japanese knotweed Reynoutria japonica	Stand on the southern bank of the Shanganagh River, west of the Loughlinstown Road
CBC0013APS18	Giant hogweed  Heracleum mantegazzianum	Stand in the western section of Loughlinstown Woods, north of Loughlinstown Pitch and Putt.



### 5.3.2 Otter

The desk study found that otter are known to occur within 1km of the Proposed Scheme and across the wider study area. Otter are known to utilise the Grand Canal for foraging and commuting purposes. Otter are also known to be present along the River Liffey, South Dublin Bay, the Shanganagh River, Deansgrange Stream and the Cabinteely Stream<sup>11</sup>, 12. Records of otter were returned from Bray, along the Swan River, which is hydrologically connected to the southern section of the Proposed Scheme, via the River Dargle. The River Dodder is known to support a healthy otter population with several records of holts and otter Activity throughout the water body<sup>13</sup>.

86 Multidisciplinary surveys conducted by Scott Cawley Ltd., during 2018 found evidence of an otter sprainting post on the River Dodder. This sprainting post was located on a rock in the mid-stream of the river, approximately 30m west of Anglesey Bridge, just north of the Dublin Bus Depot in Donnybrook. Follow on surveys in August 2020 and April 2022, found otter footprints and a potential otter track approximately 1.1km and 300m downstream of the Ballsbridge crossing, respectively. There was no evidence of otter habitation features on the downstream side of the Dodder which has been modified through the construction of flood relief measures. The vegetation on the upstream side has been cleared along one side of the watercourse during the ongoing construction of flood defences and the potential for otter holts has been reduced. Two of the watercourses (Brewery Stream and the Shanganagh River) which will be intersected by the Proposed Scheme are partially culverted and are therefore not likely to be favourable to support otter. A single otter spraint was recorded on the ledge underneath the Emmett Bridge in surveys for other BusConnects schemes undertaken by Triturus Environmental in 2022 (Triturus Environmental Ltd., 2022). The nearest European site for which this species is designated is the Wicklow Mountains SAC, which is located approximately 6.7km south-west of the Proposed Scheme. Wicklow Mountains SAC is located within the same sub-catchments (Dodder\_SC\_010 and Dargle\_SC\_010) to the Proposed Scheme. As such, populations of otter within the footprint of the Proposed Scheme are potentially connected to the SAC population.

### 5.3.3 Marine mammals

87 Harbour seal *Phoca vitulina*, grey seal *Halichoerus grypus* and harbour porpoise *Phocoena phocoena* are known to be present in Dublin Bay. Both seal species are listed on Annex II and V of the Habitats Directive, while harbour porpoise is listed on Annex II and IV of the Habitats Directive. The nearest European site for which harbour seal and grey seal have been designated is Lambay Island SAC located approximately 22.3km from the Proposed Scheme. The nearest European site for which harbour porpoise has been designated is Rockabill to Dalkey Island SAC located approximately 2.6km from the Proposed Scheme.

88 No specific marine mammal survey was undertaken as part of the Proposed Scheme.

## 5.3.4 Kingfisher

89 A desk study found that kingfisher, an Annex I bird species, are known to occur within 1km of the Proposed Scheme and across the wider study area. In particular, the River Liffey is known to support a population of kingfisher (DCC, 2021). There are also records of kingfisher on the Grand Canal, which is within 1km of the Proposed Scheme (FERS Ltd., 2018).

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<sup>&</sup>lt;sup>11</sup> Macklin, R., & Brazier, B. (2019b). Otter survey of selected rivers in Dún Laoghaire-Rathdown County Council district with management recommendations. Report prepared by Triturus Environmental Ltd. for Dún Laoghaire-Rathdown County Council.

<sup>&</sup>lt;sup>12</sup> Dún Laoghaire-Rathdown County Council (2021). Dún Laoghaire-Rathdown Biodiversity Plan 2021 - 2025.

<sup>&</sup>lt;sup>13</sup> Macklin, R., Brazier, B. & Sleeman, P. (2019a). *Dublin City otter survey*. Report prepared by Triturus Environmental Ltd. for Dublin City Council as an action of the Dublin City Biodiversity Action Plan 2015- 2020.



- 90 The nearest European site for which this species is designated is River Boyne and River Blackwater SPA, which is located approximately 39.7km from the Proposed Scheme in a separate catchment. Kingfisher populations within close proximity to the Proposed Scheme are not deemed to be SCI species.
- 91 No specific kingfisher survey was undertaken as part of the Proposed Scheme.

### 5.3.5 Other Birds

- The desk study returned records of a total of 139 wintering bird species, including 111 species with breeding and wintering populations in the wider study area (i.e., Grid Squares O12, O13, O21 and O22). Records included 21 species listed under Annex I of the Birds Directive and 55 SCI species. The majority of wintering birds identified in the desk study are typically found in coastal, estuarine and intertidal habitats including the Liffey Estuary and Dublin Bay. A desk study of lands within 300m of the Proposed Scheme returned records of five SCI wintering bird species which may use inland amenity grassland feeding sites, including light-bellied Brent goose, lapwing *Vanellus vanellus*, black-headed gull *Chroicocephalus ridibundus*, herring gull *Larus argentatus* and lesser black-backed gull *Larus fuscus*.
- 93 A review of a study into light-bellied Brent goose inland feeding sites<sup>14</sup> as identified no inland wintering bird feeding sites within the footprint of the Proposed Scheme. There is one known inland wintering bird feeding site within approximately 300m of the Proposed Scheme i.e., the disturbance ZoI Cabinteely / Kilbogget Park, located approximately 219m east of the Proposed Scheme.
- 94 Wintering bird surveys were carried out for the Proposed Scheme at two locations, along the Allies River Road, off R119 Dublin Road (referred to as CBC0013WB001), and within the Shanganagh Park on R119 Dublin Road (referred to as CBC0013WB002), during the wintering bird survey seasons 2020/21 and 2021/22. Wintering bird surveys were terminated after the first survey season for CBC0013WB001 following removal of this site from the required land intake area. As noted in Section 4.6.2.3, no wintering birds surveys were undertaken at any of the survey transects in the period October 2022 to March 2023. Table 6 provides a summary of the findings of the wintering bird surveys with respect to those species which are of highest conservation concern and were recorded within wintering bird survey sites.

Table 6: Wintering Birds of Conservation Concern Recorded at Sites CBC0013WB001 and CBC0013WB002 during the Wintering Bird Surveys

Common Name/	Site: Peak Count	Site: Peak Count	Conservation Importance		Nearest SPA	
Scientific Name/ BTO Code	and Activity in the Study Area (2020/2021)	and Activity in the Study Area (2021/2022)	BoCCI (B: Breeding/ W: Wintering)	Annex I	SCI	Designated for SCI Species
Black-headed gull Chroicocephalus ridibundus (BH)	103 individuals foraging on grassland within Shanganagh Park at CBC0013WB002	43 individuals foraging on grassland within Shanganagh Park at CBC0013WB002	Amber (B/W)	-	<b>√</b>	South Dublin Bay and River Tolka Estuary SPA c.3.3km
Herring gull Larus argentatus (HG)	Two individuals foraging on grassland within Shanganagh Park at CBC0013WB002	n/a	Amber (B/W)	-	✓	Ireland's Eye SPA c.15.9km

95 Site conditions at fields adjacent to the Allies River Road (CBC0013WB001) were of agricultural use but no noticeable crop was seen during surveys. Shanganagh Park (CBC0013WB002) is an open public

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<sup>&</sup>lt;sup>14</sup> Major importance site 401+ geese; high importance site 51-400 geese; and, moderate importance site 1-50 geese as defined by Benson's study in 2009.



amenity park with two Gaelic pitches and playground adjacent to the transect. No wintering birds were recorded at CBC0013WB001 throughout the survey period, even though no disturbance was noted at these two fields. The disturbance at CBC0013WB002 was noted as high on this site due to animals (dogs off leash) and number of walkers using the public paths and Gaelic pitches for recreational exercise.

96 Wintering bird activity was low across all visits. No droppings attributed to light-bellied Brent goose were recorded along the transects. Table 7 compares peak counts identified across surveys to their national and international populations.

Table 7: Wintering Bird Species Recorded during Wintering Bird Surveys in Comparison to the 1% of its International and National Populations

Common Name/ Scientific Name/ BTO Code	Peak Count (2020/2021)	Peak Count (2021/2022)	Associated European Sites within the Zol	1% of International Population	1% of National Population
Black-headed gull Chroicocephalus ridibundus (BH)	103	43	South Dublin Bay and River Tolka Estuary SPA North Bull Island SPA The Murrough SPA	31,000	n/a
Herring gull Larus argentatus (HG)	2	n/a	Ireland's Eye SPA The Murrough SPA	14,000	n/a

# 5.4 Hydrology

- 97 The Proposed Scheme crosses five watercourses: the Grand Canal, River Dodder, Brewery Stream, Shanganagh River and Rathmichael Stream, and ends on the northern bank of the River Dargle. The Proposed Scheme is also hydrologically connected to Elm Park Stream, Booterstown Stream, Priory Stream, the Kill of the Grange Stream, Cabinteely Stream, Carrickmines Stream and South-western Irish Sea, as well as Dublin Bay via Ringsend WwTP.
- 98 The catchment details available for the Proposed Scheme indicate that surface waters for the Proposed Scheme largely discharge directly to the Dodder\_50, Brewery Stream\_010, Kill of the Grange Stream\_010, Carrickmines Stream\_010, Shanganagh\_010, Dargle\_040, and South-Western Irish Sea Killiney Bay.
- 99 The proposed drainage system for the Proposed Scheme will discharge to the River Dodder (Dodder\_050), Elm Park Stream, Booterstown Stream, Priory Stream and Brewery Stream (all segments of the Brewery Stream\_010 WFD water body), Kill of The Grange Stream (Kill of The Grange Stream\_010), Cabinteely Stream and Carrickmines Stream (both segments of the Carrickmines Stream\_010 water body), Shanganagh River (Shanganagh\_010), Rathmichael Stream and River Dargle (Dargle\_040) and the Irish Sea.
- 100 Details on the water quality of each watercourse (for the period 2016-2021), as sourced from the EPA, and the distances from the proposed crossing point to downstream water bodies are also provided in Table 8.



Table 8: Water Quality of Watercourses / Water Bodies in the Vicinity of the Proposed Scheme

Watercourse	Location in Relation to the Proposed Scheme	EPA Q-Values (Monitoring Station) and Water Framework Directive Water Quality Status (2016- 2021) / Risk Score (3 <sup>rd</sup> Cycle RBMP)	Name of and Distance to Downstream Water Bodies Along with their Associated Water Quality
Dodder River (Dodder_050)	One existing crossing point at Anglesey Bridge on Donnybrook Road, in Donnybrook	Q3-4 (Footbridge, Beaver Row) slightly upstream of the Proposed Scheme  Q2-3 (Dodder- Ballsbridge) downstream of the Proposed Scheme  Moderate 'At risk'	It flows for approximately 3km, from the existing crossing point, until it reaches the Liffey Estuary Lower transitional water body at Grand Canal Dock (classified as "Unpolluted"), which ultimately drains to Dublin Bay coastal water body (classified as "Unpolluted").
Shanganagh River (Shanganagh_010)	One existing crossing point, where the river flows under the N11, adjacent to Loughlinstown Woods	Q3-4 (At Commons Road) Good 'At risk'	It flows for approximately 2.7km from the existing crossing point prior to outfall directly into the Southwestern Irish Sea – Killiney Bay coastal water body (classified as "Unpolluted") north of Shanganagh Wastewater Treatment Plant.
Brewery Stream (Brewery Stream_010)	One existing crossing point, where the stream is culverted under the N11 Stillorgan Road, adjacent to St. John of God Hospital	No Q-value data available  Poor 'Under review'	It flows for approximately 1.7km from the existing crossing point prior to outfall directly into Dublin Bay coastal water body (classified as "Unpolluted") at Idrone Terrace, Blackrock.
Rathmichael Stream (Dargle_040)	One existing crossing point, where the stream flows under the Dublin Road, adjacent to Woodbrook College in Shankill	No Q-value data available Good 'Not at risk'	It flows for approximately 1.3km from the existing crossing point prior to outfall directly into the Southwestern Irish Sea – Killiney Bay (classified as "Unpolluted"), north of Bray Harbour.
Grand Canal Main Line (Liffey and Dublin Bay)	One existing crossing point, at the Leeson Street Bridge	Q-Value Score not applicable  Good Ecological Potential  'Not at risk'	It flows for approximately 2.2km from the existing crossing point at Leeson Street until it reaches the Liffey Estuary Lower transitional water body (classified as "Unpolluted") at Grand Canal Dock, which ultimately drains to Dublin Bay coastal water body (classified as "Unpolluted").
Elm Park Stream (Brewery Stream_010)	Hydrologically connected to the Proposed Scheme via the receiving surface water system	No water quality data available  Poor 'Under review'	It flows through Elm Park Golf and Sports Club prior to outfall into Dublin Bay (classified as "Unpolluted"), south of Merrion Gates.



Watercourse	Location in Relation to the Proposed Scheme	EPA Q-Values (Monitoring Station) and Water Framework Directive Water Quality Status (2016- 2021) / Risk Score (3 <sup>rd</sup> Cycle RBMP)	Name of and Distance to Downstream Water Bodies Along with their Associated Water Quality
Trimlestown Stream (Booterstown Stream) (Brewery Stream_010)	Hydrologically connected to the Proposed Scheme via the receiving surface water system	No water quality data available  Poor 'Under review'	It flows into Dublin Bay (classified as "Unpolluted"), north of Booterstown Marsh.
Priory Stream (Brewery Stream_010)	Hydrologically connected to the Proposed Scheme via the receiving surface water system	No Q-value data available  Poor 'Under review'	It flows into Dublin Bay (classified as "Unpolluted"), south-east of Blackrock Park.
Kill of the Grange Stream (Kill of The Grange Stream_010)	Hydrologically connected to the Proposed Scheme via the receiving surface water system	Q2-3 (Nr Kill Lane National School, Footbridge Meadowvale)  Q3 (Bridge on Johnstown Road)  Poor 'At risk'	It flows into Southwestern Irish Sea – Killiney Bay (classified as "Unpolluted") at Killiney Strand.
Cabinteely Stream (Carrickmines Stream_010)	Hydrologically connected to the Proposed Scheme via the receiving surface water system	No Q-value data available Good 'At risk'	It flows into the Carrickmines Stream west of the N11, in Cabinteely. The Carrickmines stream flows into the Shanganagh River prior to outfall into the Southwestern Irish Sea – Killiney Bay coastal water body (classified as "Unpolluted") north of Shanganagh Wastewater Treatment Plant.
Carrickmines Stream (Carrickmines Stream_010)	Hydrologically connected to the Proposed Scheme via the receiving surface water system	Q3-4 (u/s Overpass) Moderate 'At risk'	It flows into the Shanganagh River adjacent to the Proposed Scheme, west of Loughlinstown Woods. The Shanganagh River flows into the Southwestern Irish Sea – Killiney Bay coastal water body (classified as "Unpolluted") north of Shanganagh Wastewater Treatment Plant.
River Dargle (Dargle_040	Hydrologically connected to the Proposed Scheme via the receiving surface water system	Q5 (Just d/s Bray Br) Good 'Not at risk'	It flows into the Dargle Estuary transitional water body (classified as 'Intermediate'), which ultimately drains to Southwestern Irish Sea – Killiney Bay coastal water body (classified as "Unpolluted")



Watercourse	Location in Relation to the Proposed Scheme	EPA Q-Values (Monitoring Station) and Water Framework Directive Water Quality Status (2016- 2021) / Risk Score (3 <sup>rd</sup> Cycle RBMP)	Name of and Distance to Downstream Water Bodies Along with their Associated Water Quality
Liffey Estuary Upper	Hydrologically connected to the Proposed Scheme via the receiving surface water system.	Q-Value Score not applicable Good 'At risk'	It flows into the Liffey Estuary Lower transitional water body (classified as "Unpolluted"), which ultimately drains to Dublin Bay coastal water body (classified as "Unpolluted").
Liffey Estuary Lower	Hydrologically connected to the Proposed Scheme via the receiving surface water system.	Q-Value Score not applicable Good 'At risk'	The Liffey Estuary Lower transitional water body (classified as "Unpolluted") at Grand Canal Dock, which ultimately drains to Dublin Bay coastal water body (classified as "Unpolluted").
Dublin Bay	Hydrologically connected to the Proposed Scheme via Ringsend Wastewater Treatment Plant, and the watercourses outlined in the rows above.	Q-Value Score not applicable Good 'Not at risk'	The Dublin Bay coastal water body is classified as "Unpolluted".
Dargle Estuary	Hydrologically connected to the Proposed Scheme via the receiving surface water system	Q-Value Score not applicable  Moderate	It flows into the Southwestern Irish Sea  – Killiney Bay coastal water body (classified as "Unpolluted")
Southwestern Irish Sea – Killiney Bay	Hydrologically connected to the Proposed Scheme	'Under review' High 'Not at risk'	The Southwestern Irish Sea – Killiney Bay coastal water body is classified as "Unpolluted".

# 5.5 Hydrogeology

- 101 The Geological Survey of Ireland (GSI) data indicates that the bedrock formation 1:500k in the Proposed Scheme is "Dark-grey argillaceous & cherty limestone and shale (Calp)", north of Booterstown. "Granite, granodiorite" and "Deep marine: Slate, schist & minor greywacke" are present in the middle section of the Proposed Scheme and "Marine: Greywacke & shale" is present in the southernmost section, in Bray.
- 102 The Proposed Scheme traverses three groundwater bodies. Environmental data sourced from the EPA for each of these groundwater bodies is presented below:

## **Dublin Groundwater Body**

- It is considered to be of "Good" groundwater body WFD Status (2016-2021) and the 3<sup>rd</sup> cycle WFD risk status is under "Under Review";
- The aquifers located within this groundwater body and where the Proposed Scheme traverses are classified as "locally important aquifer moderately productive only in local zones".
- 103 The vulnerability of the Dublin groundwater bodies to human activities ranges from "Rock at or Near Surface", "Extreme", "High", "Moderate" to "Low" within the footprint of the Proposed Scheme.



### Kilcullen Groundwater Body

- It is considered to be of "Good" groundwater body WFD Status (2016-2021) and the 3<sup>rd</sup> cycle WFD risk status is under "At risk";
- The aquifers located within this groundwater Body and where the Proposed Scheme traverses are classified as "poor aquifer bedrock which is generally unproductive except for local zones".
- 104 The vulnerability of the Kilcullen groundwater body to human activities ranges from "Rock at or Near Surface", "Extreme", "High" to "Moderate" within the footprint of the Proposed Scheme.

## Wicklow Groundwater Body

- It is considered to be of "Good" groundwater body WFD Status (2016-2021) and the 3<sup>rd</sup> cycle WFD risk status is under "At Risk";
- The aquifers located within this groundwater body and where the Proposed Scheme traverses are classified as "locally important aquifer moderately productive only in local zones" and "poor aquifer bedrock which is generally unproductive except for local zones".
- 105 The vulnerability of the Wicklow groundwater body to human activities ranges from "Rock at or Near Surface", "Extreme", "High", "Moderate" to "Low" within the footprint of the Proposed Scheme.

## 5.6 Soils & Geology

106 The 1:100,000 GSI bedrock geology map<sup>15</sup> of the area indicates that the underlying bedrock along the Proposed Scheme comprises of Lucan Formation- (Calp) dark limestone and shale, Rush Conglomerate Formation, Ballysteen Formation and the Tober Colleen formation- Calcareous shale, limestone conglomerate. The GSI Quaternary subsoils map shows the footprint of the Proposed Scheme is predominantly glacial tills derived from limestone. Additionally, there are areas of made ground (Urban), alluvial deposits, gravels and shallow bedrock.

## 5.7 Air Quality

107 As part of the implementation of S.I. No. 271/2002 – Air Quality Standards Regulations 2002, four air quality zones have been defined in Ireland for air quality management and assessment purposes (EPA 2020a). Dublin is defined as Zone A. With regard to Nitrogen Dioxide (NO<sub>2</sub>), continuous monitoring data from the EPA at locations in close proximity to the Proposed Scheme was reviewed. The stations considered by the project air quality experts to be representative of the Proposed Scheme include Ballyfermot, Swords, Rathmines and Dún Laoghaire, whilst long-term trends in the City Centre are available for Winetavern Street, which is adjacent to the northern end of the Proposed Scheme. Sufficient data is available for these stations to review long-term trends over a five-year period (2015 to 2019) (See Table 9).

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<sup>&</sup>lt;sup>15</sup> Accessible at dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0ab2fbde2aaac3c228



Table 9: Trends in Suburban and Urban NO<sub>2</sub> Concentration (μg/m³) In Dublin 2015 to 2019

Station	Station Classification Council Directive 96/62/EC	Averaging Period	2015	2016	2017	2018	2019	Limit Value
Rathmines	Urban Background	Annual Mean NO <sub>2</sub> (μg/m³)	18	20	17	20	22	40
		99.8 <sup>th</sup> %ile 1-hr NO <sub>2</sub> (μg/m³)	105	88	86	87	102	200
Ballyfermot	Suburban Background	Annual Mean NO <sub>2</sub> (μg/m³)	16	17	17	17	20	40
		99.8 <sup>th</sup> %ile 1-hr NO <sub>2</sub> (μg/m³)	127	90	112	101	101	200
Dún Laoghaire	Suburban Background	Annual Mean NO <sub>2</sub> (μg/m³)	16	19	17	19	15	40
		99.8 <sup>th</sup> %ile 1-hr NO <sub>2</sub> (μg/m³)	91	105	101	91	84	200
Swords	Suburban Background	Annual Mean NO <sub>2</sub> (μg/m³)	13	16	14	16	15	40
		99.8 <sup>th</sup> %ile 1-hr NO <sub>2</sub> (μg/m³)	93	96	79	85	80	200
Winetavern Street	Urban Traffic	Annual Mean NO <sub>2</sub> (μg/m³)	31	37	27	29	28	40
		99.8 <sup>th</sup> %ile 1-hr NO <sub>2</sub> (μg/m³)	128	120	110	115	115	200

- 108 Continuous  $PM_{10}$  monitoring carried out at the suburban locations of Rathmines, Phoenix Park and Ballyfermot. Ballyfermot, Dún Laoghaire, Tallaght, Rathmines and Phoenix Park, which showed annual average levels ranging from  $11\mu g/m^3$  to  $15\mu g/m^3$  in 2019, with a maximum of nine exceedances of the 24-hour limit value of  $50\mu g/m^3$  (35 exceedances are permitted per year). Longer term averages from 2015 to 2019 show annual average concentrations of between  $9\mu g/m^3$  to  $16\mu g/m^3$ .
- 109 Continuous  $PM_{2.5}$  monitoring carried out at the Zone A locations of Finglas, Rathmines and Marino showed average levels of  $9.3\mu g/m^3$  in 2019. A suburban Zone C  $PM_{2.5}$  monitoring station in Bray, 2.2km south-west of the Proposed Scheme, has sufficient long-term data for review. Long term averages for the Bray station from 2015 to 2019 show an average concentration of  $6.6\mu g/m^3$  compared to the annual limit value of  $25\mu g/m^3$ . The annual average level measured in Rathmines in 2019 was  $10\mu g/m^3$ . Rathmines monitors both  $PM_{10}$  and  $PM_{2.5}$ .

## 6 Potential Impacts, Zone of Influence and Identifying European Sites at Risk of Effects

- 110 Considering the baseline and receiving ecological environment and the nature and characteristics of the Proposed Scheme the following potential impacts have been identified:
  - Habitat loss and fragmentation;
  - Habitat degradation / effects on QI / SCI species as a result of hydrological impacts;
  - Habitat degradation as a result of hydrogeological impacts;
  - Habitat degradation as a result of introducing / spreading non-native invasive species;
  - Habitat degradation as a result of air quality impacts; and,
  - Disturbance and displacement impacts.



#### 6.1 Habitat Loss and Fragmentation

- 111 The Proposed Scheme does not overlap with any European sites. The nearest European site to the Proposed Scheme is South Dublin Bay and River Tolka Estuary SPA, which is located approximately 900m away. The nearest European sites with a hydrological connection to the Proposed Scheme are South Dublin Bay and River Tolka Estuary SPA and South Dublin Bay SAC, which are located in Dublin Bay, approximately 1.38km downstream of the Proposed Scheme. Therefore there is no potential for direct habitat loss and fragmentation to occur. Habitat loss may occur indirectly as a consequence of severe habitat degradation arising from a reduction in water quality and / or a change to the hydrological regime, as described in the section below.
- 112 SCI species for which SPAs in the vicinity of the Proposed Scheme have been designated are known to utilise *ex situ* feeding sites in the Dublin area (i.e. North Bull Island SPA, South Dublin Bay and River Tolka SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA and The Murrough SPA).
- Two potential inland feeding sites immediately adjacent to the footprint of the Proposed Scheme were surveyed to inform this assessment, CBC0013WB001 located along the Allies River Road, off R119 Dublin Road and CBC0013WB002 located within the Shanganagh Park on R119 Dublin Road. Neither of these sites will be lost, but lands directly adjacent to them will be permanently modified. According to the data collected during wintering bird surveys undertaken here during both the 2020-2021 and 2021-2022 wintering bird survey season, neither of the sites are deemed to be a significant inland foraging resource for light-bellied Brent goose or any other wetland bird species (e.g., geese, wader and / or swan species). Likewise, numbers of black-headed gull and Herring gull recorded here during surveys undertaken are not significant with respect to their national or international populations. Considering this, the Proposed Scheme will not result in the loss of a suitable inland feeding site for these SCI bird species.
- 114 The Proposed Scheme will not result in temporary and / or permanent loss of inland sites within the Proposed Scheme footprint suitable to support breeding gull and wintering bird species. As only small numbers of birds were recorded during the two seasons of survey (2020/2021 and 2021/2022) at potential inland feeding sites immediately adjacent to the Proposed Scheme, and the lack of records of light-bellied Brent goose at these sites, they are not deemed to be a significant inland foraging resource. Therefore, there is no potential for impacts on SCI species associated with SPAs to occur as a result of habitat loss / fragmentation.
- 115 Regarding the two raptor species for which Wicklow Mountains SPA is designated, according to the Scottish Natural Heritage guidance (SNH 2016) during the breeding season the core foraging range for peregrine is estimated at 2km from the nest site, with the maximum recorded distance of 18km in Britain. Likewise, during the breeding season merlin are known to forage within 5km of the next site. Wicklow Mountains SPA lies approximately 7.2km south-west of the Proposed Scheme, which is well outside the typical foraging ranges for both peregrine and merlin. Therefore, likely significant effects on these two SCI bird species, as a result of *ex situ* habitat loss / fragmentation, can be excluded.
- 116 With the exception of otter, the location of the Proposed Scheme and its construction will not result in any direct loss or fragmentation of Annex I habitats or supporting habitats to Annex II species, for which European sites are designated within the ZoI of the Proposed Scheme. In terms of otter, while the Proposed Scheme does cross the Grand Canal, River Dodder, Brewery Stream, Shanganagh River and Rathmichael Stream, and terminates at the River Dargle, it does so at existing crossing locations within which, the rivers are either culverted or where there is a pre-existing bridge. As such they will not be subject to any instream works nor alteration to the territory currently occupied by otter.

#### 6.2 Habitat Degradation / Effects on QI / SCI Species as a Result of Hydrological Impacts

117 The Proposed Scheme is hydrologically connected to Dublin Bay via the Dodder\_50, Brewery Stream\_010, Kill of the Grange Stream\_010, Carrickmines Stream\_010, Shanganagh\_010, Dargle\_040, South-western Irish Sea – Killiney Bay, and the Ringsend WwTP. The potential release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features



during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants into receiving waters. It should be noted that a highly substantial event or events would be required to generate such quantities, which is considered unlikely.

- 118 The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge point and therefore impact the downstream water bodies, i.e., in Dublin Bay and beyond, including the following European sites: South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA. This reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within these European sites, which in turn would negatively affect the QI species, as well as SCI bird species that rely upon these habitats as foraging and / or roosting habitat. It could also negatively affect the quantity and quality of prey available to SCI bird and QI species. These impacts could potentially occur to such a degree that the conservation objectives of the South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA may be undermined.
- In a potential worst case scenario, in the absence of mitigation measures, the release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during construction, or operation, also has the potential to affect mobile SCI bird species and QI mammal species that commute, forage and loaf in Dublin Bay, i.e. birds associated with South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA; marine mammals associated with Rockabill to Dalkey Island SAC and Lambay Island SAC; and otter associated with Wicklow Mountains SAC. This potential reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within downstream European sites, which in turn would negatively affect the SCI bird species that rely upon these habitats as foraging and / or roosting habitat. It could also negatively affect the quantity and quality of prey available to SCI and QI populations.
- 120 The QI habitats for which Bray Head SAC and Howth Head SAC are designated (i.e. vegetated sea cliffs [1230] and European dry heaths [4030]) lie above the high-water mark. Pollution is not regarded to be a threat or pressure which could potentially impact these SAC sites (NPWS 2013k; NPWS 2013l) and is not regarded to be a significant threat / pressure to this habitat at a national level (Barron *et al.*, 2011). Therefore, the QI habitats of Howth Head SAC and Bray Head SAC will be unaffected by a degradation in the surface water quality of the coastal waters of Dublin Bay and significant effects in that regard can be excluded.



121 As the Proposed Scheme has the potential to result in habitat degradation of the QIs / SCIs of European sites as the result of hydrological impacts, there is also the potential for in combination effects to occur in association with other activities / plans / projects.

The ZoI of this impact is any wetland, coastal or marine habitat downstream of any watercourse crossings or drainage outfalls, and any aquatic / marine species therein and includes South Dublin Bay SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA.

#### 6.3 Habitat Degradation Effects as a Result of Hydrogeological Impacts

- 122 Groundwater levels in groundwater dependent habitats may be impacted by the removal of a proportion of an aquifer or dewatering activities associated with excavations which can lead to a temporary change in groundwater levels and flow within the aquifer. Likewise, the mobilisation of contaminants into the aquifer either through accidental spillage or disturbance of contaminated ground during excavation may reduce the quality of the groundwater within the aquifer, also resulting in the degradation of groundwater dependent terrestrial ecosystem and any species that they may support.
- 123 The underlying aquifers are either 'locally important bedrock aquifer, moderately productive only in local zones', 'poor aquifer bedrock which is generally unproductive except for local zones' or 'locally important aquifer moderately productive only in local zones'. These types of aquifers are associated with low permeability which decreases with depth. An upper shallow zone of higher permeability may exist in the top few meters and is associated with relatively short flow paths. Therefore, any influence on the groundwater as a result of the proposed works will be localised a will not extend to any groundwater dependent habitats which are all located over 1.5km from any proposed work. The unmitigated hydrogeological ZoI of the Proposed Scheme is not considered to extend to any groundwater dependent terrestrial ecosystems linked to European sites. This ZoI is determined by the professional judgement of the design team hydrogeological specialists.
- 124 In summary, the Proposed Scheme does not have the potential to result in habitat degradation of the QI SCIs of any European site as the result of hydrogeological impacts.

#### 6.4 Habitat Degradation as a Result of Introducing / Spreading Non-Native Invasive Species

- There are eighteen (18) areas of non-native invasive plant species (giant hogweed, Himalayan balsam, Japanese knotweed) listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 present within, or in close proximity to, the Proposed Scheme. In the absence of mitigation, there is potential for this to spread or be introduced, during construction and / or routine maintenance / management works, to terrestrial habitat areas in European sites downstream in Dublin Bay and beyond (i.e., South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA). The introduction and / or spread of these invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat. This in turn could undermine the conservation objectives of these European sites.
- 126 It is considered unlikely that invasive species could spread to European sites which are located a significant distance from the outfall locations of the Dodder\_50, Brewery Stream\_010, Kill of the



Grange Stream\_010, Carrickmines Stream\_010, Shanganagh\_010, Dargle\_040, South-western Irish Sea – Killiney Bay or Ringsend WWTP, and separated by a large marine water body (i.e. Howth Head SAC, Lambay Island SAC, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA).

127 As the Proposed Scheme has the potential to result in habitat degradation of the QI / SCIs of European sites as the result of the spread of invasive species, there is also the potential for in combination effects to occur in association with other activities / plans / projects.

The ZoI of this impact is potentially any habitats crossed by, immediately adjacent to, or downstream of the Proposed Scheme or along any of the proposed construction routes are at risk from contaminated soil / material and includes European sites associated with Dublin Bay (i.e. South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).

#### 6.5 Habitat Degradation as a Result of Air Quality Impacts

- 128 A reduction in air quality within the immediate vicinity of the construction works may occur as a consequence of dust deposition associated with these construction activities. This includes reduction in photosynthesis due to smothering from dust on the plants and chemical changes such as acidity to soils. Furthermore, emissions from car exhausts, and the deposition of particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) and heavy metals (HM) produced by engine, brake and tyre wear, can contribute to increased deposition of pollutants such as oxides of nitrogen (NOx), volatile organic compounds (VOCs), particulate matter, heavy metals and ammonia (NH<sub>4</sub>) in the vicinity of a road carriageway. This can affect the ecosystems and vegetation present, influencing plant growth rates and species composition, diversity, and abundance.
- 129 The unmitigated ZoI for air quality effects arising from the Proposed Scheme has the potential to extend 50m from the Proposed Scheme boundary, and 500m from the Construction Compounds during the Construction Phase, and up to 200m from the Proposed Scheme boundary during the Operational Phase. There are no European sites present within these distances. The nearest European site, South Dublin Bay and River Tolka Estuary SPA, is located approximately 900m from the Proposed Scheme (as the crow flies) and is therefore not located within the ZoI of this potential impact.
- 130 As the Proposed Scheme does not have the potential to result in habitat degradation of the QI / SCI species of any European site as the result of air quality impacts, either during the Construction Phase or the Operational Phase, there is no potential for in combination effects to occur in that regard.

The ZoI of this impact is 50m from the Proposed Scheme boundary and 500m from construction compounds during the Construction Phase for dust deposition and within 200m of the Proposed Scheme boundary during operation. There are no European sites present within this ZoI.

#### 6.6 Disturbance and Displacement Impacts

131 A temporary and / or permanent increase in noise, vibration and / or human activity levels during the construction of the Proposed Scheme could result in the disturbance to and / or displacement of fauna species present within the vicinity of the Proposed Scheme. For mammal species such as otter,



disturbance effects would not be expected to extend beyond 150m<sup>16</sup>. For wintering birds, disturbance effects would not be expected to extend beyond a distance of approximately 300m<sup>17</sup>, as noise levels associated with general construction activities would attenuate to close to background levels at that distance. There are no European sites within the disturbance ZoI of the Proposed Scheme.

- (and its tributaries), the Grand Canal, River Dodder, Brewery Stream, Shanganagh River, Rathmichael Stream, River Dargle and South Dublin Bay (i.e., watercourses within 1km of the Proposed Scheme) are known to support otter, an Annex II and IV mammal species. The nearest SAC to the proposed development site for which otter has been designated is Wicklow Mountains SAC, which is located approximately 7km south-west, as the crow flies. Research carried out by Ó'Néill *et al.* (2009) on ranging behaviours of otter on river systems in Ireland found that female otter ranges averaged 7.5km while male otter home ranges varied between 7-21km. Wicklow Mountains SAC is located within the same sub-catchments (Dodder\_SC\_010 and Dargle\_SC\_010) to the Proposed Scheme. The River Liffey and tributaries are known to support otter, and the current guidance in respect of the hydrological distance that territorial otters roam suggest a maximum territorial range of 21km for otter along suitable watercourses. Thus, watercourses in proximity to the Proposed Scheme are considered to hold QI otter populations associated of the Wicklow Mountains SAC, as the SAC falls within the territorial ranges of otter and is located within the same sub-catchment.
- 133 Although marine mammals associated with European sites may commute and forage within the Liffey and lower Dargle Estuaries, it is considered unlikely that there will be any impacts on these species as a result of the Proposed Scheme as the northern end of the Proposed Scheme is located approximately 1.17km south of the Liffey Estuary Upper and the southern end is located approximately 58m east of the Dargle Estuary, in a highly urbanised environment and where water levels can drop diurnally reducing the likelihood of marine mammals venturing this far up-river. In addition to this, the scale of works proposed in the vicinity of the Liffey and Dargle Estuaries are considered to be minor.
- 134 Although no signs of kingfisher were recorded during field surveys of the Proposed Scheme, kingfisher, an Annex I bird species, are known to be present in the wider study area, in particular, along the River Liffey, River Dodder and the Grand Canal. Any kingfisher populations which are present in the vicinity of the Proposed Scheme are not considered to be associated with the SCI populations of any European site. Kingfisher territories can extend over approximately 3-5km of a river catchment<sup>18</sup>. The nearest SPA for which kingfisher has been designated is the River Boyne and Blackwater SPA which is located in a separate catchment approximately 39.7km away, therefore kingfisher present in the vicinity of the Proposed Scheme are not associated with an SPA population.
- 135 There are a number of SPAs which are designated for SCI species that are known to forage and / or roost at inland sites, such as amenity grassland playing pitches (i.e., North Bull Island SPA, South Dublin Bay and River Tolka SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries

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<sup>&</sup>lt;sup>16</sup> This is consistent with Transport Infrastructure Ireland (TII) guidance (*Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes* (National Roads Authority (NRA), 2006)). This is a precautionary distance, and likely to be moderated by the screening effect provided by surrounding vegetation and buildings, with the actual ZoI of construction related disturbance likely to be much less in reality.

<sup>&</sup>lt;sup>17</sup> Current understanding of construction related noise disturbance to wintering waterbirds is based on the research presented in Cutts *et al.* (2009) and Wright *et al.* (2010). In terms of construction noise, levels below 50dB would not be expected to result in any response from foraging or roosting birds. Noise levels between 50dB and 70dB would provoke a moderate effect/level of response from birds, i.e. birds becoming alert and some behavioural changes (e.g., reduced feeding activity), but birds would be expected to habituate to noise levels within this range. Noise levels above 70dB would likely result in birds moving out of the affected zone, or leaving the site altogether. At approximately 300m, typical noise levels associated with construction activity (BS 5228) are generally below 60dB or, in most cases, are approaching the 50dB threshold.

<sup>&</sup>lt;sup>18</sup> RSPB. Kingfisher breeding, feeding and territory webpage. Available from <a href="www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/kingfisher/breeding-feeding-territory/">www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/kingfisher/breeding-feeding-territory/</a>



Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA). Five of these species were returned from the desk study and include light-bellied Brent goose, lapwing, blacked-headed gull, herring gull and lesser black-backed gull. Suitable inland foraging / roosting sites, which these bird species utilise, are located within the potential ZoI of the Proposed Scheme (see Section 5.3.5). Therefore, there is potential for the Proposed Scheme to result in the disturbance / displacement of SCI bird species associated with SPA populations.

136 Wicklow Mountains SPA, located approximately 7.4km south-west of the Proposed Scheme, has been designated for SCI species, peregrine *Falco peregrinus* and merlin *Falco columbarius*. Both species are known to occur in the wider study area. Most peregrine prey is taken within 2km of the eyrie and few birds are taken beyond 6km (Hardey *et al.*, 2013). The home range of breeding merlin is unknown but it could be expected to be similar to peregrine considering they will defend their immediate nesting territory (Lusby *et al.*, 2017; Hardey *et al.*, 2013). Considering the distance between the Wicklow Mountains SPA and the Proposed Scheme, any peregrine and / or merlin recorded in its immediate vicinity, do not form part of the Wicklow Mountains SPA SCI populations. Therefore, there is no potential for the Proposed Scheme to result in the disturbance / displacement of SCI peregrine and / or merlin associated with SPA populations.

The ZoI for disturbance associated with general construction activities for mammal species such as otter, is 150m, while for wintering birds, disturbance effects would not be expected to extend beyond a distance of approximately 300m. There are no European sites within the disturbance ZoI of the Proposed Scheme, however SCI species are known to forage and / or roost in close proximity to the ZoI.

#### 6.7 Summary

- 137 The potential impacts associated with the Proposed Scheme have the potential to affect the receiving environment and, as a result, the conservation objectives supporting the QIs / SCIs of the following European sites: South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA.
- 138 The potential impacts of the Proposed Scheme on the receiving environment, their ZoI, and the European sites at risk of likely significant effects are summarised in Table 10.



Table 10: Summary of the Potential Impacts of the Proposed Scheme on the Receiving Environment, their Potential Zone of Influence, and the European Sites within the Zone of Influence

Potential Direct, Indirect In Combination Effects and the ZoI of the Potential Effects	Are There any European Sites within the ZoI of the Proposed Scheme?
Habitat loss	No
No European sites are at risk of direct habitat loss impacts.	There are no European sites at risk of habitat loss or fragmentation.
There is no potential for loss of <i>ex situ</i> inland feeding sites used by SCI wintering bird species (for the duration of the construction works).	
Habitat degradation/ effects on QI/SCI species as a result of hydrological impacts Habitats and species downstream of the Proposed Scheme and the associated surface water drainage discharge points, and downstream of offsite wastewater treatment plants.	Yes There are European sites at risk of downstream hydrological effects associated with the Proposed Scheme. South Dublin Bay SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA.
Habitat degradation as a result of hydrogeological impacts	No There are no European sites at risk of hydrogeological effects
Groundwater-dependent habitats, and the species those habitats support, in the local area that lie downgradient of the Proposed Scheme.	associated with the Proposed Scheme
Habitat degradation as a result of introducing / spreading non-native invasive species Habitat areas within, adjacent to, and potentially downstream of the Proposed Scheme.	Yes There are non-native invasive species present within or adjacent to the Proposed Scheme and, therefore, a risk associated with the Proposed Scheme to downstream European sites from the spread / introduction of non-native invasive species
	South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA.
Air quality impacts	No
Potentially up to 50m from the Proposed Scheme boundary and 500m from the Construction Compound at Construction Phase, and up to 200m at Operational Phase.	There are no European sites at risk of air quality effects associated with the Proposed Scheme
Disturbance and displacement impacts	Yes
Potentially up to several hundred metres from the Proposed Scheme, dependent upon the predicted levels of noise, vibration and visual disturbance associated with the Proposed Scheme, taking into account the sensitivity of the	There are no European sites within the potential ZoI of disturbance effects associated with the construction or operation of the Proposed Scheme.  However, there are <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of
QI species to disturbance effects	the Proposed Scheme.
	South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA.

# 7 Assessment of Potential Effects on European Sites

139 This section of the NIS assesses the direct and indirect impacts of the Proposed Scheme on the European sites which fall within its ZoI. For each of these European sites, the assessment below sets



- out the relevant ecological baseline information, the analysis of the potential impacts, the QIs / SCIs at risk of these potential impacts, in view of the sites' conservation objectives, and the mitigation measures (if required) to avoid / reduce the effects of any potential impacts.
- 140 European sites have been grouped in the sub-sections below where the impact pathways, European sites' sensitivities, and potential effects are identical.
- 141 The assessment of the Proposed Scheme in combination with any other plans or projects on European sites is presented in Section 9.

#### 7.1 North Dublin Bay SAC [000206] and South Dublin Bay SAC [000210]

7.1.1 Ecological Baseline Description for North Dublin Bay SAC & South Dublin Bay SAC

#### North Dublin Bay SAC

142 The Natura 2000 Standard Data Form (NPWS, 2020b) lists the SAC as having an excellent diversity of coastal habitats. The dune system is one of the most important systems on the east coast, one of the few in Ireland that is actively accreting. Saltmarsh habitat is well represented at the site with particularly good zonation evident. Of note is the occurrence of petalwort *Petalophyllum ralfsii*, a QI plant species, with its only known location away from the western seaboard. Threats to the site include pollution from Dublin Port, commercial bait digging, recreational activities and water abstraction by golf clubs.

#### South Dublin Bay SAC

- 143 According to the Natura 2000 standard data form for South Dublin Bay SAC (NPWS, 2020c), the European site possesses a fine and fairly extensive example of intertidal flats, mudflats and sandflats not covered by seawater at low tide [1140]. Sediment type is predominantly sand, with muddy sands in the more sheltered areas and a typical macro-invertebrate fauna exists. The largest stand of *Zostera* on the east coast is located at Merrion Gates. The site supports internationally important numbers of wintering waterfowl, including light-bellied brent geese which feed on *Zostera*. South Dublin Bay SAC also supports small areas of annual vegetation of drift lines [1210], *Salicornia* and other annuals colonising mud and sand [1310] and embryonic shifting dunes [2110]. Given Dublin Bay's proximity to a major population centre, recreational activities and disturbance on land and at sea is an existing pressure on habitats within the European site. Additional pressures and threats include reclamation of land, industrial or commercial areas e.g., Dublin Port, bait digging, marine water pollution, discharges and disposal of wastes, and accumulation of organic materials.
- 7.1.2 Qualifying Interests and Conservation Objectives of North Dublin Bay SAC and South Dublin Bay SAC
- 144 The QIs of North Dublin Bay SAC and South Dublin Bay SAC, and the overall conservation objectives, are listed in Table 11.



Table 11: Qualifying Interests and Conservation Objectives of North Dublin Bay SAC & South Dublin Bay SAC

Qualifying Interest(s)	Conservation Objective(s)
(*=Priority Annex I habitat)	
North Dublin Bay SAC [000206]  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 (Glauco-Puccinellietalia maritimae) 1395 Petalwort Petalophyllum ralfsii 1410 Mediterranean salt meadows (Juncetalia ) 2110 Embryonic shifting dunes 2120 Shifting dunes along the shoreline with Ammophila arenaria (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)* 2190 Humid dune slacks	To maintain or restore the favourable conservation condition of the Annex I habitat(s) and / or the Annex II species for which the SAC has been selected.
S.I. No. 524/2019 – European Union Habitats (North Dublin Bay Special Area of Conservation 000206) Regulations 2019  NPWS (2013c) Conservation Objectives: North Dublin Bay SAC 000206. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
South Dublin Bay SAC [000210] 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	To maintain or restore the favourable conservation condition of the Annex I habitat(s) and / or the Annex II species for which the SAC has been selected.
S.I. No. 525/2019 – European Union Habitats (South Dublin Bay Special Area of Conservation 000210) Regulations 2019  NPWS (2013a) Conservation Objectives: South Dublin Bay SAC 000210. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	

- 145 In conjunction with considering the generic conservation objective for these SACs "To maintain or restore the favourable conservation condition of the Annex I habitat(s) and / or the Annex II species for which the SAC has been selected", the site-specific conservation objectives document for North Dublin Bay SAC and South Dublin Bay SAC also informed this assessment.
- 146 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the QIs within these European sites. Affecting the conservation condition of the QIs is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the QIs of North Dublin Bay SAC and South Dublin Bay SAC are presented in Section 7.1.3.3.

## 7.1.3 Examination and Analysis of Potential Direct and Indirect Impacts

- 147 The direct and / or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the QIs of North Dublin Bay SAC and South Dublin Bay SAC, are:
  - Habitat degradation / effects on QI / SCI species as a result of hydrological impacts; and
  - Habitat degradation as a result of introducing / spreading non-native invasive species.



## 7.1.3.1 Habitat Degradation / Effects on QI / SCI Species as a Result of Hydrological Impacts

- 148 The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during construction or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants into receiving waters. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses five watercourses: the Grand Canal, River Dodder, Brewery Stream, Shanganagh River, and Rathmichael Stream, and ends on the northern bank of the River Dargle; and is hydrologically connected to the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WwTP, all of which drain to Dublin Bay.
- 149 Therefore, (albeit unlikely) there is potential for the Proposed Scheme to result in significant effects which could have implications for the conservation objectives of North Dublin Bay SAC and South Dublin Bay SAC as a result of hydrological impacts.

#### 7.1.3.2 Habitat Degradation as a Result of Introducing / Spreading Non-Native Invasive Species

- 150 There are 18 areas of Japanese knotweed, Himalayan balsam and giant hogweed, species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 present within, or in close proximity to, the Proposed Scheme. During construction and / or routine maintenance / management work, these species could potentially spread or be introduced to terrestrial habitats located within downstream European sites via surface water features. The introduction and / or spread of these non-native invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat. This in turn could undermine the conservation objectives of these European sites. The Proposed Scheme crosses five watercourses: the Grand Canal, River Dodder, Brewery Stream, Shanganagh River, and Rathmichael Stream, and ends on the northern bank of the River Dargle; and is hydrologically connected to the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WwTP, all of which drain to Dublin Bay.
- 151 Therefore, there is potential for the Proposed Scheme to result in significant effects which could have implications for the conservation objectives of North Dublin Bay SAC and South Dublin Bay SAC as a result of non-native invasive species spread.

## 7.1.3.3 Summary

152 Table 12 presents a summary of the potential impacts and effects of the Proposed Scheme on the QIs of North Dublin Bay SAC and South Dublin Bay SAC and how these impacts relate to affecting the site's conservation objectives.



Table 12: Potential Impacts / Effects on the Conservation Objectives of North Dublin Bay SAC and South Dublin Bay SAC

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
North Dublin Bay SAC			
Mudflats and sandflats not covered by water at low tide [1 To maintain the favourable conservation condition of the ha			
Habitat area / Hectares / The permanent habitat area is stable or increasing, subject to natural processes  Community extent / Hectares / Maintain the extent of the Mytilus edulis-dominated community, subject to natural	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could affect the quality of the intertidal habitats and the fauna communities they support.  The introduction and / or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and	The mitigation measures described in Section 7.1.4.1 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.  The mitigation measures prescribed in Section 7.1.4.2 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	No
processes  Community structure: Mytilus edulis density / Individuals/ m² / Conserve the high quality of the Mytilus edulis dominated community, subject to natural processes			
Community distribution / Hectares / Conserve the following community types in a natural condition: Fine sand to sandy mud with <i>Pygospio elegans</i> and <i>Crangon crangon</i> community complex; Fine sand with <i>Spio martinensis</i> community complex			
Annual Vegetation of drift lines [1210]			
To restore the favourable conservation condition of the hab	itat in the SAC, which is defined as follows:		
Habitat area / Hectares / Area increasing, subject to natural processes, including erosion and succession	Yes  An accidental pollution event during construction or operation	Yes The mitigation measures described in	No
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes	could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or	Section 7.1.4.1 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.  The mitigation measures prescribed in Section 7.1.4.2 will prevent the introduction and/or spread of non-native invasive species to downstream European	
Physical structure: functionality and sediment supply / Presence/ absence of physical barriers / Maintain the natural circulation of sediment and organic matter, without any physical obstructions	cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area / distribution of intertidal / coastal habitats.		
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession	The introduction and / or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats permanently or regularly inundated by seawater. These species may outcompete		



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Vegetation composition: typical species and sub-communities / Percentage cover at a representative number of monitoring stops / Maintain the presence of species-poor communities with typical species: sea rocket <i>Cakile maritima</i> , sea sandwort <i>Honckenya peploides</i> , prickly saltwort <i>Salsola kali</i> and oraches <i>Atriplex</i> spp.	other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	sites during construction and operation of the Proposed Scheme.	
Vegetation composition: negative indicator species / Percentage cover / Negative indicator species (including non-natives) to represent less than 5% cover			
Salicornia and other annuals colonising mud and sand [131			
To restore the favourable conservation condition of the hab	itat in the SAC, which is defined as follows:		1
Habitat area / Hectares / Area stable or increasing, subject to natural processes, including erosion and succession	Yes  An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental	Yes The mitigation measures described in Section 7.1.4.1 to protect water quality in	No
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes	pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect	the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.  The mitigation measures prescribed in Section 7.1.4.2 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	
Physical structure: sediment supply / Presence / absence of physical barriers	the quality (vegetation structure and composition) and area / distribution of intertidal / coastal habitats.		
Maintain, or where necessary restore, natural circulation of sediments and organic matter, without any physical obstructions	European sites could potentially result in the degradation of		
Physical structure: creeks and pans / Occurrence / Maintain creek and pan structure, subject to natural processes, including erosion and succession	permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and		
Physical structure: flooding regime / Hectares flooded; frequency / Maintain natural tidal regime	the physical structural integrity of the habitat.		
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession			
Vegetation structure: vegetation height / Centimetres / Maintain structural variation within sward			



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Vegetation structure: vegetation cover / Percentage cover at a representative number of monitoring stops / Maintain more than 90% of area outside creeks vegetated			
Vegetation composition: typical species and subcommunities / Percentage cover / Maintain the presence of species-poor communities listed in SMP (McCorry and Ryle, 2009)			
Vegetation structure: negative indicator species – Spartina anglica / Hectares / No significant expansion of common cordgrass (Spartina anglica), with an annual spread of less than 1%			
Atlantic salt meadows (Glauco-Puccinellietalia maritimae)  To maintain the favourable conservation condition of the ha			
Habitat area / Hectares / Area stable or increasing, subject to natural processes, including erosion and succession	Yes  An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental	Yes The mitigation measures described in Section 7.1.4.1 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.  The mitigation measures prescribed in Section 7.1.4.2 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	No
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes	pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect		
Physical structure: sediment supply / Presence / absence of physical barriers / Maintain natural circulation of sediments and organic matter, without any physical obstructions	the quality (vegetation structure and composition) and area / distribution of intertidal / coastal habitats.  The introduction and / or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively		
Physical structure: creeks and pans / Occurrence / Maintain creek and pan structure, subject to natural processes, including erosion and succession			
Physical structure: flooding regime / Hectares flooded; frequency / Maintain natural tidal regime			
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession			
Vegetation structure: vegetation height / Centimetres / Maintain structural variation within sward			



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Vegetation structure: vegetation cover / Percentage cover at a representative number of monitoring stops / Maintain more than 90% of area outside creeks vegetated			
Vegetation composition: typical species and sub- communities / Percentage cover at a representative number of monitoring stops / Maintain the presence of species-poor communities listed in SMP (McCorry and Ryle, 2009)			
Vegetation structure: negative indicator species – Spartina anglica / Hectares / No significant expansion of common cordgrass (Spartina anglica), with an annual spread of less than 1%			
Mediterranean salt meadows (Juncetalia maritimi) [1410]			
To maintain the favourable conservation condition of the ha		T	T
Habitat area / Hectares / Area stable or increasing, subject to natural processes, including erosion and succession	Yes  An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental	The mitigation measures described in Section 7.1.4.1 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.  The mitigation measures prescribed in Section 7.1.4.2 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of	No
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes	pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect		
Physical structure: sediment supply / Presence/ absence of physical barriers / Maintain natural circulation of sediments and organic matter, without any physical obstructions	the quality (vegetation structure and composition) and area / distribution of intertidal / coastal habitats.  The introduction and / or spread of invasive species to downstream		
Physical structure: creeks and pans / Occurrence / Maintain creek and pan structure, subject to natural processes, including erosion and succession	existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species		
Physical structure: flooding regime / Hectares flooded; frequency / Maintain natural tidal regime	impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	the Proposed Scheme.	
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession			



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Vegetation structure: vegetation height / Centimetres / Maintain structural variation within sward			
Vegetation structure: vegetation cover / Percentage cover at a representative number of monitoring stops / Maintain more than 90% of area outside creeks vegetated			
Vegetation composition: typical species and sub- communities / Percentage cover at a representative number of monitoring stops / Maintain the presence of species-poor communities listed in SMP (McCorry and Ryle, 2009)			
Vegetation structure: negative indicator species – Spartina anglica / Hectares / No significant expansion of common cordgrass (Spartina anglica), with an annual spread of less than 1%			
Embryonic shifting dunes [2110]			
To restore the favourable conservation condition of the hab	itat in the SAC, which is defined as follows:		T
Habitat area / Hectares / Area stable or increasing, subject to natural processes, including erosion and succession.	Yes  Terrestrial habitats above the high tide line are not at risk of effects from water pollution in Dublin Bay.	Yes The mitigation measures prescribed in Section 7.1.4.2 will prevent the	No
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes.	The introduction and / or spread of invasive species to downstream	introduction and/or spread of non-native invasive species to downstream European	
Physical structure: functionality sediment supply / Presence/ absence of physical barriers / Maintain natural circulation of sediments and organic matter, without any physical obstructions	THE INFOMMETION AND A SPICAR OF INVASIVE SPECIES TO ADMISTICALLE.	sites during construction and operation of the Proposed Scheme.	
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession			
Vegetation composition: plant health of foredune grasses / Percentage cover / More than 95% of sand couch Elytrigia juncea and / or lyme-grass Leymus arenarius should be healthy (i.e. green plant parts above ground and flowering heads present)			



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Vegetation composition: typical species and sub- communities / Percentage cover at a representative number of monitoring stops / Maintain the presence of species-poor communities with typical species: sand couch <i>Elytrigia juncea</i> and / or lyme-grass <i>Leymus</i> arenarius			
Vegetation composition: negative indicator species / Percentage cover / Negative indicator species (including non-native species) to represent less than 5% cover			
Shifting dunes along the shoreline with <i>Ammophila arenar</i> To restore the favourable conservation condition of the hab			
Habitat area / Hectares / Area stable or increasing, subject to natural processes, including erosion and succession	Yes  Terrestrial habitats above the high tide line are not at risk of effects from water pollution in Dublin Bay.	Yes The mitigation measures prescribed in Section 7.1.4.2 will prevent the	No
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes	The introduction and / or spread of invasive species to downstream	introduction and/or spread of non-native invasive species to downstream European	
Physical structure: functionality sediment supply / Presence/ absence of physical barriers / Maintain natural circulation of sediments and organic matter, without any physical obstructions	European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively	sites during construction and operation of the Proposed Scheme.	
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession	impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.		
Vegetation composition: plant health of dune grasses / Percentage cover / 95% of marram grass Ammophila arenaria and / or lyme-grass Leymus arenarius should be healthy (i.e. green plant parts above ground and flowering heads present)			



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Vegetation composition: typical species and sub- communities / Percentage cover at a representative number of monitoring stops / Maintain the presence of species-poor communities dominated by marram grass Ammophila arenaria and / or lyme-grass Leymus arenarius			
Vegetation composition: negative indicator species / Percentage cover / Negative indicator species (including non-native species) to represent less than 5% cover			
Fixed coastal dunes with herbaceous vegetation (grey dun			
To restore the favourable conservation condition of the hab	itat in the SAC, which is defined as follows:		Ī
Habitat area / Hectares / Area stable or increasing, subject to natural processes, including erosion and succession	Yes  Terrestrial habitats above the high tide line are not at risk of effects from water pollution in Dublin Bay.	Yes The mitigation measures prescribed in Section 7.1.4.2 will prevent the	No
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes	The introduction and / or spread of invasive species to downstream	introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	
Physical structure: functionality sediment supply / Presence/ absence of physical barriers / Maintain natural circulation of sediments and organic matter, without any physical obstructions	European sites could potentially result in the degradation of		
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession			
Vegetation structure: bare ground / Percentage cover / Bare ground should not exceed 10% of fixed dune habitat, subject to natural processes			
Vegetation structure: sward height / Centimetres / Maintain structural variation in the sward			
Vegetation composition: typical species and sub- communities / Percentage cover at a representative number of monitoring stops / Maintain range of sub- communities with typical species listed in Delaney et al. (2013)			



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Vegetation composition: negative indicator species (including <i>Hippophae rhamnoides</i> ) / Percentage cover / Negative indicator species (including non-native species) to represent less than 5% cover			
Vegetation composition: scrub / trees / Percentage cover / No more than 5% cover or under control			
Humid dune slacks [2190]			
To restore the favourable conservation condition of the hab	itat in the SAC, which is defined as follows:		
Habitat area / Hectares / Area increasing, subject to natural processes, including erosion and succession	Yes  Terrestrial habitats above the high tide line are not at risk of effects	Yes The mitigation measures prescribed in	No
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes	from water pollution in Dublin Bay.	Section 7.1.4.2 will prevent the introduction and/or spread of non-native	
Physical structure: functionality sediment supply / Presence/ absence of physical barriers / Maintain natural circulation of sediments and organic matter, without any physical obstructions	European sites could potentially result in the degradation of	invasive species to downstream European sites during construction and operation of the Proposed Scheme.	
Physical structure: hydrological and flooding regime / Water table levels; groundwater fluctuations (metres) / Maintain natural hydrological regime			
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession			
Vegetation structure: bare ground / Percentage cover / Bare ground should not exceed 5% of dune slack habitat, with the exception of pioneer slacks which can have up to 20% bare ground			
Vegetation structure: vegetation height / Centimetres / Maintain structural variation within the sward			



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Vegetation composition: typical species and sub- communities / Percentage cover at a representative number of monitoring stops / Maintain range of sub- communities with typical species listed in Delaney et al. (2013)			
Vegetation composition: cover of <i>Salix repens /</i> Percentage cover; centimetres / Maintain less than 40% cover of creeping willow ( <i>Salix repens</i> )			
Vegetation composition: negative indicator species / Percentage cover / Negative indicator species (including non-native species) to represent less than 5% cover			
Vegetation composition: scrub / trees / Percentage cover / No more than 5% cover or under control			
Petalwort Petalophyllum ralfsii [1395]  To maintain the favourable conservation condition of the sp	ecies in the SAC, which is defined as follows:		
Distribution of populations / Number and geographical spread of populations / No decline	Yes As a terrestrial flora species of damp calcareous dune slacks, found	Yes The mitigation measures prescribed in Section 7.1.4.2 will prevent the	No
Population size / Number of individuals / No decline	above the high tide line, it is not at risk of effects from water		
Area of suitable habitat / Hectares / No decline	pollution in Dublin Bay.	introduction and/or spread of non-native invasive species to downstream European	
Hydrological conditions: soil moisture / Occurrence / Maintain hydrological conditions so that substrate is kept moist and damp throughout the year, but not subject to prolonged inundation by flooding in winter	The introduction and / or spread of invasive species to downstream	sites during construction and operation of the Proposed Scheme.	
Vegetation structure: height and cover / Centimetres and percentage / Maintain open, low vegetation with a high percentage of bryophytes (small acrocarps and liverwort turf) and bare ground	may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.		
South Dublin Bay SAC			
Mudflats and sandflats not covered by water at low tide [1 To maintain the favourable conservation condition of the ha			
Habitat area / Hectares / The permanent habitat area is stable or increasing, subject to natural processes	Yes	Yes	No



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Community extent / Hectares / Maintain the extent of the Zostera dominated community, subject to natural processes	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or	The mitigation measures described in Section 7.1.4.1 to protect water quality in the receiving environment will ensure	
Community structure: <i>Mytilus edulis</i> density / Individuals/m² / Conserve the high quality of the <i>Zostera</i> dominated community, subject to natural processes	cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area / distribution of intertidal / coastal habitats.	that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.	
Community distribution / Hectares / Conserve the following community type in a natural condition: Fine sands with <i>Angulus tenuis</i> community complex	The introduction and / or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	The mitigation measures prescribed in Section 7.1.4.2 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	
Annual Vegetation of drift lines [1210]			
To restore the favourable conservation condition of the hab	itat in the SAC, which is defined as follows:		
labitat area / Hectares / Area increasing, subject to atural processes, including erosion and succession	Yes An accidental pollution event during construction or operation	Yes The mitigation measures described in	No
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes	could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or	Section 7.1.4.1 to protect water quality in the receiving environment will ensure	
Physical structure: functionality and sediment supply / Presence/ absence of physical barriers / Maintain the natural circulation of sediment and organic matter, without any physical obstructions	the quality (vegetation structure and composition) and area / distribution of intertidal / coastal habitats.  protected during construction are operation of the Proposed Scheme	that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.	
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession	The introduction and / or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively	The mitigation measures prescribed in Section 7.1.4.2 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of	
Vegetation composition: typical species and sub- communities / Percentage cover at a representative number of monitoring stops / Maintain the presence of species-poor communities with typical species: sea rocket (Cakile maritima), sea sandwort (Honckenya peploides), prickly saltwort (Salsola kali) and oraches (Atriplex spp.)	impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	the Proposed Scheme.	



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?				
Vegetation composition: negative indicator species / Percentage cover / Negative indicator species (including non-natives) to represent less than 5% cover							
	Salicornia and other annuals colonising mud and sand [1310]						
To restore the favourable conservation condition of the hab Habitat area / Hectares / Area stable or increasing, subject to natural processes, including erosion and succession	Yes  An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental	Yes The mitigation measures described in Section 7.1.4.1 to protect water quality in	No				
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes	pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect	the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.  The mitigation measures prescribed in					
Physical structure: sediment supply / Presence/ absence of physical barriers/ Maintain, or where necessary restore, natural circulation of sediments and organic matter, without any physical obstructions	the quality (vegetation structure and composition) and area / distribution of intertidal / coastal habitats.						
Physical structure: creeks and pans / Occurrence / Maintain creek and pan structure, subject to natural processes, including erosion and succession	European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively	Section 7.1.4.2 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of					
Physical structure: flooding regime / Hectares flooded; frequency / Maintain natural tidal regime	impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	the Proposed Scheme.					
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession							
Vegetation structure: vegetation height / Centimetres / Maintain structural variation within sward							
Vegetation structure: vegetation cover / Percentage cover at a representative number of monitoring stops / Maintain more than 90% of area outside creeks vegetated							
Vegetation composition: typical species and subcommunities / Percentage cover / Maintain the presence of species-poor communities listed in SMP (McCorry and Ryle, 2009)							



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?	
Vegetation structure: negative indicator species – Spartina anglica / Hectares / No significant expansion of common cordgrass (Spartina anglica), with an annual spread of less than 1%				
Embryonic shifting dunes [2110]				
To restore the favourable conservation condition of the hab	itat in the SAC, which is defined as follows:		T	
Habitat area / Hectares / Area stable or increasing, subject to natural processes, including erosion and succession.	Yes  Terrestrial habitats above the high tide line are not at risk of effects from water pollution in Dublin Bay.		No	
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes.	The introduction and / or spread of invasive species to downstream	introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.		
Physical structure: functionality sediment supply / Presence/ absence of physical barriers / Maintain natural circulation of sediments and organic matter, without any physical obstructions				
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession		, , , , , , , , , , , , , , , , , , , ,		
Vegetation composition: plant health of foredune grasses / Percentage cover / More than 95% of sand couch (Elytrigia juncea) and / or lyme-grass (Leymus arenarius) should be healthy (i.e. green plant parts above ground and flowering heads present)				
Vegetation composition: typical species and sub- communities / Percentage cover at a representative number of monitoring stops / Maintain the presence of species-poor communities with typical species: sand couch ( <i>Elytrigia juncea</i> ) and / or lyme-grass ( <i>Leymus</i> arenarius)				
Vegetation composition: negative indicator species / Percentage cover / Negative indicator species (including non-native species) to represent less than 5% cover				



#### 7.1.4 Mitigation Measures

- 153 This section presents the mitigation measures that will be implemented during construction and operation to avoid or reduce the potential impacts of the Proposed Scheme on North Dublin Bay SAC and South Dublin Bay SAC. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment. Mitigation measures are outlined in full in the Construction Environmental Management Plan (CEMP) provided in Appendix III, all of which shall, at a minimum, be implemented during the Construction Phase of the Proposed Scheme.
- 154 The CEMP (see Appendix III of this NIS) summarises the overall environmental management strategy that will be adopted and implemented during the Construction Phase of the Proposed Scheme. The purpose of the CEMP is to demonstrate how the proposed construction works can be delivered in a logical, sensible, and safe sequence with the incorporation of specific environmental control measures relevant to construction works of this nature. The CEMP sets out the mechanism by which environmental protection is to be achieved during the Construction Phase of the Proposed Scheme. The CEMP has been prepared in accordance with the following industry best practice guidance:
  - Transport Infrastructure Ireland's (TII's) Guidelines for the Creation, Implementation and Maintenance of an Environmental Operating Plan (TII 2007); and
  - Construction Industry Research and Information Association (CIRIA) in the UK, Environmental Good Practice on Site Guide, 4<sup>th</sup> Edition (CIRIA 2015).
- 155 The CEMP (Appendix III of this NIS) has been prepared in conjunction with the Environmental Impact Assessment Report (EIAR) and NIS, with input from members of the BusConnects Infrastructure team. The CEMP supports the information already provided in the EIAR and the NIS, and must be read in conjunction with the information already provided in the NIS. The details relevant to European sites are already provided in the NIS.

156 The information included in the CEMP is presented under the following topics:

- Proposed Scheme Details;
- Planning Consent;
- Contact Sheets;
- Roles and Responsibilities;
- Communication;
- Environmental Awareness Training;
- Compliance and Review;
- Environmental Commitments;
- Site Specific Method Statements / Management Plans;
  - o Construction Traffic Management Plan;
  - o Invasive Species Management Plan (ISMP);
  - Surface Water Management Plan (SWMP);
  - Construction and Demolition Resource and Waste Management Plan; and
  - o Environmental Incident Response Plan.
- 157 The CEMP will be updated by the NTA prior to the commencement of the Construction Phase, so as to include any additional measures required pursuant to conditions attached to any decision to grant approval. The CEMP has regard to the guidance contained in the TII Guidelines for the Creation, Implementation and Maintenance of an Environmental Operating Plan, and the handbook published by Construction Industry Research and Information Association (CIRIA) in the UK, Environmental Good Practice on Site Guide, 4th Edition (CIRIA 2015).



158 A number of sub-plans have also been prepared as part of the CEMP, including an SWMP and an ISMP, as outlined above. For the avoidance of doubt, all of the measures set out in the CEMP and the sub-plans appended to this NIS will be implemented in full by the appointed contractor to the satisfaction of the NTA.

#### 7.1.4.1 Measures to Protect Surface Water Quality

- 159 This section presents the mitigation measures that will be implemented during Construction and Operational Phases to avoid the potential impacts of the Proposed Scheme on downstream European sites. All of the mitigation measures will be implemented in full. They are in accordance with best practice, and tried and tested, effective control measures to protect the receiving environment.
- 160 A CEMP, including an SWMP and an ISMP, have been included with the application documentation submitted to An Bord Pleanála (see Appendix III of this NIS).
- 161 These measures have been developed in consideration of the following standard best international practice including but not limited to:
  - CIRIA (2015) Environmental Good Practice on Site. Fourth Edition (C741);
  - CIRIA (2001) Control of Water Pollution from Construction Sites, Guidance for Consultants and Contractors (C532);
  - CIRIA (2000) Environmental Handbook for Building and Civil Engineering Projects (C512);
  - CIRIA (2007) The SUDS Manual (C697);
  - CIRIA (2006a) C648: Control of water pollution from linear construction projects: Technical guidance;
  - CIRIA (2006b) Control of water pollution from linear construction projects: Site guide (C648);
  - Inland Fisheries Ireland (IFI) (2016) Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters;
  - UK Pollution Prevention Guidelines (PPG) UK Environment Agency, 2004; and
  - Enterprise Ireland (2003) Best Practice Guide BPGCS005, Oil Storage Guidelines.

## Measures to Protect Surface Water Quality during Construction

- 162 The following specific mitigation measures, all of which are incorporated into the CEMP, shall be implemented to mitigate against the release of hydrocarbons, polluting chemicals, sediment / silt and contaminated waters:
  - Specific measures to prevent the release of sediment over baseline conditions in the downstream receiving water environment, during the construction work. These measures include, but are not limited to, the use of silt fences, silt curtains, settlement lagoons and filter materials.
  - Provision of exclusion zones and barriers (e.g., silt fences) between earthworks, stockpiles
    and temporary surfaces to prevent sediment washing into the existing drainage systems and
    hence the downstream receiving water environment.
  - Provision of temporary construction surface drainage and sediment control measures to be in place before earthworks commence.
  - Weather conditions will be taken into account when planning construction activities to minimise risk of runoff from the site.
  - Prevailing weather and environmental conditions will be taken into account prior to the
    pouring of cementitious materials for the works adjacent to any surface water drainage
    features, or drainage features connected to same. Pumped concrete will be monitored to
    ensure no accidental discharge. Mixer washings and excess concrete will not be discharged
    to existing surface water drainage systems. Concrete washout areas will be located remote

to any surface water drainage features, where feasible, to avoid accidental discharge to watercourses. Concrete trucks will not be washed out on-site.

- Any fuels or chemicals (including hydrocarbons or any polluting chemicals) will be stored in
  a designated, secure bunded area(s) within the Construction Compounds to prevent any
  seepage of potential pollutants into the local surface water network. These designated areas
  will be clearly sign-posted and all personnel on-site will be made aware of their locations and
  associated risks.
- All mobile fuel bowsers shall carry a spill kit and operatives must have spill response training.
   All fuel containing equipment such as portable generators shall be placed on drip trays. All
   fuels and chemicals required to be stored on-site will be clearly marked. Care and attention
   will be taken during refuelling and maintenance operations. Particular attention will be paid
   to gradient and ground conditions, which could increase risk of discharge to waters.
- A register of all hazardous substances, which will either be used on-site or expected to be
  present (in the form of soil and / or groundwater contamination) will be established and
  maintained. This register will be available at all times and shall include as a minimum:
  - Valid Safety Data Sheets;
  - Health & Safety, Environmental controls to be implemented when storing, handling, using, and in the event of spillage of materials;
  - Emergency response procedures / precautions for each material; and
  - o The Personal Protective Equipment (PPE) required when using the material.
- Implementation of response measures to potential pollution incidents:
  - O An Environmental Incident Response Plan (EIRP) has been included within Section 5.6 of the CEMP and will be finalised prior to works commencing and they will be communicated, resourced and implemented for the duration of the works. The EIRP describes the procedures, lines of authority and processes that will be followed to ensure that incident response efforts are prompt, efficient, and suitable for particular circumstances. The EIRP details the procedures to be undertaken in the event of the release of any sediment into a watercourse, serious spillage of chemical, fuel or other hazardous wastes (e.g., concrete), non-compliance incident with any permit or licence, or other such risks that could lead to a pollution incident, including flood risks.
  - Emergency procedures / precautions and spillage kits will be available and construction staff will be trained and experienced in emergency procedures in the event of accidental fuel spillages. Details of these are included in Section 5.6 of the CEMP, in Appendix III of this NIS.
- All trucks will have a built-on tarpaulin that will cover excavated material as it is being hauled off site and wheel wash facilities will be provided at all site egress points.
- Measures to be implemented by the appointed contractor to minimise the risk of spills and contamination of soils and waters include:
  - Employing only a competent and experienced workforce, and site-specific training of site managers, foremen and workforce, including all subcontractors, in pollution risks and preventative measures;
  - Ensure that all areas where liquids (including fuel) are stored, or cleaning is carried
    out, are in designated impermeable areas that are isolated from the surrounding area
    and within a secondary containment system, e.g., by a roll-over bund, raised kerb,
    ramps or stepped access;
  - The location of any fuel storage facilities will be considered in the design of the Construction Compound. These are to be designed in accordance with relevant guidelines and codes of best practice and will be fully bunded;
  - Good housekeeping at the site (daily site clean-ups, use of disposal bins, etc.) during the entire Construction Phase;



- Potential pollutants to be adequately secured against vandalism;
- Provision of proper containment of potential pollutants according to codes of best practice;
- o Thorough control during the entire Construction Phase to ensure that any spillage is identified at early stage and subsequently effectively contained and managed; and
- Spill kits will be provided and be kept close to the storage area. Staff to be trained on how to use spill kits correctly.
- Water supplies shall be recycled for use in the wheel wash. All waters shall be drained through appropriate filter material prior to discharge from the construction sites.
- The removal of any made ground material, which may be contaminated, from the construction site and transportation to an appropriate licensed facility shall be carried out in accordance with the Waste Management Act, best practice and guidelines for same.
- A discovery procedure for contaminated material will be prepared and adopted by the appointed contractor prior to excavation works commencing on-site. These documents will detail how potentially contaminated material will be dealt with during the excavation phase.
- Implementation of measures to minimise waste and ensure correct handling, storage and disposal of waste (most notably wet concrete, pile arisings and asphalt).
- All of the above measures implemented on-site will be monitored throughout the duration of construction to ensure that they are working effectively, to implement maintenance measures if required / applicable and to address any potential issues that may arise.
- 163 In terms of mitigation, an SWMP has been prepared (provided in the CEMP) in Appendix III of this NIS, which details control and management measures for avoiding, preventing, or reducing any significant adverse impacts on the surface water environment during the Construction Phase of the Proposed Scheme.
- 164 Following implementation of the mitigation measures outlined in the SWMP, the majority of impacts will not be significant. There are a few activities, however that require additional measures to ensure that impacts are not significant. Significant impacts are predicted for the Dargle\_040, a segment which is a designated salmonid river, as a result of the extensive road construction works proposed in the section of the Proposed Scheme which drains to that water body.

Site Specific Mitigation Measures for the River Dargle and Rathmichael Stream

- 165 Approximately 600m of the Proposed Scheme in this section has some surface water connection to the Dargle\_040 (River Dargle) as it flows through Bray; this is the segment which is designated a salmonid river. The existing drainage system in this location also includes some combined sewer connections, however as a precautionary measure it is assumed that all of the gullies in this location drain to Dargle\_040. In order to prevent any silty water or hydrocarbons entering the water body during construction, it is proposed to use 'silt sacs' or the equivalent in every gully along the entire length of the Proposed Scheme in this catchment (Chainage A17900 to A18500) as construction progresses. These will capture any silt in the surface water. During the connection of the new kerbside edge drains into the existing surface water system, there is a higher risk of contamination. This will only be carried out in dry weather. No mobile plant will be refuelled in this stretch, all refuelling will be carried out at the Construction Compound BR1 and adhere to the control measures outlined in the SWMP.
- 166 In section 3c of the Proposed Scheme which drains to the other segment of the Dargle\_040 (Rathmichael River), silt sacs will also be deployed for up to 250m north and south of the point at which the water body is crossed (chainage A17100-A17150). No mobile plant will be refuelled outside of Construction Compound BR1 within 500m of the watercourse crossing (hydrocarbons can be carried long distances in surface water drains, whereas silt in water tends to drop out of suspension in a shorter distance).



#### Measures to Protect Surface Water Quality during Operation

- During Operation there will be a net increase in impermeable area draining to Brewery Stream\_010 of 11,471m², which equates to a 3.3% increase. There will also be a net increase in impermeable area draining to the Kill of The Grange Stream\_010 of 2,552m², which equates to a 2.1% increase and the Carrickmines Stream\_010 of 883m² which equates to a 1.6% increase. There will be a net increase in impermeable area draining to the Shanganagh River (Shanganagh\_010) of 2,792m² which equates to a 5.4% increase and the Dargle\_040 of 11,650m² which equates to a 14% increase. Overall, the small increases in impermeable areas for the catchments draining to the Irish Sea will have no measurable impact on this water body during the Operational Phase of the Proposed Scheme. The Proposed Scheme will not result in a significant increase in the impermeable area that drains to Ringsend WwTP. The proposed road drainage system incorporates a variety of drainage measures including, gully drainage, tree pits, filter drains, attenuation tanks, ponds and swales, pavement capping layer attenuation (UCD Bus Interchange), oversized pipes and pollution control as required in accordance with Design Manual for Road and Bridges (DMRB) and CIRIA design standards.
- 168 Given that the proposed SuDS measures, which has been designed in accordance with the Greater Dublin Strategic Drainage Study (Dublin Drainage Consultancy, 2005), will be implemented by the appointed contractor during the Construction Phase, mitigation for the Operational Phase has been built into the design of the Proposed Scheme. Where no new paved areas are proposed, the existing drainage network will be retained and utilised (see Appendix IV for Proposed Surface Water Drainage Drawings).
- 169 In the Operational Phase, the infrastructural maintenance (including the maintenance regime for SuDS) will be carried out by the Local Authorities and will be subject to their management procedures. No additional mitigation is required.
- 7.1.4.2 Measures to Prevent the Spread of Non-Native Invasive Species to Downstream European sites During Construction

## **Confirmatory Pre-Construction Survey**

170 The NTA will ensure that a confirmatory pre-construction non-native invasive species survey will be undertaken by a suitably qualified specialist to confirm the absence and / or extent of all Third Schedule non-native invasive species within the footprint of the Proposed Scheme. Where an infestation is confirmed / identified within the footprint of the Proposed Scheme, this will require the implementation of a Non-Native Invasive Species Management Plan (refer to the CEMP in Appendix III of this NIS).

## Non-Native Invasive Species Management Plan (ISMP)

- 171 Where a pre-construction non-native invasive species re-survey has confirmed the presence of previously identified Third Schedule non-native invasive species, or identifies newly established non-native invasive species within the footprint of the Proposed Scheme, the ISMP produced will provide a detailed description of the infestations (e.g., approximate area of the respective colonies (m²), where feasible; approximate total number of stems, pattern of growth and information on other vegetation present), and where necessary, include calculations of volumes of infested soils to be excavated.
- 172 The ISMP for the Proposed Scheme will be implemented, including the assessment presented in the project non-native ISMP detailing the control measures, as advised by a suitably qualified specialist, in accordance with TII's The Management of Invasive Alien Plant Species on National Roads Technical Guidance (TII 2020a) and The Management of Invasive Alien Plant Species on National Roads Standard (TII 2020b), and other species-specific guidance documents including those listed in the non-native ISMP, as necessary.
- 173 The NTA will ensure that all control measures specified in the Proposed Scheme non-native ISMP shall be implemented by a suitably qualified and licensed specialist prior to the construction of the Proposed Scheme to control the spread of newly established non-native invasive species within the footprint of



- the Proposed Scheme. Furthermore, the appointed contractor will adhere to control measures specified within the Non-Native ISMP throughout the Construction Phase of the Proposed Scheme.
- 174 The site will be monitored after control measures have been implemented and monitoring will take place again in the subsequent years following treatment. Any re-growth will be subsequently treated as detailed in the Proposed Scheme non-native ISMP. The ISMP is contained within the CEMP (Appendix III to this NIS).

Measures to Prevent the Spread of Non-Native Invasive Species to Downstream European sites During Operation

175 Once the Proposed Scheme is in operation, the control of invasive species will be subject to the local authorities management procedures. No additional mitigation is required.

## 7.1.5 Residual Impacts

176 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the Qis of North Dublin Bay SAC and South Dublin Bay SAC, and there are, therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of North Dublin Bay SAC and South Dublin Bay SAC. As is confirmed by the Water Framework Directive (WFD) Assessment for the Proposed Scheme (refer to Appendix V of this NIS), the proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

#### 7.1.6 Conclusion of Assessment for North Dublin Bay SAC and South Dublin Bay SAC

177 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the Qis of North Dublin Bay SAC and South Dublin Bay SAC, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the Qis, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of North Dublin Bay SAC and South Dublin Bay SAC.

#### 7.2 Howth Head SAC [000202] and Bray Head SAC [000714]

#### 7.2.1 Ecological Baseline Description for Howth Head SAC

178 According to the Natura 2000 Standard Data Form (NPWS, 2020a), this SAC is a rocky headland situated on the northern side of Dublin Bay. This SAC has been designated for the Annex I habitats: [1230] Vegetated Sea Cliffs and [4030] Dry Heath. The flora within this SAC is very diverse, there are records of several Red Data Book species and species of very restricted Irish distribution. The dry heath and sea cliff vegetation is extensive and well developed. Major threats to the site include walking, horse-riding and non-motorised vehicles, burning vegetation, mining and quarrying.

#### 7.2.2 Ecological Baseline Description for Bray Head SAC

179 According to the Natura 2000 Standard data form (NPWS 2019c), this SAC is a prominent landscape feature at the southern end of Bray coastal zone, and is composed of five prominent quartzite knolls. The SAC has been designated for the Annex I habitats: [1230] Vegetated Sea Cliffs and [4030] Dry Heath. The site supports a diverse flora and a range of supporting habitats particularly in respect of maritime habitats and four Red Data Book species. It has breeding peregrine *Falco peregrinus*. Major threats to the site include walking, horse-riding and non-motorised vehicles, and burning vegetation.



#### 7.2.3 Qualifying Interests and Conservation Objectives of Howth Head SAC and Bray Head SAC

180 The Qis of Howth Head SAC and Bray Head SAC, and the overall conservation objectives, are listed in Table 13.

Table 13: Qualifying Interests and Conservation Objectives of Howth Head SAC and Bray Head SAC

Qualifying Interest(s)	Conservation Objective(s)
Howth Head SAC [000202] 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts 4030 European dry heaths	To maintain or restore the favourable conservation condition of the Annex I habitats for which the SAC has been selected
S.I. No. 524/2021 – European Union Habitats (Howth Head Special Area of Conservation 000202) Regulations 2021  NPWS (2016) Conservation Objectives: Howth Head SAC 000202.  Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	
Bray Head SAC [000714] 1230 Vegetated sea cliffs I Atlantic and Baltic coasts 4030 European dry heaths	To maintain or restore the favourable conservation condition of the Annex I habitats for which the SAC has been selected
S.I. No. 620/2017 – European Union Habitats (Bray Head Special Area of Conservation 000714) Regulations 2017  NPWS (2017a) Conservation Objectives: Bray Head SAC 000714.  Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	

- 181 In conjunction with considering the generic conservation objective for these SACs "To maintain or restore the favourable conservation condition of the Annex I habitat(s) and / or the Annex II species for which the SAC has been selected", the site-specific conservation objectives documents for Howth Head SAC and Bray Head SAC also informed this assessment.
- 182 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the QIs within the European site. Affecting the conservation condition of the Qis is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the Qis of Howth Head SAC and Bray Head SAC are presented in Section 7.2.4.2.

#### 7.2.4 Examination and Analysis of Potential Direct and Indirect Impacts

- 183 The direct and / or indirect impact by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the QIs of Howth Head SAC and Bray Head SAC, is:
  - Habitat degradation as a result of hydrological impacts.

## 7.2.4.1 Habitat Degradation as a Result of Hydrological Impacts

The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses five watercourses: the Grand Canal, River Dodder, Brewery Stream, Shanganagh River, and Rathmichael Stream, and ends on the northern bank of the River Dargle; and is hydrologically connected to the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WwTP, all of which drain to Dublin Bay.



- 185 The QI habitats for which Bray Head SAC and Howth Head SAC are designated (i.e., vegetated sea cliffs [1230] and European dry heaths [4030]) lie above the high-water mark. Pollution is not regarded to be a threat or pressure, which could potentially impact these SAC sites (NPWS 2013k; NPWS 2013l) and is not regarded to be a significant threat / pressure to this habitat at a national level (Barron et al., 2011). Therefore, the QI habitats of Howth Head SAC and Bray Head SAC will be unaffected by a degradation in the surface water quality of the coastal waters of Dublin Bay and Southwestern Irish Sea Killiney Bay, and significant effects in that regard can be excluded.
- 186 Therefore, there is no potential for the Proposed Scheme to result in significant effects which could have implications for the conservation objectives of Howth Head SAC and Bray Head SAC, as a result of hydrological impacts.

#### 7.2.4.2 Summary

187 Table 14 below presents a summary of the potential impacts of the Proposed Scheme on the Qis of Howth Head SAC and Bray Head SAC and how these impacts relate to affecting the site's conservation objectives.



# Table 14: Potential Impacts / Effects on the Conservation Objectives of Howth Head SAC and Bray Head SAC

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Howth Head SAC			
Vegetated sea cliffs of the Atlantic and Baltic coasts  To maintain the favourable conservation condition of Vegetated sea cliffs of the Atlantic and Baltic coasts in Howth Head SAC,	which is defined as follows:		
Habitat length / Kilometres / Area stable, subject to natural processes, including erosion	No Terrestrial habitats above the high tide line are not at risk of effects from water pollution in Dublin Bay.	No	No
Habitat distribution / Occurrence / No decline, subject to natural processes			
Physical structure: functionality and hydrological regime / Occurrence of artificial barriers / No alteration to natural function of geomorphological and hydrological processes, including groundwater quality, due to artificial structures			
Vegetation structure: zonation / Occurrence / Maintain range of sea cliff habitat zonations including transitional zones, subject to natural processes including erosion and succession			
Vegetation structure: vegetation height / Centimetres / Maintain structural variation within sward			
Vegetation composition: typical species and sub-communities / Percentage cover at a representative number of monitoring stops / Maintain range of sub-communities with typical species listed in the Irish Sea Cliff Survey (Barron <i>et al.,</i> 2011)			
Vegetation composition: negative indicator species / Percentage / Negative indicator species (including non-natives) to represent less than 5% cover			
Vegetation composition: bracken and woody species / Percentage / Cover of bracken ( <i>Pteridium aquilinum</i> ) on grassland and / or heath less than 10%. Cover of woody species on grassland and / or heath less than 20%			
European Dry Heaths  To maintain the favourable conservation condition of European dry heaths in Howth Head SAC, which is defined as follows:			
Habitat area / Hectares / Area stable or increasing, subject to natural processes	No	No	No
Habitat distribution / Occurrence / No decline, subject to natural processes	Terrestrial habitats above		
Ecosystem function: soil nutrients / Soil pH and appropriate nutrient levels at a representative number of monitoring stops / Maintain soil nutrient status within natural range	the high tide line are not at risk of effects from water pollution in Dublin Bay.		
Community diversity/ Abundance of variety of vegetation communities/ Maintain variety of vegetation communities, subject to natural processes			
Vegetation composition: lichens and bryophytes/ Number of species at a representative number of 2m x 2m monitoring stops/ Number of bryophyte or non-crustose lichen species present at each monitoring stop is at least three, excluding <i>Campylopus</i> and <i>Polytrichum</i> mosses			
Vegetation composition: number of positive indicator species/ Number of species at a representative number of 2m x 2m monitoring stops/ Number of positive indicator species present at each monitoring stop is at least two			



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Vegetation composition: cover of positive indicator species/ Percentage cover at a representative number of $2m \times 2m$ monitoring stops/ Cover of positive indicator species at least 50% for siliceous dry heath and 50-75% for calcareous dry heath			
Vegetation composition: dwarf shrub composition/ Percentage cover at a representative number of 2m x 2m monitoring stops/ Proportion of dwarf shrub cover composed collectively of bog-myrtle <i>Myrica gale</i> , creeping willow <i>Salix repens</i> and western gorse <i>Ulex gallii</i> is less than 50%			
Vegetation composition: negative indicator species/ Percentage cover at a representative number of 2m x 2m monitoring stops/ Total cover of negative indicator species less than 1%			
Vegetation composition: non-native species/ Percentage cover at, and in local vicinity of, a representative number of 2m x 2m monitoring stops/ Cover of non-native species less than 1%			
Vegetation composition: native trees and shrubs/ Percentage cover in local vicinity of a representative number of monitoring stops/ Cover of scattered native trees and shrubs less than 20%			
Bray Head SAC			
Vegetated sea cliffs of the Atlantic and Baltic coasts  To maintain the favourable conservation condition of Vegetated sea cliffs of the Atlantic and Baltic coasts in Bray Head SAG	C, which is defined as follows:		
Habitat length/ Kilometres/ Area stable, subject to natural processes, including erosion	No	No	No
Habitat distribution/ Occurrence/ No decline, subject to natural processes	Terrestrial habitats above		
Physical structure: functionality and hydrological regime / Occurrence of artificial barriers/ No alteration to natural function of geomorphological and hydrological processes, including groundwater quality, due to artificial structures	the high tide line are not at risk of effects from water pollution in		
Vegetation structure: zonation / Occurrence / Maintain range of sea cliff habitat zonations including transitional zones, subject to natural processes including erosion and succession	Southwestern Irish Sea – Killiney Bay.		
Vegetation structure: vegetation height / Centimetres / Maintain structural variation within sward			
Vegetation composition: typical species and sub-communities / Percentage cover at a representative number of monitorin stops / Maintain range of sub-communities with typical species listed in the Irish Sea Cliff Survey (Barron et al., 2011)	g		
Vegetation composition: negative indicator species / Percentage / Negative indicator species (including non-natives) to represent less than 5% cover			
Vegetation composition: bracken and woody species / Percentage / Cover of bracken <i>Pteridium aquilinum</i> on grassland an or heath less than 10%. Cover of woody species on grassland and / or heath less than 20%	d /		
European Dry Heaths			
To restore the favourable conservation condition of European dry heaths in Bray Head SAC, which is defined as follows:			
Habitat area / Hectares / Area stable or increasing, subject to natural processes	No	No	No



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Habitat distribution / Occurrence / No decline, subject to natural processes	Terrestrial habitats above the high tide line are not at risk of effects from		
Ecosystem function: soil nutrients / Soil pH and appropriate nutrient levels at a representative number of monitoring stops / Maintain soil nutrient status within natural range		risk of effects from eter pollution in uthwestern Irish Sea –	
Community diversity / Abundance of variety of vegetation communities / Maintain variety of vegetation communities, subject to natural processes	Southwestern Irish Sea – Killiney Bay.		
Vegetation composition: lichens and bryophytes / Number of species at a representative number of 2m x 2m monitoring stops / Number of bryophyte or non-crustose lichen species present at each monitoring stop is at least three, excluding <i>Campylopus</i> and <i>Polytrichum</i> mosses			
Vegetation composition: number of positive indicator species / Number of species at a representative number of 2m x 2m monitoring stops / Number of positive indicator species present at each monitoring stop is at least two			
Vegetation composition: cover of positive indicator species / Percentage cover at a representative number of 2m x 2m monitoring stops / Cover of positive indicator species at least 50% for siliceous dry heath and 50-75% for calcareous dry heath			
Vegetation composition: dwarf shrub composition / Percentage cover at a representative number of 2m x 2m monitoring stops / Proportion of dwarf shrub cover composed collectively of bog-myrtle <i>Myrica gale</i> , creeping willow <i>Salix repens</i> and western gorse <i>Ulex gallii</i> is less than 50%			
Vegetation composition: negative indicator species / Percentage cover at a representative number of 2m x 2m monitoring stops / Total cover of negative indicator species less than 1%			
Vegetation composition: non-native species / Percentage cover at, and in local vicinity of, a representative number of 2m x 2m monitoring stops / Cover of non-native species less than 1%			
Vegetation composition: native trees and shrubs / Percentage cover in local vicinity of a representative number of monitoring stops / Cover of scattered native trees and shrubs less than 20%			
Vegetation composition bracken: Percentage cover in local vicinity of a representative number of monitoring stops / Cover of bracken <i>Pteridium aquilinum</i> less than 10%			
Vegetation composition: soft rush / Percentage cover in local vicinity of a representative number of monitoring stops / Cover of soft rush <i>Juncus effusus</i> less than 10%			
Vegetation structure: senescent ling / Percentage cover at a representative number of 2m x 2m monitoring stops / Senescent proportion of ling <i>Calluna vulgaris</i> cover less than 50%			
Vegetation structure: signs of browsing / Percentage of shoots browsed at a representative number of 2m x 2m monitoring stops / Less than 33% collectively of the last complete growing season's shoots of ericoids showing signs of browsing			
Vegetation structure: burning / Occurrence in local vicinity of a representative number of monitoring stops / No signs of burning in sensitive areas			



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Vegetation structure: growth phases of ling / Percentage cover in local vicinity of a representative number of monitoring stops / Outside sensitive areas, all growth phases of ling <i>Calluna vulgaris</i> should occur throughout, with at least 10% of cover in the mature phase			
Physical structure: disturbed bare ground / Percentage cover at, and in local vicinity of, a representative number of 2m x 2m monitoring stops / Cover of disturbed bare ground less than 10%			
Indicators of local distinctiveness / Occurrence and population size / No decline in distribution or population sizes of rare, threatened or scarce species associated with the habitat			
Disturbance / Level of impact / Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site			



## 7.2.5 Mitigation Measures

188 As there is no potential for impacts to occur on the Howth Head SAC and Bray Head SAC as a result of the Proposed Scheme, no additional mitigation measures are required, other than good site practices detailed in Section 7.1.4.1.

#### 7.2.6 Residual Impacts

189 Although no specific mitigation are required in respect of potential impacts, nonetheless with the effective implementation of standard appropriate mitigation measures identified in this NIS, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the Qis of Howth Head SAC and Bray Head SAC, and there are, therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of Howth Head SAC and Bray Head SAC. As is confirmed by the WFD Assessment for the Proposed Scheme (refer to Appendix V of this NIS), the Proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

## 7.2.7 Conclusion of Assessment for Howth Head SAC and Bray Head SAC

190 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the Qis of Howth Head SAC and Bray Head SAC, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the Qis, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) on the integrity of Howth Head SAC and Bray Head SAC.

## 7.3 Rockabill to Dalkey Island SAC [003000] and Lambay Island SAC [000204]

#### 7.3.1 Ecological Baseline Description for Rockabill to Dalkey Island SAC

191 As set out in the Natura 2000 Standard Data Form (NPWS, 2020n), this SAC is a marine site that is a rectangle shaped area extending from Rockabill south to Dalkey Island in south Dublin. The SAC has been selected for the Annex I habitat: [1170] Reefs. The only species listed as a QI for the Rockabill to Dalkey Island SAC is the Harbour porpoise *Phocoena phocoena* [1351]. Surveys of the site estimated that there are 211±47 Harbour porpoises in the northern part of the site and 138±33 in the southern part (Berrow *et al.*, 2010). Calves and juveniles have been recorded across the SAC, which suggests the site has value in the reproductive cycle of the species.

#### 7.3.2 Ecological Baseline Description for Lambay Island SAC

192 In the Natura 2000 Standard Data Form (NPWS, 2019d), this SAC is stated to be Ireland's largest east coast island, lying 4km off Dublin. The island is surrounded by steep cliffs on the north, east and south sides which hold internationally important populations of seabirds. Most of the western third of the island is intensively farmed, while the remainder is a mixture of less intensively grazed land, rock outcrops, scrub and bracken. Lambay Island is surrounded by intertidal and subtidal reef habitat. This site provides year-round haul-out habitat for the Annex II seal species grey seal *Halichoerus grypus* and harbour seal *Phoca vitulina*, and includes regionally significant breeding and moulting sites.

# 7.3.3 Qualifying Interests and Conservation Objectives of Rockabill to Dalkey Island SAC and Lambay Island SAC

193 The Qis of Rockabill to Dalkey Island SAC and Lambay Island SAC and the overall conservation objectives, are listed in Table 15.



Table 15: Qualifying Interests and Conservation Objectives of Rockabill to Dalkey Island SAC and Lambay Island SAC

Qualifying Interest(s)	Conservation Objective(s)
Rockabill to Dalkey Island SAC [003000] 1170 Reefs 1351 Harbour porpoise Phocoena phocoena  S.I. No. 94/2019 – European Union Habitats (Rockabill To Dalkey	To maintain the favourable conservation condition of the Annex I habitat(s) and / or the Annex II species for which the SAC has been selected.
Island Special Area Of Conservation 003000) Regulations 2019  NPWS (2013b) Conservation Objectives: Rockabill to Dalkey Island SAC 003000. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	
Lambay Island SAC [000204] 1170 Reefs 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts 1364 Grey seal <i>Halichoerus grypus</i> 1365 Harbour seal <i>Phoca vitulina</i>	To maintain the favourable conservation condition of the Annex I habitat(s) and / or the Annex II species for which the SAC has been selected.
S.I. No. 294/2019 – European Union Habitats (Lambay Island Special Area of Conservation 000204) Regulations 2019  NPWS (2013e) Conservation Objectives: Lambay Island SAC 000204.  Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	

- 194 In conjunction with considering the generic conservation objective for these SACs "To maintain the favourable conservation condition of the Annex I habitat(s) and / or the Annex II species for which the SAC has been selected", the site-specific conservation objectives documents for Rockabill to Dalkey Island SAC and Lambay Island SAC also informed this assessment.
- 195 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the Qis within these European sites. Affecting the conservation condition of the Qis is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the Qis of Rockabill to Dalkey Island SAC and Lambay Island SAC are presented in Section 7.3.4.2.

#### 7.3.4 Examination and Analysis of Potential Direct and Indirect Impacts

- 196 The direct and / or indirect impact by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the QIs of Rockabill to Dalkey Island SAC and Lambay Island SAC, is:
  - Habitat degradation as a result of hydrological impacts

# 7.3.4.1 Habitat Degradation as a Result of Hydrological Impacts

197 The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses five watercourses: the Grand Canal, River Dodder, Brewery Stream, Shanganagh River, and Rathmichael Stream, and ends on the northern bank of the River Dargle; and is hydrologically connected to the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WwTP, all of which drain to Dublin Bay.



198 Therefore, (albeit unlikely) there is potential for the Proposed Scheme to result in significant effects which could have implications for the conservation objectives of Rockabill to Dalkey Island SAC and Lambay Island SAC as a result of hydrological impacts.

# 7.3.4.2 Summary

199 Table 16 presents a summary of the potential impacts of the Proposed Scheme on the Qis of Rockabill to Dalkey Island SAC and Lambay Island SAC and how these impacts relate to affecting the sites' conservation objectives.



Table 16: Potential Impacts / Effects on the Conservation Objectives of Rockabill to Dalkey Island SAC and Lambay Island SAC

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?		
Rockabill to Dalkey Island SAC					
Reefs [1170]  To maintain the favourable conservation condition of the habi	itat in the SAC, which is defined as follows:				
Habitat area / Hectares / The permanent habitat area is stable or increasing, subject to natural processes  Habitat distribution / Occurrence / Distribution is stable or increasing, subject to natural processes  Community structure / Biological composition / Conserve the following community types in a natural condition: Intertidal reef community complex; and Subtidal reef community complex	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area / distribution of intertidal / coastal habitats.	Yes The mitigation measures described in Section 7.1.4.1 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.	No		
Harbour porpoise <i>Phocoena phocoena</i> [1351]  To maintain the favourable conservation condition of Harbour	1		I		
Access to suitable habitat / Number of artificial barriers / Species range within the site should not be restricted by artificial barriers to site use	Yes  An accidental pollution event during construction or operation could affect surface	Yes The mitigation measures described in Section 7.1.4.1 to	No		
Disturbance / Level of impact / Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site	water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality of the intertidal / marine habitats which support harbour porpoise and fish prey species.	protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme			
Lambay Island SAC					
Reefs [1170]  To maintain the favourable conservation condition of the habitat in the SAC, which is defined as follows:					
Habitat area / Hectares / The permanent habitat area is stable or increasing, subject to natural processes	Yes	Yes	No		



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Habitat distribution / Occurrence / Distribution is stable or increasing, subject to natural processes	An accidental pollution event during construction or operation could affect surface	The mitigation measures described in Section 7.1.4.1 to	
Community structure / Biological composition / Conserve the following community types in a natural condition: Intertidal reef community complex; <i>Laminaria</i> -dominated community complex	water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality of the intertidal / marine habitats which support harbour porpoise and fish prey species.	protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.	
Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]			
To maintain the favourable conservation condition of Vegetate	ed sea cliffs of the Atlantic and Baltic coasts in Lam	bay Island SAC, which is defined as	follows:
Habitat length Kilometres Area stable, subject to natural processes, including erosion	No Terrestrial habitats above the high tide line are	No	No
Habitat distribution / Occurrence / No decline, subject to natural processes	not at risk of effects from water pollution in Dublin Bay.		
Physical structure: functionality and hydrological regime / Occurrence of artificial barriers / No alteration to natural functioning of geomorphological and hydrological processes due to artificial structures			
Vegetation structure: zonation / Occurrence / Maintain range of sea cliff habitat zonations including transitional zones, subject to natural processes including erosion and succession			
Vegetation structure: vegetation height / Centimetres / Maintain structural variation within sward			
Vegetation composition: typical species and subcommunities / Percentage cover at a representative sample of monitoring stops / Maintain range of subcommunities with typical species listed in the Irish Sea Cliff Survey			
Vegetation composition: negative indicator species / Percentage / Negative indicator species (including non- natives) to represent less than 5% cover			



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Vegetation composition: bracken and woody species / Percentage Cover of bracken ( <i>Pteridium aquilinum</i> ) on grassland and / or heath less than 10% / Cover of woody species on grassland and / or heath less than 20%			
Grey Seal Halichoerus grypus [1364]			
To maintain the favourable conservation condition of Grey Sea	il in Lambay Island SAC, which is defined as follows		
Access to suitable habitat / Number of artificial barriers / Species range within the site should not be restricted by artificial barriers to site use	Yes  An accidental pollution event during construction or operation could affect surface	Yes The mitigation measures described in Section 7.1.4.1 to	No
Breeding behaviour / Breeding sites / The breeding sites should be maintained in a natural condition	water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude,	protect water quality in the receiving environment will	
Moulting behaviour / Moult haul-out sites / The moult haul-out sites should be maintained in a natural condition	either alone or cumulatively with other pollution sources, could potentially affect the quality of the intertidal / marine habitats which	ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.	
Resting behaviour / Resting haul-out sites / The resting haul-out sites should be maintained in a natural condition	support grey seal.		
Disturbance / Level of impact / Human activities should occur at levels that do not adversely affect the grey seal population at the site			
Harbour Seal <i>Phoca vitulina</i> [1365]  To maintain the favourable conservation condition of Harbour	Seal in Lambay Island SAC, which is defined as folk	ows:	
Access to suitable habitat / Number of artificial barriers Species range within the site should not be restricted by artificial barriers to site use	Yes  An accidental pollution event during construction or operation could affect surface	Yes The mitigation measures described in Section 7.1.4.1 to	No
Breeding behaviour / Breeding sites / The breeding sites should be maintained in a natural condition	pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality of the intertidal / marine habitats which	protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.	
Moulting behaviour / Moult haul-out sites / The moult haul- out sites should be maintained in a natural condition			
Resting behaviour / Resting haul-out sites / The resting haul-out sites should be maintained in a natural condition			
Disturbance / Level of impact / Human activities should occur at levels that do not adversely affect the harbour seal population at the site			



## 7.3.5 Mitigation Measures

200 This section presents the mitigation measures that will be implemented during Construction and Operational Phases to avoid or reduce the potential impacts of the Proposed Scheme on Rockabill to Dalkey Island SAC and Lambay Island SAC. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

#### Measures to Protect Surface Water Quality during Construction

201 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during construction of the Proposed Scheme.

#### Measures to Protect Surface Water Quality during Operation

202 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during operation of the Proposed Scheme.

## 7.3.6 Residual Impacts

203 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the Qis of Rockabill to Dalkey Island SAC and Lambay Island SAC, and there are, therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of Rockabill to Dalkey Island SAC and Lambay Island SAC. As is confirmed by the WFD Assessment for the Proposed Scheme (refer to Appendix V of this NIS), the Proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

### 7.3.7 Conclusion of Assessment for Rockabill to Dalkey Island SAC and Lambay Island SAC

204 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the Qis of Rockabill to Dalkey Island SAC and Lambay Island SAC, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the Qis, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of Rockabill to Dalkey Island SAC and Lambay Island SAC.

#### 7.4 Wicklow Mountains SAC [002122]

# 7.4.1 Ecological Baseline Description for Wicklow Mountains SAC

205 The Natura 2000 Standard Data Form (NPWS, 2020o) notes that this is an extensive upland site comprising much of the Wicklow Mountains. Most of the site occurs above 300m and includes the source of many rivers including the Liffey, the Dargle and the Slaney. The dominant habitats of the site include blanket bog, heath and upland grassland. Seven Red Data Book plant species occur within its territory and it supports significant breeding populations of merlin *Falco columbarius* and peregrine (both Birds Directive Annex I SCI species for the overlapping Wicklow Mountains SPA [004040]). The SAC is designated for a number of Annex I habitats as well as mobile otter, which occurs on several of the riverine systems. Major threats to the site include urbanised areas / human habitation, walking, horse-riding and non-motorised vehicles, paths, tracks and cycling tracks, hunting and collection of wild animals, invasive non-native species, military manoeuvres and grazing.

# 7.4.2 Qualifying Interests and Conservation Objectives of Wicklow Mountains SAC

206 The Qis of Wicklow Mountains SAC and the overall conservation objectives, are listed in Table 17.



Table 17: Qualifying Interests and Conservation Objectives of Wicklow Mountains SAC

Qualifying Interest(s)	Conservation Objective(s)
(*=Priority Annex I habitat)	
Wicklow Mountains SAC [002122] <sup>19</sup>	To maintain the favourable conservation
1355 Otter Lutra lutra	condition of the Annex I habitats for which the
3110 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	SAC has been selected.
3130 Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and / or Isoeto-Nanojuncetea	
3160 Natural dystrophic lakes and ponds	
4010 Northern Atlantic wet heaths with Erica tetralix	
4030 European dry heaths	
4060 Alpine and Boreal heaths	
6130 Calaminarian grasslands of the Violetalia calaminariae	
6230 Species-rich <i>Nardus</i> 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>Ilex</i> and <i>Blechnum</i> in the British Isles	
NPWS (2017b) Conservation Objectives: Wicklow Mountains SAC	
<i>002122.</i> Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	

- 207 In conjunction with considering the generic conservation objective for this SAC "To maintain the favourable conservation condition of the Annex I habitat(s) and / or the Annex II species for which the SAC has been selected", the site-specific conservation objectives documents for Wicklow Mountains SAC also informed this assessment.
- 208 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the Qis within the European site. Affecting the conservation condition of the Qis is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the Qis of Wicklow Mountains SAC are presented in Section 7.4.3.3.

# 7.4.3 Examination and Analysis of Potential Direct and Indirect Impacts

- 209 The direct and / or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the QIs of Wicklow Mountains SAC, are:
  - Habitat degradation as a result of hydrological impacts; and,
  - Disturbance and displacement impacts.

-

<sup>&</sup>lt;sup>19</sup> Wicklow Mountains SAC has been included due to potential effects on the otter population (a mobile species). QI habitats for which this SAC has been designated are not at risk of effects arising from the Proposed Scheme as noted in Section 6, as the SAC is located upstream of the Proposed Scheme and outside the ZoI of potential impacts. Habitats associated with the Wicklow Mountains SAC are not considered further in this report.



## 7.4.3.1 Habitat Degradation as a Result of Hydrological Impacts

210 As the Wicklow Mountains SAC is located upstream of the Proposed Scheme, there is no potential for a pollution event of any magnitude to affect any QI habitats or associated plant species for which this European site is designated. However, as the Proposed Scheme is hydrologically connected to the River Dodder and there is potential for impacts to occur on otter populations (a mobile species) associated with the Wicklow Mountains SAC. The release of contaminated surface water runoff and / or an accidental spillage or pollution event into the Dodder\_050 during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants into receiving waters. The associated effects of a reduction of surface water quality which could in turn negatively affect the otter population through direct contact with pollutants or a decline in fish prey. These potential impacts could occur to such a degree that the conservation objectives of the Wicklow Mountains SAC QI mobile species are undermined.

211 Therefore, (albeit very unlikely) there is potential for the Proposed Scheme to result in significant effects which could have implications for the conservation objectives of Wicklow Mountains SAC (in respect of otter) as a result of hydrological impacts.

## 7.4.3.2 Disturbance and Displacement Impacts

212 A temporary and / or permanent increase in noise, vibration and / or human activity levels during the construction and / or operation of the Proposed Scheme could result in the disturbance to and / or displacement of QI otter populations species present within the vicinity of the Proposed Scheme. Such disturbance effects would not be expected to extend beyond a distance of approximately 150m<sup>20</sup> for the majority of the Proposed Scheme, as noise levels associated with general construction activities would attenuate to close to background levels at that distance and beyond. Noisy works associated with the construction of the Proposed Scheme include road resurfacing at watercourse crossings e.g., Grand Canal and River Dodder road crossing. Albeit temporary, these potential impacts could occur to such a degree that the conservation objectives of the Wicklow Mountains SAC are undermined.

213 Otter are known to tolerate human disturbance under certain circumstances<sup>21</sup>. There are numerous records of otter within the urban Dublin area, which suggests a relatively high level of habituation to human disturbance and noise by otter<sup>13</sup>. As construction works will typically be undertaken during normal daylight working hours and otter are generally nocturnal in habit and can (in many circumstances) tolerate high levels of human presence and disturbance, displacement of otter from their habitat is extremely unlikely to affect the local otter population.

214 Therefore, there is no potential for the Proposed Scheme to result in significant effects which could have implications for the conservation objectives of Wicklow Mountains SAC as a result of disturbance / displacement impacts.

Environment Agency (2010) Fifth Otter Survey of England 2009-2012. Full Technical Report. Environment Agency, UK.

Irish Wildlife Trust (2012) Cork City Urban Otter Survey 2011-2012. Irish Wildlife Trust.

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<sup>&</sup>lt;sup>20</sup> This is consistent with Transport Infrastructure Ireland (TII) guidance (*Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes* and *Guidelines for the Treatment of Badgers prior to the Construction of National Road Schemes*) documents. This is a precautionary distance, and likely to be moderated by the screening effect provided by surrounding vegetation and buildings, with the actual ZoI of construction related disturbance likely to be much less in reality.

<sup>&</sup>lt;sup>21</sup> Bailey, M. and Rochford, J. (2006) *Otter Survey of Ireland 2004 / 2005 Irish Wildlife Manuals, No. 23*. National Parks and Wildlife Service, Department of Environment, Heritage and Local Government, Dublin, Ireland.



# 7.4.3.3 Summary

215 Table 18 presents a summary of the potential impacts and effects of the Proposed Scheme on the Qis of Wicklow Mountains SAC and how these impacts relate to affecting the site's conservation objectives.



Table 18: Potential Impacts / Effects on the Conservation Objectives of Wicklow Mountains SAC

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Wicklow Mountains SAC <sup>22</sup>			
Otter  To maintain the favourable conservation condition of Otter in Wicklow Mountain	ns SAC, which is defined as follows:		
Distribution / Percentage positive survey sites / No significant decline	Yes	Yes	No
Extent of terrestrial habitat / Hectares / No significant decline.	An accidental pollution event during construction or	The mitigation measures described in	
Extent of freshwater (river) habitat / Kilometres / No significant decline.	operation could affect surface water downstream.  An accidental pollution event of a sufficient	Section 7.1.4.1 to protect water quality in the receiving environment will ensure	
Extent of freshwater (lake) habitat / Hectares / No significant decline	magnitude, either alone or cumulatively with other	that surface water quality in the	
Couching sites and holts / Number / No significant decline	pollution sources, could potentially affect the otter population through direct contact with pollutants or	downstream environment is protected during construction and operation of the	
Fish biomass available / Kilograms / No significant decline	a decline in fish prey.	Proposed Scheme.	
Barriers to connectivity / Number / No significant increase	Noise, vibration and increased works, with the proposed construction, particularly if required at night-time (around existing bridges crossing watercourses) which otter utilise could potentially result in negative impacts to QI otter populations.  The mitigation measures described Section 7.4.4 to manage a range of potential disturbance risk will minimate the potential impacts to QI otter population.		

<sup>&</sup>lt;sup>22</sup> As Annex I QI habitats for which this SAC has been designated are not at risk of effects arising from the Proposed Scheme, they have not been included in Table 18.



#### 7.4.4 Mitigation Measures

216 This section presents the mitigation measures that will be implemented during Construction and Operational Phases to avoid or reduce the potential impacts of the Proposed Scheme on Wicklow Mountains SAC. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

## Measures to Protect Surface Water Quality during Construction

217 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during construction of the Proposed Scheme.

#### Measures to Protect Surface Water Quality during Operation

218 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during operation of the Proposed Scheme.

## Measures to Reduce the Loss of Breeding / Resting Sites of Otter

- 219 Although there were no signs of otter habitation recorded within the footprint of the Proposed Scheme during field surveys, otter could potentially establish new holt or couch sites within the footprint of the Proposed Scheme in the interim. Therefore, the NTA will ensure that a confirmatory preconstruction check of all suitable otter habitat will be completed within 12 months prior to any construction works commencing.
- 220 The presence of any new holt / couch sites will be treated and / or protected in accordance with the Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes (NRA, 2006).

## Measures to Prevent Injury / Mortality Impacts to Otter

- 221 To protect otters from indirect harm during construction, where practicable open excavations will be covered when not in use and backfilled as soon as practicable by the appointed contractor.
- 222 Excavations will also be covered at night, where practicable, and any deep excavations which must be left open will have appropriate egress ramps in place to allow mammals to safely exit should they fall in.
- 223 Fencing requirements as per the *Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes* (NRA, 2006) will be erected around the Construction Compounds and other working areas which are in close proximity to significant watercourses and have suitable roaming territory for otter.

#### Measures to Reduce Lighting Impacts to Otter

- 224 Security lighting in active works areas in close proximity to watercourses with known otter activity will be designed in conjunction with a suitably qualified ecologist to minimise light spill. Similarly, where any new or amended lighting design is required at a watercourse crossing, it should be cognisant of downward light-spill onto watercourses. Measures to reduce light spill may include the following:
  - The use of sensor / timer triggered lighting;
  - LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability;
  - Column heights should be considered to minimise light spill; and,
  - Accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only where needed.

## 7.4.5 Residual Impacts

225 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable



conservation condition, of the Qis of Wicklow Mountains SAC, and there are, therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of Wicklow Mountains SAC. As is confirmed by the WFD Assessment for the Proposed Scheme (refer to Appendix V of this NIS), the Proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

## 7.4.6 Conclusion of Assessment for Wicklow Mountains SAC

226 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the Qis of Wicklow Mountains SAC, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the Qis, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) on the integrity of Wicklow Mountains SAC.

## 7.5 Howth Head Coast SPA [004113], Dalkey Islands SPA [004172] and Rockabill SPA [004014]

#### 7.5.1 Ecological Baseline Description for Howth Head Coast SPA

227 The Natura 2000 Standard Data Form (NPWS, 2020l) lists the SPA as a rocky headland on the northern side of Dublin Bay. The site comprises approximately 3km of sea cliff, varying between 60m and 90m in height. Howth Head Coast SPA is of importance to breeding seabirds. This SPA is designated for its population of breeding kittiwake *Rissa tridactyla*. There are also nationally important populations of breeding razorbill *Alca torda* and black guillemot *Cepphus grylle*, and a regionally important population of common guillemot *Uria aalge*. The cliffs also support a breeding pair of peregrine falcon, a species listed on Annex I of the Birds Directive. Threats to the site include walking, horse-riding and non-motorised vehicles, as well as fire and fire suppression.

#### 7.5.2 Ecological Baseline Description for Dalkey Islands SPA

The Natura 2000 Standard Data Form (NPWS, 2020k) lists the site as an important site for both breeding and staging tern species. This SPA is designated for breeding terns and there is a well-established colony of common tern *Sterna hirundo* and smaller numbers of Arctic tern *Sterna paradisaea* and roseate tern *Sterna dougallii*. The site along with other parts of south Dublin Bay are used by the three tern species as a major post-breeding / pre-migration autumn roost area, populations are linked to additional roost areas across Dublin Bay. Terns are present between July and September with up to 2000 individuals recorded. At the time of designation, the site supported a variable population of tern species year to year. Common tern is the most dominant species with 62 pairs recorded in 2003, and 24 pairs of Arctic tern. Roseate terns are considered few, with 11 pairs recorded in 2004. The site also has breeding great black-backed gull *Larus marinus*, shelduck *Tadorna tadorna* and oystercatcher *Haematopus ostralegus*. The site is known to be frequented in winter by significant numbers of turnstone *Arenaria interpres* and purple sandpiper *Calidris maritima*. Threats to the site include urbanisation and human habitation, human intrusions and disturbances, and agriculture.

## 7.5.3 Ecological Baseline Description for Rockabill SPA

229 The Natura 2000 Standard Data Form (NPWS, 2020d) lists the site as an internationally important tern colony. It supports the largest population of roseate tern *Sterna dougallii* in north-western Europe amounting to 1,093 pairs in 2010, and the largest colony of common tern *Sterna hirundo* in the country, with 1,940 pairs recorded in 2010. There is also a significant colony of Arctic tern *Sterna paradisaea*, with 250 pairs recorded in 2010. With management for the benefit of terns, numbers of all three species have been steadily increasing since 1989. Rockabill also supports a nationally important population of black guillemot *Cepphus grille* and a small colony of kittiwake *Rissa tridactyla*.



- 7.5.4 Special Conservation Interests and Conservation Objectives of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA
- 230 The SCIs of Howth Head Coast SPA, Dalkey Islands SPA, and Rockabill SPA and the overall conservation objective, are listed in Table 19.

Table 19: Special Conservation Interests and Conservation Objectives of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA

Special Conservation Interest(s)	Conservation Objective(s)
Howth Head Coast SPA [004113] A188 Kittiwake <i>Rissa tridactyla</i>	To maintain or restore the favourable conservation condition of the bird species listed as SCIs for this SPA.
S.I. No. 185/2012 – European Communities (Conservation of Wild Birds (Howth Head Coast Special Protection Area 004113)) Regulations 2012.	
NPWS (2022d) Conservation objectives for Howth Head Coast SPA [004113]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.	
Dalkey Islands SPA [004172]	To maintain or restore the favourable
A192 Roseate Tern Sterna dougallii	conservation condition of the bird species listed as SCIs for this SPA.
A193 Common Tern Sterna hirundo	as sols for this SPA.
A194 Arctic Tern Sterna paradisaea	
S.I. No. 238/2010 – European Communities (Conservation of Wild Birds (Dalkey Islands Special Protection Area 004172)) Regulations 2010	
NPWS (2022a) Conservation objectives for Dalkey Islands SPA [004172]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.	
Rockabill SPA [004014]	To maintain or restore the favourable
A148 Purple Sandpiper <i>Calidris maritima</i>	conservation condition of the bird species listed
A192 Roseate Tern Sterna dougallii	as SCIs for this SPA.
A193 Common Tern Sterna hirundo	
A194 Arctic Tern Sterna paradisaea	
S.I. No. 94/2012 – European Communities (Conservation of Wild Birds (Rockabill Special Protection Area 004014)) Regulations 2012.  NPWS (2013j) Conservation Objectives: Rockabill SPA 004014.  Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	

- 231 In conjunction with considering the generic conservation objective for these SPAs "To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA", the site-specific conservation objectives document for Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA also informed this assessment.
- 232 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the SCIs within these European sites. Affecting the conservation condition of the SCIs is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the SCIs of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA are presented in Section 7.5.5.2.



### 7.5.5 Examination and Analysis of Potential Direct and Indirect Impacts

- 233 The direct and / or indirect impact by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the SCIs of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA is:
  - Habitat degradation / effects on QI / SCI species as a result of hydrological impacts.

## 7.5.5.1 Habitat Degradation / Effects on QI / SCI Species as a Result of Hydrological Impacts

- 234 The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses five watercourses: the Grand Canal, River Dodder, Brewery Stream, Shanganagh River, and Rathmichael Stream, and ends on the northern bank of the River Dargle; and is hydrologically connected to the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WwTP, all of which drain to Dublin Bay.
- 235 Therefore, (albeit unlikely) this reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within these European sites, which in turn would negatively affect the SCI bird species that utilise these habitats as foraging and / or roosting habitat. It could also negatively affect the quantity and quality of prey available to SCI bird species. These potential impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of Howth Head Coast SPA, Dalkey Island SPA and Rockabill SPA.

## 7.5.5.2 Summary

236 Table 20 presents a summary of the potential impacts and effects of the Proposed Scheme on the SCIs of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA, and how these impacts relate to affecting the sites' conservation objectives.



Table 20: Potential Impacts / Effects on the Conservation Objectives of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA

Conservation Objectives	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Attribute / Measure / Target		Requirea?	
Howth Head Coast SPA			
Kittiwake ( <i>Rissa tridactyla</i> ) [A188]  There is a site-specific conservation objectives document available for this below have been developed based on the specific conservation objectives	· · · · · · · · · · · · · · · · · · ·		tributes, measures and targets
Breeding population abundance: apparently occupied nests (AONs) / Number / No significant decline	Yes An accidental pollution event during	Yes The mitigation measures	No
Productivity rate / Mean number / No significant decline	construction or operation could affect	described in Section 7.1.4.1 to	
Distribution: breeding colonies / Number; location; area (hectares) / No significant decline	surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively	protect water quality in the receiving environment will ensure that surface water	
Prey biomass available / Kilogrammes / No significant decline	with other pollution sources, could	quality in Dublin Bay is	
Barriers to connectivity / Number; location; shape; area (hectares) / No significant increase	prey fish species and the quality the of	protected during construction and operation of the Proposed Scheme.	
Disturbance at the breeding site / Level of impact / No significant increase	SCI bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Screme.	
Dalkey Islands SPA			
Roseate Tern (Sterna dougallii) [A192]			
There is a site-specific conservation objectives document available for this below have been developed based on the specific conservation objectives			
Passage population: individuals / Number / No significant decline	Yes	Yes	No
Distribution: roosting areas / Number; location; area (hectares) / No significant decline	An accidental pollution event during construction or operation could affect	The mitigation measures described in Section 7.1.4.1 to	
Prey biomass available / Kilogrammes / No significant decline	surface water downstream in Dublin Bay.  An accidental pollution event of a sufficient	protect water quality in the receiving environment will	
Barriers to connectivity / Number; location; shape; area (hectares) / No significant increase	magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality and	ensure that surface water quality in Dublin Bay is	
Disturbance at roosting site / Level of impact / Human activities should occur at levels that do not adversely affect the numbers of roseate tern among the post-breeding aggregation of terns		protected during construction and operation of the Proposed Scheme.	



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?		
	Common Tern (Sterna hirundo) [A193] There is a site-specific conservation objectives document available for this SPA, however there are no specific attributes or targets defined. Therefore, the attributes, measures and targets below have been developed based on the specific conservation objectives available for common tern in the South Dublin Bay and River Tolka Estuary SPA [004024].				
Breeding population abundance: apparently occupied nests (AONs) / Number / No significant decline	Yes An accidental pollution event during	Yes The mitigation measures	No		
Productivity rate: fledged young per breeding pair / Mean number / No significant decline	construction or operation could affect surface water downstream in Dublin Bay.	described in Section 7.1.4.1 to protect water quality in the			
Passage population: individuals / Number / No significant decline	An accidental pollution event of a sufficient magnitude, either alone or cumulatively	receiving environment will ensure that surface water			
Distribution: breeding colonies / Number; location; area (Hectares) / No significant decline	with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality and	quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.			
Distribution: roosting areas / Number; location; area (Hectares) / No significant decline					
Prey biomass available / Kilogrammes / No significant decline					
Barriers to connectivity / Number; location; shape; area (hectares) / No significant increase					
Disturbance at breeding site / Level of impact / Human activities should occur at levels that do not adversely affect the breeding common tern population					
Disturbance at roosting site / Level of impact / Human activities should occur at levels that do not adversely affect the numbers of common tern among the post-breeding aggregation of terns					
Arctic Tern (Sterna paradisaea) [A194]					
There is a site-specific conservation objectives document available for this below have been developed based on the specific conservation objectives					
Passage population / Number of individuals / No significant decline	Yes	Yes	No		
Distribution: roosting areas / Number; location; area (hectares) / No significant decline	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could	The mitigation measures described in Section 7.1.4.1 to			
Prey biomass available / Kilogrammes / No significant decline		protect water quality in the receiving environment will			
Barriers to connectivity / Number; location; shape; area (hectares) / No significant increase		ensure that surface water quality in Dublin Bay is			



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Disturbance at roosting site / Level of impact / Human activities should occur at levels that do not adversely affect the numbers of Arctic tern among the post-breeding aggregation of terns	potentially affect the quantity and quality of prey fish species and the quality and suitability of roosting sites within the SPA.	protected during construction and operation of the Proposed Scheme.	
Rockabill SPA			
Purple Sandpiper (Calidris maritima) [A148]  To maintain the favourable conservation condition of Purple Sandpiper in	Rockabill SPA, which is defined as follows:		
Population trend / Percentage change / Long term population trend stable or increasing	Yes An accidental pollution event during	Yes The mitigation measures	No
Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing or intensity of use of areas by purple sandpiper other than that occurring from natural patterns of variation	construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect this SCI species through direct contact with pollutants and / or a	described in Section 7.1.4.1 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.	
Roseate Tern (Sterna dougallii) [A192]			
To maintain the favourable conservation condition of Roseate Tern in Roc  Breeding population abundance: apparently occupied nests (AONs) /  Number / No significant decline	Yes	Yes	No
Productivity rate: fledged young per breeding pair / Mean number / No significant decline	construction or operation could affect surface water downstream in Dublin Bay.  An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect this SCI species through direct contact with pollutants and / or a	The mitigation measures described in Section 7.1.4.1 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.	
Distribution: breeding colonies / Number; location; area (hectares) / No significant decline			
Prey biomass available / Kilogrammes / No significant decline			
Barriers to connectivity / Number; location; shape; area (hectares) / No significant increase			
Disturbance at breeding site / Level of impact / Human activities should occur at levels that do not adversely affect the breeding roseate tern population			



Conservation Objectives	Potential Impacts Requiring Mitigation?	Are Mitigation Measures	Residual Impacts?		
Attribute / Measure / Target		Required?			
• • • •	Common Tern (Sterna hirundo) [A193]				
To maintain the favourable conservation condition of Common Tern in Ro	ckabill SPA, which is defined as follows:				
Breeding population abundance: apparently occupied nests (AONs) / Number / No significant decline	Yes An accidental pollution event during	Yes The mitigation measures	No		
Productivity rate: fledged young per breeding pair / Mean number / No significant decline	construction or operation could affect surface water downstream in Dublin Bay.	described in Section 7.1.4.1 to protect water quality in the			
Distribution: breeding colonies / Number; location; area (Hectares) / No significant decline	An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could	receiving environment will ensure that surface water quality in Dublin Bay is			
Prey biomass available / Kilogrammes / No significant decline	potentially affect this SCI species through	protected during construction			
Barriers to connectivity / Number; location; shape; area (hectares) / No significant increase	decline in the quantity and quality of prey	and operation of the Proposed Scheme.			
Disturbance at breeding site / Level of impact / Human activities should occur at levels that do not adversely affect the breeding common tern population	fish species.				
Arctic Tern (Sterna paradisaea) [A194]					
To maintain the favourable conservation condition of Arctic Tern in Rocka	bill SPA, which is defined as follows:				
Breeding population abundance: apparently occupied nests (AONs) / Number / No significant decline	Yes  An accidental pollution event during construction or operation could affect	Yes The mitigation measures described in Section 7.1.4.1 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.	No		
Productivity rate: fledged young per breeding pair / Mean number / No significant decline	surface water downstream in Dublin Bay. An accidental pollution event of a sufficient				
Distribution: breeding colonies / Number; location; area (Hectares) / No significant decline	magnitude, either alone or cumulatively with other pollution sources, could potentially affect this SCI species through				
Prey biomass available / Kilogrammes / No significant decline	direct contact with pollutants and / or a				
Barriers to connectivity / Number; location; shape; area (hectares) / No significant increase	decline in the quantity and quality of prey fish species.				
Disturbance at breeding site / Level of impact / Human activities should occur at levels that do not adversely affect the breeding common tern population					



#### 7.5.6 Mitigation Measures

237 This section presents the mitigation measures that will be implemented during Construction and Operational Phases to avoid or reduce the potential impacts of the Proposed Scheme on Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

#### Measures to Protect Surface Water Quality during Construction

238 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during construction of the Proposed Scheme.

#### Measures to Protect Surface Water Quality during Operation

239 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during operation of the Proposed Scheme.

## 7.5.7 Residual Impacts

240 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the SCIs of Howth Head Coast SPA, Dalkey Islands SPA, and Rockabill SPA, and there are, therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA. As is confirmed by the WFD Assessment for the Proposed Scheme (refer to Appendix V of this NIS), the Proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

### 7.5.8 Conclusion of Assessment for Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA

241 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the SCIs of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the SCIs, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA.

#### 7.6 North Bull Island SPA [004006]

# 7.6.1 Ecological Baseline Description for North Bull Island SPA

242 The Natura 2000 Standard Data Form (NPWS, 2020e) lists the SPA as one of the top ten sites in the country for wintering waterfowl. It provides important feeding and roosting habitat for bird species listed as SCIs for the site and supports internationally important populations of light-bellied brent goose and bar-tailed godwit. The quality of the estuarine habitats in the SPA are considered to be very good, part of which are designated as North Dublin Bay SAC. There are no serious imminent threats to the wintering birds. Threats to the site include oil pollution from Dublin Port along with localised commercial bait digging, and disturbance from activities such as sailing, walkers and dogs.

## 7.6.2 Special Conservation Interests and Conservation Objectives of North Bull Island SPA

243 The SCIs of North Bull Island SPA, and the overall conservation objective, are listed in Table 21.



Table 21: Special Conservation Interests and Conservation Objectives of North Bull Island SPA

Special Conservation Interest(s)	Conservation Objective(s)
North Bull Island SPA [004006]  A046 Light-bellied Brent Goose Branta bernicla hrota A048 Shelduck Tadorna tadorna A052 Teal Anas crecca A054 Pintail Anas acuta A056 Shoveler Anas clypeata A130 Oystercatcher Haematopus ostralegus A140 Golden Plover Pluvialis apricaria A141 Grey Plover Pluvialis squatarola A143 Knot Calidris canutus A144 Sanderling Calidris alba A149 Dunlin Calidris alpina A156 Black-tailed Godwit Limosa limosa A157 Bar-tailed Godwit Limosa lapponica A160 Curlew Numenius arquata A162 Redshank Tringa totanus A169 Turnstone Arenaria interpres A179 Black-headed Gull Chroicocephalus ridibundus A999 Wetlands	To maintain the favourable conservation condition of the bird species listed as SCIs for this SPA.  To maintain the favourable conservation condition of the wetland habitat in North Bull Island SPA as a resource for the regularly occurring migratory waterbirds that utilise it.
S.I. No. 211/2010 – European Communities (Conservation of Wild Birds (North Bull Island Special Protection Area 004006)) Regulations 2010.  NPWS (2015b) Conservation Objectives: North Bull Island SPA 004006. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	

- 244 In conjunction with considering the generic conservation objective for this SPA "To maintain the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA", the site-specific conservation objectives document for North Bull Island SPA also informed this assessment.
- 245 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the SCIs within the European site. Affecting the conservation condition of the SCIs is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the SCIs of North Bull Island SPA are presented in Section 7.6.3.4.

#### 7.6.3 Examination and Analysis of Potential Direct and Indirect Impacts

- 246 The direct and / or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the SCIs of North Bull Island SPA, are:
  - Habitat degradation / effects on SCI species as a result of hydrological impacts;
  - Habitat degradation as a result of introducing / spreading non-native invasive species; and,
  - Disturbance and displacement impacts.

## 7.6.3.1 Habitat Degradation / Effects on SCI Species as a Result of Hydrological Impacts

247 The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into



receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses five watercourses: the Grand Canal, River Dodder, Brewery Stream, Shanganagh River and Rathmichael Stream, and ends on the northern bank of the River Dargle; and is hydrologically connected to the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WwTP, all of which drain to Dublin Bay.

248 Therefore, (albeit unlikely) this reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within this European site, which in turn would negatively affect the SCI bird species that utilise these habitats as foraging and / or roosting habitat. It could also negatively affect the quantity and quality of prey available to SCI bird species. These potential impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of North Bull Island SPA.

#### 7.6.3.2 Habitat Degradation as a Result of Introducing / Spreading Non-Native Invasive Species

249 There are eighteen areas of Japanese knotweed, Himalayan balsam and giant hogweed, species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 present within, or in close proximity to, the Proposed Scheme. During construction and / or routine maintenance / management work, these species could potentially spread or be introduced to terrestrial habitats located within downstream European sites via surface water features. The introduction and / or spread of these non-native invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat. This in turn could undermine the conservation objectives of these European sites. The Proposed Scheme crosses five watercourses: the Grand Canal, River Dodder, Brewery Stream, Shanganagh River, and Rathmichael Stream, and ends on the northern bank of the River Dargle; and is hydrologically connected to the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WwTP, all of which drain to Dublin Bay. Therefore, there is potential for the Proposed Scheme to result in significant effects which could have implications for the conservation objectives of North Bull Island SPA as a result of non-native invasive species spread.

# 7.6.3.3 Disturbance and Displacement Impacts

- 250 A temporary and / or permanent increase in noise, vibration and / or human activity levels during the construction and / or operation of the Proposed Scheme could result in the disturbance to and / or displacement of SCI bird species present within footprint and / or the vicinity of the Proposed Scheme. Such disturbance effects would not be expected to extend beyond a distance of approximately 300m, as noise levels associated with general construction activities would attenuate to close to background levels at that distance and beyond.
- 251 Table 22 provides the indicative construction noise limits associated with different construction activities of the Proposed Scheme.



Table 22: Indicative Construction Noise Levels Associated with the Proposed Scheme

Activity	Predicted CNL at Stated Distance from Edge of Works (dB L <sub>Aeq,12hr</sub> or L <sub>Aeq,4hr</sub> )								
(dB)	10m	15m	20m	30m	50m	75m	100m	150m	250m
General Road works	79	76	73	69	65	61	59	55	51
Road Widening and Utility Diversion	83	80	77	73	69	65	63	59	55
Urban Realm landscaping	79	76	73	69	65	61	59	55	51
Construction Compounds	78	75	72	68	64	60	58	54	50
Boundary wall construction	80	77	74	70	66	62	60	56	49
Retaining walls	81	78	75	71	67	63	61	57	53
Bored/Auger Piling	80	77	74	70	66	62	60	56	52
Additional Structural Works (e.g., bridge construction)	83	80	77	73	69	65	63	59	55

- i.e. birds becoming alert and some behavioural changes (e.g., reduced feeding activity)—but birds would be expected to habituate to noise levels within this range. Noise levels above 70dB would likely result in birds moving out of the affected zone, or leaving the site altogether. This is supported by published findings (Wright *et al.*, 2010) which found that noise levels above 60dB resulted in behavioural responses, with birds abandoning the site in response to noise levels above 70dB. Thus, in respect of known inland feeding sites, Construction Phase noise disturbance may be in or above the levels that could provoke a response from birds. However, given that all the identified feeding sites are separated by buildings and or vegetation to varying degrees from the existing road corridor and the fact that the construction disturbance would also be temporary and discrete operating along existing transport corridors, it is concluded that the birds will not be subject to any substantial and long-term change and would be considered habituated to existing activities in the urban / suburban transport corridor.
- 253 The Operational Phase is not deemed to result in significant changes to existing noise levels due to the urban locality of the Proposed Scheme as an existing transport route.
- 254 The North Bull Island SPA is designated for wintering SCI species that are known to forage and / or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied Brent goose, golden plover, oystercatcher, curlew, black-headed gull and black-tailed godwit. There are no areas of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme, however there is one area of suitable foraging and / or roosting habitat available for these SCI bird species within the disturbance ZoI of the Proposed Scheme. Suitable wintering bird sites within the disturbance ZoI of the Proposed Scheme include Cabinteely / Kilbogget Park (located 290m from the Proposed Scheme), a site of major importance which was returned from the desk study (Scott Cawley Ltd., 2017).
- 255 As records of SCI bird species associated with the North Bull Island SPA have been returned from the desk study in the vicinity of the Proposed Scheme, it is possible that SCI bird species associated with the North Bull Island SPA currently utilise these and other suitable lands in the wider area. However, there is no potential for impacts to occur on any SCI bird species population of North Bull Island SPA, in light of their conservation objectives, as a consequence of the disturbance and / or displacement from inland feeding / roosting sites due to increased levels of disturbance due to the following reasons:
  - Very small numbers of SCI bird species were recorded on CBC0013WB002, suggesting that
    these species do not regularly use or rely upon these lands as foraging and / or roosting
    habitat, and are likely to use other suitable sites available in the wider area on a similar or
    more regular basis;



- Noise modelling carried out for the Proposed Scheme found that at 150m, noise levels are below 60dB. Therefore, noise produced as a result of construction activities would not provoke more than a moderate effect / level of response from birds at Cabinteely / Kilbogget Park:
- The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as St. Anne's Park, Clontarf Golf Club and Royal Dublin and St. Anne's golf course on the Bull Island; and
- Impacts associated with increased levels of disturbance will likely result in the temporary
  displacement of these SCI species to other suitable available lands in the locality, for a
  maximum of 30 months during construction works. Following the completion of
  construction, disturbance levels will likely return to baseline conditions and as a result these
  lands will become available again as foraging and / or roosting habitat for these SCI species.

## 7.6.3.4 Summary

256 Table 23 presents a summary of the potential impacts of the Proposed Scheme on the SCIs of North Bull Island SPA, and how these impacts relate to affecting the site's conservation objectives.



Table 23: Potential Impacts / Effects on the Conservation Objectives of North Bull Island SPA

Conservation Objectives	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Attribute / Measure / Target			
North Bull Island SPA			
Oystercatcher (Haematopus ostralegus) [A1 alba) [A144], Dunlin (Calidris alpina) [A149] (Tringa totanus) [A162], Turnstone (Arenar	nrota) [A046], Shelduck ( <i>Tadorna tadorna</i> ) [A048], Teal ( <i>Anas crecca</i> ) [A052], F L30], Golden Plover ( <i>Pluvialis apricaria</i> ) [A140], Grey Plover ( <i>Pluvialis squatara</i> I, Black-tailed Godwit ( <i>Limosa limosa</i> ) [A156], Bar-tailed Godwit ( <i>Limosa lappo ia interpres</i> ) [A169], Black-headed Gull ( <i>Chroicocephalus ridibundus</i> ) [A179] Indition of the SCIs of the SPA, which is defined as follows:	ola) [A141], Knot (Calidris canutus) [A143],	Sanderling (Calidris
Population trend / Percentage change / Long term population trend stable or increasing  Distribution / Range, timing and intensity	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal / coastal	Yes The mitigation measures described in Section 7.1.4.1 to protect water quality in the receiving environment will ensure that surface water quality in	No
of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the above-named species, other than that occurring from natural patterns of variation	habitats that support the SCI bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Dublin Bay is protected during construction and operation of the Proposed Scheme.	
	The introduction and / or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.	The mitigation measures described in Section 7.1.4.2 to prevent the introduction and / or spread of invasive species to downstream European sites during construction and operation of the Proposed Scheme.	
<b>Wetlands [A999]</b> To maintain the favourable conservation cor	ndition of wetland habitats within the SPA, which is defined as follows:		
Habitat area / Hectares / The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 1,713ha, other than that occurring from natural patterns of variation	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal / coastal habitats that support the SCI bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Yes The mitigation measures described in Section 7.1.4.1 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.	No



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
	The introduction and / or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.	The mitigation measures described in Section 7.1.4.2 to prevent the introduction and / or spread of invasive species to downstream European sites during construction and operation of the Proposed Scheme	



#### 7.6.4 Mitigation Measures

257 This section presents the mitigation measures that will be implemented during Construction and Operational Phases to avoid or reduce the potential impacts of the Proposed Scheme on North Bull Island SPA. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

## Measures to Protect Surface Water Quality during Construction

258 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during construction of the Proposed Scheme.

## Measures to Protect Surface Water Quality during Operation

259 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during operation of the Proposed Scheme.

#### Measures to Prevent the Spread of Non-native Invasive Species to Downstream European sites

260 The mitigation measures presented above in Section 7.1.4.2 will prevent the spread of invasive species to downstream European sites.

#### 7.6.5 Residual Impacts

With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the SCIs of North Bull Island SPA, and there are, therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of North Bull Island SPA. As is confirmed by the WFD Assessment for the Proposed Scheme (refer to Appendix V of this NIS), the Proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

### 7.6.6 Conclusion of Assessment for North Bull Island SPA

262 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the SCIs of North Bull Island SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the SCIs, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of North Bull Island SPA.

## 7.7 South Dublin Bay and River Tolka Estuary SPA [004024]

# 7.7.1 Ecological Baseline Description for South Dublin Bay and River Tolka Estuary SPA

263 The Natura 2000 Standard Data Form (NPWS, 2020p) states that the SPA possesses extensive intertidal flats, part of which are designated as South Dublin Bay SAC, and which supports wintering waterfowl as part of the wider Dublin Bay population. The site also supports an internationally important population of light-bellied Brent geese, feeding on the stands of *Zostera*. It hosts nationally important numbers of six species, is an important site for wintering gulls and is an autumn roosting site for a significant number of terns. The main threat to the site is land reclamation, with other threats including oil pollution from Dublin Port, commercial bait digging and disturbance by walkers and dogs.



- 7.7.2 Special Conservation Interests and Conservation Objectives of South Dublin Bay and River Tolka Estuary SPA
- 264 The SCIs of South Dublin Bay and River Tolka Estuary SPA, and the overall conservation objective, are listed in Table 24.

Table 24: Special Conservation Interests and Conservation Objectives of South Dublin Bay and River Tolka Estuary SPA

Special Conservation Interest(s)	Conservation Objective(s)
South Dublin Bay and River Tolka Estuary SPA [004024]	To maintain the favourable conservation
A046 Light-bellied Brent Goose Branta bernicla hrota	condition of the bird species listed as SCIs for
A130 Oystercatcher Haematopus ostralegus	this SPA.
A137 Ringed Plover Charadrius hiaticula	
A141 Grey Plover Pluvialis squatarola	To maintain or restore the favourable
A143 Knot Calidris canutus	conservation condition of the wetland habitat at South Dublin Bay and River Tolka Estuary SPA as
A144 Sanderling Calidris alba	a resource for the regularly occurring migratory
A149 Dunlin Calidris alpina	waterbirds that utilise it.
A157 Bar-tailed Godwit <i>Limosa lapponica</i>	
A162 Redshank <i>Tringa totanus</i>	
A179 Black-headed Gull Chroicocephalus ridibundus	
A192 Roseate Tern Sterna dougallii	
A193 Common Tern Sterna hirundo	
A194 Arctic Tern Sterna paradisaea	
A999 Wetlands	
S.I. No. 212/2010 – European Communities (Conservation of Wild Birds (South Dublin Bay and River Tolka Estuary Special Protection Area 004024)) Regulations 2010.	
NPWS (2015a) Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	

- 265 In conjunction with considering the generic conservation objective for this SPA "To maintain the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA", the site-specific conservation objectives document for South Dublin Bay and River Tolka Estuary SPA also informed this assessment.
- 266 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the SCIs within the European site. Affecting the conservation condition of the SCIs is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the SCIs of South Dublin Bay and River Tolka Estuary SPA are presented in Section 7.7.3.4.

## 7.7.3 Examination and Analysis of Potential Direct and Indirect Impacts

- 267 The direct and / or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the SCIs of South Dublin Bay and River Tolka Estuary SPA, are:
  - Habitat degradation / effects on SCI species as a result of hydrological impacts;
  - Habitat degradation as a result of introducing / spreading non-native invasive species; and,
  - Disturbance and displacement impacts.



### 7.7.3.1 Habitat Degradation / Effects on SCI Species as a Result of Hydrological Impacts

268 The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses five watercourses: the Grand Canal, River Dodder, Brewery Stream, Shanganagh River, and Rathmichael Stream, and ends on the northern bank of the River Dargle; and is hydrologically connected to the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WwTP, all of which drain to Dublin Bay.

269 Therefore, (albeit unlikely) this reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within this European site, which in turn would negatively affect the SCI bird species that utilise these habitats as foraging and / or roosting habitat. It could also negatively affect the quantity and quality of prey available to SCI bird species. These potential impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of South Dublin Bay and River Tolka Estuary SPA.

## 7.7.3.2 Habitat Degradation as a Result of Introducing / Spreading Non-Native Invasive Species

270 There are eighteen areas of Japanese knotweed, Himalayan balsam and giant hogweed, species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 present within, or in close proximity to, the Proposed Scheme. During construction and / or routine maintenance / management work, these species could potentially spread or be introduced to terrestrial habitats located within downstream European sites via surface water features. The introduction and / or spread of these non-native invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat. This in turn could undermine the conservation objectives of these European sites. The Proposed Scheme crosses five watercourses: the Grand Canal, River Dodder, Brewery Stream, Shanganagh River, and Rathmichael Stream, and ends on the northern bank of the River Dargle; and is hydrologically connected to the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WwTP, all of which drain to Dublin Bay. Therefore, there is potential for the Proposed Scheme to result in significant effects which could have implications for the conservation objectives of South Dublin Bay and River Tolka Estuary SPA as a result of non-native invasive species spread.

# 7.7.3.3 Disturbance and Displacement Impacts

- 271 A temporary and / or permanent increase in noise, vibration and / or human activity levels during the construction and / or operation of the Proposed Scheme could result in the disturbance to and / or displacement of SCI bird species present within footprint and / or the vicinity of the Proposed Scheme. Such disturbance effects would not be expected to extend beyond a distance of approximately 300m, as noise levels associated with general construction activities would attenuate to close to background levels at that distance and beyond.
- 272 Table 22 in Section 7.6.3.3 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.
- 273 The South Dublin Bay and River Tolka Estuary SPA is designated for wintering SCI species that are known to forage and / or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied Brent goose, oystercatcher and black-headed gull. There are no areas of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme, however there is one area of suitable foraging and / or roosting habitat available



for these SCI bird species within the disturbance ZoI of the Proposed Scheme. Suitable wintering bird sites within the disturbance ZoI of the Proposed Scheme include Cabinteely / Kilbogget Park (located 290m from the Proposed Scheme), a site of major importance which was returned from the desk study (Scott Cawley Ltd., 2017).

- 274 As records of SCI bird species associated with the South Dublin Bay and River Tolka Estuary SPA have been returned from the desk study in the vicinity of the Proposed Scheme, it is likely that SCI bird species associated with the South Dublin Bay and River Tolka Estuary SPA currently utilise these and other suitable lands in the wider area. However, no significant effects will occur on any SCI bird species population of South Dublin Bay and River Tolka Estuary SPA, in light of their conservation objectives, as a consequence of the disturbance and / or displacement from inland feeding / roosting sites due to increased levels of disturbance due to the following reasons:
  - The small numbers of species recorded utilising CBC0013WB002 during field surveys suggesting that these species do not regularly use or rely upon these lands as foraging and / or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
  - Noise modelling carried out for the Proposed Scheme found that at 150m, noise levels are below 60dB. Therefore, noise produced as a result of construction activities would not provoke more than a moderate effect / level of response from birds at Cabinteely / Kilbogget Park;
  - The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as St. Anne's Park, Clontarf Golf Club and Royal Dublin and St. Anne's golf course on the Bull Island; and
  - Impacts associated with increased levels of disturbance will likely result in the temporary
    displacement of these SCI species to other suitable available lands in the locality, for a
    maximum of 30 months during construction works. Following the completion of
    construction, disturbance levels will likely return to baseline conditions and as a result these
    lands will become available again as foraging and / or roosting habitat for these SCI species.

# 7.7.3.4 Summary

275 Table 25 presents a summary of the potential impacts of the Proposed Scheme on the SCIs of South Dublin Bay and River Tolka Estuary SPA, and how these impacts relate to affecting the site's conservation objectives.



Table 25: Potential Impacts / Effects on the Conservation Objectives of South Dublin Bay and River Tolka Estuary SPA

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
South Dublin Bay and River Tolka Estuary SPA			
	046], Oystercatcher ( <i>Haematopus ostralegus</i> ) [A130], Ringed Plover <i>pina</i> ) [A149], Bar-tailed Godwit ( <i>Limosa lapponica</i> ) [A157], Redshanl		
Note: Grey Plover ( <i>Pluvialis squatarola</i> ) [A141] is pro	posed for removal from the list of SCIs for the site so no site-specific of	conservation objective is included for the speci	ies
To maintain the favourable conservation condition o	f the SCIs of the SPA, which is defined as follows:		
Population trend / Percentage change / Long term population trend stable or increasing	Yes  An accidental pollution event during construction or operation	Yes The mitigation measures described in	No
Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the abovenamed species, other than that occurring from natural patterns of variation	could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal / coastal habitats that support the SCI bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.  The introduction and / or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Section 7.1.4.1 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.  The mitigation measures prescribed in Section 7.1.4.2 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	
Roseate Tern (Sterna dougallii) [A192]			
To maintain the favourable conservation condition o	f the SCIs of the SPA, which is defined as follows:		
Passage population: individuals / Number / No significant decline	Yes An accidental pollution event during construction or operation	Yes The mitigation measures described in	No
Distribution: roosting areas / Number; location; area (hectares) / No significant decline	could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone	Section 7.1.4.1 to protect water quality in the receiving environment will ensure that	
Prey biomass available / Kilogrammes / No significant decline	or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish and the quality the of intertidal / coastal habitats that support the SCI bird species of the	surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.	
Barriers to connectivity / Number; location; shape; area (hectares) / No significant increase	SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	,	



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Disturbance at roosting site / Level of impact / Human activities should occur at levels that do not adversely affect the numbers of roseate tern among the post-breeding aggregation of terns	The introduction and / or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.	The mitigation measures prescribed in Section 7.1.4.2 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	
Common Tern (Sterna hirundo) [A193]			
To maintain the favourable conservation condition of	of the SCIs of the SPA, which is defined as follows:		
Breeding population abundance: apparently occupied nests (AONs) / Number / No significant decline	Yes  An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An	Yes The mitigation measures described in Section 7.1.4.1 to protect water quality in	No
Productivity rate: fledged young per breeding pair / Mean number / No significant decline	accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially	the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.  The mitigation measures prescribed in Section 7.1.4.2 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	
Passage population: individuals / Number / No significant decline	intertidal / coastal habitats that support the SCI bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.  The introduction and / or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal		
Distribution: breeding colonies / Number; location; area (Hectares) / No significant decline			
Distribution: roosting areas / Number; location; area (Hectares) / No significant decline			
Prey biomass available / Kilogrammes / No significant decline			
Barriers to connectivity / Number; location; shape; area (hectares) / No significant increase			
Disturbance at breeding site / Level of impact / Human activities should occur at levels that do not adversely affect the breeding common tern population			
Disturbance at roosting site / Level of impact / Human activities should occur at levels that do not adversely affect the numbers of common tern among the post-breeding aggregation of terns			



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?			
Arctic Tern (Sterna paradisaea) [A194]  To maintain the favourable conservation condition of	Arctic Tern (Sterna paradisaea) [A194] To maintain the favourable conservation condition of the SCIs of the SPA, which is defined as follows:					
Passage population / Number of individuals / No significant decline	Yes  An accidental pollution event during construction or operation	Yes The mitigation measures described in	No			
Distribution: roosting areas / Number; location; area (hectares) / No significant decline	could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone	Section 7.1.4.1 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.				
Prey biomass available / Kilogrammes / No significant decline	or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish and the quality the of intertidal / coastal habitats that support the SCI bird species of the					
Barriers to connectivity / Number; location; shape; area (hectares) / No significant increase	SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	The mitigation measures prescribed in				
Disturbance at roosting site / Level of impact / Human activities should occur at levels that do not adversely affect the numbers of Arctic tern among the post-breeding aggregation of terns	The introduction and / or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Section 7.1.4.2 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.				
Wetlands [A999]  To maintain the favourable conservation condition of	of wetland habitats within the SPA, which is defined as follows:					
Habitat area / Hectares / The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 2,192ha, other than that occurring from natural patterns of variation	Yes  An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal / coastal habitats that support the SCI bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.  The introduction and / or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. This	Yes The mitigation measures described in Section 7.1.4.1 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.  The mitigation measures prescribed in Section 7.1.4.2 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.	No			



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
	in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.		



#### 7.7.4 Mitigation Measures

276 This section presents the mitigation measures that will be implemented during the Construction and Operational Phases to avoid or reduce the potential impacts of the Proposed Scheme on South Dublin Bay and River Tolka Estuary SPA. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

# Measures to Protect Surface Water Quality during Construction

277 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during construction of the Proposed Scheme.

# Measures to Protect Surface Water Quality during Operation

278 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during operation of the Proposed Scheme.

#### Measures to Prevent the Spread of Non-Native Invasive Species to Downstream European sites

279 The mitigation measures presented above in Section 7.1.4.2 will prevent the spread of invasive species to downstream European sites.

## 7.7.5 Residual Impacts

280 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the SCIs of South Dublin Bay and River Tolka Estuary SPA, and there are, therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of South Dublin Bay and River Tolka Estuary SPA. As is confirmed by the WFD Assessment for the Proposed Scheme (refer to Appendix V of this NIS), the Proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

## 7.7.6 Conclusion of Assessment for South Dublin Bay and River Tolka Estuary SPA

281 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the SCIs of South Dublin Bay and River Tolka Estuary SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the SCIs, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of South Dublin Bay and River Tolka Estuary SPA.

## 7.8 Malahide Estuary SPA [004025]

#### 7.8.1 Ecological Baseline Description for Malahide Estuary SPA

282 Malahide Estuary SPA comprises the estuary of the River Broadmeadow. According to the Natura 2000 Standard Data Form for the site (NPWS, 2020q), the estuary comprises of saltmarsh habitats and extensive intertidal flats. This site is of high importance for wintering waterfowl and supports a particularly good diversity of species. It provides both feeding and roosting areas for a range of wintering waterfowl. It supports an internationally important population of light-bellied Brent geese and nationally important populations of a further 12 species. The site is also an important and regular site for a range of autumn passage migrants.

## 7.8.2 Special Conservation Interests and Conservation Objectives of Malahide Estuary SPA

283 The SCIs of Malahide Estuary SPA, and the overall conservation objective, are listed in Table 26.



### Table 26: Special Conservation Interests and Conservation Objectives of Malahide Estuary SPA

Special Conservation Interest(s)	Conservation Objective(s)
Malahide Estuary SPA [004025] A005 Great Crested Grebe Podiceps cristatus A046 Light-bellied 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 A156 Black-tailed Godwit Limosa limosa A157 Bar-tailed Godwit Limosa lapponica A162 Redshank Tringa totanus A999 Wetlands	To maintain the favourable conservation condition of the bird species listed as SCIs for this SPA  To maintain the favourable conservation condition of the wetland habitat at Malahide Estuary SPA as a resource for the regularly occurring migratory waterbirds that utilise it.
S.I. No. 285/2011 – European Communities (Conservation of Wild Birds (Malahide Estuary Special Protection Area 004025)) Regulations 2011.  NPWS (2013g) Conservation Objectives: Malahide Estuary SPA 004025. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	

- 284 In conjunction with considering the generic conservation objective for this SPA "To maintain the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA", the site-specific conservation objectives document for Malahide Estuary SPA also informed this assessment.
- 285 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the SCIs within the European site. Affecting the conservation condition of the SCIs is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the SCIs of Malahide Estuary SPA are presented in Section 7.8.3.3.

### 7.8.3 Examination and Analysis of Potential Direct and Indirect Impacts

- 286 The direct and / or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the SCIs of Malahide Estuary SPA, are:
  - Habitat degradation / effects on SCI species as a result of hydrological impacts; and,
  - Disturbance and displacement impacts.

## 7.8.3.1 Habitat Degradation / Effects on SCI Species as a Result of Hydrological Impacts

287 The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses five watercourses: the Grand Canal,



River Dodder, Brewery Stream, Shanganagh River and Rathmichael Stream, and ends on the northern bank of the River Dargle; and is hydrologically connected to the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WwTP, all of which drain to Dublin Bay.

288 Therefore, (albeit unlikely) this reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within Dublin Bay. As a worst-case scenario there is potential to affect mobile SCI bird species that commute, forage and loaf in Dublin Bay. It could also negatively affect the quantity and quality of prey available to SCI bird species. These potential impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of Malahide Estuary SPA.

# 7.8.3.2 Disturbance and Displacement Impacts

- 289 A temporary and / or permanent increase in noise, vibration and / or human activity levels during the construction and / or operation of the Proposed Scheme could result in the disturbance to and / or displacement of SCI bird species present within footprint and / or the vicinity of the Proposed Scheme. Such disturbance effects would not be expected to extend beyond a distance of approximately 300m, as noise levels associated with general construction activities would attenuate to close to background levels at that distance and beyond.
- 290 Table 22 in Section 7.6.3.3 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.
- 291 Malahide Estuary SPA is designated for wintering SCI species that are known to forage and / or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied Brent goose, oystercatcher, golden plover and black-tailed godwit. There are no areas of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme, however there is one area of suitable foraging and / or roosting habitat available for these SCI bird species within the disturbance ZoI of the Proposed Scheme. Suitable wintering bird sites within the disturbance ZoI of the Proposed Scheme include Cabinteely / Kilbogget Park (located 290m from the Proposed Scheme), a site of major importance which was returned from the desk study (Scott Cawley Ltd., 2017).
- 292 It is possible that SCI bird species associated with the Malahide Estuary SPA currently utilise these and other suitable lands in the wider area. However, no significant effects will occur on any SCI bird species population of Malahide Estuary SPA, in light of their conservation objectives, as a consequence of the disturbance and / or displacement from inland feeding / roosting sites due to increased levels of disturbance due to the following reasons:
  - The small numbers of species recorded utilising CBC0013WB002 during field surveys suggesting that these species do not regularly use or rely upon these lands as foraging and / or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
  - Noise modelling carried out for the Proposed Scheme found that at 150m, noise levels are below 60dB. Therefore, noise produced as a result of construction activities would not provoke more than a moderate effect / level of response from birds at Cabinteely / Kilbogget Park;
  - The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as St. Anne's Park, Clontarf Golf Club and Royal Dublin and St. Anne's golf course on Bull Island; and
  - Impacts associated with increased levels of disturbance will likely result in the temporary displacement of these SCI species to other suitable available lands in the locality, for a maximum of 30 months during construction works. Following the completion of



construction, disturbance levels will likely return to baseline conditions and as a result these lands will become available again as foraging and / or roosting habitat for these SCI species.

# 7.8.3.3 Summary

293 Table 27 presents a summary of the potential impacts of the Proposed Scheme on the SCIs of Malahide Estuary SPA, and how these impacts relate to affecting the site's conservation objectives.



Table 27: Potential Impacts / Effects on the Conservation Objectives of Malahide Estuary SPA

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Malahide Estuary SPA			
(Bucephala clangula) [A067], Red-breasted Merganser	bellied Brent Goose ( <i>Branta bernicla hrota</i> ) [A046], Shelduck ( <i>Tada</i> ( <i>Mergus serrator</i> ) [A069], Oystercatcher ( <i>Haematopus ostralegus</i> ) 143], Dunlin ( <i>Calidris alpina</i> ) [A149], Black-tailed Godwit ( <i>Limosa l</i>	[A130], Golden Plover (Pluvialis apricaria)	[A140], Grey Plover
To maintain the favourable conservation condition of th	e SCIs of the SPA, which is defined as follows:		
Population trend / Percentage change / Long term population trend stable or increasing	Yes In a worst case scenario, an accidental pollution event during	Yes The mitigation measures described in	No
Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the abovenamed species, other than that occurring from natural patterns of variation	In a worst case scenario, an accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay, which SCI birds may utilise outside of their core SPA foraging areas. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality the of intertidal / coastal habitats that support the SCI bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Section 7.1.4.1 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.	
Wetlands [A999]			
To maintain the favourable conservation condition of we	etland habitats within the SPA, which is defined as follows:		
Habitat area / Hectares / The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 765ha, other than that occurring from natural patterns of variation	No There is no potential for impacts to occur on any habitats associated with the Malahide Estuary SPA as the Proposed Scheme is not hydrologically connected to the Malahide Estuary.	No	No



### 7.8.4 Mitigation Measures

294 This section presents the mitigation measures that will be implemented during the Construction and Operational Phases to avoid or reduce the potential impacts of the Proposed Scheme on Malahide Estuary SPA. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

### Measures to Protect Surface Water Quality during Construction

295 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during construction of the Proposed Scheme.

### Measures to Protect Surface Water Quality during Operation

296 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during operation of the Proposed Scheme.

#### 7.8.5 Residual Impacts

297 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the SCIs of Malahide Estuary SPA, and there are, therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of Malahide Estuary SPA. As is confirmed by the WFD Assessment for the Proposed Scheme (refer to Appendix V of this NIS), the Proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

### 7.8.6 Conclusion of Assessment for Malahide Estuary SPA

298 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the SCIs of Malahide Estuary SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the SCIs, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of Malahide Estuary SPA.

### 7.9 Baldoyle Bay SPA [004016]

#### 7.9.1 Ecological Baseline Description for Baldoyle Bay SPA

299 The Natura 2000 Standard Data Form (NPWS, 2020f) lists the SPA as an estuarine and bay system with habitats of variable but generally good quality. It has extensive mud and sand flats, often with a high organic content and salt marsh habitat. It has good salt marsh fringes where birds roost. The site supports wintering waterfowl, most notably an internationally important population of light-bellied Brent goose. It also supports nationally important populations of shelduck, pintail, ringed plover, golden plover, grey plover and bar-tailed godwit. At high tide, the shallow waters attract species such as great-crested grebe and red-breasted merganser. Threats to the site include hunting, eutrophication, bait-digging and human habitation / urbanisation.

### 7.9.2 Special Conservation Interests and Conservation Objectives of Baldoyle Bay SPA

300 The SCIs of Baldoyle Bay SPA, and the overall conservation objective, are listed in Table 28.



Table 28: Special Conservation Interests and Conservation Objectives of Baldoyle Bay SPA

Special Conservation Interest(s)	Conservation Objective(s)
Baldoyle Bay SPA [004016]  A046 Light-bellied Brent Goose Branta bernicla hrota  A048 Shelduck Tadorna tadorna  A137 Ringed Plover Charadrius hiaticula  A140 Golden Plover Pluvialis apricaria  A141 Grey Plover Pluvialis squatarola  A157 Bar-tailed Godwit Limosa lapponica  A999 Wetlands	To maintain the favourable conservation condition of the bird species listed as SCIs for this SPA  To maintain the favourable conservation condition of the wetland habitat at Baldoyle Bay SPA.
S.I. No. 275/2010 – European Communities (Conservation of Wild Birds (Baldoyle Bay Special Protection Area 004016)) Regulations 2010.	
NPWS (2013f) Conservation Objectives: Baldoyle Bay SPA 004016.  Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	

- 301 In conjunction with considering the generic conservation objective for this SPA "To maintain the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA", the site-specific conservation objectives document for Baldoyle Bay SPA also informed this assessment.
- 302 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the SCIs within the European site. Affecting the conservation condition of the SCIs is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the SCIs of Baldoyle Bay SPA are presented in Section 7.9.3.3.

## 7.9.3 Examination and Analysis of Potential Direct and Indirect Impacts

- 303 The direct and / or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the SCIs of Baldoyle Bay SPA, are:
  - Habitat degradation / effects on SCI species as a result of hydrological impacts; and,
  - Disturbance and displacement impacts.

### 7.9.3.1 Habitat Degradation / Effects on SCI Species as a Result of Hydrological Impacts

- 304 The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during the Construction, or Operational Phase, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses five watercourses: the Grand Canal, River Dodder, Brewery Stream, Shanganagh River and the Rathmichael Stream, and ends on the northern bank of the River Dargle; and is hydrologically connected to the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WwTP, all of which drain to Dublin Bay.
- 305 Therefore, (albeit unlikely) this reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within Dublin Bay. As a worst-case scenario there is potential to affect mobile SCI bird species that commute, forage and loaf in Dublin Bay. It could also negatively affect the quantity and quality of prey available to SCI



bird species. These potential impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of Baldoyle Bay SPA.

### 7.9.3.2 Disturbance and Displacement Impacts

- 306 A temporary and / or permanent increase in noise, vibration and / or human activity levels during the construction and / or operation of the Proposed Scheme could result in the disturbance to and / or displacement of SCI bird species present within footprint and / or the vicinity of the Proposed Scheme. Such disturbance effects would not be expected to extend beyond a distance of approximately 300m, as noise levels associated with general construction activities would attenuate to close to background levels at that distance and beyond.
- 307 Table 22 in Section 7.6.3.3 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.
- 308 Baldoyle Bay SPA is designated for a wintering SCI species that are known to forage and / or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied Brent goose and golden plover. There are no areas of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme, however there is one area of suitable foraging and / or roosting habitat available for these SCI bird species within the disturbance ZoI of the Proposed Scheme. Suitable wintering bird sites within the disturbance ZoI of the Proposed Scheme include Cabinteely / Kilbogget Park (located 290m from the Proposed Scheme), a site of major importance which was returned from the desk study (Scott Cawley Ltd., 2017).
- 309 As records of light-bellied Brent goose have been returned from the desk study in the vicinity of the Proposed Scheme, it is considered to be possible that light-bellied Brent goose associated with the Baldoyle Bay SPA currently utilise these and other suitable lands in the wider area. However, no significant effects will occur on any SCI bird species population of Baldoyle Bay, in light of their conservation objectives, as a consequence of the disturbance and / or displacement from inland feeding / roosting sites due to increased levels of disturbance due to the following reasons:
  - The small numbers of species recorded utilising CBC0013WB002 during field surveys suggesting that these species do not regularly use or rely upon these lands as foraging and / or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
  - Noise modelling carried out for the Proposed Scheme found that at 150m, noise levels are below 60dB. Therefore, noise produced as a result of construction activities would not provoke more than a moderate effect / level of response from birds at Cabinteely / Kilbogget Park;
  - The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as St. Anne's Park, Clontarf Golf Club and Royal Dublin and St. Anne's golf course on Bull Island; and
  - Impacts associated with increased levels of disturbance will likely result in the temporary
    displacement of these SCI species to other suitable available lands in the locality, for a
    maximum of 30 months during construction works. Following the completion of
    construction, disturbance levels will likely return to baseline conditions and as a result these
    lands will become available again as foraging and / or roosting habitat for these SCI species.

#### 7.9.3.3 Summary

310 Table 29 presents a summary of the potential impacts of the Proposed Scheme on the SCIs of Baldoyle Bay SPA, and how these impacts relate to affecting the site's conservation objectives.



Table 29: Potential Impacts / Effects on the Conservation Objectives of Baldoyle Bay SPA

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Baldoyle Bay SPA			
Light-bellied Brent Goose ( <i>Branta bernicla hrota</i> ) [ACGrey Plover ( <i>Pluvialis squatarola</i> ) [A141], Bar-tailed	946], Shelduck ( <i>Tadorna tadorna</i> ) [A048], Ringed Plover ( <i>Charadrius hia</i> Godwit ( <i>Limosa lapponica</i> ) [A157]	ticula) [A137], Golden Plover (Pl	luvialis apricaria) [A140],
To maintain the favourable conservation condition of	the SCIs of the SPA, which is defined as follows:		
Population trend / Percentage change / Long term population trend stable or increasing  Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the abovenamed species, other than that occurring from natural patterns of variation	Yes In a worst case scenario, an accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay, which SCI birds may utilise outside of their core SPA foraging areas. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality the of intertidal / coastal habitats that support the SCI bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	The mitigation measures described in Section 7.1.4.1 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.	No
Wetlands [A999]  To maintain the favourable conservation condition of wetland habitats within the SPA, which is defined as follows:  Habitat area / Hectares / The permanent area occupied by the wetland habitat should be stable occupied by the wetland by th			
and not significantly less than the area of 263ha, other than that occurring from natural patterns of variation	There is no potential for impacts to occur on any habitats associated with the Baldoyle Bay SPA as the Proposed Scheme is not hydrologically connected to Baldoyle Bay		



### 7.9.4 Mitigation Measures

311 This section presents the mitigation measures that will be implemented during the Construction and Operational Phases to avoid or reduce the potential impacts of the Proposed Scheme on Baldoyle Bay SPA. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

### Measures to Protect Surface Water Quality during Construction

312 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during construction of the Proposed Scheme.

### Measures to Protect Surface Water Quality during Operation

313 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during operation of the Proposed Scheme.

## 7.9.5 Residual Impacts

314 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the SCIs of Baldoyle Bay SPA, and there are, therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of Baldoyle Bay SPA. As is confirmed by the WFD Assessment for the Proposed Scheme (refer to Appendix V of this NIS), the proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

### 7.9.6 Conclusion of Assessment for Baldoyle Bay SPA

315 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the SCIs of Baldoyle Bay SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the SCIs, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of Baldoyle Bay SPA.

### 7.10 Rogerstown Estuary SPA [004015]

#### 7.10.1 Ecological Baseline Description for Rogerstown Estuary SPA

316 The Natura Standard Data Form (NPWS, 2020m) lists Rogerstown Estuary SPA as a relatively small estuarine system in north County Dublin. It has salt marsh and sand dune habitat as well as agricultural fields which have ornithological and botanical interest. It has extensive sand and mud flats and supports wintering waterfowl. It supports an internationally important population of light-bellied brent goose and nationally important populations of a further 15 species. It is an important and regular site for a range of autumn passage migrants. Little tern has bred in Rogerstown Estuary in the past and there are populations of three Red Data Book plant species present. The main threats to the site include disposal of household / recreational facility waste, non-native invasive species, disposal of industrial waste, fertilisation and landfill, land reclamation and drying out.

#### 7.10.2 Special Conservation Interests and Conservation Objectives of Rogerstown Estuary SPA

317 The SCIs of Rogerstown Estuary SPA, and the overall conservation objectives, are listed in Table 30.



Table 30: Special Conservation Interests and Conservation Objectives of Rogerstown Estuary SPA

Special Conservation Interest(s)	Conservation Objective(s)
Rogerstown Estuary SPA [004015] A043 Greylag Goose Anser anser A046 Brent Goose Branta bernicla hrota A048 Shelduck Tadorna tadorna A056 Shoveler Anas clypeata A130 Oystercatcher Haematopus ostralegus A137 Ringed Plover Charadrius hiaticula A141 Grey Plover Pluvialis squatarola A143 Knot Calidris canutus A149 Dunlin Calidris alpina A156 Black-tailed Godwit Limosa limosa A162 Redshank Tringa totanus A999 Wetlands	To maintain the favourable conservation condition of the bird species listed as SCIs for this SPA.  To maintain the favourable conservation condition of the wetland habitat at Rogerstown Estuary SPA as a resource for the regularly occurring migratory waterbirds that utilise it.
S.I. No. 271/2010 – European Communities (Conservation of Wild Birds (Rogerstown Estuary Special Protection Area 004015)) Regulations 2010.  NPWS (2013h) Conservation Objectives: Rogerstown Estuary SPA 004015. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	

- 318 In conjunction with considering the generic conservation objective for this SPA "To maintain the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA", the site-specific conservation objectives document for Rogerstown Estuary SPA also informed this assessment.
- 319 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the SCIs within the European site. Affecting the conservation condition of the SCIs is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the SCIs of Rogerstown Estuary SPA are presented in Section 7.10.3.3.

# 7.10.3 Examination and Analysis of Potential Direct and Indirect Impacts

- 320 The direct and / or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the SCIs of Rogerstown Estuary SPA, are:
  - Habitat degradation / effects on QI / SCI species as a result of hydrological impacts; and,
  - Disturbance and displacement impacts.

### 7.10.3.1 Habitat Degradation / Effects on SCI Species as a Result of Hydrological Impacts

321 The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during the Construction, or Operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses five watercourses: the Grand Canal, River Dodder, Brewery Stream, Shanganagh River and the Rathmichael Stream, and ends on the northern bank of the River Dargle; and is hydrologically connected to the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WwTP, all of which drain to Dublin Bay.



Therefore, (albeit unlikely) this reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within Dublin Bay. As a worst-case scenario there is potential to affect mobile SCI bird species that commute, forage and loaf in Dublin Bay. It could also negatively affect the quantity and quality of prey available to SCI bird species. These potential impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of Rogerstown Estuary SPA.

#### 7.10.3.2 Disturbance and Displacement Impacts

- 323 A temporary and / or permanent increase in noise, vibration and / or human activity levels during the construction and / or operation of the Proposed Scheme could result in the disturbance to and / or displacement of SCI bird species present within footprint and / or the vicinity of the Proposed Scheme. Such disturbance effects would not be expected to extend beyond a distance of approximately 300m, as noise levels associated with general construction activities would attenuate to close to background levels at that distance and beyond.
- 324 Table 22 in Section 7.6.3.3 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.
- 325 Rogerstown Estuary SPA is designated for wintering SCI species that are known to forage and / or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied Brent goose, oystercatcher and black-tailed godwit. There are no areas of suitable foraging and / or roosting habitat for these species within the footprint of the Proposed Scheme, however there is one area of suitable foraging and / or roosting habitat available for these SCI bird species within the disturbance ZoI of the Proposed Scheme. Suitable wintering bird sites within the disturbance ZoI of the Proposed Scheme include Cabinteely / Kilbogget Park (located 290m from the Proposed Scheme), a site of major importance which was returned from the desk study (Scott Cawley Ltd., 2017).
- 326 As records of light-bellied Brent goose have been returned from the desk study in the vicinity of the Proposed Scheme, it is considered to be possible that light-bellied Brent goose associated with the Rogerstown Estuary SPA currently utilise these and other suitable lands in the wider area. However, no significant effects will occur on any SCI bird species population of Rogerstown Estuary, in light of their conservation objectives, as a consequence of the disturbance and / or displacement from inland feeding / roosting sites due to increased levels of disturbance due to the following reasons:
  - The small numbers of species recorded utilising CBC0013WB002 during field surveys suggesting that these species do not regularly use or rely upon these lands as foraging and / or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
  - Noise modelling carried out for the Proposed Scheme found that at 150m, noise levels are below 60dB. Therefore, noise produced as a result of construction activities would not provoke more than a moderate effect / level of response from birds at Cabinteely / Kilbogget Park;
  - The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as St. Anne's Park, Clontarf Golf Club and Royal Dublin and St. Anne's golf course on the Bull Island; and,
  - Impacts associated with increased levels of disturbance will likely result in the temporary
    displacement of these SCI species to other suitable available lands in the locality, for a
    maximum of 30 months during construction works. Following the completion of
    construction, disturbance levels will likely return to baseline conditions and as a result these
    lands will become available again as foraging and / or roosting habitat for these SCI species.



# 7.10.3.3 Summary

327 Table 31 presents a summary of the potential impacts of the Proposed Scheme on the SCIs of Rogerstown Estuary SPA, and how these impacts relate to affecting the site's conservation objectives.



Table 31: Potential Impacts / Effects on the Conservation Objectives of Rogerstown Estuary SPA

Conservation Objectives	Potential Impacts Requiring Mitigation?	Are Mitigation Measures	Residual Impacts?
Attribute / Measure / Target		Required?	
Rogerstown Estuary SPA			
Greylag Goose (Anser anser) [A043], Light-bellied Brent Goose (Haematopus ostralegus) [A130], Ringed Plover (Charadrius hi Black-tailed Godwit (Limosa limosa) [A156] and Redshank (Tri	aticula) [A137], Grey Plover ( <i>Pluvialis squatarola</i> ) [A141], K		
To maintain the favourable conservation condition of the SCIs of	f the SPA, which is defined as follows:		
Population trend / Percentage change / Long term population trend stable or increasing  Distribution / Range, timing and intensity of use of areas / No	Yes In a worst case scenario, an accidental pollution event during construction or operation could affect surface	Yes The mitigation measures described in Section 7.1.4.1 to	No
significant decrease in the range, timing and intensity of use of areas y No of areas by all of the above-named species, other than that occurring from natural patterns of variation	water downstream in Dublin Bay, which SCI birds may utilise outside of their core SPA foraging areas. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality the of intertidal /	protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.	
Wetlands [A999]			
To maintain the favourable conservation condition of wetland h	nabitats within the SPA, which is defined as follows:		
Habitat area / Hectares / The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 646ha, other than that occurring from natural patterns of variation	No There is no potential for impacts to occur on any habitats associated with the Rogerstown Estuary SPA as the Proposed Scheme is not hydrologically connected to Rogerstown Estuary.	No	No



#### 7.10.4 Mitigation Measures

328 This section presents the mitigation measures that will be implemented during the Construction and Operational Phases to avoid or reduce the potential impacts of the Proposed Scheme on Rogerstown Estuary SPA. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

### Measures to Protect Surface Water Quality during Construction

329 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during construction of the Proposed Scheme.

### Measures to Protect Surface Water Quality during Operation

330 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during operation of the Proposed Scheme.

#### 7.10.5 Residual Impacts

331 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the SCIs of Rogerstown Estuary SPA, and there are, therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of Rogerstown Estuary SPA. As is confirmed by the WFD Assessment for the Proposed Scheme (refer to Appendix V of this NIS), the proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

### 7.10.6 Conclusion of Assessment for Rogerstown Estuary SPA

332 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the SCIs of Rogerstown Estuary SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the SCIs, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of Rogerstown Estuary SPA.

#### 7.11 Skerries Islands SPA [004122]

### 7.11.1 Ecological Baseline Description for Skerries Islands SPA

333 The Natura Standard Data Form (NPWS, 2020g) lists Skerries Islands SPA as a group of three small, uninhabited islands between approximately 0.5 and 1.5km off the north Dublin coastline. Habitats on the islands include low cliffs, rocky shores, sandflats and a shingle bar. Vegetation of the islands is dominated by rank grasses and brambles. The site has nationally important breeding colonies of cormorant, shag, herring gull and greater black-backed gull. In winter, the site is visited by a good diversity of waterfowl. It supports an internationally important population of light-bellied brent goose and nationally important populations of cormorant, purple sandpiper and turnstone.

#### 7.11.2 Special Conservation Interests and Conservation Objectives of Skerries Islands SPA

334 The SCIs of Skerries Islands SPA, and the overall conservation objective, are listed in Table 32.



Table 32: Special Conservation Interests and Conservation Objectives of Skerries Islands SPA

Special Conservation Interest(s)	Conservation Objective(s)
Skerries Islands SPA [004122]	To maintain the favourable conservation
A017 Cormorant Phalacrocorax carbo	condition of the bird species listed as SCIs for
A018 Shag Phalacrocorax aristotelis	this SPA.
A046 Light-bellied Brent Goose Branta bernicla hrota	
A148 Purple Sandpiper Calidris maritima	
A169 Turnstone Arenaria interpres	
A184 Herring Gull Larus argentatus	
S.I. No. 245/2010 – European Communities (Conservation of Wild Birds (Skerries Islands Special Protection Area 004122)) Regulations 2010.	
NPWS (2022g) Conservation objectives for Skerries Islands SPA [004122]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.	

- 335 In conjunction with considering the generic conservation objective for this SPA "To maintain the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA", site-specific conservation objectives documents have been compiled from other relevant European sites, including Rogerstown Estuary SPA (see Table 33) to inform this assessment.
- 336 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the SCIs within the European site. Affecting the conservation condition of the SCIs is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the SCIs of Skerries Islands SPA are presented in Section 7.11.3.3.

### 7.11.3 Examination and Analysis of Potential Direct and Indirect Impacts

- 337 The direct and / or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the SCIs of Skerries Islands SPA, are:
  - Habitat degradation / effects on SCI species as a result of hydrological impacts; and,
  - Disturbance and displacement impacts.

## 7.11.3.1 Habitat Degradation / Effects on SCI Species as a Result of Hydrological Impacts

- 338 The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during the Construction, or Operational Phases, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses six watercourses: the Grand Canal, River Dodder, Brewery Stream, Shanganagh River and the Rathmichael Stream, and ends on the northern bank of the River Dargle; and is hydrologically connected to the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WwTP, all of which drain to Dublin Bay.
- 339 Therefore, (albeit unlikely) this reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within Dublin Bay. As a worst-case scenario there is potential to affect mobile SCI bird species that commute, forage and loaf in Dublin Bay. It could also negatively affect the quantity and quality of prey available to SCI bird species. These potential impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of Skerries Islands SPA.



#### 7.11.3.2 Disturbance and Displacement Impacts

- 340 A temporary and / or permanent increase in noise, vibration and / or human activity levels during the construction and / or operation of the Proposed Scheme could result in the disturbance to and / or displacement of SCI bird species present within footprint and / or the vicinity of the Proposed Scheme. Such disturbance effects would not be expected to extend beyond a distance of approximately 300m, as noise levels associated with general construction activities would attenuate to close to background levels at that distance and beyond.
- 341 Table 22 in Section 7.6.3.3 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.
- 342 Skerries Islands SPA is designated for wintering SCI species that are known to forage and / or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied Brent goose and herring gull. There are no areas of suitable foraging and / or roosting habitat for these species within the footprint of the Proposed Scheme, however there is one area of suitable foraging and / or roosting habitat available for these SCI bird species within the disturbance ZoI of the Proposed Scheme. Suitable wintering bird sites within the disturbance ZoI of the Proposed Scheme include Cabinteely / Kilbogget Park (located 290m from the Proposed Scheme), a site of major importance which was returned from the desk study (Scott Cawley Ltd., 2017).
- 343 As records of SCI bird species associated with Skerries Islands SPA have been returned from the desk study in the vicinity of the Proposed Scheme (i.e., light-bellied Brent goose and herring gull), it is considered to be possible that SCI species associated with Skerries Islands SPA currently utilise these and other suitable lands in the wider area. However, there is no potential for impacts to occur on any SCI bird species population of Skerries Islands SPA, in light of their conservation objectives, as a consequence of the disturbance and / or displacement from inland feeding / roosting sites due to increased levels of disturbance due to the following reasons:
  - The small numbers of species recorded utilising CBC0013WB002 during field surveys suggesting that these species do not regularly use or rely upon these lands as foraging and / or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
  - Noise modelling carried out for the Proposed Scheme found that at 150m, noise levels are below 60dB. Therefore, noise produced as a result of construction activities would not provoke more than a moderate effect / level of response from birds at Cabinteely / Kilbogget Park;
  - The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as St. Anne's Park, Clontarf Golf Club and Royal Dublin and St. Anne's golf course on the Bull Island; and
  - Impacts associated with increased levels of disturbance will likely result in the temporary
    displacement of these SCI species to other suitable available lands in the locality, for a
    maximum of 30 months during construction works. Following the completion of
    construction, disturbance levels will likely return to baseline conditions and as a result these
    lands will become available again as foraging and / or roosting habitat for these SCI species.

## 7.11.3.3 Summary

344 Table 33 presents a summary of the potential impacts of the Proposed Scheme on the SCIs of Skerries Islands SPA, and how these impacts relate to the site's conservation objectives.



Table 33: Potential Impacts / Effects on the Conservation Objectives of Skerries Islands SPA

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?	
Skerries Islands SPA				
Turnstone (Arenaria interpres) [A169] and Herrin	Cormorant ( <i>Phalacrocorax</i> carbo) [A017], Shag <i>Phalacrocorax</i> aristotelis) [A018], Light-bellied Brent Goose ( <i>Branta bernicla hrota</i> ) [A046], Purple Sandpiper ( <i>Calidris maritima</i> ) [A148] Turnstone ( <i>Arenaria interpres</i> ) [A169] and Herring Gull ( <i>Larus argentatus</i> ) [A184]  There is no site-specific conservation objectives document available for this SPA. Therefore, the attributes, measures and targets below have been developed based on the specific			
conservation objectives available for Rogerstown B	Estuary SPA [004015]			
Population trend / Percentage change / Long term population trend stable or increasing	Yes In a worst case scenario, an accidental pollution event during	Yes The mitigation measures described in	No	
Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the above-named species, other than that occurring from natural patterns of variation	construction or operation could affect surface water downstream in Dublin Bay, which SCI birds may utilise outside of their core SPA foraging areas. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality the of intertidal / coastal habitats that support the SCI bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Section 7.1.4.1 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.		



#### 7.11.4 Mitigation Measures

345 This section presents the mitigation measures that will be implemented during the Construction and Operational Phases to avoid or reduce the potential impacts of the Proposed Scheme on Skerries Islands SPA. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

### Measures to Protect Surface Water Quality during Construction

346 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during construction of the Proposed Scheme.

## Measures to Protect Surface Water Quality during Operation

347 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during operation of the Proposed Scheme.

#### 7.11.5 Residual Impacts

348 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the SCIs of Skerries Islands SPA, and there are, therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of Skerries Islands SPA. As is confirmed by the WFD Assessment for the Proposed Scheme (refer to Appendix V of this NIS), the Proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

#### 7.11.6 Conclusion of Assessment for Skerries Islands SPA

349 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the SCIs of Skerries Islands SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the SCIs, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of Skerries Islands SPA.

## 7.12 Ireland's Eye SPA [004117] and Lambay Island SPA [004069]

#### 7.12.1 Ecological Baseline Description for Ireland's Eye SPA

350 According to the Natura 2000 Standard Data Form (NPWS, 2020h), this SPA is a small uninhabited island located approximately 1.5km north of Howth Head. The main habitat on the island is a mix of dry grassland and bracken. There are impressive cliff formations along the northern and eastern sides of the island. This SPA has a large seabird colony, with 11 species breeding regularly. It is designated for breeding populations of cormorant, herring gull, kittiwake, guillemot and razorbill. Major threats to the site include walking, horse-riding and non-motorised vehicles and leisure fishing.

# 7.12.2 Ecological Baseline Description for Lambay Island SPA

351 According to the Natura 2000 Standard Data Form (NPWS, 2020i), this SPA is an island located approximately 4km off the north Dublin coastline. Habitats present on the island include rocky shorelines, low tide sandflats and fertile grassland. The northern, eastern and southern shorelines consist of steep cliffs. The predominant land use of the island is cattle grazing. This SPA has one of the most important seabird colonies in Ireland, with 12 species breeding regularly. It has been designated for breeding populations of fulmar, cormorant, shag, greylag goose, lesser black-backed gull, herring gull, kittiwake, guillemot, razorbill and puffin.



- 7.12.3 Special Conservation Interests and Conservation Objectives of Ireland's Eye SPA and Lambay Island SPA
- 352 The SCIs of Ireland's Eye SPA and Lambay Island SPA, and the overall conservation objectives, are listed in Table 34.

Table 34: Special Conservation Interests and Conservation Objectives of Ireland's Eye SPA and Lambay Island SPA

Special Conservation Interest(s)	Conservation Objective(s)
Ireland's Eye SPA [004117]	To maintain or restore the favourable
A017 Cormorant Phalacrocorax carbo	conservation condition of the bird species listed
A184 Herring Gull Larus argentatus	as SCI for this SPA.
A188 Kittiwake <i>Rissa tridactyla</i>	
A199 Guillemot <i>Uria aalge</i>	
A200 Razorbill <i>Alca torda</i>	
S.I. No. 240/2010 – European Communities (Conservation of Wild Birds (Ireland's Eye Special Protection Area 004117)) Regulations 2010.  NPWS (2022e) Conservation objectives for Ireland's Eye SPA [004117]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.	
Lambay Island SPA [004069]	To maintain or retore the favourable
A009 Fulmar Fulmarus glacialis	conservation condition of the bird species listed
A017 Cormorant Phalacrocorax carbo	as SCI for this SPA.
A018 Shag Phalacrocorax aristotelis	
A043 Greylag Goose Anser anser	
A183 Lesser Black-backed Gull Larus fuscus	
A184 Herring Gull Larus argentatus	
A188 Kittiwake <i>Rissa tridactyla</i>	
A199 Guillemot <i>Uria aalge</i>	
A200 Razorbill Alca torda	
A204 Puffin Fratercula arctica	
S.I. No. 242/2010 – European Communities (Conservation of Wild Birds (Lambay Island Special Protection Area 004069)) Regulations 2010. NPWS (2022f) Conservation objectives for Lambay Island SPA [004069]. First Order Site-specific Conservation Objectives Version	
1.0. Department of Housing, Local Government and Heritage.	

- 353 In conjunction with considering the generic conservation objective for these SPAs "To maintain the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA", site-specific conservation objectives documents have been compiled from other relevant European sites (identified in Table 35) to inform this assessment
- 354 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the SCI within the European site. Affecting the conservation condition of the SCIs is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the SCIs of Ireland's Eye SPA and Lambay Island SPA are presented in Section 7.12.4.3.



#### 7.12.4 Examination and Analysis of Potential Direct and Indirect Impacts

- 355 The direct and / or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the SCIs of Ireland's Eye SPA and Lambay Island SPA, are:
  - Habitat degradation / effects on SCI species as a result of hydrological impacts; and
  - Disturbance and displacement impacts.

#### 7.12.4.1 Habitat Degradation / Effects on SCI Species as a Result of Hydrological Impacts

- 356 The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during the Construction, or Operational Phase, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses five watercourses: the Grand Canal, River Dodder, Brewery Stream, Shanganagh River and the Rathmichael Stream, and ends on the northern bank of the River Dargle; and is hydrologically connected to the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WwTP, all of which drain to Dublin Bay.
- 357 Therefore, (albeit unlikely) this reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within Dublin Bay. As a worst-case scenario there is potential to affect mobile SCI bird species that commute, forage and loaf in Dublin Bay. It could also negatively affect the quantity and quality of prey available to SCI bird species. These potential impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of Ireland's Eye SPA and Lambay Island SPA.

## 7.12.4.2 Disturbance and Displacement Impacts

- 358 A temporary and / or permanent increase in noise, vibration and / or human activity levels during the construction and / or operation of the Proposed Scheme could result in the disturbance to and / or displacement of SCI bird species present within footprint and / or the vicinity of the Proposed Scheme. Such disturbance effects would not be expected to extend beyond a distance of approximately, as noise levels associated with general construction activities would attenuate to close to background levels at that distance and beyond.
- 359 Table 22 in Section 7.6.3.3 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.
- 360 Ireland's Eye SPA and Lambay Island SPA are designated for breeding SCI gull species that are known to forage and / or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include black-headed gull, herring gull and lesser black-backed gull. There are no areas of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme, however there is one area of suitable foraging and / or roosting habitat available for these SCI bird species within the disturbance ZoI of the Proposed Scheme. Suitable wintering bird sites within the disturbance ZoI of the Proposed Scheme include Cabinteely / Kilbogget Park (located 290m from the Proposed Scheme), a site of major importance which was returned from the desk study (Scott Cawley Ltd., 2017).
- 361 As records of SCI bird species associated with Ireland's Eye SPA and Lambay Island SPA have been returned from the desk study in the vicinity of the Proposed Scheme (i.e., herring gull, black-headed gull and lesser black-backed gull), it is considered to be possible that these species currently utilise these and other suitable lands in the wider area. However, no significant effects will occur on any SCI bird species population of Ireland's Eye SPA or Lambay Island SPA, in light of their conservation



objectives, as a consequence of the disturbance and / or displacement from inland feeding / roosting sites due to increased levels of disturbance due to the following reasons:

- The small numbers of species recorded utilising CBC0013WB002 during field surveys suggesting that these species do not regularly use or rely upon these lands as foraging and / or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- Noise modelling carried out for the Proposed Scheme found that at 150m, noise levels are below 60dB. Therefore, noise produced as a result of construction activities would not provoke more than a moderate effect / level of response from birds at Cabinteely / Kilbogget Park;
- The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as St. Anne's Park, Clontarf Golf Club and Royal Dublin and St. Anne's golf course on the Bull Island; and
- Impacts associated with increased levels of disturbance will likely result in the temporary displacement of these SCI species to other suitable available lands in the locality, for a maximum of 30 months during construction works. Following the completion of construction, disturbance levels will likely return to baseline conditions and as a result these lands will become available again as foraging and / or roosting habitat for these SCI species.

### 7.12.4.3 Summary

362 Table 35 presents a summary of the potential impacts of the Proposed Scheme on the SCIs of Ireland's Eye SPA and Lambay Island SPA, and how these impacts relate to the sites' conservation objectives.



Table 35: Potential Impacts / Effects on the Conservation Objectives of Ireland's Eye SPA and Lambay Island SPA

Conservation Objectives	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Attribute / Measure / Target			
Ireland's Eye SPA			
Cormorant ( <i>Phalacrocorax carbo</i> ) [A017], Herring Gull ( <i>Lo</i> There is a First order site-specific conservation objectives targets below have been developed based on the specific	document available for this SPA, but it does not prov	ide detail on attributes and targets. Therefore, the	· •
Population trend / Percentage change / Long term population trend stable or increasing	Yes In a worst case scenario, an accidental pollution	Yes The mitigation measures described in Section	No
Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the above-named species, other than that occurring from natural patterns of variation	event during construction or operation could affect surface water downstream in Dublin Bay, which SCI birds may utilise outside of their core SPA foraging areas. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality the of intertidal / coastal habitats that support the SCI bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	7.1.4.1 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.	
Lambay Island SPA			
Fulmar [A009], Cormorant ( <i>Phalacrocorax carbo</i> ) [A017], Herring Gull ( <i>Larus argentatus</i> ) [A184], Kittiwake ( <i>Rissa t</i> There is a First -order site-specific conservation objectives	cridactyla) [A188], Guillemot (Uria aalge) [A199], Radocument available for this SPA but it does not prov	zorbill (Alca torda) [A200], Puffin (Fratercula arctidide detail on attributes and targets. Therefore, the	ica) [A204]
targets below have been developed based on the specific  Population trend / Percentage change / Long term population trend stable or increasing	Yes In a worst case scenario, an accidental pollution	Yes The mitigation measures described in Section	No
Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the above-named species, other than that occurring from natural patterns of variation	event during construction or operation could affect surface water downstream in Dublin Bay, which SCI birds may utilise outside of their core SPA foraging areas. An accidental pollution event of a sufficient magnitude, either alone or	7.1.4.1 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.	



Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the above-named species, other than that occurring from natural patterns of variation	cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality the of intertidal / coastal habitats that support the SCI bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.		



#### 7.12.5 Mitigation Measures

363 This section presents the mitigation measures that will be implemented during the Construction and Operational Phases to avoid or reduce the potential impacts of the Proposed Scheme on Ireland's Eye SPA or Lambay Island SPA. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

#### Measures to Protect Surface Water Quality during Construction

364 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during construction of the Proposed Scheme.

## Measures to Protect Surface Water Quality during Operation

365 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during operation of the Proposed Scheme.

#### 7.12.6 Residual Impacts

366 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the SCIs of Ireland's Eye SPA or Lambay Island SPA, and there are therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of Ireland's Eye SPA or Lambay Island SPA. As is confirmed by the WFD Assessment for the Proposed Scheme (refer to Appendix V of this NIS), the Proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

#### 7.12.7 Conclusion of Assessment for Ireland's Eye SPA or Lambay Island SPA

367 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the SCIs of Ireland's Eye SPA or Lambay Island SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the SCIs, it has been concluded that the Proposed Scheme poses no risk of adversely affecting (either directly or indirectly) the integrity of Ireland's Eye SPA or Lambay Island SPA.

## 7.13 The Murrough SPA [004186]

#### 7.13.1 Ecological Baseline Description for The Murrough SPA

368 According to the Natura 2000 Standard Data Form (NPWS, 2020j), this SPA comprises a coastal wetland complex stretching for 13km from Kilcoole train station southwards towards Wicklow town. The site extends between the 200m low water mark inland up to 1km in places. In terms of habitat diversity, it includes the coastal water, a shingle shore with some sand and cobble. The SPA is bisected by the Dublin Rosslare railway line which runs along the upper part of the shingle beach. Much of the low-lying land behind the railway is manged for agriculture including reclaimed wetland, although a number of wet and brackish marshes remain including Broad Lough at its southern end and the manged wetland complex associated with Kilcoole reserve. This extensive coastal wetland complex is considered oh high importance owing to the numbers and variety of waterfowl species that it holds in winter and on passage. Its shingle beach also supports the country largest breeding colony of little tern. The main threats listed for the site include: the presence of Railway lines, Fertilisation of agricultural lands and the presence of walkers, horse riders and non-motorised vehicles.

### 7.13.2 Special Conservation Interests and Conservation Objectives for The Murrough SPA

369 The SCIs of The Murrough SPA and the overall conservation objectives are listed in Table 36.



Table 36: Special Conservation Interests and Conservation Objectives of The Murrough SPA

Special Conservation Interest(s)	Conservation Objective(s)
The Murrough SPA [004186]  A001 Red-throated Diver Gavia stellata  A043 Greylag Goose Anser anser  A046 Light Bellied Brent Goose Branta bernicla hrota  A050 Wigeon Anas penelope  A052 Teal Anas crecca  A179 Black-headed Gull Chroicocephalus ridibundus  A162 Herring Gull Larus argentatus  A195 Little Tern Sterna albifrons  A999 Wetlands	To maintain the favourable conservation condition of the bird species listed as SCIs for this SPA.  To maintain or restore the favourable conservation condition of the wetland habitat at The Murrough SPA as a resource for the regularly occurring migratory waterbirds that utilise it.
S.I. No. 298/2011 – European Communities (Conservation of Wild Birds (The Murrough Special Protection Area 004186)) Regulations 2011.  NPWS (2022c) Conservation objectives for The Murrough SPA [004186]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.	

- 370 In conjunction with considering the generic conservation objective for this SPA "To maintain the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA", the site-specific conservation objectives documents have been compiled from other relevant European sites (identified in Table 37) to inform this assessment.
- 371 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the SCIs within the European site. Affecting the conservation condition of the SCIs would constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the SCIs in respect of The Murrough SPA are presented in Section 7.13.3.3.

## 7.13.3 Examination and Analysis of Potential Direct and Indirect Impacts

- 372 The direct and / or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the SCIs for The Murrough SPA are:
  - Habitat degradation / effects on SCI species as a result of hydrological impacts; and,
  - Disturbance and displacement impacts.

### 7.13.3.1 Habitat Degradation / Effects on SCI Species as a Result of Hydrological Impacts

- 373 The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during the Construction, or Operational Phases, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses five watercourses: the Grand Canal, River Dodder, Brewery Stream, Shanganagh River and the Rathmichael Stream, and ends on the northern bank of the River Dargle; and is hydrologically connected to the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WwTP, all of which drain to Dublin Bay.
- 374 Therefore, (albeit unlikely) this reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within Dublin Bay. As a worst-case scenario there is potential to affect mobile SCI bird species that commute, forage



and loaf in Dublin Bay. It could also negatively affect the quantity and quality of prey available to SCI bird species. These potential impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of the Murrough SPA.

#### 7.13.3.2 Disturbance and Displacement Impacts

- 375 A temporary and / or permanent increase in noise, vibration and / or human activity levels during the construction and / or operation of the Proposed Scheme could result in the disturbance to and / or displacement of SCI bird species present within footprint and / or the vicinity of the Proposed Scheme. Such disturbance effects would not be expected to extend beyond a distance of approximately 300m, as noise levels associated with general construction activities would attenuate to close to background levels at that distance and beyond.
- 376 Table 22 in Section 7.6.3.3 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.
- 377 The Murrough SPA is designated for wintering SCI species that are known to forage and / or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied Brent goose, black-headed gull and herring gull. There are no areas of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme, however there is one area of suitable foraging and / or roosting habitat available for these SCI bird species within the disturbance ZoI of the Proposed Scheme. Suitable wintering bird sites within the disturbance ZoI of the Proposed Scheme include Cabinteely / Kilbogget Park (located 290m from the Proposed Scheme), a site of major importance which was returned from the desk study (Scott Cawley Ltd., 2017).
- 378 As records of SCI bird species associated with The Murrough SPA have been returned from the desk study in the vicinity of the Proposed Scheme (i.e., light-bellied Brent goose, black-headed gull and herring gull), it is considered to be possible that SCI species associated with The Murrough SPA currently utilise these and other suitable lands in the wider area. However, there is no potential for impacts to occur on any SCI bird species population of The Murrough SPA, in light of their conservation objectives, as a consequence of the disturbance and / or displacement from inland feeding / roosting sites due to increased levels of disturbance due to the following reasons:
  - The small numbers of species recorded utilising CBC0013WB002 during field surveys suggesting that these species do not regularly use or rely upon these lands as foraging and / or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
  - Noise modelling carried out for the Proposed Scheme found that at 150m, noise levels are below 60dB. Therefore, noise produced as a result of construction activities would not provoke more than a moderate effect / level of response from birds at Cabinteely / Kilbogget Park;
  - The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as St. Anne's Park, Clontarf Golf Club and Royal Dublin and St. Anne's golf course on the Bull Island; and
  - Impacts associated with increased levels of disturbance will likely result in the temporary
    displacement of these SCI species to other suitable available lands in the locality, for a
    maximum of 30 months during construction works. Following the completion of
    construction, disturbance levels will likely return to baseline conditions and as a result these
    lands will become available again as foraging and / or roosting habitat for these SCI species.

#### 7.13.3.3 Summary

379 Table 37 presents a summary of the potential impacts of the Proposed Scheme on the SCIs of The Murrough SPA, and how these impacts affect the site's conservation objectives.



Table 37: Potential Impacts / Effects on the Conservation Objectives of The Murrough SPA

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
The Murrough SPA			
Red-throated Diver (Gavia stellata) [A001]; Greylag (	Goose ( <i>Anser anser</i> ) [A043]; Light-bellied Brent Goose ( <i>Branta belidibundus</i> ) [179]; Herring Gull ( <i>Larus argentatus</i> ) [184] Little Terr		
targets below have been developed based on the spec	tive document available for this SPA but it does not provide detail cific conservation objectives available for The Raven SPA [004019] .] (NPWS, 2015a); Wexford Harbour and Slobs SPA [004076] (NPW	(NPWS, 2012b); Rogerstown Estuary SPA [00	4015] (NPWS, 2013h);
Population trend / % change / Long term population trend stable or increasing	Yes In a worst case scenario, an accidental pollution event during	Yes The mitigation measures described in	No
Distribution / Number and range of areas used by waterbirds / There should be no significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation	construction or operation could affect surface water downstream in Dublin Bay, which SCI birds may utilise outside of their core SPA foraging areas. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality the of intertidal / coastal habitats that support the SCI bird species of the SPA. This could potentially affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Section 7.1.4.1 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.	
Wetlands [A999]			
To maintain the favourable conservation condition of	wetland habitats within the SPA, which is defined as follows:	,	T
Habitat area / Hectares / The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of the designated site, other than that occurring from natural patterns of variation	No	No	No



#### 7.13.4 Mitigation Measures

380 This section presents the mitigation measures that will be implemented during the Construction and Operational Phases to avoid or reduce the potential impacts of the Proposed Scheme on The Murrough SPA. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

#### Measures to Protect Surface Water Quality during Construction

381 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during construction of the Proposed Scheme.

#### Measures to Protect Surface Water Quality during Operation

382 The mitigation measures presented above in Section 7.1.4.1 will protect surface water quality during operation of the Proposed Scheme.

#### 7.13.5 Residual Impacts

383 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the SCIs of The Murrough SPA, and there are therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of The Murrough SPA. As is confirmed by the WFD Assessment for the Proposed Scheme (refer to Appendix V of this NIS), the Proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

#### 7.13.6 Conclusion of Assessment for The Murrough SPA

384 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the SCIs of The Murrough SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the SCIs, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of The Murrough SPA.

#### 7.14 Wicklow Mountains SPA [004040]

### 7.14.1 Ecological Baseline Description for Wicklow Mountains SPA

385 The Natura Standard Data Form (NPWS, 2018b) lists the Wicklow Mountains SPA as an extensive upland site, comprising a substantial part of the Wicklow Mountains. This area was subject to glaciation and features fine examples of glacial lakes, deep valleys and moraines. The dominant habitats present are blanket bog, heaths and upland grassland. The site supports good examples of upland and woodland bird communities. It has breeding peregrine and merlin *Falco columbarius*, as well as ring ouzel *Turdus torquatus* and red grouse *Lagopus lagopus scotica*, both of the latter being Red listed in Ireland (Gilbert *et al.*, 2021).

### 7.14.2 Special Conservation Interests and Conservation Objectives of Wicklow Mountains SPA

386 The SCIs of Wicklow Mountains SPA, and the overall conservation objective, are listed in Table 38.



#### Table 38: Special Conservation Interests and Conservation Objectives of Wicklow Mountains SPA

Special Conservation Interests	Conservation Objective(s)
Wicklow Mountains SPA [004040] A098 Merlin <i>Falco columbarius</i> A103 Peregrine <i>Falco peregrinus</i>	To maintain or restore the favourable conservation condition of the bird species listed as SCIs for this SPA
S.I. No. 586/2012 – European Communities (Conservation of Wild Birds (Wicklow Mountains Special Protection Area 004040)) Regulations 2012	
NPWS (2022b) <i>Conservation objectives for Wicklow Mountains SPA</i> [004040]. First Order Site-specific Conservation Objectives. Version 1.0. Department of Housing, Local Government and Heritage.	

- 387 In conjunction with considering the generic conservation objective for this SPA "To maintain the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA", site-specific conservation objectives document for Wicklow Mountains SPA also informed this assessment.
- 388 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the SCIs within the European site. Affecting the conservation condition of the SCIs would constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the SCIs of Wicklow Mountains SPA are presented in Section 7.14.3.2.

#### 7.14.3 Examination and Analysis of Potential Direct and Indirect Impacts

- 389 The direct and / or indirect impacts by which the Proposed Scheme could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the SCIs of Wicklow Mountains SPA, are:
  - Disturbance and displacement impacts.

## 7.14.3.1 Disturbance and Displacement Impacts

390 Wicklow Mountains SPA, located approximately 7.2km east of the Proposed Scheme, has been designated for the following SCI species, peregrine *Falco peregrinus* and merlin *Falco columbarius*. Both species are known to occur in the wider study area. Most peregrine prey is taken within 2km of the eyrie and few birds are taken beyond 6km (Hardey *et al.*, 2013). The home range of breeding merlin is unknown but it could be expected to be similar to peregrine considering they will defend their immediate nesting territory (Lusby *et al.*, 2017; Hardey *et al.*, 2013). Considering the distance between the Wicklow Mountains SPA and the Proposed Scheme, any peregrine and / or merlin recorded in its immediate vicinity, do not form part of the Wicklow Mountains SPA SCI populations. Therefore, there is no potential for the Proposed Scheme to result in the disturbance / displacement of SCI peregrine and / or merlin associated with SPA populations.

## 7.14.3.2 Summary

391 Table 39 presents a summary of the potential impacts of the Proposed Scheme on the SCIs of Wicklow Mountains SPA, and how these impacts relate to affecting the site's conservation objectives.



# Table 39: Potential Impacts / Effects on the Conservation Objectives of Wicklow Mountains SPA

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts?
Wicklow Mountains SPA			
Peregrine (Falco peregrinus) [A103], Merlin (Falco columbarius) [A0980]  There is a first order site-specific conservation objective document available for this SPA, but measures and targets and therefore the attributes, measures and targets below have been	·		
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	No	No	No



### 7.14.4 Mitigation Measures

392 As there is no potential for impacts to occur on the SCIs of the Wicklow Mountains SPA as a result of the Proposed Scheme, no specific mitigation measures are required, other than good site practices detailed in Section 7.1.4.

#### 7.14.5 Residual Impacts

393 Although no specific mitigation are required in respect of potential impacts, with the effective implementation of standard mitigation measures identified in this NIS, the Proposed Scheme will not have any adverse effect on the conservation objectives, or the favourable conservation condition, of the SCIs of Wicklow Mountains SPA, and there are, therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of Wicklow Mountains SPA. As is confirmed by the WFD Assessment for the Proposed Scheme (refer to Appendix V), the Proposed Scheme will not cause a deterioration in status in any water body, will not prevent any water body from achieving good ecological status or good ecological potential, and it can be concluded that the Proposed Scheme complies with all requirements of the WFD.

## 7.14.6 Conclusion of Assessment for Wicklow Mountains SPA

394 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the SCIs of Wicklow Mountains SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the SCIs, it has been concluded that the Proposed Scheme poses no risk of adversely affecting (either directly or indirectly) the integrity of Wicklow Mountains SPA.

## 8 Summary of Mitigation Measures and Residual Impacts

### 8.1 Summary of Mitigation Measures

- 395 This section summarises the mitigation measures that will be implemented during the Construction and Operational Phases to avoid or reduce the potential impacts of the Proposed Scheme on the European sites as already set out throughout Section 7. A matrix of mitigation measures is provided in Table 40, identifying the specific mitigation measures required for each relevant European site.
- 396 All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment. Mitigation measures and associated Management Plans are included within the Construction Environmental Management Plan (CEMP) provided in Appendix III of this NIS, all of which shall, at a minimum, be implemented during the Construction Phase of the Proposed Scheme.



Table 40: Matrix of Mitigation Measures and Residual Impacts

European	Potential Impacts and Mitigation Required												
Site	Construction						Operation	Effect on the Integrity of					
	Habitat Loss and Fragmentation	Hydrology	Hydro- geology	Invasive Species	Air Quality	Disturbance / Displacement	Habitat Loss and Fragmentation	Hydrology	Hydro- geology	Invasi ve Specie s	Air Quality	Disturbance / Displacement	European Sites (Post- Mitigation)
North Dublin Bay SAC	X	Section 7.1.4 Section 5.4 in CEMP	х	Section 7.1.4 Section 5.3 in CEMP	X	x	X	Section 7.1.4 Section 5.4 in CEMP	х	Section 7.1.4 Section 5.3 in CEMP	х	х	No
South Dublin Bay SAC	Х	Section 7.1.4 Section 5.4 in CEMP	Х	Section 7.1.4 Section 5.3 in CEMP	Х	X	Х	Section 7.1.4 Section 5.4 in CEMP	Х	Section 7.1.4 Section 5.3 in CEMP	Х	X	No
Howth Head SAC	Х	х	Х	х	Х	х	Х	Х	х	Х	х	х	No
Bray Head SAC	Х	х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	No
Rockabill to Dalkey Island SAC	Х	Section 7.1.4 Section 5.4 in CEMP	Х	Х	Х	х	Х	Section 7.1.4 Section 5.4 in CEMP	Х	х	Х	Х	No



European	Potential Impacts and Mitigation Required												
Site	Construction						Operation	Effect on the Integrity of					
	Habitat Loss and Fragmentation	Hydrology	Hydro- geology	Invasive Species	Air Quality	Disturbance / Displacement	Habitat Loss and Fragmentation	Hydrology	Hydro- geology	Invasi ve Specie s	Air Quality	Disturbance / Displacement	European Sites (Post- Mitigation)
Lambay Island SAC	Х	√ Section 7.1.4 Section 5.4 in CEMP	х	Х	х	X	Х	√ Section 7.1.4 Section 5.4 in CEMP	х	х	Х	х	No
Wicklow Mountain s SAC	X	Section 7.1.4 Section 5.4 in CEMP	X	X	X	X	X	Section 7.4.4 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	No
Howth Head Coast SPA	Х	Section 7.1.4 Section 5.4 in CEMP	х	х	х	X	Х	Section 7.1.4 Section 5.4 in CEMP	х	х	х	х	No
Dalkey Islands SPA	Х	Section 7.1.4 Section 5.4 in CEMP	х	х	х	X	Х	Section 7.1.4 Section 5.4 in CEMP	х	х	х	х	No



European	Potential Impacts and Mitigation Required												Any Adverse
Site	Construction						Operation	Effect on the Integrity of					
	Habitat Loss and Fragmentation	Hydrology	Hydro- geology	Invasive Species	Air Quality	Disturbance / Displacement	Habitat Loss and Fragmentation	Hydrology	Hydro- geology	Invasi ve Specie s	Air Quality	Disturbance / Displacement	European Sites (Post- Mitigation)
Rockabill SPA	Х	Section 7.1.4 Section 5.4 in CEMP	X	Х	х	X	Х	Section 7.1.4 Section 5.4 in CEMP	X	х	X	х	No
North Bull Island SPA	X	Section 7.1.4 Section 5.4 in CEMP	Х	Section 7.1.4 Section 5.3 in CEMP	Х	X	Х	Section. 7.1.4 Section 5.4 in CEMP	Х	Section 7.1.4 Section 5.3 in CEMP	Х	Х	No
South Dublin Bay and River Tolka Estuary SPA	X	Section 7.1.4 Section 5.4 in CEMP	Х	Section 7.1.4 Section 5.3 in CEMP	х	X	X	Section 7.1.4 Section 5.4 in CEMP	Х	Section 7.1.4 Section 5.3 in CEMP	Х	х	No
Malahide Estuary SPA	X	Section 7.1.4 Section 5.4 in CEMP	х	х	х	X	X	Section 7.1.4 Section 5.4 in CEMP	х	x	х	х	No



European Site	Potential Impacts and Mitigation Required												Any Adverse
	Construction						Operation	Effect on the Integrity of					
	Habitat Loss and Fragmentation	Hydrology	Hydro- geology	Invasive Species	Air Quality	Disturbance / Displacement	Habitat Loss and Fragmentation	Hydrology	Hydro- geology	Invasi ve Specie s	Air Quality	Disturbance / Displacement	European Sites (Post- Mitigation)
Baldoyle Bay SPA	Х	Section 7.1.4 Section 5.4 in CEMP	х	х	Х	Х	Х	Section 7.1.4 Section 5.4 in CEMP	х	х	х	Х	No
Rogersto wn Estuary SPA	X	Section 7.1.4 Section 5.4 in CEMP	Х	Х	Х	Х	Х	Section 7.1.4 Section 5.4 in CEMP	Х	х	Х	Х	No
Skerries Islands SPA	X	Section 7.1.4 Section 5.4 in CEMP	Х	Х	Х	Х	Х	Section 7.1.4 Section 5.4 in CEMP	Х	х	Х	Х	No
Ireland's Eye SPA	Х	Section 7.1.4 Section 5.4 in CEMP	Х	х	Х	Х	Х	Section 7.1.4 Section 5.4 in CEMP	х	х	х	х	No



European Site	Potential Impacts and Mitigation Required												Any Adverse
	Construction						Operation	Effect on the Integrity of					
	Habitat Loss and Fragmentation	Hydrology	Hydro- geology	Invasive Species	Air Quality	Disturbance / Displacement	Habitat Loss and Fragmentation	Hydrology	Hydro- geology	Invasi ve Specie s	Air Quality	Disturbance / Displacement	European Sites (Post- Mitigation)
Lambay Island SPA	Х	Section 7.1.4 Section 5.4 in CEMP	Х	Х	х	x	Х	Section 7.1.4 Section 5.4 in CEMP	Х	х	Х	х	No
The Murrough SPA	Х	Section 7.1.4 Section 5.4 in CEMP	Х	Х	Х	Х	Х	Section 7.1.4 Section 5.4 in CEMP	Х	х	Х	Х	No
Wicklow Mountain s SPA	Х	х	х	х	х	Х	Х	х	х	Х	х	х	No



#### 8.2 Summary of Residual Impacts

397 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme will not have any adverse effect on the conservation objectives, or the favourable conservation condition, of the QI habitats and species and / or SCI species of the European sites assessed in Section 7. There are, therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of such European sites. A matrix identifying those aspects which will be subject to mitigation measures and the residual impacts post mitigation is provided in Table 40, for the relevant European sites.

#### 9 In Combination Assessment

398 This section of the NIS presents the assessment carried out to examine whether any other plans or projects have the potential to act in combination with the Proposed Scheme to have a significant effect on any of the European sites including those within its ZoI.

399 There are nineteen (19) European sites within the ZoI of the Proposed Scheme are:

- South Dublin Bay SAC;
- Bray Head SAC;
- Rockabill to Dalkey Island SAC;
- North Dublin Bay SAC;
- Wicklow Mountains SAC;
- Howth Head SAC;
- Lambay Island SAC;
- South Dublin Bay and River Tolka Estuary SPA;
- Dalkey Island SPA;
- North Bull Island SPA;
- Baldoyle Bay SPA;
- The Murrough SPA;
- Howth Head Coast SPA;
- Ireland's Eye SPA;
- Malahide Estuary SPA;
- Rogerstown Estuary SPA;
- Lambay Island SPA;
- Skerries Islands SPA; and
- Rockabill SPA.

400 All other European sites fall beyond the ZoI of the Proposed Scheme. Therefore, there is no potential for any other plans or projects to act in combination with the Proposed Scheme to adversely affect the integrity of any other European sites. The protective policies and objectives from the land use plans referred to in this section are included in Section 9.2.

## 9.1 Analysis of Potential In Combination Effects

- 401 The in combination assessment involved first identifying those plans and projects which have the potential to impact on those European sites within the ZoI of the Proposed Scheme.
- 402 Those plans or projects with the potential to impact upon these European sites are any national, regional and local land use plans or any existing or proposed projects that could potentially affect the ecological environment within the ZoI of the Proposed Scheme. These are presented below in Table 41.



403 The potential cumulative impacts on those European sites within the ZoI of the Proposed Scheme from the Proposed Scheme in combination with the plan and projects listed in Table 41 were identified and assessed. This assessment is presented in Table 42 and Table 43.

### Table 41: Land Use Plans and Programmes Considered for the In Combination Assessment

#### **National Plans**

National Energy & Climate Plan 2021-2030

Climate Action Plan 2023

National Spatial Strategy for Ireland 2002-2020; Project Ireland 2040 – Building Ireland's Future<sup>23</sup>

National Transport Authority Integrated Implementation Plan 2019-2024

Smarter Travel a Sustainable Transport Future 2009-2020

National Biodiversity Action Plan 2017-2021

River Basin Management Plan 2018-2021

National Air Pollution Control Programme (NAPCP) 2021

National Marine Planning Framework 2018

Water Services Strategic Plan 2015

#### **Regional Plans**

Regional Planning Guidelines for the Greater Dublin Area Vol I & II 2010-2022;

Regional Spatial & Economic Strategy for the Eastern and Midland Region 2019-2031

2022 Greater Dublin Area Cycle Network Plan (Supersedes Greater Dublin Area Cycle Network Plan 2013)

Greater Dublin Transport Strategy 2022-2042

Eastern Catchment Flood Risk Assessment and Management (CFRAM) study 2011-2016

#### County/Local Plans

#### Fingal Development Plan 2023-2029

Fingal Biodiversity Action Plan 2010-2015; Draft Fingal Biodiversity Action Plan 2022-2030

Fingal County Council Climate Action Plan 2019-2024

- Donabate Local Area Plan 2016
- Rivermeade Local Area Plan 2018
- Barnhill Local Area Plan 2019
- Kinsaley Local Area Plan 2019
- Dublin Airport Local Area Plan 2020

#### **Dublin City Development Plan 2022-2028**

Dublin City Biodiversity Action Plan 2021-2025

Dublin City Council Climate Change Action Plan 2019-2024

- Ballymun Local Area Plan 2017 (Extended to 2027)
- Naas Road Local Area Plan 2013-2023
- Park West-Cherry Orchard Local Area Plan 2019

### South Dublin County Development Plan 2022-2028

Biodiversity Action Plan for South Dublin County (2020-2026)- Draft for public consultation

South Dublin County Council Climate Change Action Plan 2019-2024

• Tallaght Town Centre Local Area Plan 2020

<sup>&</sup>lt;sup>23</sup> Together the National Development Plan and the National Framework are referred to as Project Ireland 2040: Building Ireland's Future.



## Dún Laoghaire-Rathdown County Development Plan 2022-2028

Dún Laoghaire-Rathdown Biodiversity Plan 2021-2025

Dún Laoghaire-Rathdown County Council Climate Change Action Plan 2019-2024

- Stillorgan Local Area Plan 2018-2024
- Blackrock Local Area Plan 2015-2021 (extended to 2025)
- Woodbrook-Shanganagh Local Area Plan 2017-2023

## Wicklow County Development Plan 2022-2028

Wicklow Biodiversity Plan 2010-2015

Wicklow County Council Climate Change Adaptation Strategy 2019

• Bray Municipal District Local Area Plan 2018-2024

## **Projects**

- N3 Castaheany Interchange Upgrade:
- Reconfiguration of the N7 from its junction with the M50 to Naas, to rationalise junctions and accesses in order to provide a higher level of service for strategic traffic travelling on the mainline
- N3–N4: Barnhill to Leixlip Interchange
- Reconfiguration of the N4 from its junction with the M50 to Leixlip to rationalise accesses and to provide additional capacity at the Quarryvale junction
- Clonburris Strategic Development Zone (SDZ) roads development
- DART+ Programme West
- Porterstown Distributor Link Road
- Widening of the N3 between Junction 1 (M50) and Junction 4 (Clonee), plus related junction and necessary changes to the existing national road network
- Lucan Luas
- DART+ Programme South-West
- Junction upgrades and other capacity improvements on the M1 motorway, including additional lanes south of Drogheda, where required
- Finglas Luas (Green Line extension Broombridge to Finglas)
- DART+ Tunnel Element (Kildare Line to Northern Line)
- Potential Metro South alignment: SW option
- Luas Cross City incorporating Luas Green Line Capacity Enhancement Phase 1
- Oldtown-Mooretown Western Distributor Link Road
- Potential Metro South alignment: Charlemont to Sandyford
- Poolbeg Luas
- Leopardstown Link Road Phase 2
- Development of a road link connecting from the southern end of the Dublin Port Tunnel to the South Port area, which will serve the South Port and adjoining development areas
- Poolbeg SDZ roads development: Glenamuck District Distributor Road
- Widening of the M50 to three lanes in each direction between Junction 14 (Sandyford) and Junction 17 (M11) plus related junction and other changes
- Cherrywood SDZ roads development:
- DART+ Programme Coastal South
- Extension of Luas Green Line to Bray
- Capacity enhancement and reconfiguration of the M11/N11 from Junction 4 (M50) to Junction 14 (Ashford) inclusive of ancillary and associated road schemes, to provide additional lanes and upgraded junctions, plus service roads and linkages to cater for local traffic movements
- MetroLink
- Cycling: Greater Dublin Area Cycle Network Plan (excluding Radial Core Bus Corridor elements)
- Dublin SPAR. Proposed 1.6km Southern Part Access Route (SPAR) which includes an opening bridge across the Liffey east of the existing Tom Clarke Bridge (East-Link Toll Bridge), has been identified in the Dublin Port



Masterplan ("3FM Project"). The SPAR will be a private road which will take Heavy Goods Vehicle (HGV) traffic destined to/from the port off the local public road network. It will also allow access for other HGV traffic such as to the Covanta Waste-to-Energy plant. The SPAR will include an active travel corridor open to the public. Construction is anticipated in 2026.

- Snugborough Interchange Upgrade
- Dublin Mountain Visitors Centre and all associated works. Killakee and Jamestown.
- FCC/12/0001 Broadmeadow Way. Greenway between Malahide Demesne and Newbridge Demesne to be known as 'Broadmeadow Way'. Malahide.
- Alterations to a permitted double circuit 110kV electricity transmission line development between substations. Darndale / Belcamp.
- 15-year permission for development at Oil Berth 3 and Oil Berth 4, Eastern Oil Jetty and at Berths 50A, 50N, 50S, 51, 51A, 49, 52, 53 and associated terminal yards to provide for various elements including new Ro-Ro jetty and consolidation of passenger terminal buildings. Dublin Port.
- A residential development with ancillary commercial uses (retail unit, café and crèche) partially comprising a "Build to Rent" scheme on circa 9.69 hectares. The townlands of Shanganagh, Cork Little and Shankill, Co. Dublin.
- The proposed development for Brexit Infrastructure will consist of Installation of porta-cabin structures. Resurfacing and amalgamation of existing yards. Parking for heavy good vehicles, cars and bicycles. Gates, signage and all ancillary site works. Dublin Port.
- Provision of a double circuit 220kV transmission line and a 220kV gas insulated switchgear (GIS) substation along
  with associated and ancillary works. Townlands of Cruiserath, Goddamendy and Bay, Co. Dublin.
- Construction of a 2 storey 110kV GIS substation, underground cable and all associated and ancillary site works.
   Former Clyde House, IDA Blanchardstown Business and Technology Park, Snugborough Road, Blanchardstown,
   Dublin 15
- Flood alleviation works along and adjacent to the River Poddle extending from the upper reaches of the river. Tymon North, Tallaght to Merchant's Quay, Dublin.
- Increase the capacity of the Dublin Waste to Energy Facility from 600,000 tonnes per annum to 690,000 tonnes per annum.
- Clutterland 110kV GIS Substation building and 2 underground single circuit transmission lines.
- Provision of two 110kV transmission lines. Connecting Coolderrig 110kV GIS Substation to Grange Castle Kilmahud circuits.
- 2 no. 110kV transmission lines and a 110kV GIS substation.
- Build to Rent shared accommodation at Joyces Court off Foley Street.
- Emergency extension to Mater Hospital off Eccles Street.
- Proposed Apartment development at Graymount, Dungriffin Road.
- Advance Infrastructure works at site at Hackettstown, Skerries.
- Advance Infrastructure works at site at Castlelands, Balbriggan.
- Office Redevelopment of Protected Structure centred on Harcourt Street.
- Construction of residential unit in three apartment blocks.
- Residential development to replace car wash and associated facilities.
- Demolition of commercial buildings and construction of 54 apartments centred on Seapoint Road, Bray.
- Construction of 6-storey building including residential and commercial units, Bray.
- Construction of 49 apartments, centred on Castle Street, Bray.
- Change of use from retail to 25 residential apartments, Bray Central development.
- Demolition of 5 storey office development and replacement with residential units at Eglinton Road, Dublin.
- Redevelopment of Canal House at 2-6 Dunville Terrace, Dublin.
- Development of Protected Structure at 18-21 St Stephens Green Dublin 2.
- Development of Protected Structure at number 22 St Stephens Green Dublin 2.
- Development of Protected Structure at National Concert Hall.
- Demolition and redevelopment of existing office block and construction of new 9 storey office block, Dublin.
- Four-storey mixed used development at Mespil Court, Mespil Road and Burlington Road, Dublin 4.
- Development of Protected Structure at 92 and 93 St Stephens Green Dublin 2.
- Rejuvenation of St Stephens Green Shopping centre involving internal reconfiguration and partial redevelopment.



- Development of Protected Structure at 35 Harcourt Street and extending to 35 35 Camden Place Dublin 2.
- Demolition of existing st4ructure and redevelopment of site facing towards Harcourt Rad/Adelaide Road.
- Demolition of 4 storey building and construction of student accommodation, Montrose, Dublin.
- Demolition of 2 storey dwelling and construction 5 storey BTR later living facility.
- Residential and mixed use development at Plot T11, Cherrywood SDZ Planning Scheme.
- Development of lands including area around protected structure (water tower) to facilitate expansion of sports facilities, UCD sports and amenities precinct.
- Installation of solar photovoltaic panels on existing building.
- Residential development at Plot TC6, Cherrywood SDZ Planning Scheme.
- Development of specialist hospital and ancillary features at "The Aske", (a protected structure) Old Dublin Road, Bray.
- Residential development comprising 65 dwellings near Lehaunstown Lane, Cherrywood SDZ Planning Scheme.
- Residential development at Plot T11, Cherrywood SDZ Planning Scheme.
- Residential development at Plot T3, Cherrywood SDZ Planning Scheme.
- Build to Rent development around Village Green, Gun and Drum Hill.
- Mixed use development at Blocks B1, B2, B3, B4, Cherrywood SDZ Planning Scheme.
- Site development and removal of existing ground carpark near Luas terminus, Cherrywood SDZ Planning Scheme.
- Residential development at boundary to Castle Street and Beckett Park, Cherrywood SDZ Planning Scheme.
- Residential development comprising 89 units centred on Castle Street, Cherrywood SDZ Planning Scheme.
- Clongriffin to City Centre Core Bus Corridor Scheme
- Swords to City Centre Core Bus Corridor Scheme
- Ballymun / Finglas to City Centre Core Bus Corridor Scheme
- Blanchardstown to City Centre Core Bus Corridor Scheme
- Lucan to City Centre Core Bus Corridor Scheme
- Liffey Valley to City Centre Core Bus Corridor Scheme
- Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme
- Kimmage to City Centre Core Bus Corridor Scheme
- Templeogue / Rathfarnham to City Centre Core Bus Corridor Scheme
- Belfield / Blackrock to City Centre Core Bus Corridor Scheme
- Ringsend to City Centre Core Bus Corridor Scheme
- A range of Strategic Housing Developments (SHDS)
- A range of Large Scale Residential Developments (LRDs)
- Greater Dublin Area (GDA) Transport Strategy Park and Ride (All Included despite distance as hydrological connectivity)
- A range of Irish Water Projects



Table 42: In Combination Assessment of Plans and Programmes

Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
National Energy & Climate Plan 2021-2030  This National Energy and Climate Plan builds on previous national strategies and sets out in detail objectives regarding the five energy dimensions together with planned policies and measures to ensure that these objectives are achieved. It aims as a fundamental national objective to pursue a trajectory of emissions reduction which is in line with reaching net zero in Ireland by 2050.  In relation to transport the plan aims to:  Make growth less transport intensive through better planning, remote and home-working and modal shift to public transport  Increase the renewable biofuel content of motor fuels  Set targets for the conversion of public transport fleets to zero carbon alternatives.	No potential impact pathways to European sites.  There are no specific spatial references in this policy document and therefore, no specific link (in terms of potential impact pathways) between it and European sites within the ZoI of the Proposed Scheme.	No in combination impact Key to considering the on-going evolution of national climate policy included are the obligations of the State under EU law (e.g., the EU Habitats Directive), and the promotion of sustainable development. Considering that, this policy position poses no identifiable risk of resulting in adverse effects on the integrity of any European sites.
National Development Plan Ireland 2021-2030  As part of Project Ireland 2040 the National Development Plan sets out the Government's over-arching investment strategy and budget for the period 2021-2030. The plan that aims to balance demand for public investment across all sectors and regions of Ireland with a major focus on the delivery of infrastructure projects.	There is the potential that developments implemented under the National Development Plan could affect European sites within the ZoI of the Proposed Scheme. The potential impact pathways cannot be defined based on the level of detail included in the plan. However, future developments implemented through the National Development Plan have the potential to lie either within those European sites, or be situated in a location where they may be within the ZoI of those European sites.	No in combination impact.  Any projects required to achieve the objectives of the National Development Plan must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the ZoI of the Proposed Scheme, the overarching land use plans are Fingal DP (2023-2029), Dublin City DP (2022-2028), South Dublin CDP (2022-2028), Dún Laoghaire-Rathdown CDP (2022-2028), and Wicklow CDP (2022 – 2028).



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		All of these land use plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2.  This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below).  Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the National Development Plan poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
Project Ireland 2040 – National Planning Framework (NPF)  The National Planning Framework is a high- level strategic plan to guide future growth and development in Ireland. The NPF makes reference to delivering projects in Dublin (here Dublin refers to the Greater Dublin Area (GDA). This area includes Dublin City and the following surrounding lands and counties: Dún Laoghaire-Rathdown, Fingal, Kildare, Meath, South Dublin and Wicklow. Projects such as the DART expansion programme, BusConnects Scheme, and investment at Dublin Port, amongst others are referenced. Key objectives of the plan include:  Managing sustainable growth of cities, towns and villages  Providing accessibility between key urban centres  Enhance public transport in a sustainable manner	There is the potential that developments implemented under Project Ireland 2040 could affect European sites within the ZoI of the Proposed Scheme. The potential impact pathways cannot be defined based on the level of detail included in the plan. However, future developments implemented through Project Ireland 2040 have the potential to lie either within those European sites, or be situated in a location where they may be within the ZoI of those European sites.	No in combination impact.  Any projects required to achieve the objectives of Project Ireland 2040 Plan must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the ZoI of the Proposed Scheme, the overarching land use plans are Fingal DP (2023-2029), Dublin City DP (2022-2028), South Dublin CDP (2022-2028), Dún Laoghaire-Rathdown CDP (2022-2028), and Wicklow CDP (2022-2028).  All of these land use plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2.  This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below).  Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, Project Ireland 2040 poses no identifiable risk of resulting in adverse effects on the



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		integrity of any European sites in combination with the Proposed Scheme.
National Transport Authority Integrated Implementation Plan 2019-2024  An infrastructure investment programme forms the core of this plan. There are four key investment areas: bus, light rail, heavy rail, and integration measures and sustainable transport. The NTA Integrated Implementation Plan refers to the delivery of projects in Dublin, such as the DART expansion program and GDA Cycle Network Plan, amongst others.	There is the potential that developments implemented under this plan could affect European sites within the ZoI of the Proposed Scheme. The potential impact pathways cannot be defined based on the level of detail included in the plan. However, future developments implemented through this plan have the potential to lie either within those European sites, or be situated in a location where they may be within the ZoI of those European sites.	No in combination impact.  Any projects required to achieve the objectives of this plan must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the ZoI of the Proposed Scheme, the overarching land use plans are Fingal DP (2023-2029), Dublin City DP (2022-2028), South Dublin CDP (2022-2028), Dún Laoghaire-Rathdown CDP (2022-2028), and Wicklow CDP (2022-2028).  All of these land use plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2.  This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below).  Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this plan poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
Smarter Travel a Sustainable Transport Future 2009-2020  Smarter Travel is a government policy document outlining a strategy related to sustainable transport. It sets out actions to reduce overall travel demand, to maximise the efficiency of the transport network, to reduce reliance on fossil fuels, to reduce transport emissions, and to improve accessibility to transport.	There is the potential that developments implemented under Smarter Travel could affect European sites within the ZoI of the Proposed Scheme. Smarter Travel does not propose or support any specific development proposals in identified locations and the potential impact pathways cannot be defined. However, future developments implemented through Smarter Travel have the potential to lie either within those European sites, or be situated in a location where they may be within the ZoI of those European sites.	Any projects required to achieve the objectives of smarter travel must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the ZoI of the Proposed Scheme, the overarching land use plans are Fingal DP (2023-2029), Dublin City DP (2022-2028), South Dublin CDP (2022-2028), Dún Laoghaire-Rathdown CDP (2022-2028), and Wicklow CDP (2022-2028).



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
National Biodiversity Action Plan 2017-2021 The National Biodiversity Action Plan sets out 119 targeted actions, underpinned by seven strategic objectives aimed at ensuring that Irelands' biodiversity and ecosystems are conserved and restored, delivering benefits essential for all sectors of society and that Ireland contributes to efforts to halt the loss of biodiversity and the degradation of ecosystems in the EU and globally. The strategic objectives lay out a clear framework for Ireland's national approach to biodiversity.	The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems therefore, it will contribute towards maintaining or restoring the conservation condition of the European sites within their ZoI. Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites	All of these land use plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2.  This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below).  Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, Smarter Travel poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.  No in combination impact  As the National Biodiversity Action Plan aims to halt biodiversity loss, no likely significant in-combination effects are predicted
River Basin Management Plan 2018-2021 The River Basin Management Plan outlines the measures the State and other sectors will take to improve water quality in Ireland's groundwater, rivers, lakes, estuarine and coastal waters.	The purpose of this plan is to improve water quality in Ireland's groundwater, rivers, lakes, estuarine and coastal waters therefore, it will contribute towards maintaining or restoring the conservation condition of the European sites within their Zol. Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites.	No in combination impact  No potential for in combination impacts with the Proposed Scheme as such a plan is intended to improve the quality of the ecological environment within its ZoI.
National Air Pollution Control Programme (NAPCP) 2021	The purpose of this programme is to reduce emissions and improve air quality in Ireland therefore, it will contribute towards maintaining or restoring the conservation condition of the European	No in combination impact



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
The National Air Pollution Control Programme (Article 6 of Directive (EU) 2016/2284 – 'the NEC Directive') is the main governance instrument by which EU Member States must ensure that the emission reduction commitments for 2020-2029 and 2030 onwards are met.	sites within its ZoI. Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites.	No potential for in combination impacts with the Proposed Scheme as such a plan is intended to improve the quality of the ecological environment within its Zol.
National Marine Planning Framework 2018 This framework is the first formal step towards the preparation of a marine spatial plan for Ireland which will contribute to the effective management of marine activities e.g., fishing, shipping, leisure, aquaculture and renewable energy, and a more sustainable use of our marine resources.	There is the potential that any developments implemented under the National Marine Planning Framework could affect European sites within the Zol of the Proposed Scheme. The National Marine Planning Framework does not propose or support any specific development proposals in identified locations and the potential impact pathways cannot be defined. However, any future developments implemented through the National Marine Planning Framework have the potential to lie either within those European sites, or be situated in a location where they may be within the Zol of those European sites.	No in combination impact Any projects required to achieve the objectives of the National Marine Planning Framework will be implemented by the relevant local or other consenting authorities and statutory bodies and must comply with the statutory planning or other legislative requirements, including those of any relevant land use plans. All of these plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2.  This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below).  Considering the environmental protection policies included within the National Marine Planning Framework 2018, and in the county and local level land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the National Marine Planning Framework 2018 poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
Water Services Strategic Plan 2015 Water Services Strategic Plan (WSSP) sets out strategic objectives for the delivery of water services over the next 25 years up to 2040. Its six strategic objectives include: meeting customer expectations; ensuring a safe and reliable water supply; providing effective management of wastewater; protecting and enhancing the environment;	Objectives of the WSSP 2015 are implemented through relevant local authorities and statutory bodies i.e. Fingal DP (2023-2029), Dublin City DP (2022-2028), South Dublin CDP (2022-2028), Dún Laoghaire-Rathdown CDP (2022-2028), and Wicklow CDP (2022-2028), NTA and TII.  There is the potential that developments implemented under the WSSP could affect European sites within the ZoI of the Proposed Scheme. The WSSP does not propose or support any specific development proposals in identified locations and the potential	No in combination impact Any projects required to achieve the objectives of the Water Services Strategic Plan will be implemented locally by the relevant local authority and must comply with the statutory planning requirements, and those of the relevant land use plans. All of these plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2. This assessment has



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
supporting social and economic growth; and investing in our future.	impact pathways cannot be defined. However, future developments implemented through the WSSP have the potential to lie either within these European sites, or be situated in a location where these European sites may be within their ZoI.	identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below).  Considering the environmental protection policies included within the NPF, and in the county and local level land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the WSSP 2015 poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
Regional Spatial & Economic Strategy (RSES) for the Eastern and Midland Region 2019-2031  A RSES is a strategic plan which identifies regional assets, opportunities and pressures and provides appropriate policy responses in the form of Regional Policy Objectives. One of its main aims is to provide a framework to better manage spatial planning and economic development throughout the Region.	There is the potential that developments implemented under the Regional Spatial & Economic Strategy for the Eastern and Midland Region could affect European sites within the ZoI of the Proposed Scheme. The Regional Spatial & Economic Strategy for the Eastern and Midland Region does not propose or support any specific development proposals in identified locations and the potential impact pathways cannot be defined. However, future developments implemented through the Regional Spatial & Economic Strategy for the Eastern and Midland Region have the potential to lie either within those European sites, or be situated in a location where they may be within the ZoI of those European sites.	No in combination impact.  Any projects required to achieve the objectives of the Regional Spatial & Economic Strategy for the Eastern and Midland Region will be implemented locally by the relevant local authority and must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the ZoI of the Proposed Scheme, the overarching land use plans are Fingal DP (2023-2029), Dublin City CDP (2022-2028), South Dublin CDP (2022-2028), Dún Laoghaire-Rathdown CDP (2022-2028), and Wicklow CDP (2022-2028).  All of these land use plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2.  This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below).  Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the Regional Spatial & Economic Strategy for the Eastern and Midland Region poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.



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2022 Greater Dublin Area Cycle Network (Supersedes Greater Dublin Area Cycle Network Plan 2013)  The Greater Dublin Area Cycle Network Plan sets out the goals to promote and provide cycling infrastructure across the Greater Dublin Area, and the actions to achieve these goals.	The Proposed Scheme lies partly within the functional areas of the Dublin City DP 2022-2028, Dún Laoghaire-Rathdown CDP 2022-2028 and Wicklow CDP 2022 – 2028. And many of the objectives and policies of the Greater Dublin Area Cycle Network Plan 2013, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.  As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including:  Habitat degradation / effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  Habitat degradation as a result of introducing / spreading nonnative invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and  Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, Ireland's	No in combination impact.  Any projects required to achieve the objectives of the 2022 Greater Dublin Area Cycle Network Plan will be implemented locally by the relevant local authority and must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the ZoI of the Proposed Scheme, the overarching land use plans are Fingal CDP (2017-2023), Dublin City DP (2022-2028), South Dublin CDP (2022-2028), Dún Laoghaire-Rathdown CDP (20122-2028), and Wicklow CDP (2022-2028).  All of these land use plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2.  This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below).  Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the 2022 Greater Dublin Area Cycle Network Plan poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	
Greater Dublin Area Transport Strategy 2022- 2042 The Strategy, which replaces the 2016-2035 strategy, sets out the framework for investment in transport infrastructure and services over the next two decades to 2042. It has been developed to be consistent with National Planning Framework and spatial planning policies and objectives.	The Proposed Scheme lies partly within the functional areas of the Dublin City DP 2022-2028, Dún Laoghaire-Rathdown CDP 2022-2028 and Wicklow CDP 2022 – 2028, and many of the objectives and policies of the Greater Dublin Area Transport Strategy 2022- 2042, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including:  • Habitat degradation / effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading nonnative invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and  • Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZOI of the Proposed Scheme for South Dublin Bay and River Tolka	No in combination impact.  The Greater Dublin Area Transport Strategy 2020-2042 has undergone AA and therefore, subject to the mitigation proposed in the NIS being incorporated, there would be no adverse effects on any European sites as a result of implementation of the plan.  The Greater Dublin Area Transport Strategy 2020-2042 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. These are presented in Section 9.2.  Considering the protective environmental policies contained within the Greater Dublin Area Transport Strategy 2020-2042, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.  Any projects required to achieve the objectives of the Greater Dublin Area Transport Strategy 20020-2042 will be implemented locally by the relevant local authority and must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the ZoI of the Proposed Scheme, the overarching land use plans are Fingal DP (2023-2029), Dublin City DP (2022-2028), South Dublin CDP (2022-2028), Dún Laoghaire-Rathdown CDP (2022-2028), and Wicklow CDP (2022-2028).  All of these land use plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2.  This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below).



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the Greater Dublin Area Transport Strategy 2020-2042 poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
Eastern Catchment Flood Risk Assessment and Management (CFRAM) Study 2011-2016 This study includes the following main elements within the Eastern catchment:  1. Flood Risk Assessments 2. Flood Risk Mapping 3. Flood Risk Management Plans	The Eastern Catchment Flood Risk Assessment and Management (CFRAM) Study will ultimately result in the development of catchment- based flood risk management plans. These may propose flood risk management measures which, through various potential impact pathways, could affect the conservation objectives supporting QI/SCI habitats and species of spatially relevant European sites.  Potential impacts include hydrological impacts e.g., reduction in water quality or changes to water flow.	No in combination impact CFRAM Studies and their product Flood Risk Management Plans have undergone AA. The AA of the CFRAMs considered the potential for impacts from hard engineering solutions and how they might affect hydrological connectivity and hydromorphological supporting conditions for protected habitats and species.  Any projects required to achieve the objectives of CFRAM must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of any relevant land use plans (Development Plans, Local Area Plans etc.).  All of these land use plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the CFRAMS will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
Fingal Development Plan 2023-2029 The Fingal CDP makes reference to residential development, zoning and infrastructure targets / obligations.	The Proposed Scheme lies within the functional areas of the Dublin City DP 2022-2028, Dún Laoghaire-Rathdown CDP 2022-2028 and Wicklow CDP 2022 – 2028, however many of the objectives and policies of the Fingal Development Plan 2023-2029, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment	No in combination impact.  The Fingal Development Plan 2023-2029 was subject to AA screening, and AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of the plan.  The Fingal Development Plan 2023-2029 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. These are presented in Section 9.2.



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	<ul> <li>that are measurable in some way, but themselves will not affect the conservation objectives of European sites including:</li> <li>Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);</li> <li>Habitat degradation as a result of introducing / spreading nonnative invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and</li> <li>Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul>	Considering the protective environmental policies contained within the Fingal Development Plan 2023-2029, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
Fingal Biodiversity Action Plan 2010-2015	No, there are no potential impact pathways to European sites.	No in combination impact
Draft Fingal Biodiversity Action Plan 2022-2030  The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems.	This plan will contribute towards maintaining or restoring the conservation condition of the European sites within their Zol. Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites.	No potential for in combination impacts with the proposed scheme as such a plan is intended to improve the quality of the ecological environment within its ZoI.
Fingal County Council Climate Action Plan 2019-2024	No, there are no potential impact pathways to European sites.  This plan will contribute towards improving the climate change resilience of the European sites within their ZoI. Consequently, there	No in combination impact



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are no potential impact pathways by which it could adversely affect the integrity of any European sites.	No potential for in combination impacts with the Proposed Scheme as such a plan is intended to improve the quality of the environment within its Zol.
The Proposed Scheme lies with the functional areas of the Dublin City DP 2022-2028, Dún Laoghaire-Rathdown CDP 2022-2028 and Wicklow CDP 2022 – 2028 and some of the objectives and policies of the Donabate Local Area Plan 2016, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.  As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading nonnative invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and  • Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird	No in combination impact.  The Donabate LAP was subject to AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of the plan.  The Donabate Local Area Plan 2016 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.  Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
	Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?  are no potential impact pathways by which it could adversely affect the integrity of any European sites.  The Proposed Scheme lies with the functional areas of the Dublin City DP 2022-2028, Dún Laoghaire-Rathdown CDP 2022-2028 and Wicklow CDP 2022 – 2028 and some of the objectives and policies of the Donabate Local Area Plan 2016, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.  As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in in South Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading nonnative invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tol



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	
Rivermeade Local Area Plan 2018  The LAP makes reference to 11 development area targets / obligations and the creation of a link road to connect Rivermeade to Swords.	The Proposed Scheme lies within the functional areas of the Dublin City DP 2022-2028, Dún Laoghaire-Rathdown CDP 2022-2028 and Wicklow CDP 2022 – 2028 and some of the objectives and policies of the Rivermeade Local Area Plan 2018, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.  As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading nonnative invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and,  • Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed	No in combination impact.  The Rivermeade LAP 2018 was subject to AA prior to its adoption and therefore, there will be no adverse effects on any European sites as a result of implementation of the plan.  The Rivermeade Local Area Plan 2018 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.  Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	
Barnhill Local Area Plan 2019 The LAP makes reference to residential development targets / obligations.	The Proposed Scheme lies within the functional areas of the Dublin City DP 2022-2028, Dún Laoghaire-Rathdown CDP 2022-2028 and Wicklow CDP 2022 – 2028, however some of the objectives and policies of the Barnhill Local Area Plan 2019, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.  As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including:  Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  Habitat degradation as a result of introducing / spreading nonnative invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and  Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed	No in combination impact.  The Barnhill Local Area Plan 2019 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of the plan.  The Barnhill Local Area Plan 2019 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.  Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	
Kinsaley Local Area Plan 2019 The LAP makes reference to commercial and residential development targets / obligations.	The Proposed Scheme lies within the functional areas of the Dublin City DP 2022-2028, Dún Laoghaire-Rathdown CDP 2022-2028 and Wicklow CDP 2022 – 2028 and some of the objectives and policies of the Kinsaley Local Area Plan 2019, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.  As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading nonnative invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin	No in combination impact.  The Kinsaley Local Area Plan 2019 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of the LAP.  The Kinsaley Local Area Plan 2019 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.  Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	
Dublin Airport Local Area Plan 2020 The LAP makes reference to airside and landside infrastructure targets / obligations.	The Proposed Scheme lies within the functional areas of the Dublin City DP 2022-2028, Dún Laoghaire-Rathdown CDP 2022-2028 and Wicklow CDP 2022 – 2028 and some of the objectives and policies of the Dublin Airport Local Area Plan 2020, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.  As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading nonnative invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and  • Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed	No in combination impact.  The Dublin Airport Local Area Plan was subject to AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of the LAP.  The Dublin Airport Local Area Plan 2020 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.  Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	
Dublin City Development Plan 2022-2028 The Dublin City DP makes reference to improvement of the public transport network and facilities for pedestrians and cyclists and targets / obligations to create strategic development and regeneration areas.	The Proposed Scheme lies within the functional area of the Dublin City Administrative Area and many of the objectives and policies therein, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.  As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading nonnative invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and  • Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North	No in combination impact.  The Dublin City Development Plan 2022-2028 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of the plan.  The Dublin City Development Plan 2022-2028 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.  Considering the protective environmental policies contained within the Dublin City Development Plan 2022-2028, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	
Dublin City Biodiversity Action Plan 2021-2025  The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems.	No, there are no potential impact pathways to European sites.  This plan will contribute towards maintaining or restoring the conservation condition of the European sites within their Zol.  Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites.	No in combination impact  No potential for in combination impacts with the Proposed Scheme as such a plan is intended to improve the quality of the ecological environment within its Zol.
Dublin City Council Climate Change Action Plan 2019-2024  The purpose of this action plan is to improve the council's energy efficiency, reduce their greenhouse emissions and create a climate resilient Dublin.	<ul> <li>This plan will contribute towards improving the climate change resilience of the European sites within their Zol. While by and large the majority of the measures proposed in the plan will have a positive or supportive function for European sites, some of the proposals, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.</li> <li>Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);</li> <li>Habitat degradation as a result of introducing / spreading nonnative invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and</li> <li>Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZOI of the Proposed</li> </ul>	No in combination impact The plan is intended to improve the quality of the environment within its Zol.  Any projects required to achieve the objectives of plan will be implemented by the relevant local or other consenting authorities and must comply with the statutory planning or other legislative requirements, including those of any relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the Zol of the Proposed Scheme, the overarching land use plans are Fingal DP (2023-2029), Dublin City DP (2022-2028), South Dublin CDP (2022-2028), Dún Laoghaire-Rathdown CDP (2022-2028), and Wicklow CDP (2022-2028).  All of these land use plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2.  This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below).  Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, CFRAM poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	
Clongriffin-Belmayne Local Area Plan 2012-2018  The LAP makes reference to commercial and residential development targets / obligations, and targets associated with interconnecting walking, cycling and public transport routes.	The Proposed Scheme lies within the functional areas of the Dublin City DP 2022-2028, Dún Laoghaire-Rathdown CDP 2022-2028 and Wicklow CDP 2022 – 2028 and some of the objectives and policies of the Clongriffin-Belmayne Local Area Plan 2012-2018, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.  As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading nonnative invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and	No in combination impact.  The Clongriffin-Belmayne Local Area Plan 2012-2018 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of the plan.  The Clongriffin-Belmayne Local Area Plan 2012-2018 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.  Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.



will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
ry SPA, North A, Ireland's y SPA,
The Bullymun Local Area Plan 2017 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of the plan.  The Ballymun Local Area Plan 2017 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.  Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.  a result of er quality in servation in South Island SAC, with Head ratio and the servation in South Island's A, Baldoyle A, Ireland's Y, SPA, will SPA); eading non-leuropean II to Dalkey ins SAC, ey Island SPA  e ex situ ing bird proposed



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	
Naas Road Local Area Plan 2013-2023 This LAP makes reference to the creation of four strategic development regeneration areas and targets / obligations associated making improvements to pedestrian, cycling and public transport infrastructure.	The Proposed Scheme lies within the functional areas of the Dublin City DP 2022-2028, Dún Laoghaire-Rathdown CDP 2022-2028 and Wicklow CDP 2022 – 2028 and some of the objectives and policies of the Naas Road Local Area Plan 2013-2023, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.  As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including:  Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and  Habitat degradation as a result of introducing / spreading nonnative invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).	No in combination impact.  The Naas Road Local Area Plan 2013-2023 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of the plan.  The Naas Road Local Area Plan 2013-2023 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.  Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
Park West – Cherry Orchard Local Area Plan 2019	The Proposed Scheme lies within the functional areas of the Dublin City DP 2022-2028, Dún Laoghaire-Rathdown CDP 2022-2028 and Wicklow CDP 2022 – 2028 and some of the objectives and policies of	No in combination impact.



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
This LAP makes reference to residential and mixed-use development targets / obligations, and targets associated with the improvement of infrastructure connecting pedestrians, cycling and public transport.	the Park West – Cherry Orchard Local Area Plan 2019, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.  As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and  • Habitat degradation as a result of introducing / spreading nonnative invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).	The Park West – Cherry Orchard Local Area Plan 2019 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of the plan.  The Park West – Cherry Orchard Local Area Plan 2019 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.  Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
South Dublin County Development Plan 2022-2028  The South Dublin CDP makes reference to commercial and residential development (including Adamstown and Clonburris SDZs), and infrastructure targets / obligations aimed at increasing connectivity between pedestrian and cycle routes and public transport.	The Proposed Scheme lies within the functional areas of the Dublin City DP 2022-2028, Dún Laoghaire-Rathdown CDP 2022-2028 and Wicklow CDP 2022 – 2028 however some of the objectives and policies of the South Dublin County Development Plan 2022-2028, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.  As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those	No in combination impact.  The South Dublin County Development Plan 2022-2028 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of South Dublin County Development Plan 2022-2028.  The South Dublin County Development Plan 2022-2028 contains objectives and policies to ensure the protection of European sites,



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	<ul> <li>effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including:</li> <li>Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);</li> <li>Habitat degradation as a result of introducing / spreading nonnative invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and</li> <li>Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul>	including surface water quality, from any projects proposed within the plan area.  Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
Biodiversity Action Plan for South Dublin County (2020-2026) Draft for public consultation The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems.	No, there are no potential impact pathways to European sites.  This draft plan (once adopted) will contribute towards maintaining or restoring the conservation condition of the European sites within their ZoI. Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites.	No in combination impact  No potential for in combination impacts with the Proposed Scheme as such a plan is intended to improve the quality of the ecological environment within its ZoI.
South Dublin County Council Climate Change Action Plan 2019-2024	No, there are no potential impact pathways to European sites.	No in combination impact



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
The purpose of this action plan is to improve the council's energy efficiency, reduce their greenhouse emissions and create a climate resilient Dublin.	This plan will contribute towards improving the climate change resilience. There are no potential impact pathways by which it could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme.	No potential for in combination impacts with the Proposed Scheme as such a plan is intended to improve the quality of the environment within its ZoI.
Tallaght Town Centre Local Area Plan 2020 This LAP makes reference to residential and mixed-use development targets / obligations, and targets associated with the improvement of infrastructure connecting pedestrians, cycling and public transport.	The Proposed Scheme lies within the functional areas of the Dublin City DP 2022-2028, Dún Laoghaire-Rathdown CDP 2022-2028 and Wicklow CDP 2022 – 2028, however some of the objectives and policies of the Tallaght Town Centre Local Area Plan 2020, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.  As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading nonnative invasive species (for example to downstream European sites South Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and  • Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed	No in combination impact.  The Tallaght Town Centre Local Area Plan 2020 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified, there will be no adverse effects on any European sites as a result of implementation of the LAP.  The Tallaght Town Centre Local Area Plan 2020 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.  Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	
Dún Laoghaire-Rathdown County Development Plan 2022-2028  The Dún Laoghaire-Rathdown CDP makes reference to commercial and residential development (including Cherrywood SDZ) targets / obligations, and targets associated with providing suitable community infrastructure.	The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan 2022-2028, as well as Dublin City DP 2022-2028 and Wicklow CDP 2022 – 2028. Therefore some of the objectives and policies of the Dún Laoghaire-Rathdown County Development Plan 2022-2028, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.  As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading nonnative invasive species (for example to downstream European sites South Dublin Bay AAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and	No in combination impact.  The Dún Laoghaire-Rathdown County Development Plan 2022-2028 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified, there will be no adverse effects on any European sites as a result of implementation of Dún Laoghaire-Rathdown CDP.  The Dún Laoghaire-Rathdown County Development Plan 2022-2028 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.  Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the Dún Laoghaire-Rathdown CDP will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	
Dún Laoghaire-Rathdown Biodiversity Plan 2021-2025  The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems.	No, there are no potential impact pathways to European sites.  This plan will contribute towards maintaining or restoring the conservation condition of the European sites within their Zol.  Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites.	No in combination impact  No potential for in combination impacts with the Proposed Scheme as such a plan is intended to improve the quality of the ecological environment within its Zol.
Dún Laoghaire-Rathdown County Council Climate Change Action Plan 2019-2024  The purpose of this action plan is to improve the council's energy efficiency, reduce their greenhouse emissions and create a climate resilient Dublin.	No, there are no potential impact pathways to European sites.  This plan will contribute towards improving the climate change resilience. There are no potential impact pathways by which it could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme.	No in combination impact  No potential for in combination impacts with the proposed scheme as such a plan is intended to improve the quality of the environment within its ZoI.
Stillorgan Local Area Plan 2018-2024 This LAP makes reference to the redevelopment of five key sites, commercial and residential development targets / obligations, and targets associated with the improvement of infrastructure connecting pedestrians, cycling and public transport.	The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan 2022-2028, as well as the Dublin City DP 2022-2028, and Wicklow CDP 2022 – 2028 areas. Therefore some of the objectives and policies of the Stillorgan Local Area Plan 2018-2024, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.  As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head	No in combination impact.  The Stillorgan Local Area Plan 2018-2024 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified, there will be no adverse effects on any European sites as a result of implementation of the plan.  The Stillorgan Local Area Plan 2018-2024 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.  Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	<ul> <li>SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);</li> <li>Habitat degradation as a result of introducing / spreading nonnative invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and</li> <li>Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul>	
Woodbrook-Shanganagh Local Area Plan 2017-2024  This LAP makes reference to residential development targets / obligations, and targets associated with the improvement of infrastructure connecting pedestrians, cycling and public transport.	The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan 2022-2028, as well as the Dublin City DP 2022-2028, and Wicklow CDP 2022 – 2028 functional areas. Therefore some of the objectives and policies of the Woodbrook-Shanganagh Local Area Plan 2017-2024, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.  As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC,	No in combination impact.  The Woodbrook-Shanganagh Local Area Plan 2017-2024 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified, there will be no adverse effects on any European sites as a result of implementation of the plan.  The Woodbrook-Shanganagh Local Area Plan 2017-2024 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.  Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading nonnative invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and  • Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	
Wicklow County Development Plan 2022-2028  The Wicklow CDP makes reference to commercial and residential development targets / obligations, and targets associated with facilitating an extension of the LUAS and rail services, and facilitating the development of cycleways and walkways throughout the county.	The Proposed Scheme lies within the functional area of the Wicklow County administrative area as well as Dublin City DP 2022-2028 and Dún Laoghaire-Rathdown CDP 2022-2028 functional areas. Therefore some of the objectives and policies of the Wicklow County Development County Plan 2022-2028, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.  As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including  • disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North	No in combination impact.  The Wicklow County Development Plan 2022-2028 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified, there will be no adverse effects on any European sites as a result of implementation of Wicklow CDP.  The Wicklow County Development Plan 2022-2028 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.  Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the Wicklow CDP will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.



Plan Description	Are There Potential Impact Pathways by Which the Plan / Programme Could Act In Combination With the Proposed Scheme to Adversely Impact European Sites?	Will the Plan / Programme Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	
Wicklow Biodiversity Plan 2010-2015 The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems.	No, there are no potential impact pathways to European sites.  This plan will contribute towards maintaining or restoring the conservation condition of the European sites within their Zol.  Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites.	No in combination impact  No potential for in combination impacts with the Proposed Scheme as such a plan is intended to improve the quality of the ecological environment within its ZoI.
Wicklow County Council Climate Change Adaptation Strategy 2019  The purpose of this action plan is to improve the council's energy efficiency, reduce their greenhouse emissions and create a climate resilient Wicklow.	No, there are no potential impact pathways to European sites.  This plan will contribute towards improving the climate change resilience. There are no potential impact pathways by which it could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme.	No in combination impact  No potential for in combination impacts with the Proposed Scheme as such a plan is intended to improve the quality of the environment within its ZoI.
Bray Municipal District Local Area Plan 2018-2024  This LAP makes reference to commercial and residential development targets / obligations, including the two key development areas of Fassaroe and the former Bray Golf Club, and targets associated with improving roads and transport infrastructure, and providing pedestrian, cycling and public transport routes.	The Proposed Scheme lies within the functional area of the Wicklow County Development Plan 2022-2028 as well as Dublin City DP 2022-2028 and Dún Laoghaire-Rathdown CDP 2022-2028 functional areas. Therefore some of the objectives and policies of the Bray Municipal District Local Area Plan 2018-2024, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.  As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including  • disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	No in combination impact.  The Bray Municipal District Local Area Plan 2018-2024 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified, there will be no adverse effects on any European sites as a result of implementation the LAP.  The Bray Municipal District Local Area Plan 2018-2024 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.  Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.



Table 43: In Combination Assessment of Major Projects

Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
MP01	Widening of the M7 between Junction 9 (Naas North) and Junction 11 (M7/M9) to provide an additional lane in each direction	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could adversely affect the integrity of any European sites within the Zol of the Proposed Scheme.	No in combination effect.
MP02	Enhancements of the N2/M2 national route inclusive of a bypass of Slane, to provide for additional capacity on the non-motorway sections of this route, and to address safety issues in Slane village associated with, in particular, heavy goods vehicles	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme.	No in combination effect.
MP03	N3 Castaheany Interchange Upgrade	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  There is no physical overlap between the Proposed Scheme and this project and the only potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island	No in combination effect.  The proposed N3 Castaheany Interchange Upgrade project will comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant development Plan. This land use plan contains objectives and policies to ensure the protection of European sites.  The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required. In granting permission for the proposed project, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the N3 Castaheany Interchange Upgrade



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).</li> </ul>	project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed N3 Castaheany Interchange Upgrade and has included mitigation in that regard to prevent any such adverse effects.
MP04	Reconfiguration of the N7 from its junction with the M50 to Naas, to rationalise junctions and accesses in order to provide a higher level of service for strategic traffic travelling on the mainline	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  There is no physical overlap between the Proposed Scheme and this project and the only potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North	No in -combination effect.  The proposed Reconfiguration of the N7 from its junction with the M50 to Naas project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant Development Plan. This land use plan contains objectives and policies to ensure the protection of European sites.  The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed project, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed Reconfiguration of the N7 from its junction with the M50 to Naas, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).	not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Reconfiguration of the N7 from its junction with the M50 to Naas and has included mitigation in that regard to prevent any such adverse effects
MP05	N3-N4: Barnhill to Leixlip Interchange	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).	No in combination effect.  The proposed N3-N4 Barnhill to Leixlip Interchange project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed reconfiguration works will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the reconfiguration works it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and proposed N3-N4 Barnhill to Leixlip Interchange project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, including the proposed N3-N4 Barnhill to Leixlip Interchange and has included mitigation in that regard to prevent any such adverse effects.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
MP06	Reconfiguration of the N4 from its junction with the M50 to Leixlip to rationalise accesses and to provide additional capacity at the Quarryvale junction	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).	No in combination effect.  The proposed Reconfiguration of the N4 from its junction with the M50 to Leixlip must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed reconfiguration works will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the reconfiguration works it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the Reconfiguration of the N4 from its junction with the M50 to Leixlip, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Reconfiguration of the N4 from its junction with the M50 to Leixlip and has included mitigation in that regard to prevent any such adverse effects.
MP07	Clonburris Strategic Development Zone (SDZ) roads development	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are	No in-combination effect.  The proposed Clonburris SDZ roads development project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>measurable in some way, but themselves will not affect the conservation objectives of European sites.</li> <li>There is no physical overlap between the Proposed Scheme and this project and the only potential for in-combination effects could be as a result of:</li> <li>Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and</li> <li>Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul>	of the relevant Development Plan. This land use plan contains objectives and policies to ensure the protection of European sites. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed project, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed Clonburris SDZ roads development, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Clonburris SDZ roads development and has included mitigation in that regard to prevent any such adverse effects.
MP08	DART+ Programme West	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:	No in-combination effect.  The proposed DART+ Programme West project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and</li> <li>Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul>	The proposed DART+ Programme West will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the DART+ Programme West it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the DART+ Programme West and has included mitigation in that regard to prevent any such adverse effects.
MP09	Porterstown Distributor Link Road	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin	No in-combination effect.  The proposed Porterstown Distributor Link Road project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed link road will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the link road it will be necessary to demonstrate that the project will not result in adverse effects on



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and</li> <li>Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul>	the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed Porterstown Distributor Link Road, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Porterstown Distributor Link Road and has included mitigation in that regard to prevent any such adverse effects.
MP10	Widening of the N3 between Junction 1 (M50) and Junction 4 (Clonee), plus related junction and necessary changes to the existing national road network	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA,	No in-combination effect.  The proposed N3 widening project between Junction 1 (M50) and Junction 4 (Clonee) must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed N3 widening will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the N3 widening it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA.</li> </ul>	Considering the lack of physical overlap between the Proposed Scheme and the proposed N3 widening project between Junction 1 (M50) and Junction 4 (Clonee), the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the widening of the N3 between Junction 1 (M50) and Junction 4 (Clonee) and has included mitigation in that regard to prevent any such adverse effects.
MP11	Lucan Luas	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:	No in-combination effect.  The proposed Lucan Luas project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.
		<ul> <li>Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North</li> </ul>	The proposed Lucan Luas will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the Lucan Luas, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed Lucan Luas project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).	will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Lucan Luas project and has included mitigation in that regard to prevent any such adverse effects.
MP12	DART+ Programme South West	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and  • Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South	No in-combination effect.  The proposed DART+ Programme South West project must comply with statutory licensing and planning requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed DART+ Programme South West must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant development Plan. This land use plan contains objectives and policies to ensure the protection of European sites.  The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the DART+ Programme South West it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed DART+ Programme South West project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any
		Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide	European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the DART+ Programme South West and has included mitigation in that regard to prevent any such adverse effects.
MP13	Junction upgrades and other capacity improvements on the M1 motorway, including additional lanes south of Drogheda, where required	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and  • Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	No in combination effect.  The proposed M1 motorway upgrades project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites and surface water quality from any projects proposed within the plan area.  The proposed M1 motorway upgrades will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the M1 motorway upgrades it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed M1 motorway upgrades project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to have an adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Junction upgrades and other capacity improvements on the M1 motorway and has included mitigation in that regard to prevent any such adverse effects.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
MP14	Finglas Luas (Green Line extension Broombridge to Finglas)	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and  • Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	No in combination effect.  The proposed Finglas Luas (Green Line extension Broombridge to Finglas) project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed Finglas Luas extension will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the Finglas Luas extension project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed Finglas Luas project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Finglas Luas extension and has included mitigation in that regard to prevent any such adverse effects.
MP15	DART+ Tunnel Element (Kildare Line to Northern Line)	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are	No in combination effect.  The proposed DART+ Tunnel Element (Kildare Line to Northern Line) project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans,



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>measurable in some way, but themselves will not affect the conservation objectives of European sites.</li> <li>The potential for in-combination effects could be as a result of:         <ul> <li>Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and</li> <li>Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).</li> </ul> </li> </ul>	Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed DART+ Tunnel Element will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the DART+ Tunnel Element (Kildare Line to Northern Line) project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and proposed DART+ Tunnel Element (Kildare Line to Northern Line) project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed DART+ Tunnel Element (Kildare Line to Northern Line) project and has included mitigation in that regard to prevent any such adverse effects.
MP16	Potential Metro South alignment: SW option	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation	No in combination effect.  The proposed Metro South alignment SW option must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed Metro South alignment will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and</li> <li>Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul>	In granting permission for the Metro South alignment it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the potential Metro South alignment: SW option, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Potential Metro South alignment: SW option and has included mitigation in that regard to prevent any such adverse effects
MP17	Luas Cross City incorporating Luas Green Line Capacity Enhancement – Phase 1	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  As these works are completed and there is no physical overlap between the Proposed Scheme and this project, there is limited potential for incombination effects to arise.  The main potential for in-combination effects is habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head	No in combination effect.  The proposed Luas Cross City incorporating Luas Green Line Capacity Enhancement – Phase 1 enhancements works were subject to consent, which was required to comply with requirements of the EIA and Habitats Directive as relevant. In granting consent it was necessary to determine that the project would not adversely affect any European sites, including arising from any impacts on water quality. Considering that alone, neither the Proposed Scheme nor the Luas enhancements works, will adversely affect the integrity of any European sites, the lack of any overlap either physically or in terms of the time of construction works, and the range of mitigation measures included in the Proposed Scheme to avoid significant impacts on water quality which is the only pathway with potential for in combination effects,



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA).	the two projects will not generate any in combination effects which could adversely affect the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Luas Cross City incorporating Luas Green Line Capacity Enhancement – Phase 1 project and has included mitigation in that regard to prevent any such adverse effects.
MP18	Oldtown-Mooretown Western Distributor Link Road	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:	No in combination effect.  The proposed Oldtown-Mooretown Western Distributor Link Road project must comply with all planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.
		Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);	The proposed link road will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the link road it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed Oldtown-Mooretown Western Distributor Link Road, the environmental protection policies
		Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and	included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect
		Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide	on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Oldtown-Mooretown Western Distributor



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	Link Road and has included mitigation in that regard to prevent any such adverse effects.
MP19	Potential Metro South alignment: Charlemont to Sandyford	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, and North Bull Island SPA); and  • Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	No in combination effect.  The proposed Metro South alignment – Charlemont to Sandyford project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed Metro South alignment will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the Metro South alignment it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed Metro South alignment – Charlemont to Sandyford project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Metro South alignment: Charlemont to Sandyford and has included mitigation in that regard to prevent any such adverse effects
MP20	Poolbeg Luas	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the	No in combination effect.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.</li> <li>The potential for in-combination effects could be as a result of:         <ul> <li>Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).</li> </ul> </li> </ul>	The proposed Poolbeg Luas project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed Luas will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the Luas it will be necessary to demonstrate that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Poolbeg Luas and has included mitigation in that regard to prevent any such adverse effects.
MP21	Leopardstown Link Road Phase 2	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation	No in combination effect.  The proposed link road project must comply with all planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed link road will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).</li> </ul>	In granting permission for the link road it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed Leopardstown Link Road Phase 2 project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Leopardstown Link Road Phase 2 and has included mitigation in that regard to prevent any such adverse effects.
MP22	Development of a road link connecting from the southern end of the Dublin Port Tunnel to the South Port area, which will serve the South Port and adjoining development areas	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA,	No in combination effect.  The proposed development of a road link connecting the southern end of the Dublin Port Tunnel to the South Port area, project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed link road will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the link road it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).</li> </ul>	Considering the lack of physical overlap between the Proposed Scheme and the proposed development of a road link connecting from the southern end of the Dublin Port Tunnel to the South Port area, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the development of a road link connecting the southern end of the Dublin Port Tunnel to the South Port area and has included mitigation in that regard to prevent any such adverse effects.
MP23	Poolbeg SDZ roads development	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);	No in combination effect.  The proposed Poolbeg SDZ roads development project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed SDZ roads development will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the SDZ roads development it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed Poolbeg SDZ roads development project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and</li> <li>Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul>	Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Poolbeg SDZ roads development project and has included mitigation in that regard to prevent any such adverse effects.
MP24	Glenamuck District Distributor Road	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA);	No in combination effect.  The proposed Glenamuck District Distributor Road development project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed road development will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the road development it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed Glenamuck District Distributor Road development project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River ToIka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Glenamuck District Distributor Road development project and has included mitigation in that regard to prevent any such adverse effects.
MP25	DART+ Programme Coastal North	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme.	No in combination effect.
MP26	Widening of the M50 to three lanes in each direction between Junction 14 (Sandyford) and Junction 17 (M11) plus related junction and other changes	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).	No in combination effect.  The proposed Widening of the M50 to three lanes in each direction between Junction 14 (Sandyford) and Junction 17 (M11) project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed M50 widening will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for M50 widening it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed widening of the M50 to three lanes in each direction between Junction 14 (Sandyford) and Junction 17 (M11), the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
			Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the widening of the M50 to three lanes in each direction between Junction 14 (Sandyford) and Junction 17 (M11) and has included mitigation in that regard to prevent any such adverse effects.
MP27	Cherrywood SDZ roads development	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and  • Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA,	No in combination effect.  The proposed Cherrywood SDZ roads development project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed road development will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the road development it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed Cherrywood SDZ roads development project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Cherrywood SDZ roads



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	development project and has included mitigation in that regard to prevent any such adverse effects.
MP28	DART+ Programme Coastal South	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and  • Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	No in combination effect.  The proposed DART+ Programme Coastal South project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed DART+ Programme Coastal South will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for DART+ Programme Coastal South it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the DART+ Programme Coastal South project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed DART+ Programme Coastal South and has included mitigation in that regard to prevent any such adverse effects.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
MP29	R126 Donabate Relief Road: R132 to Portrane Demesne	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could adversely affect the integrity of any European sites within the Zol of the Proposed Scheme.	No in combination effect.
MP30	Extension of Luas Green Line to Bray	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and  • Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	No in combination effect.  The proposed extension of Luas Green Line to Bray must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed Luas development will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the Luas development it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed extension of Luas Green Line to Bray and has included mitigation in that regard to prevent any such adverse effects.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
MP31	Capacity enhancement and reconfiguration of the M11/N11 from Junction 4 (M50) to Junction 14 (Ashford) inclusive of ancillary and associated road schemes, to provide additional lanes and upgraded junctions, plus service roads and linkages	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and  • Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	No in combination effect.  The proposed M11/N11 road development must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed development will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the M11/N11 road development it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed M11/N11 road development and has included mitigation in that regard to prevent any such adverse effects.
MP32	MetroLink	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are	No in combination effect.  The proposed Metrolink project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>measurable in some way, but themselves will not affect the conservation objectives of European sites.</li> <li>The potential for in-combination effects could be as a result of:         <ul> <li>Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);</li> </ul> </li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA); and</li> <li>Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul>	plans contain objectives and policies to ensure the protection of European sites.  The proposed MetroLink will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for MetroLink it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the MetroLink project and has included mitigation in that regard to prevent any such adverse effects.
MP33	Greater Dublin Drainage (GDD)	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could adversely affect the integrity of any European sites within the Zol of the Proposed Scheme.	No in combination effect.
MP34	Cycling: Greater Dublin Area Cycle Network Plan (excluding Radial Core Bus Corridor elements)	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are	No in combination effect.  Proposals arising out of the cycle network plan must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>measurable in some way, but themselves will not affect the conservation objectives of European sites.</li> <li>The potential for in-combination effects could be as a result of:         <ul> <li>Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and</li> <li>Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul> </li> </ul>	land use plans contain objectives and policies to ensure the protection of European sites.  Proposals arising out of the cycle network plan will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for proposals arising out of the cycle network plan it will be necessary to determine that they will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Greater Dublin Area Cycle Network Plan elements and has included mitigation in that regard to prevent any such adverse effects.
MP35	Dublin Array – offshore windfarm	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme.	No in combination effect.
MP36	Southern Port Access Route (SPAR): proposed 1.6km (SPAR) includes an opening bridge across the Liffey east of	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are	No in combination effect.  The proposed Southern Port Access Route (SPAR) project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	the existing Tom Clarke Bridge. It will be a private road which will take HGV traffic destined to/from the port off the local public road network. It will also allow access for other HGV traffic such as to the Covanta Waste-to-Energy plant. The SPAR will include an active travel corridor open to the public.	<ul> <li>measurable in some way, but themselves will not affect the conservation objectives of European sites.</li> <li>The potential for in-combination effects could be as a result of:         <ul> <li>Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and</li> <li>Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul> </li> </ul>	etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed SPAR will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for SPAR it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed SPAR project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Southern Port Access Route (SPAR and has included mitigation in that regard to prevent any such adverse effects.
MP37	Snugborough Interchange Upgrade	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in	No in combination effect.  The proposed Snugborough Interchange Upgrade project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.



Application	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect
Reference			Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and  Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).	The proposed Snugborough Interchange Upgrade will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for Snugborough Interchange Upgrade it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed Snugborough Interchange Upgrade project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Snugborough Interchange Upgrade and has included mitigation in that regard to prevent any such adverse effects.
303678	Air insulated switchgear 110kV transmission substation. Platin, Duleek	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme either via habitat fragmentation or habitat degradation impacts (either hydrological, invasive species, air quality or disturbance/displacement to SCI species).	No in combination effect.
304799	Construction of a new distributor road and junction to the southwest of Kells town centre, Kells	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme either via habitat fragmentation or habitat degradation impacts (either hydrological, invasive species, air quality or disturbance/displacement to SCI species).	No in combination effect.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
JA0040	Dublin Mountain Visitors Centre and all associated works. Killakee and Jamestown	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and  • Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	No in combination effect.  The proposed Dublin Mountain Visitors Centre project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the Dublin Mountain Visitors Centre it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed Dublin Mountain Visitors Centre project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Dublin Mountain Visitors Centre and has included mitigation in that regard to prevent any such adverse effects.
304624	FCC/12/0001 Broadmeadow Way. Greenway between Malahide Demesne and Newbridge Demesne to	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are	No in combination effect.  The proposed Broadmeadow Way Greenway must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	be known as 'Broadmeadow Way'. Malahide	<ul> <li>measurable in some way, but themselves will not affect the conservation objectives of European sites.</li> <li>The potential for in-combination effects could be as a result of:         <ul> <li>Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);</li> </ul> </li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and</li> <li>Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul>	land use plans contain objectives and policies to ensure the protection of European sites.  The proposed project has been subject to planning consent, including preparation of an EIAR and Natura Impact Statement. In granting permission for the project it was necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the consented Broadmeadow Way Greenway project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the consented Broadmeadow Way Greenway and has included mitigation in that regard to prevent any such adverse effects.
307073	Alterations to a permitted double circuit 110kV electricity transmission line development between substations. Darndale / Belcamp	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in	No in combination effect.  The proposed alternations to a permitted double circuit 110kV electricity transmission line development between substations must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and  Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).	The proposed project has been subject to planning consent, including preparation of an EIAR and Natura Impact Statement. In granting permission for the project it was necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the consented alternations to a permitted double circuit 110kV electricity transmission line development between substations project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the consented alternations to a permitted double circuit 110kV electricity transmission line development between substations and has included mitigation in that regard to prevent any such adverse effects.
303249	110kV on-site electrical substation with associated electrical plant, electrical equipment, welfare facilities and wastewater holding tank and security fencing. 110kV overhead line grid connection cabling, upgrade of existing tracks and provision of	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme either via habitat fragmentation or habitat degradation impacts (either hydrological, invasive species, air quality or disturbance/displacement to SCI species).	No in combination effect.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	new site access roads with all associated site development and ancillary works. Timahoe East		
304888	15-year permission for development at Oil Berth 3 and Oil Berth 4, Eastern Oil Jetty and at Berths 50A, 50N, 50S, 51, 51A, 49, 52, 53 and associated terminal yards to provide for various elements including new Ro-Ro jetty and consolidation of passenger terminal buildings. Dublin Port.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).	No in combination effect.  The proposed project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed project it will be necessary to demonstrate that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and this project at Dublin Port, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed developments around Dublin Port and has included mitigation in that regard to prevent any such adverse effects.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
306583	A residential development with ancillary commercial uses (retail unit, café and crèche) partially comprising a "Build to Rent" scheme on circa 9.69 hectares. The townlands of Shanganagh, Cork Little and Shankill, Co. Dublin.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).	No in combination effect.  The proposed project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to have an adverse effect on the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed residential development in named townlands around Shankill and has included mitigation in that regard to prevent any such adverse effects.
307352	The proposed development for Brexit Infrastructure will consist of – Installation of porta-cabin structures. Resurfacing and amalgamation of existing yards. Parking	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:	No in combination effect.  The proposed project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	for heavy good vehicles, cars and bicycles. Gates, signage and all ancillary site works. Dublin Port.	<ul> <li>Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and</li> <li>Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul>	The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed development for Brexit Infrastructure at Dublin Port, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed development for Brexit Infrastructure at Dublin Port and has included mitigation in that regard to prevent any such adverse effects.
306834	Provision of a double circuit 220kV transmission line and a 220kV GIS substation along with associated and ancillary works. Townlands of Cruiserath, Goddamendy and Bay, Co. Dublin.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin	No in combination effect.  The proposed project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).</li> </ul>	the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed residential in named townlands around Shankill project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed residential development in named townlands around Shankill and has included mitigation in that regard to prevent any such adverse effects.
307296	Construction of a 2 storey 110kV GIS substation, underground cable and all associated and ancillary site works. Former Clyde House, IDA Blanchardstown Business and Technology Park, Snugborough Road, Blanchardstown, Dublin 15	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and	No in combination effect.  The proposed project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed 110kV GIS substation and underground cable project, the environmental protection policies included within



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).	the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed 110kV GIS substation and underground cable and has included mitigation in that regard to prevent any such adverse effects.
306725	Flood alleviation works along and adjacent to the River Poddle extending from the upper reaches of the river. Tymon North, Tallaght to Merchant's Quay, Dublin.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA,	No in combination effect.  The proposed River Poddle flood alleviation works must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed
		<ul> <li>Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and</li> </ul>	Scheme and the proposed River Poddle flood alleviation works, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed River Poddle flood alleviation works and has included mitigation in that regard to prevent any such adverse effects.
309812	Increase the capacity of the Dublin Waste to Energy Facility from 600,000 tonnes per annum to 690,000 tonnes per annum	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).	No in combination effect.  The proposed capacity increase project at the Dublin Waste to Energy Facility must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed capacity increase project at the Dublin Waste to Energy Facility, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed capacity increase project at the



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
			Dublin Waste to Energy Facility and has included mitigation in that regard to prevent any such adverse effects.
308585	Clutterland 110kV GIS Substation building and 2 underground single circuit transmission lines	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).	No in combination effect.  The proposed Clutterland project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed Clutterland project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to have an adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Clutterland project and has included mitigation in that regard to prevent any such adverse effects.
309951	Provision of two 110kV transmission lines. Connecting Coolderrig 110kV GIS Substation to	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are	No in combination effect.  The proposed provision of transmission lines project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	Grange Castle – Kilmahud circuits.	<ul> <li>measurable in some way, but themselves will not affect the conservation objectives of European sites.</li> <li>The potential for in-combination effects could be as a result of:         <ul> <li>Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).</li> </ul> </li> </ul>	of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed provision of transmission lines project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed provision of transmission lines project and has included mitigation in that regard to prevent any such adverse effects.
309146, 309773	2 no. 110kV transmission lines and a 110kV GIS substation	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation	No in combination effect.  The proposed project to install 2 no. 110kV transmission lines and a 110kV GIS substation must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>objectives supporting aquatic habitats and species in in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).</li> </ul>	The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed project to install 2 no. 110kV transmission lines and a 110kV GIS substation, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the development of 2 no. 110kV transmission lines and a 110kV GIS substation and has included mitigation in that regard to prevent any such adverse effects.
311315	Park development project at the Racecourse Park	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme either via habitat fragmentation or habitat degradation impacts (either hydrological, invasive species, air quality or disturbance/displacement to SCI species).	No in combination effect.
3966/20	Build to Rent shared accommodation at Joyces Court off Foley Street.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:	No in combination effect.  The proposed BTR project at Joyces Court, Dublin must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.).  These land use plans contain objectives and policies to ensure the protection of European sites.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).</li> </ul>	The proposed BTR project at Joyces Court, Dublin will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed BTR project at Joyces Court, Dublin it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed BTR project at Joyces Court, Dublin, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed BTR project at Joyces Court, Dublin and has included mitigation in that regard to prevent any such adverse effects.
3400/21	Emergency extension to Mater Hospital off Eccles Street.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin	No in combination effect.  The proposed Emergency extension to Mater Hospital off Eccles Street must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The Emergency extension to Mater Hospital off Eccles Street will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required. In granting permission for the Emergency extension to Mater Hospital off Eccles Street.it will be necessary to determine that the



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).</li> </ul>	project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the Emergency extension to Mater Hospital off Eccles Street. the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Emergency extension to Mater Hospital off Eccles Street and has included mitigation in that regard to prevent any such adverse effects.
F21A/0386	Proposed Apartment development at Graymount, Dungriffin Road	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA,	No in combination effect.  The proposed development at Dungriffin Road must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed development at Dungriffin Road will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed development at Dungriffin Road, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).</li> </ul>	Considering the lack of physical overlap between the Proposed Scheme and proposed development at Dungriffin Road, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed development at Dungriffin Road and has included mitigation in that regard to prevent any such adverse effects.
F21A/0287	Advance Infrastructure works at site at Hackettstown, Skerries.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North	No in combination effect.  The proposed advance infrastructure works at Hackettstown, Skerries must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed advance infrastructure works at Hackettstown, Skerries will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed advance infrastructure works at Hackettstown, Skerries, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and proposed advance infrastructure works at Hackettstown, Skerries, the environmental protection policies



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and,</li> <li>Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul>	included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed advance infrastructure works at Hackettstown, Skerries and has included mitigation in that regard to prevent any such adverse effects.
F21A/0576	Advance Infrastructure works at site at Castlelands, Balbriggan.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and,	No in combination effect.  The proposed advance infrastructure works at Castlelands, Balbriggan must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed advance infrastructure works at Castlelands, Balbriggan will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed advance infrastructure works at Castlelands, Balbriggan, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and proposed advance infrastructure works at Castlelands, Balbriggan, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed advance infrastructure works at Castlelands, Balbriggan and has included mitigation in that regard to prevent any such adverse effects.
2062/21	Office Redevelopment of Protected Structure centred on Harcourt Street.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);	No in combination effect.  The proposed office redevelopment centred on Harcourt Street must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed office redevelopment centred on Harcourt Street will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required. In granting permission for the proposed office redevelopment centred on Harcourt Street, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and proposed office redevelopment centred on Harcourt Street, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
			projects, including the proposed office redevelopment centred on Harcourt Street and has included mitigation in that regard to prevent any such adverse effects.
D20A/0746	Construction of residential unit in three apartment blocks.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA).	No in combination effect.  The proposed residential apartment blocks must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed residential apartment blocks will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed residential apartment blocks, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and proposed residential apartment blocks, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed residential apartment blocks and has included mitigation in that regard to prevent any such adverse effects.
D19A/0439	Residential development to replace	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential	No in combination effect.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	car wash and associated facilities at Braemor Road, Churchtown.	for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);	The proposed residential development at Braemor Road, Churchtown must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed residential development at Braemor Road, Churchtown will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed residential development at Braemor Road, Churchtown, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and proposed residential development at Braemor Road, Churchtown, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to have an adverse effect on the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed residential development at Braemor Road, Churchtown and has included mitigation in that regard to prevent any such adverse effects.
22188	Demolition of commercial buildings and construction of 54	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are	No in combination effect.  The proposed development at Seapoint Road, Bray must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	apartments centred on Seapoint Road, Bray.	<ul> <li>measurable in some way, but themselves will not affect the conservation objectives of European sites.</li> <li>The potential for in-combination effects could be as a result of:         <ul> <li>Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA).</li> </ul> </li> </ul>	of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed development at Seapoint Road, Bray will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed development at Seapoint Road, Bray, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed development at Seapoint Road, Bray, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed development at Seapoint Road, Bray and has included mitigation in that regard to prevent any such adverse effects.
22217	Construction of 6- storey building including residential and commercial units on land off Wyvern, Main Street Bray.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in	No in combination effect.  The proposed development adjacent to Wyvern lands, Main Street, Bray must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed development adjacent to Wyvern lands, Main Street, Bray will be subject to planning consent, including preparation of an



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA).	EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed development adjacent to Wyvern lands, Main Street, Bray, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed development adjacent to Wyvern lands, Main Street, Bray, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed development adjacent to Wyvern lands, Main Street, Bray and has included mitigation in that regard to prevent any such adverse effects.
221054	Construction of 49 apartments, centred on Castle Street, Bray.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island	No in combination effect.  The proposed development centred on Castle Street, Bray, must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed development centred on Castle Street, Bray, will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed development centred on Castle Street, Bray, it will be necessary to determine that the project will not result in adverse effects on the integrity of any



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA).	European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Notwithstanding the proximity between the Proposed Scheme and the proposed development centred on Castle Street, Bray, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed development centred on Castle Street, Bray, and has included mitigation in that regard to prevent any such adverse effects.
221357	Change of use from retail to 25 residential apartments, Bray Central development.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA).	No in combination effect.  The proposed change of use from retail to residential apartments at Bray Central Development, Bray Main Street must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed change of use from retail to residential apartments at Bray Central Development, Bray Main Street will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed change of use from retail to residential apartments at Bray Central Development, Bray Main Street it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
			column in this table, either alone or in combination with the Proposed Scheme.  Notwithstanding the proximity between the Proposed Scheme and the proposed change of use from retail to residential apartments at Bray Central Development, Bray Main Street, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed change of use from retail to residential apartments at Bray Central Development, Bray Main Street and has included mitigation in that regard to prevent any such adverse effects.
3386/22	Demolition of 5 storey office development and replacement with residential units at Eglinton Road, Donnybrook.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and	No in combination effect.  The proposed development on Eglinton Road, Donnybrook must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed development on Eglinton Road, Donnybrook will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed development on Eglinton Road, Donnybrook it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Notwithstanding the proximity between the Proposed Scheme and the proposed development on Eglinton Road, Donnybrook, the



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).	environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed development on Eglinton Road, Donnybrook and has included mitigation in that regard to prevent any such adverse effects.
4027/22	Redevelopment of Canal House at 2-6 Dunville Terrace, Dublin.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North	No in combination effect.  The proposed redevelopment Canal House, Dunville Terrace must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed redevelopment Canal House, Dunville Terrace will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed redevelopment Canal House, Dunville Terrace it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed redevelopment Canal House, Dunville Terrace, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed redevelopment Canal House, Dunville Terrace and has included mitigation in that regard to prevent any such adverse effects.
4055/22	Development of Protected Structure at 18-21 St Stephens Green Dublin 2.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA).	No in combination effect.  The proposed development at 18-21 St Stephens Green Dublin must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed development at 18-21 St Stephens Green Dublin will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required. In granting permission for the proposed development at 18-21 St Stephens Green Dublin it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme between the Proposed Scheme and proposed development at 18-21 St Stephens Green Dublin the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed development at 18-21 St Stephens



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites? Green Dublin and has included mitigation in that regard to prevent any such adverse effects.
4559/22	Development of Protected Structure at number 23 St Stephens Green Dublin 2.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA).	No in combination effect.  The proposed development at number 23 St Stephens Green Dublin must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed development at number 23 St Stephens Green Dublin will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed development at number 23 St Stephens Green Dublin it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme between the Proposed Scheme and the proposed development at number 23 St Stephens Green Dublin the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to have an adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed development at number 23 St Stephens Green Dublin and has included mitigation in that regard to prevent any such adverse effects.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
4591/22	Development of Protected Structure at National Concert Hall.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA).	No in combination effect.  The proposed development at national Concert Hall Dublin must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed development at national Concert Hall Dublin will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed development at national Concert Hall Dublin it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme between the Proposed Scheme and proposed development at national Concert Hall Dublin the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to have an adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including proposed development at national Concert Hall Dublin and has included mitigation in that regard to prevent any such adverse effects.
4936/22	Demolition and redevelopment of existing office block and construction of new 9 storey office block	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are	No in combination effect.  The proposed redevelopment of the office block at Block 9, Harcourt Street Dublin must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	(Block 9), Harcourt Street, Dublin.	measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA).	(Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed redevelopment of the office block at Block 9, Harcourt Street Dublin will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed redevelopment of the office block at Block 9, Harcourt Street Dublin it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme between the Proposed Scheme and proposed redevelopment of the office block at Block 9, Harcourt Street Dublin the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites, in its own right, nor in combination with other projects, including proposed redevelopment of the office block at Block 9, Harcourt Street Dublin and has included mitigation in that regard to prevent any such adverse effects.
4977/22	Four-storey mixed used development at Mespil Court, Mespil Road and Burlington Road, Dublin 4.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:	No in combination effect.  The proposed redevelopment at Mespil Court, Ballsbridge must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and</li> <li>Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul>	The proposed redevelopment at Mespil Court, Ballsbridge will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed redevelopment at Mespil Court, Ballsbridge it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed redevelopment at Mespil Court, Ballsbridge, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed redevelopment at Mespil Court, Ballsbridge has included mitigation in that regard to prevent any such adverse effects.
5099/22	Development of Protected Structure at 92 and 93 St Stephens Green Dublin 2.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin	No in combination effect.  The proposed redevelopment 92 and 93 St Stephens Green Dublin 2, must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed redevelopment 92 and 93 St Stephens Green Dublin 2, will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA).	In granting permission for the proposed redevelopment 92 and 93 St Stephens Green Dublin 2, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme between the Proposed Scheme and the proposed redevelopment 92 and 93 St Stephens Green Dublin 2, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including proposed redevelopment 92 and 93 St Stephens Green Dublin 2, and has included mitigation in that regard to prevent any such adverse effects.
3012/23	Rejuvenation of St Stephens Green Shopping centre involving internal reconfiguration and partial redevelopment.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island	No in combination effect.  The proposed rejuvenation of St. Stephens Green Shopping Centre Dublin 2, must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed rejuvenation of St. Stephens Green Shopping Centre Dublin 2 will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed rejuvenation of St. Stephens Green Shopping Centre Dublin 2, it will be necessary to



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA).	determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme between the Proposed Scheme and proposed rejuvenation of St. Stephens Green Shopping Centre Dublin 2, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed rejuvenation of St. Stephens Green Shopping Centre Dublin 2and has included mitigation in that regard to prevent any such adverse effects.
3086/23	Development of Protected Structure at 35 Harcourt Street and extending to 35 35 Camden Place Dublin 2.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA,	No in combination effect.  The proposed development at 35 Harcourt Street, Dublin 2, must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed development at 35 Harcourt Street, Dublin 2, will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed development at 35 Harcourt Street, Dublin 22, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA).	Considering the lack of physical overlap between the Proposed Scheme between the Proposed Scheme and the proposed development at 35 Harcourt Street, Dublin 2, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including proposed development at 35 Harcourt Street, Dublin 2, and has included mitigation in that regard to prevent any such adverse effects.
3136/23	Demolition of existing structure and redevelopment of site facing towards Harcourt Rad/Adelaide Road.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA).	No in combination effect.  The proposed redevelopment at a site facing towards Harcourt Street/Adelaide Road, Dublin 2, must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed redevelopment at a site facing towards Harcourt Street/Adelaide Road, Dublin 2, will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed redevelopment at a site facing towards Harcourt Street/Adelaide Road, Dublin 2, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme between the Proposed Scheme and the proposed redevelopment at a site facing towards Harcourt Street/Adelaide



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
			Road, Dublin 2, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed redevelopment at a site facing towards Harcourt Street/Adelaide Road, Dublin 2, and has included mitigation in that regard to prevent any such adverse effects.
D22A/0614	Demolition of 4 storey building and construction of student accommodation, Montrose, Dublin.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA).	No in combination effect.  The proposed development of student accommodation at Montrose, Stillorgan Road Dublin 4, must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed development of student accommodation at Montrose, Stillorgan Road Dublin 4, will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for proposed development of student accommodation at Montrose, Stillorgan Road Dublin 4, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme between the Proposed Scheme and the proposed development of student accommodation at Montrose, Stillorgan Road Dublin 4, the environmental protection policies included within the relevant land use plans, the range of mitigation measures



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
			included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed development of student accommodation at Montrose, Stillorgan Road Dublin 4, and has included mitigation in that regard to prevent any such adverse effects.
D22A/0202	Demolition of 2 storey dwelling and construction 5 storey BTR later living facility at Woodlands Park, Blackrock.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA).	No in combination effect.  The proposed development at Woodlands Park, Blackrock, must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed development at Woodlands Park, Blackrock, will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed development at Woodlands Park, Blackrock, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme between the Proposed Scheme and the proposed development at Woodlands Park, Blackrock, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites? will not act in combination with the Proposed Scheme to have an
			adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed development at Woodlands Park, Blackrock, and has included mitigation in that regard to prevent any such adverse effects.
DZ22A/0770	Residential and mixed use development at Plot T11, Cherrywood SDZ Planning Scheme.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and  • Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	No in combination effect.  The proposed development at Plot T11, Cherrywood SDZ Planning Scheme, must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed development at Plot T11, Cherrywood SDZ Planning Scheme, will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed development at Plot T11, Cherrywood SDZ Planning Scheme, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed development at Plot T11, Cherrywood SDZ Planning Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
			The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed development at Plot T11, Cherrywood SDZ Planning Scheme, has included mitigation in that regard to prevent any such adverse effects.
D22A/0828	Development of lands including area around protected structure (water tower) to facilitate expansion of sports facilities, UCD sports and amenities precinct.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA).	No in combination effect.  The proposed expansion of sports facilities, UCD sports and amenities precinct must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  proposed expansion of sports facilities, UCD sports and amenities precinct will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed expansion of sports facilities, UCD sports and amenities precinct it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed expansion of sports facilities, UCD sports and amenities precinct, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed expansion of sports facilities, UCD



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			sports and amenities precinct has included mitigation in that regard to prevent any such adverse effects.
D22A/0574	Installation of solar photovoltaic panels on existing building.	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could adversely affect the integrity of any European sites within the Zol of the Proposed Scheme.	No in combination effect.
DZ22A/0133	Residential development at Plot TC6, Cherrywood SDZ Planning Scheme.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and	No in combination effect.  The proposed development at Plot TC6, Cherrywood SDZ Planning Scheme, must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed development at Plot TC6, Cherrywood SDZ Planning Scheme, will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed development at Plot TC6, Cherrywood SDZ Planning Scheme, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed development at Plot TC6, Cherrywood SDZ Planning Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
			projects, including the proposed development at Plot TC6, Cherrywood SDZ Planning Scheme, has included mitigation in that regard to prevent any such adverse effects.
D22A/0915	Development of specialist hospital and ancillary features at "The Aske", (a protected structure) Old Dublin Road, Bray.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and  • Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	No in combination effect.  The proposed development at "The Aske", Old Dublin Road, Bray must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed development at "The Aske", Old Dublin Road, Bray will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required. In granting permission for the proposed development at "The Aske", Old Dublin Road, Bray it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed development at "The Aske", Old Dublin Road, Bray, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to have an adverse effect on the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed development at "The Aske", Old Dublin Road, Bray has included mitigation in that regard to prevent any such adverse effects.
DZ22A/1085	Residential development	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential	No in combination effect.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	comprising 65 dwellings near Lehaunstown Lane, Cherrywood SDZ Planning Scheme.	for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA).	The proposed development near Lehaunstown Lane, Cherrywood SDZ Planning Scheme, must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed development near Lehaunstown Lane, Cherrywood SDZ Planning Scheme, will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed development near Lehaunstown Lane, Cherrywood SDZ Planning Scheme, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed development near Lehaunstown Lane, Cherrywood SDZ Planning Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to have an adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed development near Lehaunstown Lane, Cherrywood SDZ Planning Scheme, has included mitigation in tha
DZ22A/0623	Residential development at Plot T11, Cherrywood SDZ Planning Scheme.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are	No in combination effect.  The proposed development at Plot T11, Cherrywood SDZ Planning Scheme, must comply with all applicable planning and environmental approval requirements and be in accordance with



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>measurable in some way, but themselves will not affect the conservation objectives of European sites.</li> <li>The potential for in-combination effects could be as a result of:         <ul> <li>Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and</li> <li>Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul> </li> </ul>	the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed development at Plot T11, Cherrywood SDZ Planning Scheme, will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed development at Plot T11, Cherrywood SDZ Planning Scheme, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed development at Plot T11, Cherrywood SDZ Planning Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to have an adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed development at Plot T11, Cherrywood SDZ Planning Scheme, has included mitigation in that regard to prevent any such adverse effects.
DZ22A/0729	Residential development at Plot T3, Cherrywood SDZ Planning Scheme.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:	No in combination effect.  The proposed development at Plot T3, Cherrywood SDZ Planning Scheme, must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and</li> <li>Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul>	contain objectives and policies to ensure the protection of European sites.  The proposed development at Plot T3, Cherrywood SDZ Planning Scheme, will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed development at Plot T3, Cherrywood SDZ Planning Scheme, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed development at Plot T3, Cherrywood SDZ Planning Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to have an adverse effect on the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed development at Plot T3, Cherrywood SDZ Planning Scheme, has included mitigation in that regard to prevent any such adverse effects.
DZ23A/0106	Build to Rent development around Village Green, Gun and Drum Hill, Cherrywood SDZ Planning Scheme.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in	No in combination effect.  The proposed development Gun and Drum Hill, Cherrywood SDZ Planning Scheme, must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and  • Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	The proposed development at Gun and Drum Hill, Cherrywood SDZ Planning Scheme, will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the Gun and Drum Hill, Cherrywood SDZ Planning Scheme, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed development at Gun and Drum Hill, Cherrywood SDZ Planning Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed development at Gun and Drum Hill, Cherrywood SDZ Planning Scheme, has included mitigation in that regard to prevent any such adverse effects.
DZ22A/1021	Mixed use development at Blocks B1, B2, B3, B4, Cherrywood SDZ Planning Scheme.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin	No in combination effect.  The proposed development at Blocks B1, B2, B3, B4, Cherrywood SDZ Planning Scheme, must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed development at Blocks B1, B2, B3, B4, Cherrywood SDZ Planning Scheme, will be subject to planning consent, including



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA).	preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed development at Blocks B1, B2, B3, B4, Cherrywood SDZ Planning Scheme, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed development at Blocks B1, B2, B3, B4, Cherrywood SDZ Planning Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed development at Blocks B1, B2, B3, B4, Cherrywood SDZ Planning Scheme, has included mitigation in that regard to prevent any such adverse effects.
DZ22A/1025	Site development and removal of existing ground carpark near Luas terminus, at Cherrywood Avenue, Cherrywood SDZ Planning Scheme.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island	No in combination effect.  The proposed development at Cherrywood Avenue, Cherrywood SDZ Planning Scheme, must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed development at Cherrywood Avenue, Cherrywood SDZ Planning Scheme, will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA).	In granting permission for proposed development at Cherrywood Avenue, Cherrywood SDZ Planning Scheme, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed development at Cherrywood Avenue, Cherrywood SDZ Planning Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed development at Cherrywood Avenue, Cherrywood SDZ Planning Scheme, has included mitigation in that regard to prevent any such adverse effects.
DZ23A/0028	Residential development at boundary to Castle Street and Beckett Park, Cherrywood SDZ Planning Scheme.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA,	No in combination effect.  The proposed development at the boundary to Castle Street and Beckett Park, Cherrywood SDZ Planning Scheme, must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed development at the boundary to Castle Street and Beckett Park, Cherrywood SDZ Planning Scheme, will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for the proposed development at the boundary to Castle Street and Beckett Park, Cherrywood SDZ Planning Scheme, it will be necessary to determine that the project



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and,</li> <li>Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul>	will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed development at the boundary to Castle Street and Beckett Park, Cherrywood SDZ Planning Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed development at the boundary to Castle Street and Beckett Park, Cherrywood SDZ Planning Scheme, has included mitigation in that regard to prevent any such adverse effects.
DZ23A/0005	Residential development comprising 89 units centred on Castle Street, in townlands of Laughanstown and Brennanstown, Cherrywood SDZ Planning Scheme.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA,	No in combination effect.  The proposed development centred on Castle Street within the townlands of Laughanstown and Brennanstown in Cherrywood SDZ Planning Scheme must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed development centred on Castle Street within the townlands of Laughanstown and Brennanstown in Cherrywood SDZ Planning Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA).	In granting permission for the proposed development centred on Castle Street within the townlands of Laughanstown and Brennanstown in Cherrywood SDZ Planning Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the proposed development centred on Castle Street within the townlands of Laughanstown and Brennanstown in Cherrywood SDZ Planning Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed development centred on Castle Street within the townlands of Laughanstown and Brennanstown in Cherrywood SDZ Planning Scheme has included mitigation in that regard to prevent any such adverse effects.
	Clongriffin to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin	No in combination effect.  The proposed Clongriffin to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for this Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and</li> <li>Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul>	effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Clongriffin to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
	Swords to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA,	No in combination effect.  The proposed Swords to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for this Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and</li> <li>Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul>	included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Swords to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
	Ballymun/Finglas to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North	No in combination effect.  The proposed Ballymun/Finglas to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for this Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the Ballymun/Finglas to City Centre Core Bus Corridor Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).	the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Ballymun/Finglas to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
	Blanchardstown to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).	No in combination effect.  The proposed Blanchardstown to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for this Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the Blanchardstown to City Centre Core Bus Corridor Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites? The Proposed Scheme will not adversely affect the integrity of any
			European sites, in its own right, nor in combination with other projects, including the proposed Blanchardstown to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
	Lucan to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).	No in combination effect.  The proposed Lucan to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for this Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the Lucan to City Centre Core Bus Corridor Scheme the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Lucan to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	Liffey Valley to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).	No in combination effect.  The proposed Liffey Valley to City Centre Core Bus Corridor Scheme must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for this Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the Liffey Valley to City Centre Core Bus Corridor Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Liffey Valley to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
	Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.	No in combination effect.  The proposed Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>The potential for in-combination effects could be as a result of:</li> <li>Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).</li> </ul>	contain objectives and policies to ensure the protection of European sites.  The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for this Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the Tallaght / Clondalkin to City Centre Core Bus Corridor Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Tallaght – Clondalkin to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
	Kimmage to City Centre to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin	No in combination effect.  The proposed Kimmage to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA); and  Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA).	In granting permission for this Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the Kimmage to City Centre Core Bus Corridor Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Kimmage to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
	Templeogue / Rathfarnham to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA,	No in combination effect.  The proposed Templeogue / Rathfarnham to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for this Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and</li> <li>Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul>	Considering the lack of physical overlap between the Proposed Scheme and the Templeogue / Rathfarnham to City Centre Core Bus Corridor Scheme the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Templeogue / Rathfarnham to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
	Blackrock / Belfield to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North	No in combination effect.  The proposed Blackrock – Belfield to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for this Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Although there is limited physical overlap between the Proposed Scheme and the Blackrock / Belfield to City Centre Core Bus Corridor Scheme at the R138 Stillorgan Road / Nutley Lane intersection, there will be no temporal overlap in the construction of both schemes.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		<ul> <li>Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and</li> <li>Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul>	Owing to the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Blackrock / Belfield to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
	Ringsend to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA); and	No in combination effect.  The proposed Ringsend to City Centre Core Bus Corridor Scheme must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for this Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the lack of physical overlap between the Proposed Scheme and the Ringsend to City Centre Core Bus Corridor Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Ringsend to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
	Strategic Housing Developments (SHDs) (Impact dependent on proximity to Proposed Scheme)	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:	No in combination effect.  Proposed SHD projects must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.
		Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);	Proposed SHD projects will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for proposed SHD projects it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and
		<ul> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and</li> </ul>	that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  Proposed SHD projects will not adversely affect the integrity of any
		Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide	European sites, in its own right, nor in combination with other projects, including any proposed SHD schemes and has included mitigation in that regard to prevent any such adverse effects.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
		Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	
	Large Scale Residential Developments (LRDs) (Impact dependent on proximity to Proposed Scheme)	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:  • Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);  • Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and  • Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).	No in combination effect.  Proposed LRD projects must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  Proposed LRD projects will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for proposed LRD projects it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to have an adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  Proposed LRD projects will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including any proposed LRD schemes and has included mitigation in that regard to prevent any such adverse effects.
	GDA Transport Strategy Park and Ride	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the	No in combination effect.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	(All Included despite distance as hydrological connectivity cannot be ruled out to downstream European sites in Dublin Bay)	<ul> <li>Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.</li> <li>The potential for in-combination effects could be as a result of:         <ul> <li>Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and</li> <li>Disturbance and displacement impacts (for example ex situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul> </li> </ul>	Proposed GDA Transport Strategy Park and Ride projects must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.  Proposed GDA Transport Strategy Park and Ride projects will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for proposed Irish Water projects it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme to have an adverse effect on the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including GDA Transport Strategy Park and Ride projects and has included mitigation in that regard to prevent any such adverse effects.
	Irish Water Projects (Impact dependent on proximity to Proposed Scheme) Larger scale Irish Water infrastructure projects are described	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.  The potential for in-combination effects could be as a result of:	No in combination effect.  Proposed Irish Water projects must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.



Application Reference	Brief Description	Potential for In-Combination Effect	Conclusion Regarding In Combination Effect Will the Project Act In Combination With the Proposed Scheme to Adversely Affect the Integrity of European Sites?
	separately under major projects	<ul> <li>Habitat degradation / effects on QI / SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA);</li> <li>Habitat degradation as a result of introducing / spreading non-native invasive species (for example to downstream European sites South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA and North Bull Island SPA); and</li> <li>Disturbance and displacement impacts (for example <i>ex situ</i> inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme for South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA and Skerries Islands SPA).</li> </ul>	Proposed Irish Water projects will be subject to planning consent, including preparation of an EIAR and AA Screening Report / Natura Impact Statement, if required.  In granting permission for proposed Irish Water projects it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.  Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.  The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including Irish Water projects and has included mitigation in that regard to prevent any such adverse effects.



#### 9.2 Plan Level Environmental Protection Policies and Objectives

- 404 This section lists the overarching plan level environmental protection policies from the following plans Fingal Development Plan 2023-2029, Dublin City Development Plan 2022 2028, South Dublin County Development Plan 2022 2028, Wicklow County Development Plan 2022 2028 and Dún Laoghaire-Rathdown County Development Plan 2022 2028.
- 405 The Proposed Scheme is compliant with all of the plan level biodiversity protection policies and objectives described above, including those within the Fingal Development Plan 2023-2029, the Dublin City Development Plan 2022 2028, the South Dublin County Development Plan 2022 2028, the Wicklow County Development Plan 2022 2028 and the Dún Laoghaire-Rathdown County Development Plan 2022 2028. Furthermore, the Proposed Scheme will not prevent the achievement of any of these plan level biodiversity protection policies and objectives across the identified potential impact pathways.

### Fingal Development Plan 2023-2029

- 406 **Objective GINHO3 Biodiversity in Open Space:** Make provision for biodiversity within public open space and include water sensitive design and management measures (including SuDS) as part of a sustainable approach to open space design and management.
- 407 **Objective GINHO15 SuDS:** Limit surface water run-off from new developments through the use of appropriate Sustainable Urban Drainage Systems (SuDS) using nature-based solutions and ensure that SuDS is integrated into all new development in the County.
- 408 **Policy GINHP17 Protection of European and National Sites:** Strictly protect areas designated or proposed to be designated as Natura 2000 sites (i.e. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs); also known as European sites) including any areas that may be proposed for designation or designated during the lifetime of this Plan.
- 409 **Objective GINHO33 Annex I and Annex II:** Ensure that development does not have a significant adverse impact on proposed Natural Heritage Areas (pNHAs), Natural Heritage Areas (NHAs), Statutory Nature Reserves, Refuges for Fauna, Habitat Directive Annex I sites and Annex II species contained therein, and on rare and threatened species including those protected by law and their habitats.
- 410 **Objective GINHO28 Protection of Natural Heritage Areas:** Ensure that development does not have a significant adverse impact on proposed Natural Heritage Areas (pNHAs), Natural Heritage Areas (NHAs), Statutory Nature Reserves, Refuges for Fauna, Habitat Directive Annex I sites and Annex II species contained therein, and on rare and threatened species including those protected by law and their habitats.
- 411 **Objective GINHO35 Appropriate Assessment:** In accordance with Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities 2010, any plans or projects that are likely to have a significant effect on a Natura 2000 site, either individually or in combination with other plans or projects, are subject to a screening for Appropriate Assessment unless they are directly connected with or necessary to the management of a Natura 2000 site.

#### **Dublin City Development Plan 2022 – 2028**

- 412 **GI9 European Union Natura 2000 Sites:** To conserve, manage, protect and restore the favourable conservation condition of all qualifying interest/special conservation interests of all European sites designated, or proposed to be designated, under the EU Birds and Habitats Directives, as Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) (European / Natura 2000 sites).
- 413 **GI10** Flora and Fauna Protected under National and European Legislation Located Outside Designated Areas: To adequately protect flora and fauna (under the EU Habitats and Birds Directives, the Wildlife Acts 1976–2021, the Fisheries Acts 1959-2006 and the Flora (Protection) Order 2015 S.I No. 356 of 2015), wherever they occur within Dublin City, or have been identified as supporting the favourable conservation condition of any European sites.



- 414 **GI13 Areas of Ecological Importance for Protected Species:** To ensure the protection, conservation and enhancement of all areas of ecological importance for protected species, and especially those listed in the EU Birds and Habitats Directives, including those identified as supporting the favourable conservation condition of any European sites, in accordance with development standards set out in this plan.
- 415 **GI31 Protect and Improve Ecological Status of Rivers under the EU Water Framework Directive:** To support the improvement of the ecological status of all rivers / water bodies within the administrative area of Dublin City Council and those rivers identified in accordance with the River Basin Management Plan 2018 2021 and the next management plan to be produced under the 3<sup>rd</sup> river basin planning cycle (2022-2027), as required under the EU Water Framework Directive (see Chapter 9, Section 9.5.2 Urban Watercourses and Water Quality).

#### South Dublin County Development Plan 2022 – 2028

- 416 **Policy NCBH3 Natura 2000 Sites:** Conserve and protect Natura 2000 sites and achieve and maintain favourable conservation status for habitats and species that are considered to be at risk through the protection of the Natura 2000 network from any plans or projects that are likely to have a significant effect on their coherence or integrity
- 417 **NCBH3 Objective 1:** To prevent development and activities that would adversely affect the integrity of any Natura 2000 site located within or adjacent to the County and promote the favourable conservation status of the habitats and species integral to these sites.
- 418 **NCBH3 Objective 3:** To ensure that planning permission will only be granted for a development proposal that, either individually or in combination with existing and / or proposed plans or projects, will not have a significant adverse effect on a European Site, or where such a development proposal is likely or might have such a significant adverse effect (either alone or in combination), the planning authority will, as required by law, carry out an appropriate assessment as per requirements of Article 6(3) of the Habitats Directive 92 / 43 / EEC of the 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, as transposed into Irish legislation. Only after having ascertained that the development proposal will not adversely affect the integrity of any European site, will the planning authority agree to the development and impose appropriate mitigation measures in the form of planning conditions. A development proposal which could adversely affect the integrity of a European site may only be permitted in exceptional circumstances, as provided for in Article 6(4) of the Habitats Directive as transposed into Irish legislation

# Wicklow County Development Plan 2022 – 2028

- 419 **CPO 17.4:** To contribute, as appropriate, towards the protection of designated ecological sites including Special Areas of Conservation (SACs) and Special Protection Areas (SPAs); Wildlife Sites (including proposed Natural Heritage Areas); Salmonid Waters; Flora Protection Order sites; Wildfowl Sanctuaries (see S.I. 192 of 1979); Freshwater Pearl Mussel catchments; and Tree Preservation Orders (TPOs).
- 420 To contribute towards compliance with relevant EU Environmental Directives and applicable National Legislation, Policies, Plans and Guidelines, including but not limited to the following and any updated/superseding documents:
  - EU Directives, including the Habitats Directive (92/43/EEC, as amended), the Birds Directive (2009/147/EC), the Environmental Liability Directive (2004/35/EC), the Environmental Impact Assessment Directive (2011/92/EU, as amended), the Water Framework Directive (2000/60/EC), EU Groundwater Directive (2006/118/EC) and the Strategic Environmental Assessment Directive (2001/42/EC); EU 'Guidance on integrating ecosystems and their services into decision-making' (European Commission 2019)
  - National legislation, including the Wildlife Acts 1976 and 2010 (as amended), European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018,



the Wildlife (Amendment) Act 2000, the European Union (Water Policy) Regulations 2003 (as amended), the Planning and Development Act 2000 (as amended), the European Communities (Birds and Natural Habitats) Regulations 2011 (SI No. 477 of 2011), the European Communities (Environmental Liability) Regulations 2008 (as amended) and the Flora Protection order 2015.

- 421 **CPO 17.5:** Projects giving rise to adverse effects on the integrity of European sites (cumulatively, directly or indirectly) arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall not be permitted on the basis of this plan<sup>24</sup>.
- 422 **CPO 17.6:** Ensure that development proposals, contribute as appropriate towards the protection and where possible enhancement of the ecological coherence of the European Site network and encourage the retention and management of landscape features that are of major importance for wild fauna and flora as per Article 10 of the EU Habitats directive. All projects and plans arising from this Plan will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive.
- 423 **CPO 17.8:** Ensure ecological impact assessment is carried out for any proposed development likely to have a significant impact on proposed Natural Heritage Areas (pNHAs), Natural Heritage Areas (NHAs), Statutory Nature Reserves, Refuges for Fauna, Annex I habitats, or rare and threatened species including those species protected by law and their habitats. Ensure appropriate avoidance and mitigation measures are incorporated into development proposals as part of any ecological impact assessment.
- 424 **CPO 17.24:** To ensure and support the implementation of the EU Groundwater Directive and the EU Water Framework Directive and associated River Basin and Sub-Basin Management Plans and Blue Dot Catchment Programme, to ensure the protection, improvement and sustainable use of all waters in the County, including rivers, lakes, ground water, coastal and estuarine waters, and to restrict development likely to lead to a deterioration in water quality. The Council will also have cognisance of, where relevant, the EU's Common Implementation Strategy Guidance Document No. 20 and 36 which provide guidance on exemptions to the environmental objectives of the Water Framework Directive.

#### Dún Laoghaire-Rathdown County Development Plan 2022 - 2028

- 425 Policy Objective GIB18: Protection of Natural Heritage and the Environment. It is a Policy Objective to protect and conserve the environment including, in particular, the natural heritage of the County and to conserve and manage Nationally and Internationally important and EU designated sites such as Special Protection Areas (SPAs), Special Areas of Conservations (SACs), proposed Natural Heritage Areas (pNHAs) and Ramsar sites (wetlands) as well as non-designated areas of high nature conservation value known as locally important areas which also serve as 'Stepping Stones' for the purposes of Article 10 of the Habitats Directive
- 426 **Policy Objective GIB19**: **Habitats Directive**. It is a Policy Objective to ensure the protection of natural heritage and biodiversity, including European Sites that form part of the Natura 2000 network, in accordance with relevant EU Environmental Directives and applicable National Legislation, Policies, Plans and Guidelines.
- 427 **Policy Objective GIB21**: **Designated Sites**. It is a Policy Objective to protect and preserve areas designated as proposed Natural Heritage Areas, Special Areas of Conservation, and Special Protection Areas. It is Council policy to promote the maintenance and as appropriate, delivery of 'favourable' conservation status of habitats and species within these areas.

<sup>&</sup>lt;sup>24</sup> Except as provided for in Article 6(4) of the Habitats Directive, viz. there must be: a) no alternative solution available, b) imperative reasons of overriding public interest for the project to proceed; and c) adequate compensatory measures in place.



#### 9.3 Conclusion of In Combination Assessment

- 428 The Proposed Scheme will not affect the integrity of any European sites including those within its ZoI. It will not result in the loss or fragmentation of any QI habitats, or habitats supporting populations of QI / SCI species, in (or associated with) any European sites, nor will it degrade any such habitats or affect QI / SCI species as a result of hydrological or hydrogeological impacts (quality or quantity), air quality impacts or introducing / spreading non-native invasive plant species.
- 429 The in-combination assessment has concluded that there is no potential for adverse effects on the integrity of any European sites including those within its ZoI, to arise as a consequence of the Proposed Scheme in combination with any other plans or projects, as in consideration of the mitigation measures detailed in Section 7 of this NIS, no adverse effects on European site integrity will arise from the implementation of the Proposed Scheme.
- 430 The implementation of, and adherence to, the policies and objectives set out in Section 9.2 will ensure the protection of European sites across all identified potential impact pathways, and will include the requirement for any future project to undergo Screening for Appropriate Assessment and / or Appropriate Assessment as appropriate.
- 431 As the Proposed Scheme will not affect the integrity of European sites within the Zol of the Proposed Scheme, and given the protection afforded to European sites under the overarching land use plans, it has been concluded that there will be no adverse effects on the integrity of any European sites to arise as a consequence of the Proposed Scheme acting in combination with any other plans or projects.
- 432 Table 42 and Table 43 present the results of a pairwise assessment of the Proposed Scheme in combination with all of those projects and plans. This assessment found that there will be no adverse effects on the integrity of any European sites as a consequence of the Proposed Scheme acting in combination with each of these plans and projects.
- 433 Furthermore, for the same reasons, there will be no adverse effects on the integrity of any European sites as a consequence of the Proposed Scheme acting in combination with any, some or indeed all taken together, of these plans or projects.
- 434 Therefore, the Proposed Scheme will not adversely affect the integrity of any European sites, either alone or in combination with any other plans or projects. No additional mitigation measures are necessary or required following this update assessment.

# 10 NIS Conclusion

- 435 This NIS has examined and analysed, in light of the best scientific knowledge, with respect to those European sites within the ZoI of the Proposed Scheme, the potential impact sources and pathways, the manner in which these could potentially impact on the European sites' QI habitats and species and SCI species and whether the predicted impacts would adversely affect the integrity of South Dublin Bay SAC, Bray Head SAC, Rockabill to Dalkey Island SAC, North Dublin Bay SAC, Wicklow Mountains SAC, Howth Head SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Dalkey Island SPA, North Bull Island SPA, Baldoyle Bay SPA, The Murrough SPA, Howth Head Coast SPA, Ireland's Eye SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Lambay Island SPA, Skerries Islands SPA and Rockabill SPA. The are no other European sites at risk of effects from the Proposed Scheme.
- 436 Avoidance, design requirements and mitigation measures are set out within this NIS (and its appendices) and the effective implementation of these mitigation measures will ensure that any impacts on the conservation objectives of European sites will be avoided during the Construction and Operational Phases of the Proposed Scheme such that there will be no adverse effects on any European sites.
- 437 It has been objectively concluded by Scott Cawley Ltd., following an examination, analysis and evaluation of the relevant information, including in particular the nature of the predicted impacts from the Proposed Scheme and the effective implementation of the mitigation measures proposed that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of any European



site, either alone or in combination with other plans or projects, and there is no reasonable scientific doubt in relation to this conclusion.

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## **Directives and Legislation**

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