

**Belfield / Blackrock
to City Centre Core
Bus Corridor Scheme**
March 2022

**Natura
Impact
Statement**

**BUS
CONNECTS**

SUSTAINABLE TRANSPORT FOR A BETTER CITY.

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to City Centre Core
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Main Report

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SUSTAINABLE TRANSPORT FOR A BETTER CITY.

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Natura Impact
Statement

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1 Introduction

- 1 This Natura Impact Statement (NIS) has been prepared by Scott Cawley Ltd. on behalf of the National Transport Authority in respect of the Belfield/Blackrock City Centre Core Bus Corridor Scheme (hereinafter “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.
- 2 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).
- 3 It considers the implications of the Proposed Scheme, on its own and in combination with other plans or projects, for European sites¹ 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 report has been prepared following an assessment, in view of best scientific knowledge for 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 screening report.
- 5 Following an examination, analysis and evaluation of all relevant information and in view of best scientific knowledge, and applying the precautionary principle, that Appropriate Assessment screening report concluded that there is the possibility for significant effects on European sites to arise, either from the project alone or in combination with other plans and projects.

Accordingly, an 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 have a significant effect on some European site(s) in view of their conservation objectives.

- 6 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.
- 7 The Proposed Scheme is neither connected with nor necessary to the management of any European sites.
- 8 It is the considered view of the authors of this NIS (Scott Cawley Ltd.) that, following the implementation of the mitigation measures proposed in Section 7, the Proposed Scheme will not, individually or in

¹ 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* –defined under the Planning and Development Acts and/or Birds and Natural Habitats Regulations as (a) a candidate site of Community importance, (b) a site of Community importance, (c) a candidate special area of conservation, (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).

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

- 9 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.’

- 10 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.’

- 11 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.

- 12 In the latter context, subsections 177T(1) and (2) provide that:

- 13 ‘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.

Consideration has been given in the preparation of this report, to the evolution in interpretation and application of provisions of EU Directives and 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

- 14 The following sections provide information to facilitate the Appropriate Assessment of the Proposed Scheme to be undertaken by the competent authority.

- 15 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.).

- 16 The potential impacts are examined in order to define the potential zone of influence 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 sites’ QIs or SCIs.

3.1 Overview

- 17 The Proposed Scheme has an overall length of approximately 8.3km and is comprised of two main alignments in terms of the route it follows, from Blackrock to the City Centre and along Nutley Lane.
- 18 The Blackrock to City Centre section will commence on the R113 at Temple Hill, approximately 80m to the north of the R827 Stradbroke Road, travel along the N31 Frascati Road, the R118 Rock Road / Merrion Road / Pembroke Road, the R816 Pembroke Road / Baggot Street Upper / Baggot Street Lower, turn onto Fitzwilliam Street Lower and terminate at the junction of Mount Street Upper / Merrion Square South / Merrion Square East. The Nutley Lane section of the Proposed Scheme will commence at the tie-in with the signalised junction on the R138 Stillorgan Road on the southern end of Nutley Lane, travel along Nutley Lane and terminate at the junction with the R118 Merrion Road.
- 19 The Proposed Scheme includes an upgrade of the existing bus priority and cycle facilities. The 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.
- 20 Moreover, pedestrian facilities will be upgraded and additional signalised crossings are provided. In addition, public 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 between Herbert Road and Elgin Road.
- 21 See Figure 1 (at the end of the NIS) for the Proposed Scheme Location Plan and Appendix I and II for the General Arrangement drawings in respect of the scheme layout and proposed surface water drainage respectively.
- 22 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 Surface Water Drainage Infrastructure

- 23 The surface water drainage system for the Proposed Scheme will discharge to three surface water receptors: Brewery Stream_010, Dublin Bay and Ringsend WwTP, which ultimately discharges to Liffey Estuary Lower, before ultimately draining to Dublin Bay. All drainage outfall discharges to surface waters represent point discharges. For the Proposed Scheme, there will be a net increase of 3,797m² in the impermeable area ultimately discharging to Dublin Bay. The drainage design principles ensure that all runoff from increases in impermeable areas will be attenuated and there will be no net increase in the surface water flow discharged to these receptors.
- 24 Proposed Surface Water Drainage Works is provided in Appendix II and Sustainable Urban Drainage Systems (SuDS) solutions are summarised in Table 1.

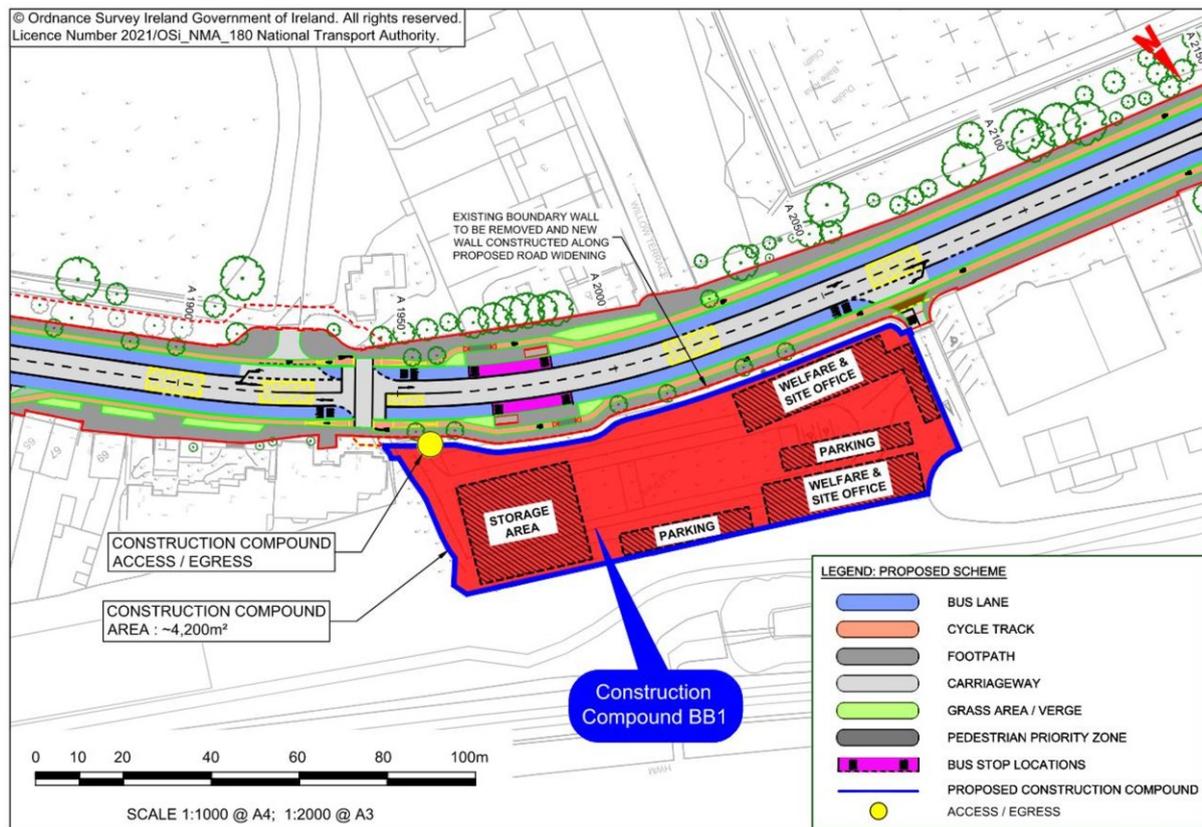
Table 1 Summary of Impermeable Areas and SuDS proposed by waterbody

Waterbody	Approx. Impermeable Surface Area			SuDS measures Proposed
	Existing (m ²)	Additional (m ²)	Percentage change (%)	
Brewery Stream_010	24,535	3,466	14	Filter drains, Sealed drains, Tree Pits & Oversized pipes.
Boosterstown Marsh and Nutley Stream	N/A	No change	-	N/A
Dublin Bay	N/A	No change	-	N/A
Dodder_050	N/A	No change	-	N/A
Grand Canal Main Line	N/A	No change	-	N/A
Ringsend WwTP	5,145	331	6	Filter drains, Sealed drains, Tree Pits & Oversized pipes. Bio retention/rain garden areas

3.3 Construction Compound

- 25 The Construction Compound BB1 will be located at Booterstown Car Park, within Blackrock Park, along the R118, opposite Willow Terrace for the duration of the Proposed Scheme's Construction Phase and its location is shown in Image 1.
- 26 Construction Compound (BB1) will be the Construction Compound servicing the Proposed Scheme. This Construction Compound will be used to store materials, plant and equipment, to manage the activities from and to provide welfare facilities for construction personnel.
- 27 The Construction Compound will be in place for the duration of the Construction Phase of the Proposed Scheme. The compound will be dismantled and the site returned to its existing condition on completion of the Construction Phase.

Image 1 Location, Extent and Layout of Construction Compound BB1 (Image from EIAR Chapter 5 Construction – report BCIDE-JAC-ENV_UC-1415_XX_00-RP-ES-00)



3.4 Estimated Construction Phase Duration

28 The duration of the Construction Phase is estimated to be 24 months.

3.5 Operational Phase

29 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

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

Tim Ryle

31 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 survey 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.

Emmi Virkki

- 32 Emmi Virkki is a Senior Consultant Ecologist with Scott Cawley Ltd. She obtained an honours degree in Environmental Biology, from University College Dublin and a Master's degree in Environmental Science from the same institution. Emmi is a member and volunteer of BirdWatch Ireland, and a member of the British Trust for Ornithology, the Irish Bryophyte Group, the Botanical Society of Britain and Ireland, and Bat Conservation Ireland. She has over five years of professional experience working in ecology in Ireland and has worked with clients at both government and private levels. Emmi's specialism is ornithology, but she is also skilled in protected flora and fauna, invasive species and habitat surveys. She has conducted ecological survey and assessment (Ecological Impact Assessment, Appropriate Assessment and Biodiversity Chapters of Environmental Impact Assessment Reports) of linear infrastructure, residential, commercial and industrial projects.

Suvi Harris

- 33 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 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 Compliance Assessment, Surface Water Impact Assessment, Sustainability Appraisal, Planning, Licencing etc. Suvi holds a deep technical understanding of the relevant National and European Legislation which govern environmental protection and planning in Ireland.

Aebhín Cawley

- 34 Aebhín Cawley is Managing Director with Scott Cawley Ltd. She holds an honours degree in Zoology from Trinity College, Dublin and a postgraduate diploma in Physical Planning at 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 EPA and delivered training on its application to its inspectorate.

4.2 Guidance and Approach

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

European Commission Guidance

- *Assessment of Plans and Projects in Relation to Affecting Natura 2000 sites: Methodological Guidance on 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);
- *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 of Plans and Projects in Ireland – Guidance for Planning Authorities* (Department of Environment, Heritage and Local Government 2010 revision);
- *Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPW 1/10 & PSSP 2/10* (NPWS, 2010); and
- *OPR Practice Note PN01. Appropriate Assessment Screening for Development Management* (Office of the Planning Regulator, 2021);

36 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, including

- *Guidelines for Ecological Impact Assessment in the UK and Ireland* (Chartered Institute of Ecology and Environmental Assessment, 2018).

4.3 Assessment Methodology

37 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.

38 From this, the zone of influence (Zoi) of the Proposed Scheme was defined. Based on the identified impacts, and their zone of influence, the European sites potentially at risk of any direct or indirect impacts were identified.

39 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 Qualifying Interest(s) (QIs) or Special Conservation Interest(s) (SCIs) 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.

40 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 zone of influence of the Proposed Scheme, and therefore potentially at risk of significant effects. The zone of influence 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).

41 The identification of a source-pathway-receptor risk does not automatically 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 occurring, with the significance of the effect depending upon the nature and exposure to the risk and the characteristics of the receptor. Where there is any uncertainty, the precautionary principle has been applied.

42 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.

43 The conservation objectives relating to each European site and its QIs/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”.

- 44 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, and
 - the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
 - the conservation status of its typical species is favourable.
- 45 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, and
 - the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
 - there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.
- 46 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.
- 47 In the case of Irelands Eye SPA, Skerries Islands SPA, The Murrough SPA and Dalkey Islands 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. 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 which has occurred since their designation, insofar as possible.
- 48 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

- 49 The data sources used to inform the assessment presented in this report are as follows (accessed in February 2022):
- Online data available on European sites and on Natural Heritage Areas (NHAs) or proposed Natural Heritage Areas (pNHAs) from www.npws.ie², including conservation objectives documents;
 - Online data records available on National Biodiversity Data Centre Database (NBDC Online Database 2022);
 - Online data records made available via an NPWS data request (NPWS 2020);
 - Information on the status of EU protected habitats and species in Ireland (National Parks & Wildlife Service, 2019a, 2019b and 2019c);

²The following SAC and SPA GIS boundary datasets are the most recently available at the time of writing: SAC_ITM_2021_10 and SPA_ITM_2021_10.

- Ordnance Survey Ireland (OSI) orthophotography for the Proposed Scheme study area available from www.osi.ie;
- Habitat and species GIS datasets provided by the NPWS, including Article 12 and Article 17 data³;
- Records from the Botanical Society of Britain and Ireland (BSBI);
- Information contained within the Flora of County Dublin⁴;
- 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 Ireland⁵;
- Information on light-bellied Brent goose inland feeding sites⁶;
- The results of ecological surveys undertaken as part of the Environmental Impact Assessment (EIA) studies for the Proposed Scheme (see Section 5 below for details); and,
- Information on the location, nature and design of the Proposed Scheme.

4.5 Consultation

50 Table 2 outlines the Appropriate Assessment issues raised during consultation.

³ 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 .

⁴ Doogue, D., Nash, D., Parnell, J., Reynolds, S. & Wyse Jackson, P. (eds) (1998) Flora of County Dublin. The Dublin Naturalists' Field Club, Dublin

⁵ NPWS (2019). The Status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview. Unpublished NPWS report.

⁶ 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 5.

Table 2 Appropriate Assessment Issues raised during Consultation

Consultee	Phase/Date of Consultation	Issues Raised	Relevant Section of the NIS where issues raised during the consultation are addressed
<p><i>Department of Housing, Local Government and Heritage (formerly Department of Culture, Heritage and the Gaeltacht)</i></p>	<p>30/07/19 Ref. G Pre00165/2019</p>	<p>The Department recommend identification, description, and assessment of direct and indirect impacts of the Proposed Scheme on the following features:</p> <ul style="list-style-type: none"> • Biodiversity in general and with specific attention to Natura 2000 sites. • 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). • Species and/or habitats listed in the Habitats Directive inside or outside of Natura 2000 sites be recorded. • Species protected under the Wildlife Act, including protected flora. • Important bird areas such as those identified by Birdwatch Ireland. • 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. 	<p>Section 5.1 European Sites, Section 3.6 Baseline, Section 7 Assessment of Effects on European Sites</p>
		<p>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.</p>	<p>Section 3.6 Baseline, Section 7 Assessment of Effects on European Sites</p>
		<p>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.</p>	<p>Section 6.3 Habitat degradation as a result of introducing/spreading non-native invasive species. An ISMP has been drafted and can be found as an Appendix III to the NIS.</p>
		<p>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.</p>	<p>Section 1 Introduction, 2 Legislative Context, 6.4 Disturbance and Displacement Impacts</p>

Consultee	Phase/Date of Consultation	Issues Raised	Relevant Section of the NIS where issues raised during the consultation are addressed
		<p>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.</p> <p>To assess mitigations, the following tasks must be completed:</p> <ul style="list-style-type: none"> • 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. <p>Then, for each of the listed mitigation measures:</p> <ul style="list-style-type: none"> • 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. <p>Where residual impacts remain, further mitigation measures may be required:</p> <ul style="list-style-type: none"> • 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. 	<p>The Proposed Scheme has been subject to Screening for AA and the production of a Natura Impact statement, which accompanies the planning submission.</p> <p>Section 6 Potential Impacts, Zone of Influence and Identifying European Sites at Risk of Effects</p>

Consultee	Phase/Date of Consultation	Issues Raised	Relevant Section of the NIS where issues raised during the consultation are addressed
Peter Foss Consultant Ecologist	16th April 2021 (By telephone)	<p>Topics discussed included:</p> <ul style="list-style-type: none"> Based on target mapping at various locations and observation of 2009 NPWS, Annex I habitats broadly similar distribution Distribution of Borrer's saltmarsh grass not confirmed owing to date of surveys. Second visit was postponed by author owing to pandemic restrictions. Scattered clumps of Third schedule non-native Common Cordgrass <i>Spartina anglica</i> noted in north east corner of marsh. 	<ul style="list-style-type: none"> Section 5.1.1 Habitats Section 5.1.2 Flora and Fauna Species Section 6 Potential Impacts, Zone of Influence and Identifying European Sites at Risk of Effects Section 7 Assessment of Effects on European sites

4.6 Baseline Surveys

- 51 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.

4.6.1 Habitats and Flora

- 52 Habitat surveys were carried out by Scott Cawley Ltd. between June and August 2018 along the then Proposed Scheme alignment (see Figure 1 at the back of the report). Surveys were subsequently undertaken on the Proposed Scheme again in August and October 2020 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. 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 Fossitt⁷ and in accordance with Best Practice Guidance for Habitat Survey and Mapping⁸. 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 or listed in the 'threatened' category or higher on the Red List for vascular plants and bryophytes) were recorded, along with their relative abundances. Non-native invasive plant species listed on the Third Schedule of the (Birds and Natural Habitats) Regulations were also recorded. The habitat's extent was mapped onto an aerial photograph, with 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 Edition⁹.
- 53 A desk study was carried out to identify all hydrological crossing points within the footprint of the Proposed Scheme. The desk study identified no sites where water bodies may be subject to significant disturbance as a consequence of the Proposed Scheme. Construction methodologies do not involve instream works,

⁷ Fossitt, J.A. (2000) *A Guide to Habitats in Ireland*. Heritage Council, Kilkenny.

⁸ Smith, G.F., O'Donoghue, P., O'Hara, K. & Delaney, E. (2011) *Best Practice Guidance for Habitat Survey and Mapping*. The Heritage Council Church Lane, Kilkenny, Ireland

⁹ Stace, C. (2019) *New Flora of the British Isles. 4th Edition*. C&M Floristics

modifications to banks or significant disturbance, and as such instream aquatic habitat surveys were not deemed necessary.

4.6.2 Fauna Surveys

- 54 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 Special Conservation Interest bird species. Dedicated fisheries or aquatic surveys were not deemed to be 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. The nearest known European site designated for Salmon, River Lamprey and Brook Lamprey is the River Boyne and River Blackwater SAC, located approximately 30km 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 44km south-west of the Proposed Scheme in the River Barrow catchment, River Nore catchment and River Ballyteigue-Bannow river catchment.

4.6.3 Otter

- 55 The footprint of the Proposed Scheme and suitable lands (e.g., greenfield sites) immediately adjacent were surveyed for otter *Lutra lutra* activity as part of the multi-disciplinary walkover survey, undertaken between June and August 2018, and in August and October 2020 (see Figure 1 at the back of the report) as well as follow on survey (February 2021) up and downstream of watercourse crossings for which evidence of otter activity was known. 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 identified during surveys or returned from desktop research. Where present, any evidence of use was recorded.
- 56 A desk study was carried out to identify all hydrological crossing points within the footprint of the Proposed Scheme. The Proposed Scheme crosses the Grand Canal at Baggot Street Bridge and the River Dodder at Ballsbridge. The remainder of the watercourses are considered unsuitable to support otter, by virtue of their dimension and condition - culverted/canalised and with no significant feeding resource.
- 57 Construction methodologies do not involve in-stream works, modifications to banks or significant disturbance, however otter surveys were carried out taking the precautionary approach. The desk study identified no sites where water bodies may be subject to significant disturbance as a consequence of the Proposed Scheme. While no in-stream works are proposed, a follow-on survey was undertaken in February 2021, at accessible locations 150m upstream and downstream of the River Dodder at the Ballsbridge crossing.

4.6.4 Kingfisher

- 58 A desk study was carried out to identify all hydrological crossing points within the footprint of the Proposed Scheme. Construction methodologies do not involve in-stream works, modifications to banks or significant disturbance along any watercourse, including the Grand Canal. The desk study identified no sites where water bodies would be subject to such significant disturbance as a consequence of the Proposed Scheme. As such, kingfisher habitat suitability assessment surveys were not deemed necessary.

4.6.5 Other Birds

- 59 The results of the desk study have informed the assessment of potential impacts on breeding bird species arising from the Proposed Scheme.
- 60 A desk-based 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*⁸ (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.

- 61 A field survey was carried out to confirm the suitability or presence of wintering birds at suitable sites. The wintering bird surveys were undertaken along two transects, namely: CBC1415WB001 which is adjacent to Booterstown Marsh, while CBC1415WB002 was centred on the large open grassy areas around Blackrock Park and its pond (see Figure 2 at the back of the report). A total of 27 wintering bird surveys were carried out for the Proposed Scheme over seven consecutive weeks across February and March 2020, and additionally twice a month, between the months of November 2020 and March 2021 and October 2021 and March 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.
- 62 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, 2009) 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

- 63 The Proposed Scheme runs immediately alongside two single European sites, namely South Dublin Bay SAC at the Merrion Gates and South Dublin Bay and River Tolka Estuary SPA at Booterstown Marsh.
- 64 The Proposed Scheme is hydrologically connected to South Dublin Bay and River Tolka Estuary SPA as well as South Dublin Bay SAC, which has four connection points, the nearest of which is located directly adjacent to the proposed crossing point on the Booterstown stream.
- 65 There are eight European sites located in Dublin Bay which are downstream of the Proposed Scheme. These sites include South Dublin Bay SAC, North Dublin Bay SAC, Howth Head SAC, Rockabill to Dalkey Island SAC, Dalkey Islands SPA, Howth Head Coast SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA. European sites will be hydrologically connected to the Proposed Scheme via the Dodder_050, Grand Canal, the Liffey Estuary Lower, the Brewery Stream_010, and Booterstown Marsh and Nutley Stream. In addition, Wicklow Mountains SAC is located upstream of the Proposed Scheme and will be hydrologically connected to the Proposed Scheme via the Dodder_050.
- 66 There are nine SPAs designated for SCI species that are known to forage and/or roost at inland sites across Dublin City and/or utilise Dublin Bay. These include South Dublin Bay and River Tolka SPA, North Bull Island SPA, Dalkey Islands SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Rockabill SPA, Ireland’s Eye SPA, Howth Head Coast SPA, Lambay Island SPA, Malahide Estuary SPA, and The Murrrough SPA.
- 67 In addition, Rockabill to Dalkey Island SAC and Lambay Island SAC are designated for mobile QI species known to utilise the Dublin Bay and the Liffey Estuary Lower.
- 68 The European sites present in the vicinity of the Proposed Scheme are shown in Figure 3 at the end of this report and listed in Table 3, along with their qualifying interests and proximity to the Proposed Scheme.

Table 3 European sites in the vicinity of the Proposed Scheme

European Site Name [Code] and its Qualifying interest(s) /Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Scheme (as the crow flies)
Special Area of Conservation (SAC)	
<p>South Dublin Bay SAC [000210] 1140 Mudflats and sandflats not covered by seawater at low tide 1210 Annual vegetation of drift lines 1310 <i>Salicornia</i> and other annuals colonising mud and sand 2110 Embryonic shifting dunes</p> <p><i>S.I. No. 525/2019 - European Union Habitats (South Dublin Bay Special Area of Conservation 000210) Regulations 2019</i> NPWS (2013) <i>Conservation Objectives: South Dublin Bay SAC 000210</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	Immediately adjacent to the Proposed Scheme
<p>North Dublin Bay SAC [000206] 1140 Mudflats and sandflats not covered by seawater at low tide 1210 Annual vegetation of drift lines 1310 <i>Salicornia</i> and other annuals colonising mud and sand 1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) 1395 Petalwort <i>Petalophyllum ralfsii</i> 1410 Mediterranean salt meadows (<i>Juncetalia maritimi</i>) 2110 Embryonic shifting dunes 2120 Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)* 2190 Humid dune slacks</p> <p><i>S.I. No. 524/2019 - European Union Habitats (North Dublin Bay Special Area of Conservation 000206) Regulations 2019</i> NPWS (2013) <i>Conservation Objectives: North Dublin Bay SAC 000206</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	Approximately 4.7km north-east of the Proposed Scheme
<p>Rockabill to Dalkey Island SAC [003000] 1170 Reefs 1351 Harbour porpoise <i>Phocoena phocoena</i></p> <p><i>S.I. No. 94/2019 - European Union Habitats (Rockabill To Dalkey Island Special Area Of Conservation 003000) Regulations 2019</i> NPWS (2013) <i>Conservation Objectives: Rockabill to Dalkey Island SAC 003000</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	Approximately 5.3km east of the Proposed Scheme
<p>Howth Head SAC [000202] 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts 4030 European dry heaths</p>	Approximately 9.2km north-east of the Proposed Scheme

European Site Name [Code] and its Qualifying interest(s) /Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Scheme (as the crow flies)
<p><i>S.I. No. 524/2021 - European Union Habitats (Howth Head Special Area of Conservation 000202) Regulations 2021.</i></p> <p>NPWS (2016) <i>Conservation Objectives: Howth Head SAC 000202</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.</p>	
<p>Wicklow Mountains SAC [002122]</p> <p>3110 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)</p> <p>3160 Natural dystrophic lakes and ponds</p> <p>4010 Northern Atlantic wet heaths with <i>Erica tetralix</i></p> <p>4030 European dry heaths</p> <p>4060 Alpine and Boreal heaths</p> <p>6130 <i>Calaminarian</i> grasslands of the <i>Violetalia calaminariae</i></p> <p>6230 Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)</p> <p>7130 Blanket bogs (* if active bog)</p> <p>8110 Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>)</p> <p>8210 Calcareous rocky slopes with chasmophytic vegetation</p> <p>8220 Siliceous rocky slopes with chasmophytic vegetation</p> <p>91A0 Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles</p> <p>1355 <i>Lutra lutra</i> (Otter)</p> <p>NPWS (2017) <i>Conservation Objectives: Wicklow Mountains SAC 002122</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.</p>	<p>Approximately 9.3km south-west of the Proposed Scheme</p>
<p>Knocksink Wood SAC [000725]</p> <p>7220 Petrifying Springs with Tufa formation (Cratonuerion)*</p> <p>91A0 Old Sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles</p> <p>91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae)*</p> <p><i>S.I. No. 93/2019- European Union Habitats (Knocksink Wood Special Area of Conservation 000725) Regulations 2019</i></p> <p>NPWS (2021) <i>Conservation objectives for Knocksink Wood SAC [000725]</i>. Version 1.0. Department of Housing, Local Government and Heritage..</p>	<p>Approximately 9.6km south of the Proposed Scheme</p>
<p>Ballyman Glen SAC [000713]</p> <p>7220 Petrifying springs with tufa formation (Cratoneurion)*</p> <p>7230 Alkaline fens</p> <p><i>S.I. No. 92/2019- European Union Habitats (Ballyman Glen Special Area of Conservation 000713) Regulations 2019</i></p> <p>NPWS (2019) <i>Conservation objectives: Ballyman Glen SAC [000713]</i>. Version 1.0. Department of Housing, Local Government and Heritage..</p>	<p>Approximately 9.7km south of the Proposed Scheme</p>

European Site Name [Code] and its Qualifying interest(s) /Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Scheme (as the crow flies)
<p>Baldoyle Bay SAC [000199]</p> <p>1140 Mudflats and sandflats not covered by seawater at low tide 1310 <i>Salicornia</i> and other annuals colonizing mud and sand 1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) 1410 Mediterranean salt meadows (<i>Juncetalia maritimi</i>)</p> <p><i>S.I. No. 472/2021 - European Union Habitats (Baldoyle Bay Special Area of Conservation 000199) Regulations 2021</i></p> <p>NPWS (2012) <i>Conservation Objectives: Baldoyle Bay SAC 000199</i>. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht</p>	<p>Approximately 10.1km north-east of the Proposed Scheme</p>
<p>Glenasmole Valley SAC [001209]</p> <p>6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) 6410 <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) 7220 Petrifying springs with tufa formation (<i>Cratoneurion</i>)*</p> <p>NPWS (2021) <i>Conservation objectives for Glenasmole Valley SAC [001209]</i>. Generic Version 1.0. Department of Housing, Local Government and Heritage.</p>	<p>Approximately 11.4km south-west of the Proposed Scheme</p>
<p>Bray Head SAC [002193]</p> <p>1230 Vegetated sea cliffs of the Atlantic and Baltic coasts 4030 European dry heaths</p> <p><i>S.I. No. 620/2017 - European Union Habitats (Bray Head Special Area of Conservation 000714) Regulations 2017</i></p> <p>NPWS (2017) <i>Conservation objectives: Bray Head SAC [000714]</i>. Version 1.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.</p>	<p>Approximately 12.2km south-east of the Proposed Scheme</p>
<p>Ireland's Eye SAC [002193]</p> <p>1220 Perennial vegetation of stony banks 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts</p> <p><i>S.I. No. 501/2017 - European Union Habitats (Ireland's Eye Special Area of Conservation 002193) Regulations 2017</i></p> <p>NPWS (2017) <i>Conservation objectives: Ireland's Eye SAC [002193]</i>. Version 1.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.</p>	<p>Approximately 13.3km north-east of the Proposed Scheme</p>
<p>Malahide Estuary SAC [000205]</p> <p>1140 Mudflats and sandflats not covered by seawater at low tide 1310 <i>Salicornia</i> and other annuals colonising mud and sand</p>	<p>Approximately 13.5km north-east of the Proposed Scheme</p>

European Site Name [Code] and its Qualifying interest(s) /Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Scheme (as the crow flies)
<p>1320 <i>Spartina</i> swards (<i>Spartinion maritimae</i>)¹⁰</p> <p>1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)</p> <p>1410 Mediterranean salt meadows (<i>Juncetalia maritimi</i>)</p> <p>2120 Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes)</p> <p>2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)*</p> <p><i>S.I. No. 91/2019 - European Union Habitats (Malahide Estuary Special Area of Conservation 000205) Regulations 2019</i></p> <p>NPWS (2013) <i>Conservation Objectives: Malahide Estuary SAC 000205</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	
<p>Lambay Island SAC [000204]</p> <p>1170 Reefs</p> <p>1230 Vegetated sea cliffs of the Atlantic and Baltic coasts</p> <p>1364 Grey seal <i>Halichoerus grypus</i></p> <p>1365 Harbour seal <i>Phoca vitulina</i></p> <p><i>S.I. No. 294/2019 - European Union Habitats (Lambay Island Special Area of Conservation 000204) Regulations 2019</i></p> <p>NPWS (2013) <i>Conservation Objectives: Lambay Island SAC 000204</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	<p>Approximately 21.7km north-east of the Proposed Scheme</p>
Special Protection Area (SPA)	
<p>South Dublin Bay and River Tolka Estuary SPA [004024]</p> <p>A046 Light-bellied Brent Goose <i>Branta bernicla hrota</i></p> <p>A130 Oystercatcher <i>Haematopus ostralegus</i></p> <p>A137 Ringed Plover <i>Charadrius hiaticula</i></p> <p>A141 Grey Plover <i>Pluvialis squatarola</i></p> <p>A143 Knot <i>Calidris canutus</i></p> <p>A144 Sanderling <i>Calidris alba</i></p> <p>A149 Dunlin <i>Calidris alpina</i></p> <p>A157 Bar-tailed Godwit <i>Limosa lapponica</i></p> <p>A162 Redshank <i>Tringa totanus</i></p> <p>A179 Black-headed Gull <i>Chroicocephalus ridibundus</i></p> <p>A192 Roseate Tern <i>Sterna dougallii</i></p> <p>A193 Common Tern <i>Sterna hirundo</i></p> <p>A194 Arctic Tern <i>Sterna paradisaea</i></p>	<p>Immediately adjacent to the Proposed Scheme (at Booterstown Marsh)</p>

¹⁰ 1320 *Spartina* swards (*Spartinion maritimae*) habitat is included within the conservation objectives document for Malahide Estuary SAC, but not within the Statutory Instruments document. This is likely because *Spartina* is an invasive alien species in Ireland and as such NPWs have not set a conservation target for it, nor is there a requirement to assess the habitat as a QI.

European Site Name [Code] and its Qualifying interest(s) /Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Scheme (as the crow flies)
<p>A999 Wetland and Waterbirds</p> <p><i>S.I. No. 212/2010 - European Communities (Conservation of Wild Birds (South Dublin Bay and River Tolka Estuary Special Protection Area 004024)) Regulations 2010.</i></p> <p>NPWS (2015) <i>Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	
<p>North Bull Island SPA [004006]</p> <p>A046 Light-bellied Brent Goose <i>Branta bernicla hrota</i></p> <p>A048 Shelduck <i>Tadorna tadorna</i></p> <p>A052 Teal <i>Anas crecca</i></p> <p>A054 Pintail <i>Anas acuta</i></p> <p>A056 Shoveler <i>Anas clypeata</i></p> <p>A130 Oystercatcher <i>Haematopus ostralegus</i></p> <p>A140 Golden Plover <i>Pluvialis apricaria</i></p> <p>A141 Grey Plover <i>Pluvialis squatarola</i></p> <p>A143 Knot <i>Calidris canutus</i></p> <p>A144 Sanderling <i>Calidris alba</i></p> <p>A149 Dunlin <i>Calidris alpina</i></p> <p>A156 Black-tailed Godwit <i>Limosa limosa</i></p> <p>A157 Bar-tailed Godwit <i>Limosa lapponica</i></p> <p>A160 Curlew <i>Numenius arquata</i></p> <p>A162 Redshank <i>Tringa totanus</i></p> <p>A169 Turnstone <i>Arenaria interpres</i></p> <p>A179 Black-headed Gull <i>Chroicocephalus ridibundus</i></p> <p>A999 Wetlands & Waterbirds</p> <p><i>S.I. No. 211/2010 - European Communities (Conservation of Wild Birds (North Bull Island Special Protection Area 004006)) Regulations 2010.</i></p> <p>NPWS (2015) <i>Conservation Objectives: North Bull Island SPA 004006</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	<p>Approximately 4.7km north-east of the Proposed Scheme</p>
<p>Dalkey Islands SPA [004172]</p> <p>A192 Roseate Tern <i>Sterna dougallii</i></p> <p>A193 Common Tern <i>Sterna hirundo</i></p> <p>A194 Arctic Tern <i>Sterna paradisaea</i></p> <p><i>S.I. No. 238/2010 - European Communities (Conservation of Wild Birds (Dalkey Islands Special Protection Area 004172)) Regulations 2010</i></p> <p>NPWS (2021) <i>Conservation objectives for Dalkey Islands SPA [004172]</i>. Generic Version 8.0. Department of Housing, Local Government and Heritage.</p>	<p>Approximately 5.3km south-east of the Proposed Scheme</p>
<p>Wicklow Mountains SPA [004040]</p> <p>A098 Merlin <i>Falco columbarius</i></p>	<p>Approximately 9.6km south-west of the Proposed Scheme</p>

European Site Name [Code] and its Qualifying interest(s) /Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Scheme (as the crow flies)
<p>A103 Peregrine <i>Falco peregrinus</i></p> <p><i>S.I. No. 586/2012 - European Communities (Conservation of Wild Birds (Wicklow Mountains Special Protection Area 004040)) Regulations 2012.</i></p> <p>NPWS (2021) <i>Conservation objectives for Wicklow Mountains SPA [004040].</i> Generic Version 8.0. Department of Housing, Local Government and Heritage.</p>	
<p>Baldoyle Bay SPA [004016]</p> <p>A046 Light-bellied Brent Goose <i>Branta bernicla hrota</i></p> <p>A048 Shelduck <i>Tadorna tadorna</i></p> <p>A137 Ringed Plover <i>Charadrius hiaticula</i></p> <p>A140 Golden Plover <i>Pluvialis apricaria</i></p> <p>A141 Grey Plover <i>Pluvialis squatarola</i></p> <p>A157 Bar-tailed Godwit <i>Limosa lapponica</i></p> <p>A999 Wetland and Waterbirds</p> <p><i>S.I. No. 275/2010 - European Communities (Conservation of Wild Birds (Baldoyle Bay Special Protection Area 004016)) Regulations 2010.</i></p> <p>NPWS (2013) <i>Conservation Objectives: Baldoyle Bay SPA 004016. Version 1.</i> National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	<p>Approximately 10.1km north-east of the Proposed Scheme</p>
<p>Howth Head Coast SPA [004113]</p> <p>A188 Kittiwake <i>Rissa tridactyla</i></p> <p><i>S.I. No. 185/2012 - European Communities (Conservation of Wild Birds (Howth Head Coast Special Protection Area 004113)) Regulations 2012.</i></p> <p>NPWS (2021) <i>Conservation objectives for Howth Head Coast SPA [004113].</i> Generic Version 8.0. Department of Housing, Local Government and Heritage.</p>	<p>Approximately 10.6km north-east of the Proposed Scheme</p>
<p>Ireland's Eye SPA [004117]</p> <p>A017 Cormorant <i>Phalacrocorax carbo</i></p> <p>A184 Herring Gull <i>Larus argentatus</i></p> <p>A188 Kittiwake <i>Rissa tridactyla</i></p> <p>A199 Guillemot <i>Uria aalge</i></p> <p>A200 Razorbill <i>Alca torda</i></p> <p><i>S.I. No. 240/2010 - European Communities (Conservation of Wild Birds (Ireland's Eye Special Protection Area 004117)) Regulations 2010.</i></p> <p>NPWS (2021) <i>Conservation objectives for Ireland's Eye SPA [004117].</i> Generic Version 8.0. Department of Housing, Local Government and Heritage</p>	<p>Approximately 13.0km north-east of the Proposed Scheme</p>
<p>Malahide Estuary SPA [004025]</p> <p>A005 Great Crested Grebe <i>Podiceps cristatus</i></p> <p>A046 Light-bellied Brent Goose <i>Branta bernicla hrota</i></p> <p>A048 Shelduck <i>Tadorna tadorna</i></p> <p>A054 Pintail <i>Anas acuta</i></p>	<p>Approximately 13.7km north-east of the Proposed Scheme</p>

European Site Name [Code] and its Qualifying interest(s) /Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Scheme (as the crow flies)
<p>A067 Goldeneye <i>Bucephala clangula</i> A069 Red-breasted Merganser <i>Mergus serrator</i> A130 Oystercatcher <i>Haematopus ostralegus</i> A140 Golden Plover <i>Pluvialis apricaria</i> A141 Grey Plover <i>Pluvialis squatarola</i> A143 Knot <i>Calidris canutus</i> A149 Dunlin <i>Calidris alpina</i> A156 Black-tailed Godwit <i>Limosa limosa</i> A157 Bar-tailed Godwit <i>Limosa lapponica</i> A162 Redshank <i>Tringa totanus</i> A999 Wetland and Waterbirds</p> <p><i>S.I. No. 285/2011 - European Communities (Conservation of Wild Birds (Malahide Estuary Special Protection Area 004025)) Regulations 2011.</i> NPWS (2013) <i>Conservation Objectives: Malahide Estuary SPA 004025</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	
<p>Rogerstown Estuary SPA [004015] A043 Greylag Goose <i>Anser anser</i> A046 Brent Goose <i>Branta bernicla hrota</i> A048 Shelduck <i>Tadorna tadorna</i> A056 Shoveler <i>Anas clypeata</i> A130 Oystercatcher <i>Haematopus ostralegus</i> A137 Ringed Plover <i>Charadrius hiaticula</i> A141 Grey Plover <i>Pluvialis squatarola</i> A143 Knot <i>Calidris canutus</i> A149 Dunlin <i>Calidris alpina alpina</i> A156 Black-tailed Godwit <i>Limosa limosa</i> A162 Redshank <i>Tringa totanus</i> A999 Wetlands</p> <p><i>S.I. No. 271/2010 - European Communities (Conservation of Wild Birds (Rogerstown Estuary Special Protection Area 004015)) Regulations 2010.</i> NPWS (2013) <i>Conservation Objectives: Rogerstown Estuary SPA 004015</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	<p>Approximately 18.4km north-east of the Proposed Scheme</p>
<p>Lambay Island SPA [004069] A009 Fulmar <i>Fulmarus glacialis</i> A017 Cormorant <i>Phalacrocorax carbo</i> A018 Shag <i>Phalacrocorax aristotelis</i> A043 Greylag Goose <i>Anser anser</i> A183 Lesser Black-backed Gull <i>Larus fuscus</i> A184 Herring Gull <i>Larus argentatus</i> A188 Kittiwake <i>Rissa tridactyla</i></p>	<p>Approximately 21.5km north-east of the Proposed Scheme</p>

European Site Name [Code] and its Qualifying interest(s) /Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Scheme (as the crow flies)
<p>A199 Guillemot <i>Uria aalge</i> A200 Razorbill <i>Alca torda</i> A204 Puffin <i>Fratercula arctica</i></p> <p><i>S.I. No. 242/2010 - European Communities (Conservation of Wild Birds (Lambay Island Special Protection Area 004069)) Regulations 2010.</i> NPWS (2021) <i>Conservation objectives for Lambay Island SPA [004069].</i> Generic Version 8.0. Department of Housing, Local Government and Heritage.</p>	
<p>The Murrough SPA [004186] A001 Red-throated Diver <i>Gavia stellata</i> 13.5km A043 Greylag Goose <i>Anser anser</i> 15-20km A046 Light-bellied Brent Goose <i>Branta bernicla hrota</i> 15-20km A050 Wigeon <i>Anas penelope</i> A052 Teal <i>Anas crecca</i> A179 Black-Headed Gull <i>Chroicocephalus ridibundus</i> A184 Herring Gull <i>Larus argentatus</i> A195 Little Tern <i>Sterna albifrons</i></p> <p><i>S.I. No. 298/2011 - European Communities (Conservation of Wild Birds (The Murrough Special Protection Area 004186)) Regulations 2011</i> NPWS (2020) <i>Conservation objectives for The Murrough SPA [004186].</i> Generic Version 7.0. Department of Housing, Local Government and Heritage..</p>	<p>Approximately 22.7km south-east of the Proposed Scheme</p>
<p>Skerries Islands SPA [004122] A017 Cormorant <i>Phalacrocorax carbo</i> A018 Shag <i>Phalacrocorax aristotelis</i> 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></p> <p><i>S.I. No. 245/2010 - European Communities (Conservation of Wild Birds (Skerries Islands Special Protection Area 004122)) Regulations 2010.</i> NPWS (2021) <i>Conservation objectives for Skerries Islands SPA [004122].</i> Generic Version 8.0. Department of Housing, Local Government and Heritage.</p>	<p>Approximately 27.7km from the Proposed Scheme</p>
<p>Rockabill SPA [004114] A148 Purple Sandpiper <i>Calidris maritima</i> A192 Roseate Tern <i>Sterna dougallii</i> A193 Common Tern <i>Sterna hirundo</i> A194 Arctic Tern <i>Sterna paradisaea</i></p> <p><i>S.I. No. 94/2012- European Communities (Conservation of Wild Birds (Rockabill Special Protection Area 004114)) Regulations 2012.</i></p>	<p>Approximately 28.3km north-east of the Proposed Scheme</p>

European Site Name [Code] and its Qualifying interest(s) /Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Scheme (as the crow flies)
NPWS (2013) <i>Conservation objectives for Rockabill SPA [004114]</i> . Generic Version 1.0. Department of Arts, Heritage and the Gaeltacht.	

5.2 Habitats

69 The Proposed Scheme is located in a highly urbanised environment, which in places is routed along the coastal corridor parallel to South Dublin Bay. Habitats present in the footprint of the Proposed Scheme include the following:

- Flower beds and borders (BC4);
- Stone walls and other stonework (BL1);
- Buildings and artificial surfaces (BL3);
- Exposed sand, gravel or till (ED1);
- Recolonising bare ground (ED3);
- Other artificial lakes and ponds (FL8);
- Depositing lowland rivers (FW2);
- Canals (FW3);
- Amenity Grassland (Improved) (GA2);
- Residential;
- (Mixed) broadleaved woodland (WD1);
- Scattered trees and parkland (WD5);
- Hedgerows (WL1);
- Treelines (WL2);
- Scrub (WS1); and
- Ornamental/ non-native shrub (WS3).

70 None of these habitats corresponds to Annex I or Qualifying Interest Habitats. However, Booterstown Marsh, which runs along the Proposed Scheme boundary, is documented as supporting a number of coastal Annex I habitats within the marshes' wetland complex. A survey of habitats within Booterstown Marsh was not undertaken. A description of the habitats based on published historical survey data undertaken for NPWS (McCorry and Ryle, 2009) is included separately below.

5.2.1 Booterstown Marsh

71 The Proposed Scheme runs alongside Booterstown Nature Reserve, which is also designated as a pNHA, while the Marsh is also a subsite of South Dublin Bay and River Tolka Estuary SPA. The overall wetland complex of the marsh is an important bird resource including wintering SCI species associated with the South Dublin Bay and River Tolka Estuary SPA.

72 Given the proximity of the Proposed Scheme to the marsh and links to known Annex I habitats present therein, the following habitat description is provided owing to the conservation importance of the site. The data used in characterizing the marsh is based on historical NPWS data adapted from McCorry & Ryle (2009). A recent survey of the marsh commissioned by An Taisce has not yet been published. However, An Taisce consented for the NTA to communicate with the reporting author, who noted that the distribution of Annex I habitats that was observed was similar in extent as the survey mapping from 2009.

5.2.1.1 Lower saltmarsh (CM1)

- 73 A desk study of habitats adjacent to the Proposed Scheme identified small pockets of lower salt marsh at Booterstown Nature Reserve (McCorry and Ryle 2009). This habitat is approximately 16m east of the Proposed Scheme, totalled c. 120m². Based on analysis of the NPWS (2019b) data, the lower saltmarsh is buffered by approximately 15m of scrub and linear habitats, recorded in 2020 survey season, exists along the elevated landward side of the marsh. Based on a desk study of available data, parts of this lower saltmarsh complex has links to a number of Annex I habitats), (McCorry and Ryle 2009, NPWS 2019b).
- 74 McCorry and Ryle (2009) recorded saltmarsh communities with potential links to Annex I habitats around the marsh. The annual *Salicornia* and other annuals colonising mud and sand (1310) habitat was recorded at low densities on the margins of exposed mud flats and was comprised of small clumps of glasswort *Salicornia* spp., with the occasional presence of annual sea-blite *Suaeda maritima* and sea purslane *Atriplex portulacoides*. Additional plant species were recorded in low numbers at transitional zones with upper salt marsh habitat and included, creeping bent *Agrostis stolonifera* and sea beet *Beta vulgaris* subsp. *maritima*. This habitat is a Qualifying Interest habitat of the adjacent South Dublin Bay SAC.
- 75 The distribution of this habitat at Booterstown Marsh overlaps with the favourable reference range of this Annex I habitat as presented in 'The Status of EU Protected Habitats and Species in Ireland Article 17' report and is of National Ecological Importance (NPWS 2019b).
- 76 Owing to classification difference between Fossitt system and the EU Interpretation Manual (EU 2013), it is noted that the lower saltmarsh habitat also included elements of upper saltmarsh, in terms of Annexed habitats. These are discussed below.

5.2.1.2 Upper saltmarsh (CM2)

- 77 A desk study of habitats adjacent to the Proposed Scheme identified linear strips of upper salt marsh, often discontinuous in nature owing to the presence of brackish marsh vegetation dominated by sea club-rush *Schoenoplectus maritimus* (McCorry and Ryle 2009). The habitat is located between 10m to 16m east of the Proposed Scheme with a total area estimated at being approximately 0.8ha. A buffer of approximately 10m of scrub and linear habitats such as treelines and hedgerows were recorded in 2020 survey season between the Proposed Scheme and the upper saltmarsh habitats identified in the NPWS data (NPWS 2019b). Based on a desk study of available data, this habitat corresponds to both Annex I habitats such as Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) (1330) or Mediterranean salt meadows (*Juncetalia maritimi*) (1410), where Mediterranean sea rush *Juncus maritimus* was recorded (McCorry and Ryle 2009, NPWS 2019b).
- 78 The Annex I Atlantic salt meadows (1330) habitat was noted as comprising 50% of the lower saltmarsh habitat with species such as sea purslane *Sesuvium portulacastrum*, sea aster *Aster tripolium*, common saltmarsh-grass *Puccinellia maritima*, glasswort, sea mayweed *Tripleurospermum maritimum*, greater sea spurrey *Spergularia media*, spear-leaved orache *Atriplex prostrata*, lax-flowered sea lavender *Limonium humile*, rock sea lavender *Limonium binervosum* and sea plantain *Plantago maritima*. Sea club-rush was also present but at low densities.
- 79 Mediterranean salt meadows (1410) was also identified in low densities, being distinguished solely during the 2009 survey on the presence of sea rush. However, this habitat was noted as being very poorly developed and there was no significant development of a distinctive vegetation type. Other species that were associated with the Mediterranean salt marsh included sea aster, greater sea-spurrey, sea arrowgrass *Triglochin maritima* and glasswort. Borrer's saltmarsh grass *Puccinellia fasciculata*, which is listed in the Flora (Protection) Order, was also recorded in low densities along the transition of the open muds and Brackish marsh e.g., to the landward side of the marsh proper.
- 80 Additional plant species were recorded at transitional zone with lower saltmarsh habitat and included creeping bent and sea beet which were recorded in low numbers. Both of these Annex I saltmarsh habitats are qualifying interest habitats for North Dublin Bay SAC, which is within the Zol of the Proposed Scheme.

- 81 This habitat type is of National Ecological Importance (Higher Value) as it corresponds with Annex I habitats Atlantic salt meadows (*Glauco-Puccinellietalia maritima*) (1330) and Mediterranean salt meadows (*Juncetalia maritimi*) (1410).

5.2.1.3 Mud sand shores (LS4)

- 82 Based on a desk top study, this habitat was identified at one location adjacent to the Proposed Scheme (McCorry and Ryle 2009). A large part of Booterstown Nature Reserve comprises soft mud and sand associated intertidal habitats prone to periodic inundation by sea water.
- 83 Few plant species were recorded by McCorry and Ryle (2009), though the peripheral mud sand shores can be associated with lower saltmarsh habitats as pioneer species form colonies. Glassworts can act as pioneer species for saltmarsh formation and was recorded at adjacent habitats.
- 84 Mud sand shore habitats at Booterstown Nature Reserve may be linked to Annex I 'mudflats and sandflats not covered by sea water at low tide (1140)' habitats.

5.3 Flora and Fauna Species

5.4 Flora

- 85 No records of any Annex II plant species were recorded within the footprint of the Proposed Scheme during field surveys.
- 86 There was one non-native invasive plant species, three-cornered garlic *Allium triquetrum*, listed on the Third Schedule of the Birds and Habitats Regulations which was identified along the Proposed Scheme, near the north-western corner of Booterstown Marsh.
- 87 The desk study returned records of a total of 20 species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations within 1km of the Proposed Scheme (see Appendix IV, Desk Study). These records include aquatic species associated with the Grand Canal and River Dodder water fern *Azolla filiculoides*, curly waterweed *Lagarosiphon major* and Nuttall's waterweed *Elodea nuttallii* which were recorded at various sites along the River Liffey and Grand Canal. There are also records of Himalayan balsam *Impatiens glandulifera* and Japanese knotweed *Reynoutria japonica* along the Dodder in multiple locations, as well as localised records of giant rhubarb *Gunnera tinctoria*. There is also stand of Japanese knotweed along the Grand canal. A single old record of giant hogweed *Heracleum mantegazzianum* is noted at Blackrock College. The majority of the other records returned from the NBDC online database are from further afield and are not considered to be within the ZOI of the Proposed Scheme. These species were not present within the footprint of the Proposed Scheme. Common cordgrass *Spartina anglica* is known to be locally present on exposed muds within the saline parts of Booterstown Marsh.

5.5 Otter

- 88 A desk study found that otter is known to occur at a number of areas adjacent to the Proposed Scheme. The areas include the Grand Canal Dock which is hydrologically connected to the Proposed Scheme via drainage system and a crossing of the Proposed Scheme at McCartney Bridge; as well as the River Dodder at Herbert Park (up and downstream) and at Donnybrook. The Proposed Scheme cross the Dodder River across the existing road bridge at Ballsbridge. Another record from Monkstown at grid reference O2262929, possibly refers to the coastal area south-west of the Proposed Scheme.
- 89 A recent dedicated otter survey¹¹ recorded otter activity around the River Dodder at Ballsbridge. Two holts and several spraints were observed between Donnybrook and Milltown within 2km of the Proposed

¹¹ Macklin, R., Brazier, B. & Sleeman, P. (2019). *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.

Scheme. Two holts and several spraints were observed on the River Dodder/ Slang which fell within 2km of Merrion Road. Otter signs on Merrion Strand were recorded within 1km of Proposed Scheme. In addition, three holts and several spraints were recorded approximately 6km upstream of Ballsbridge at various locations along the river between Rathfarnham and Donnybrook¹¹.

- 90 No signs of otter, an Annex II species, were recorded during surveys within the footprint of the Proposed Scheme during the original multidisciplinary surveys. A follow-on survey in February 2021, at accessible locations 150m up and downstream of the Ballsbridge crossing over the River Dodder, noted a single mustelid print in exposed muds – the print could belong to otter or mink. There was no evidence of otter habitation features on the downstream side of the River Dodder at this point, although it has been heavily modified through the construction of flood relief measures. Ongoing works have remodelled the upstream side of the river crossing; the work included installation of hard flood walls along one bank which would preclude otter habitation whilst on the other side, vegetation clearance has reduced the potential for otter habitation.
- 91 The nearest European site for which this species is designated is the Wicklow Mountains SAC, which is located approximately 11.9km upstream of the Proposed Scheme. Otter territories are within the range of approximately 7.5km for females and can reach up to 21 km for males via hydrological pathways (O' Neill et al., 2009). The River Dodder and Liffey Estuary provide the key pathway to Wicklow Mountains SAC, whereas the Proposed Scheme will discharge into the Tolka Estuary. Wicklow Mountains SAC is located within a different sub-catchment (Dodder_SC_010) to the Proposed Scheme (Santry 10 Mayne_SC_010). As such, populations of otter within the footprint of the Proposed Scheme are deemed not to be connected to the SAC population.

5.6 Marine mammals

- 92 The Proposed Scheme is hydrologically connected to Dublin Bay via the River Liffey and runs parallel and at times in close proximity to the southern shoreline of South Dublin Bay.
- 93 Harbour seal, grey seal, and harbour porpoise are known to be present in Dublin Bay. Both seal species are listed on Annex II of the habitats directive and harbour porpoise are listed on Annex 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 21.5km from the Proposed Scheme. The nearest European site for which harbour porpoise has been designated is Rockabill to Dalkey Island SAC located approximately 5.3km from the Proposed Scheme.

5.7 Invertebrates

- 94 During ecological surveys for the Proposed Scheme, a search for species and or suitable supporting habitat was made. Two species included on Annex II list of Habitats Directive, namely marsh fritillary *Euphydryas aurinia* and white-clawed crayfish *Austropotamobius pallipes* were returned from the desktop review of the NBDC online database. The desk study did not return any records for white-clawed crayfish *Austropotamobius pallipes* in watercourses in the Zol of the Proposed Scheme. The nearest documented record in Dublin for the crayfish is from the Camac River around Clondalkin. The nearest documented record in Dublin for the crayfish is from the Camac River around Clondalkin.
- 95 There were no records of marsh fritillary from within the footprint of the Proposed Scheme. Desk study records in the wider area were largely historical (pre-1980s). Recent records for marsh fritillary were identified approximately 5.5km north-east of the Proposed Scheme at North Bull Island in 2019 (NBDC 2020). Marsh fritillary are restricted to habitats containing a low, open sward with abundant devil's-bit scabious *Succisa pratensis* including sand dunes, calcareous grassland, fens, raised and blanket bogs, upland heaths and grasslands. Neither devil's-bit scabious nor these habitats were recorded within the footprint of the Proposed Scheme.

5.8 Kingfisher

- 96 A desk study found that kingfisher *Alcedo atthis*, an Annex I species, are known to occur within 1km of the Proposed Scheme and across the wider study area, particularly along larger, sylvan watercourse corridors.

The desk study returned multiple records from Booterstown Marsh, whilst the Dodder River is another area, for which multiple records are documented. Booterstown Marsh is adjacent to the Proposed Scheme and is hydrologically connected to the scheme via the culverted Booterstown Stream. Likewise, the Proposed Scheme crosses the River Dodder and the Grand canal, although no instream works are planned.

- 97 Kingfisher were not recorded during multidisciplinary surveys within the footprint of the Proposed Scheme. However, Scott Cawley Ltd. are aware of kingfisher activity, with a potential resident breeding pair along the Nutley Stream. The stream, which is not mapped by the EPA, runs alongside the DART line and discharges into Dublin Bay at two areas, namely east of the Proposed construction compound and another tie-in with the Priory Stream at Blackrock Park. The stream is not intersected by the Proposed Scheme and its closest point to the Proposed Scheme is adjacent to the proposed Construction Compound (approximately 12m). The nearest European site for which this species is designated is River Boyne and River Blackwater SPA, which is located approximately 40km from the Proposed Scheme. Kingfisher populations within close proximity to the Proposed Scheme are not deemed to be SCI species.

5.9 Birds

- 98 The desk study returned records of three breeding gull species within 300m of the Proposed Scheme which may use inland amenity grassland feeding sites including black-headed gull *Chroicocephalus ridibundus*, herring gull *Larus argentatus* and lesser black-backed gull *Larus fuscus*.
- 99 The desk study returned records of a total of 44 regularly occurring wintering bird species in the wider study area (i.e., Grid Squares O13 and O14). Records included four species listed under Annex I of the Birds Directive, 36 SCI species, and an additional four amber listed species. The majority of wintering birds identified in the desk study are typically found in coastal, estuarine and intertidal habitats including the Tolka Estuary, North Bull Island transitional water body, and Dublin Bay. A desk-based review of lands within 300m of the Proposed Scheme returned records of 12 SCI wintering bird species which may use inland amenity grassland feeding sites, including light-bellied Brent goose, lapwing, curlew, oystercatcher, black-tailed godwit, herring gull, black-headed gull and lesser-black-backed gull.
- 100 A total of 27 wintering birds surveys were carried out for the Proposed Scheme at two transects, namely CBC1415WB001 (which was centred on a small area of amenity grassland at the north-western corner of the Booterstown Marsh as well as derelict ground to the north of Booterstown Marsh) and Transect CBC1415WB002 which covered the expansive grassed area in Blackrock Park around the main Pond. Species identified included light-bellied Brent goose and black-headed gull. Numerous swan and geese droppings were also commonly sighted across the site. Table 4 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 4 Wintering Birds of Conservation Concern Recorded at Sites CBC1415WB001 and CBC1415WB002 during the Wintering Bird Surveys

Common Name/Scientific Name/BTO Code	Site: Peak Count and Activity in the Study Area (Date)	Conservation Importance		
		BoCCI (B – Breeding/W - Wintering)	Annex I	SCI
Black-headed gull <i>Chroicocephalus ridibundus</i> (BH)	CBC1415WB002: Two birds feeding in lake next to transect (28/02/2020); 13 birds swimming in lake next to transect (21/01/2021); 19 birds loafing in lake next to transect (26/10/2021); 13 birds swimming in lake next to transect (09/11/2021); 20 birds swimming in lake next to transect (25/11/2021); 17 birds swimming in lake next to transect (06/12/2021); 29 birds loafing on the island edge next to transect (11/01/2022); 18 birds loafing on the island edge next to transect (18/01/2022); 22 birds swimming in lake next to transect (01/02/2022); 27 birds swimming in lake next to transect (22/02/2021); 19 birds swimming in lake next to transect (08/03/2022).	Amber (B/W)	-	✓

Common Name/Scientific Name/BTO Code	Site: Peak Count and Activity in the Study Area (Date)	Conservation Importance		
		BoCCI (B – Breeding/W - Wintering)	Annex I	SCI
Light-bellied Brent goose <i>Branta bernicla</i> (BG)	CBC1415WB001: One bird feeding east of the transect within intertidal habitats of Booterstown Marsh (08/03/2022). CBC1415WB002: 18 birds feeding on grass between lake and transect (16/03/2020); six birds swimming in lake adjacent to transect (11/01/2022); nine birds feeding on grass between lake and transect (18/01/2022); five birds feeding on grass between lake and transect (01/02/2022); nine birds feeding on grass between lake and transect (22/01/2022); 16 birds swimming in lake adjacent to transect (29/03/2022).	Amber (W)	-	✓
Little grebe <i>Tachybaptus ruficollis</i> (LG)	CBC1415WB002: One bird swimming in lake adjacent to transect (09/11/2021).	Green (B/W)		✓
Mallard <i>Anas platyrhynchos</i> (MA)	CBC1415WB002: Seven individuals swimming in lake next to transect (25/11/2021); two birds swimming in lake next to transect (06/12/2021); six birds swimming in lake next to transect (11/01/2022).	Amber (B/W)	-	✓

- 101 Transect CBC1415WB001 captured amenity grassland area next to Booterstown Marsh (within South Dublin Bay and River Tolka Estuary SPA) and Rock Road. The site is maintained with cutting by the local authority. Disturbance within the site is moderate-high with frequent public use which is frequent. Brent geese have not been observed using this small area for feeding or resting based on no live observation or droppings within the site. However, wintering birds were sighted using Booterstown Marsh as a feeding/resting spot.
- 102 Transect CBC1415WB002 captured amenity grassland area in Blackrock Park. The grassland sward within the park is maintained with regular cutting. Disturbance is moderate on the site, the transect is between the path of the park and Rock Road, which is frequently used by walkers. Light bellied Brent geese feed on the grass areas next to the transect and are frequently sighted using the lake.
- 103 Wintering bird activity was low across all visits. Table 5 compares peak counts identified across surveys to their national and international populations.

Table 5 Wintering Bird Species Recorded during Winter Bird Surveys in Comparison to the 1% of its International and National Populations

Common Name/Scientific Name/BTO Code	Associated European sites within the ZOI	1% of International Population	1% of National Population
Black-headed gull <i>Chroicocephalus ridibundus</i> (BH)	South Dublin Bay and River Tolka Estuary SPA; North Bull Island SPA; The Murrrough SPA	31,000	N/A
Light-bellied Brent goose <i>Branta bernicla</i> (BG)	South Dublin Bay and River Tolka Estuary SPA; North Bull Island SPA; Baldoyle Bay SPA; Malahide Estuary SPA; Rogerstown Estuary SPA; Skerries Islands SPA; The Murrrough SPA	400	350
Little grebe <i>Tachybaptus ruficollis</i> (LG)	N/A. The nearest designated site is Wexford Harbour and Slobbs SPA, located approximately 85.2km south	4,700	20
Mallard <i>Anas platyrhynchos</i> (MA)	N/A. The nearest designated site is Dundalk Bay SPA, located approximately 58.3km north.	20,000	280

A review of a study into light-bellied Brent goose inland feeding sites⁸ has identified one SPA wintering bird feeding site in the footprint of the Proposed Scheme, namely Booterstown Marsh. There are also five inland wintering bird feeding sites within approximately 300m of the Proposed Scheme i.e. the disturbance ZoI¹². The known inland wintering feedings sites, along with the relative importance to Brent Goose population as assessed in 2017 and distances from the Proposed Scheme are as follows:

- Blackrock/Blackrock Park (High importance) 0m from the Proposed Scheme;
- Blackrock/Blackrock College (High importance) 0m from the Proposed Scheme;
- Blackrock/Williamstown Park (High importance) immediately adjacent to the Proposed Scheme;
- Pembroke Cricket Club and Monkstown Rugby Club (High Importance) approximately 224m from the Proposed Scheme; and
- St. Andrews Playing Pitch (No data other than mention of droppings approximately 253m from the Proposed Scheme.

104 A number of SPAs have been included on a precautionary basis for assessment as it cannot with certainty be confirmed that their Special Conservation Interest species do not use areas in the vicinity of the Proposed Scheme as *ex-situ* habitat.

5.10 Hydrology

105 The Proposed Scheme is hydrologically connected to Dublin Bay via the Dodder_050, Brewery Stream_010, Grand Canal, and Booterstown marsh and Nutley Stream.

106 Details on the water quality of each watercourse, as sourced from the Environmental Protection Agency (EPA), and the distances from the proposed crossing point to downstream waterbodies are also provided in Table 6.

¹² 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. - Benson (2009). *Use of Inland Feeding Sites by Light-bellied Brent Geese in Dublin 2008-2009: A New Conservation Concern?* Irish Birds 8: 563-570.

Table 6 Water Quality of Watercourses/Waterbodies 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/Risk Score	Name of and Distance to Downstream Waterbodies along with their associated Water Quality
Grand Canal (CP098)	One crossing point at Baggott Street Bridge.	Q-Value Score not applicable WFD status 2013-2018 <i>“Good”</i> WFD waterbodies risk - <i>‘Not at risk’</i>	It flows into the Liffey Estuary Lower transitional waterbody (classified as <i>“Unpolluted”</i>) at Grand Canal Dock, which ultimately drains to Dublin Bay (approximately 4.86km to SPA) coastal waterbody, classified as <i>“Unpolluted”</i> .
Dodder River (Dodder_050) (CP097)	One culverted crossing point over bridge at Ballsbridge. Where Merrion road merges into Pembroke Road.	Q-Value 1984 – 2-3 Poor WFD status 2013-2018 <i>“Moderate”</i> WFD waterbodies risk - <i>‘at risk’</i>	It flows into the Liffey Estuary Lower transitional waterbody (classified as <i>“Unpolluted”</i>) alongside Grand Canal Dock, which ultimately drains to Dublin Bay coastal waterbody (approximately 4.86km to SPA) classified as <i>“Unpolluted”</i> .
Elm Park Stream (Brewery Stream_010) (CP095)	One crossing point under Merrion Road, north-west of petrol station.	Q-Value Score not applicable WFD status 2013-2018 <i>“Moderate”</i> WFD waterbodies risk – None presented	If flows in a culverted under railway line before discharging to Dublin Bay Coastal Waterbody whose WFD 2013-2018 status is classified as <i>“Good”</i> , a distance of approximately 61 metres.
Boosterstown stream (Brewery Stream_010) (CP092)	One culverted crossing point under Merrion Road from Trimbleston Avenue.	Q-Value Score not applicable WFD status 2013-2018 <i>“Good”</i> WFD status <i>“Moderate”</i> WFD waterbodies risk – None presented	It flows in an above-ground culverted chamber along northern boundary of Boosterstown marsh (the northern boundary of the SPA territory), before discharging to Dublin Bay Coastal Waterbody whose WFD 2013-2018 status is classified as <i>“Good”</i> , distance of approximately 179metres.
Priory Stream (Brewery Stream_010) (CP090)	One crossing point under Frascati Road/Rock Hill road intersection near Blackrock Park.	Q-Value Score not applicable WFD status 2013-2018 <i>“Moderate”</i> WFD waterbodies risk – None presented	It flows aboveground, along the southern boundary of the Blackrock Park before discharging via culvert under the railway line to Dublin Bay Coastal Waterbody whose WFD 2013-2018 status is classified as <i>“Good”</i> , a distance of approximately 220metres.
Brewery Stream (Brewery Stream_010) (CP088)	One culverted crossing point under Temple Road/Frascati Road changeover.	Q-Value Score not applicable WFD status 2013-2018 <i>“Moderate”</i> WFD waterbodies risk – None presented	It flows partially through culverts and open canalised sections to the east of Idrone Terrace to Dublin Bay Coastal Waterbody whose WFD 2013-2018 status is classified as <i>“Good”</i> , a distance of approximately 311metres.
Boosterstown Marsh and Nutley Stream	Adjacent to the Proposed Scheme Nutley Stream is a small watercourse which runs from Merrion House car park east to Boosterstown Marsh.	Q-Value Score not applicable Not classified as WFD waterbodies	The marsh is part of the South Dublin Bay and River Tolka Estuary SPA and is hydrologically connected via an outfall/inlet to the north of Boosterstown Park car park to Dublin Bay Coastal Waterbody whose WFD 2013-2018 status is classified as <i>“Good”</i>
Dublin Bay	Hydrologically connected to the Proposed Scheme via the Brewery Stream_010, Wad River, Tolka Estuary and North Bull Island transitional water bodies.	Q-value score N/A Good <i>‘Not at Risk’</i>	N/A

5.11 Hydrogeology

107 The Geological Survey of Ireland (GSI) data indicates that the site is underlain The underlying aquifers are either Locally Important Bedrock Aquifer, Moderately Productive only in Local Zones or Poor Bedrock Aquifer, Moderately Productive only in Local Zones, and that the bedrock formation 1:500k in the Proposed Scheme indicates that considerable section of the proposed scheme is underlain by “marine basinal facies (Tobercolleen and Lucan formations “Calp” comprising *Dark-grey argillaceous & cherty limestone and shale*”. Further east, beyond Booterstown Marsh, a small sliver of Marine shelf and ramp facies rocks are recorded comprising “*Argillaceous Dark-grey bioclastic limestone and subsidiary shale*” is mapped. The final section of the proposed route is characterised by *Granite and Granodiorite* lithologies.

108 The Proposed Scheme transverses two groundwater bodies, namely Dublin waterbody and the Kilcullen waterbody. Environmental data sourced from the EPA for each of these ground waterbodies is presented below:

Dublin Groundwater body

- The groundwater body it is ranked as being of “*Good*” Ground Waterbody WFD Status (2013-2018) and “*not at risk*” of failing the WFD groundwater quality objectives for the majority of its area;
- The aquifers located within this ground waterbody and where the Proposed Scheme transverses are classified as “*locally important aquifer - moderately productive only in local zones*”.

109 The vulnerability of the Dublin ground waterbody to human activities largely ranges from “*Rock at or Near Surface*”, “*Extreme*”, “*High*”, “*Moderate*” to “*Low*” within the footprint of the Proposed Scheme.

Kilcullen Groundwater body

- The groundwater body it is ranked as being of “*Good*” Ground Waterbody WFD Status (2013-2018) and “*not at risk*” of failing the WFD groundwater quality objectives for the majority of its area;
- The aquifers located within this ground waterbody and where the Proposed Scheme transverses are classified as “*Poor aquifer – bedrock which is generally unproductive except for local zones*”.

110 The vulnerability of the Kilcullen ground waterbody to human activities ranges from “*Low*”, “*Extreme*” and “*High*”, with some “*Rock at or Near Surface*” or “*Moderate*” ranking” within the footprint of the Proposed Scheme.

5.12 Soils & Geology

111 The 1:100,000 GSI bedrock geology map of the area indicates that the underlying bedrock along the Proposed Scheme is predominantly underlain by Carboniferous Limestones. The majority of the Dublin City area was a deep marine basin known as the Dublin Basin where these sedimentary rocks were deposited.

112 To the south of the region, stretching from Dún Laoghaire on the coast in a south to south-west direction and located beneath much of the Dublin and Wicklow Mountains, are the older Caledonian granites known as the Leinster Granite. This is a large intrusion of igneous rock which occurred during the Devonian Period mountain building event known as the Caledonian Orogeny.

113 Additionally, there are areas of made ground (Urban). The majority of the soils expected to be encountered within the study area are made ground comprising varying forms of hard standing materials including road pavements and footpaths. However, there are topsoil and other soils present within the study area.

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

114 Based on 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

- 115 The Proposed Scheme runs immediately alongside two single European sites, namely South Dublin Bay SAC at the Merrion Gates and South Dublin Bay and River Tolka Estuary SPA at Booterstown Marsh. The Proposed Scheme boundary overlaps the SAC and SPA boundaries by 2.7m² and 4.3m², respectively, where habitats within these areas do not currently correspond to QI habitats, and / or habitats on which QI / SCI species of nearby habitats rely on for foraging, resting / roosting and / or commuting on.
- 116 Where the SAC boundary overlaps within the application boundary areas, the area comprises of pre-existing hardstanding surfaces, which are of low ecological value and are not listed on Annex I of the Directive. With regard to the South Dublin Bay and River Tolka Estuary SPA, the area of overlap, c. 4.3m², does not contain any wetland or saltmarsh habitat for which the site is designated nor does the area of overlap represent important wetland habitat for wintering bird species, a finding that was confirmed during wintering bird surveys. The pre-existing hardstanding areas impacted, will be replaced by new road surface, i.e. equivalent habitat to what is being lost.
- 117 Therefore, although there is a small overlap with the boundaries of the South Dublin Bay SAC and the South Dublin Bay and River Tolka Estuary SPA, the Proposed Scheme boundary does not overlap with any Annex I habitats listed as a Qualifying Interest of the SAC, or habitats considered to support the SCI species of the SPAs, or have an impact on the conservation objectives of these, or any other, European sites.
- 118 The nearest European sites with a hydrological connection to the Proposed Scheme includes South Dublin Bay and River Tolka Estuary SPA and the overlapping South Dublin SAC, although the discharges are via a number of culverted streams; therefore there is potential (albeit limited) for direct habitat loss and fragmentation to occur within the SPA territory at Booterstown Marsh. Habitat loss (SPA Annex I wetland complex or Annex I saltmarsh habitats) could also occur indirectly as a consequence of habitat degradation arising from a reduction in water quality and/or a change to the hydrological regime, as described in the section below.
- 119 It also is proposed to remove some screening vegetation alongside known *ex-situ* feeding sites at Blackrock Park and Blackrock College, both of which are adjacent to the SPA. The full extent and nature of the vegetation removal may have an impact on both the extent of available feeding territory as well as screening vegetation – this is discussed separately in Section 6.6.
- 120 Special Conservation Interest (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. Malahide Estuary SPA, Baldoyle Bay SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, Dalkey Islands SPA and potentially The Murrough SPA). The Proposed Scheme will not result in the loss of sites suitable to support breeding gull and wintering bird species.
- 121 A number of potential inland feeding sites within the footprint of the Proposed Scheme were surveyed to inform this assessment, these were located at lands adjacent to Booterstown Marsh referred to as CBC1415WB001, and at Blackrock Park referred to as CBC1415WB002. Of these, Blackrock Park was found to support SCI species. The Proposed Scheme will result in the permanent loss of sites suitable to support breeding gull and wintering bird species at Blackrock Park (referred to as CBC1415WB002).
- 122 Therefore, there is potential (albeit limited) for impacts on SCI species associated with SPAs to occur as a result of habitat loss/fragmentation. Therefore, there is potential for in combination effects to occur.

- 123 With the exception of otter, Annex I habitats and Annex II species for which European sites are designated for within the ZoI of the Proposed Scheme will not result in any direct loss or fragmentation of habitat by virtue of the location of the Proposed Scheme and its construction. In terms of otter, while the Proposed Scheme does cross the Dodder River and the Grand Canal, it does so at existing transport bridges and as such will not be subject to any instream works nor alteration to the territory currently occupied by otter.

The ZoI of this impact is potentially any habitat area within or traversed by the proposed development boundary that lies either within/immediately adjacent to Dublin Bay or those potential *ex-situ* sites supporting SCI listed bird species of Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA and The Murrrough SPA.

6.2 Habitat degradation/effects on QI/SCI species as a result of hydrological impacts

- 124 The Proposed Scheme is hydrologically connected to Dublin Bay via the Dodder_050, Brewery Stream_010, Grand Canal, and Booterstown Marsh and Nutley Stream as well as a network of interconnecting and established surface or combined sewer/surface water pipes. 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. It should be noted that a highly substantial event/events would be required to generate such quantities, which is not deemed likely. Such a potential 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. This occurrence could happen at any time during construction but could potentially be exacerbated by the removal of vegetation. In the absence of mitigation, the associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the discharge point or location of the accidental pollution event. Such an occurrence, of a sufficient magnitude, either alone or in combination with other pressures on water quality, could undermine the conservation objectives of the European sites downstream in Dublin Bay (i.e. North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Rockabill to Dalkey Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA and Dalkey Islands SPA).
- 125 The Proposed Scheme is hydrologically connected to the River Dodder, via the drainage network as well as crossing it directly at Ballsbridge. The source of the River Dodder is in the Wicklow Mountains SAC which is located approximately 11.9km south (upstream). Otter territories are within the range of 7.5km for females and 21km for males (Ó'Neill *et al.*, 2009). Therefore, there is potential for otter associated with the Wicklow Mountains SAC to move downstream and to come within the ZoI of the Proposed Scheme. The remaining QIs for the SAC, namely Oligotrophic water containing very few minerals of sandy plains (*Littorelletalia*); Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or *Isoteo-Nanojuncetea*; Natural dystrophic lakes and ponds; Northern Atlantic wet heaths with *Erica tetralix*; European dry heaths; Alpine and Boreal heaths; *Calaminarina* grasslands of the *Violetalia calaminariae*; Species-rich *Nardus* grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)*; Blanket Bogs (*if active bog); Siliceous scree of the montane to snow levels (*Androsacetalia alpinae* and *Galeopsietalia ladani*); Calcareous rocky slopes with chasmophytic vegetation; and Old sessile oak Woods with *Ilex* and *Blechnum* in the British Isles do not occur within the ZoI of the Proposed Scheme. These habitats are located upstream of the Proposed Scheme and will not be subject to any hydrological impacts as a result of the Proposed Scheme.
- 126 A reduction in water quality as a result of an accidental pollution event (either alone or in combination with other pressures on water quality) however could result in the degradation of the local aquatic environment, which could in turn negatively affect the otter population through direct contact with pollutants or a decline in fish prey.
- 127 In a potential worst case scenario, 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 SCI bird species and QI mammal species that commute, forage and loaf in Booterstown

Marsh and Dublin Bay i.e. birds associated with Skerries Islands SPA, Rockabill SPA and Lambay Island SPA, Ireland's Eye SPA, North Dublin Bay SPA, South Dublin Bay and River Tolka Estuary SPA, Baldoyle Bay SPA, Malahide Estuary SPA, Rogerstown SPA, Dalkey Islands SPA, Murrrough SPA, and marine mammals associated with Rockabill to Dalkey Island SAC and Lambay Island SAC. 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 downstream, which in turn could 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. In a worst-case scenario these potential impacts could occur to such a degree that the conservation objectives of the Skerries Islands SPA, Rockabill SPA and Lambay Island SPA, Ireland's Eye SPA, North Dublin Bay SPA, South Dublin Bay and River Tolka Estuary SPA, Baldoyle Bay SPA, Malahide Estuary SPA, Rogerstown SPA, Dalkey Islands SPA, Murrrough SPA, Rockabill to Dalkey Island SAC and Lambay Island SAC are undermined.

- 128 As the Proposed Scheme has the potential to result in habitat degradation and effects on the qualifying/special conservation interest species of European sites as the result of hydrological impacts, there is the potential for in combination effects to occur.

The Zol 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Lambay Island SAC, Rockabill to Dalkey Island SAC, Howth Head Coast SPA, Dalkey Islands SPA, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Rockabill SPA, Lambay Island SPA, Dalkey Islands SPA and The Murrrough SPA.

6.3 Habitat degradation as a result of hydrogeological Impacts

- 129 Groundwater levels in groundwater dependant 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.
- 130 The potential for hydrogeological impacts are highly variable depending on the nature of the proposed works at specific locations and the receiving environment ground conditions. The unmitigated hydrogeological Zol of the Proposed Scheme is not considered to extend to any groundwater dependent terrestrial ecosystems linked to European sites. However it may extend into Booterstown Marsh wetland habitat, which is a constituent element of South Dublin Bay and River Tolka Estuary SPA. This Zol follows the professional judgement of the hydrogeology specialists.
- 131 As the Proposed Scheme has the potential to result in habitat degradation of the qualifying interest species/special conservation interest supporting habitat of a European site as the result of hydrogeological impacts there is potential for in combination effects to occur in that regard.

6.4 Habitat degradation as a result of introducing/spreading non-native invasive species

- 132 A single area of three-cornered garlic, a species listed on the Third Schedule of the (Birds and Natural Habitats) Regulations present within, or in close proximity to, the Proposed Scheme. A second non-native species common cordgrass *Spartina anglica* is known to be locally present on exposed muds within the saline parts of Booterstown marsh. This coastal species, often associated with saltmarsh habitats is outside the footprint of 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 and habitat areas in European sites downstream in Dublin Bay (i.e., North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). These in turn may result in

the degradation of the existing habitats and therefore undermine the conservation objectives of these European sites.

- 133 It is not considered possible that the listed invasive species could spread to European sites that are located a considerable distance downstream of the Proposed Scheme at a number of outfall locations. In terms of the extent and nature of the three-cornered garlic, it is a terrestrial species of shady banks and managed verges and is unlikely to become established in SPA wetland areas nor in coastal SAC habitats. It could potentially spread within the edges of the adjacent SPA albeit along non-wetland boundary vegetation.
- 134 Common cordgrass, lies outside of but adjacent to the Proposed Scheme Red Line Boundary. It will not be directly impacted by the Proposed Scheme by virtue of its location, and avoidance of works within Booterstown Marsh. Indirect impacts could arise in the case where water draining off the Proposed Scheme during construction and of such a magnitude that it resulted in seed dispersal into other areas of bare saline mudflats or into Annex I coastal habitats.
- 135 As the Proposed Scheme has the potential to result in habitat degradation of the qualifying/special conservation interest species of European sites as the result of the spread of invasive species, there is the potential for in combination effects to occur in association with other activities/plans/projects.

The Zol 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. North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA.

6.5 Habitat degradation as a result of air quality impacts

- 136 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 and heavy metals produced by engine, brake and tyre wear, can contribute to increased deposition of pollutants such as oxides of nitrogen (NO_x), volatile organic compounds (VOCs), particulate matter (PM), heavy metals (HM) and ammonia (NH₄) 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.
- 137 The unmitigated Zol for air quality effects arising from the Proposed Scheme has the potential to extend 50m from the Proposed Scheme boundary, and 500m from construction compounds during the construction phase, and up to 200m the Proposed Scheme boundary during the operational phase. There are no European sites present within these distances.
- 138 A change in AADT (Annual Average Daily Traffic) flows greater than 1,000 is predicted to occur on Rock Road. This lies adjacent to South Dublin Bay SAC and South Dublin Bay and River Tolka Estuary SPA. As such conservation interest the Proposed Scheme has the potential to result in habitat degradation of the qualifying / special species/ habitats of South Dublin Bay SAC and South Dublin Bay and River Tolka Estuary SPA during the Operation Phase of the Proposed Scheme.

The Zol 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. The Zol also extends 200m from roads where a change in AADT (Annual Average Daily Traffic) flows greater than 1,000 is predicted to occur as a result of the Proposed Scheme. There are two European site within this Zol, namely South Dublin Bay and River Tolka Estuary SPA and South Dublin Bay SAC.

6.6 Disturbance and displacement impacts

- 139 A temporary and/or permanent increase in noise, vibration and/or human activity levels during the Construction Phase 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 150m¹³. For wintering birds, disturbance effects would not be expected to extend beyond a distance of approximately 300m¹⁴, as noise levels associated with general construction activities would attenuate to close to background levels at that distance. South Dublin Bay and River Tolka Estuary SPA is within the disturbance Zol of the Proposed Scheme.
- 140 At least three of these species from South Dublin Bay and River Tolka Estuary SPA were returned from the desk study and include light-bellied Brent goose, blacked-headed gull and herring gull. The Proposed Scheme is immediately adjacent to the SPA territory at Booterstown Marsh and a small area of amenity grassland and scrub associated with the SPA boundary and north-west of the Booterstown Marsh, will be lost (see section 6.1). No birds were recorded using this area for foraging and/or roosting during wintering bird surveys. This habitat loss will occur outside the SPA boundary, and therefore there will be no habitat loss from the SPA. There are also a number of suitable inland foraging/roosting sites, which these bird species utilise, located within the potential Zol of the Proposed Scheme e.g., three of which are immediately adjacent to the SPA territory (See Section 5.1.2 above). In particular, there will be disturbance to SCI birds during construction by virtue of proximity of the proposed works adjacent to Booterstown Marsh and Blackrock College (where screening vegetation will be removed), as well as alongside Blackrock Park overlooking the pond. In addition, the location of the Construction Compound is adjacent to the SPA territory and potential flight path to Blackrock College playing fields. Therefore, there is potential for the Proposed Scheme to result in the disturbance/displacement of SCI bird species associated with SPA populations.
- 141 In addition to South Dublin Bay and River Tolka SPA, which is immediately adjacent to the Proposed Scheme at Booterstown Marsh, there are a number of SPAs located in relatively close proximity to the Proposed Scheme 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. Malahide Estuary SPA, Baldoyle Bay SPA, North Bull Island SPA, and Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA and Lambay Island SPA, as

¹³ 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 Zol of construction related disturbance likely to be much less in reality.

¹⁴ 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 c. 300m, typical noise levels associated with construction activity (BS 5228) are generally below 60dB or, in most cases, are approaching the 50dB threshold.

well as The Murrough SPA (a distal site outside the typical 20km range but nonetheless supporting Brent Geese and a number of other SCI species that are recorded from Dublin Bay).

- 142 Although no signs of kingfisher were recorded during field surveys of the Proposed Scheme, kingfisher, an Annex I bird species, is known to be present in the wider study area, in particular, along the Dodder River and the Grand Canal, as well as along the Nutley Stream. 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 catchment¹⁵. The nearest SPA for which kingfisher has been designated is the River Boyne and Blackwater SPA, which is located approximately 40km away, therefore kingfisher present in the vicinity of the Proposed Scheme are not associated with an SPA population.
- 143 Although no signs of otter were recorded during multidisciplinary field surveys of the Proposed Scheme, the River Dodder and the Grand Canal are known to support otter, an Annex II and IV mammal species. Further survey at likely watercourses supporting otter activity (based on desktop research and assessment of watercourse condition (culverted, supporting habitat, feed potential) returned an unconfirmed footprint, which could belong to otter. The nearest SAC to the Proposed Scheme for which otter has been designated is Wicklow Mountains SAC which is located approximately 11.7km upstream, within the same WFD sub catchment.
- 144 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 up to 21km. Therefore, it cannot be ruled out that otter recorded from the Dodder River and Grand Canal where intersected by the Proposed Scheme are not associated with the QI populations of Wicklow Mountains SAC. However, no significant impacts on otter are predicted as a result of disturbance/displacement from the Proposed Scheme for the following reasons:
- Notwithstanding the fact that the Proposed Scheme crosses two watercourses for which otter are known to inhabit, the corridor is a pre-existing national road into Dublin City. Otter are known to commute and reside nearby these areas and as such are likely to be tolerant to traffic noise and other human related noise and disturbance.
 - The minor nature of the works proposed in the vicinity of the Dodder crossing and Grand Canal. The main works required in these areas include new road markings and signage, traffic signal installation construction of a bus interchange building, construction of a public realm plaza, carriageway and pavement resurfacing, kerb build outs and traffic island construction/removal, landscaping and utility diversions, and the upgrade of the current access ramp from the McCartney Bridge to the Grand Canal.
- 145 Marine mammals associated with European sites may commute and forage within the Liffey Estuary (to which both the Dodder River and the Grand Canal discharge downstream of the Proposed Scheme) and Dublin Bay, it is not considered to be likely that there will be any impacts on these species as a result of the Proposed Scheme as it terminates inland at Fitzwilliam Street, which is upstream of Dublin Bay, in a highly urbanised environment. The scale of upstream works proposed are considered to be minor. Elsewhere the Proposed Scheme follows a coastal corridor, in places, in close proximity to Dublin Bay. However, it is typically physically separated from the coast by urban development, public park all of which is fronted along its seaward boundary by the Dublin to Bray Greystones DART line/Wexford rail line. Furthermore, the Proposed Scheme does not intersect directly with any estuarine or coastal area (Boosterstown Marsh being isolated from Dublin Bay by a sluice gate that prevents ingress by marine mammal). While marine mammals are documented as being present in South Dublin Bay, it is considered unlikely, given the

¹⁵ RSPB. *Kingfisher breeding, feeding and territory webpage*. Available from: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/kingfisher/branding-feeding-territory/>

terrestrial nature of the Proposed Scheme in an urbanised transport corridor separated from direct marine connectivity that there will be any impacts on these species as a result of the Proposed Scheme.

- 146 As the Proposed Scheme has the potential to result in the disturbance/displacement of the qualifying/special conservation interest species of any European site, there is the potential for in combination effects to occur in association with other activities/plans/projects.

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 is one European site within this ZoI, namely South Dublin Bay and River Tolka Estuary SPA. In addition, the ZoI comprises of potential *ex-situ* feeding sites supporting SCI listed bird species of Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Ireland’s Eye SPA, Lambay Island SPA and The Murrrough SPA, and suitable habitat for Wicklow Mountains SAC QI, the otter.

6.7 Summary

- 147 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 qualifying interest/special conservation interests of the following European sites: North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, Wicklow Mountains SAC, South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Dalkey Islands SPA, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Rockabill SPA, Ireland’s Eye SPA and Lambay Island SPA, and The Murrrough SPA.

- 148 The potential impacts of the Proposed Scheme on the receiving environment, their zone of influence, and the European sites at risk of likely significant effects are summarised in Table 7.

Table 7 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 European sites are at risk of direct habitat loss impacts There is potential for loss of <i>ex situ</i> inland feeding sites used by SCI wintering bird species.	Yes There are European sites at risk of <i>ex-situ</i> habitat losses: Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland’s Eye SPA and The Murrrough SPA There is also potential indirect loss of Annex I saltmarsh habitat through hydrological emergency.
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 hydrological effects associated with the Proposed Scheme, namely: North Dublin Bay SAC, South Dublin Bay SAC, Wicklow Mountains SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland’s Eye SAC, Ireland’s Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Dalkey Islands SPA and The Murrrough SPA.

Potential Direct, Indirect In Combination Effects and the Zol of the Potential Effects	Are there any European sites within the Zol of the Proposed Scheme?
<p>Habitat degradation as a result of hydrogeological impacts</p> <p>Groundwater-dependant habitats, and the species those habitats support, in the local area that lie downgradient of the Proposed Scheme.</p>	<p>Yes</p> <p>There is one European site at risk of hydrogeological effects associated with the Proposed Scheme during the Construction Phase. South Dublin Bay and River Tolka Estuary SPA, at Booterstown Marsh.</p>
<p>Habitat degradation as a result of introducing/spreading non-native invasive species</p> <p>Habitat areas within, adjacent to, and potentially downstream of the Proposed Scheme.</p>	<p>Yes.</p> <p>There are non-native invasive species present within or adjacent to the Proposed Scheme and in the surrounding area, therefore there is a risk associated with the Proposed Scheme to adjacent European site e.g. South Dublin Bay and River Tolka Estuary SPA and downstream European sites in Dublin Bay from the spread/introduction of non-native invasive species</p> <p>South Dublin Bay and River Tolka Estuary SPA , South Dublin Bay SAC, North Dublin Bay SAC, and North Bull Island SPA.</p>
<p>Air Quality impacts</p> <p>Potentially up to 50m from the Proposed Scheme boundary and 500m from the Construction Compound at Construction phase, and up to 200 metres at Operation Phase.</p>	<p>Yes</p> <p>The Proposed Scheme is adjacent to two European sites and there is potential for air quality impacts associated with the Proposed Scheme.</p> <p>South Dublin Bay and River Tolka Estuary SPA and South Dublin Bay SAC</p>
<p>Disturbance and displacement impacts</p> <p>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 qualifying interest species to disturbance effects</p>	<p>Yes.</p> <p>There is one European site within the potential zone of influence of disturbance effects associated with the Construction or Operation of the Proposed Scheme: South Dublin Bay and River Tolka Estuary SPA at Booterstown Marsh.</p> <p>There are also identified <i>ex situ</i> inland feeding sites both adjacent to the Proposed Scheme (Blackrock Park and Blackrock College) and further afield, which are utilised by SCI wintering bird species within the potential disturbance Zol of the Proposed Scheme:</p> <p>Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Ireland’s Eye SPA, Lambay Island SPA and The Murrough SPA.</p> <p>Otter is a QI for a single distal SAC, namely Wicklow Mountains SAC and for which there is potential for Construction and Operation impacts.</p>

7 Assessment of Potential Effects on European Sites

149 This section of the NIS assesses the direct and indirect impacts of the Proposed Scheme on the European sites which fall within its zone of influence. For each of these European sites, the assessment below sets out the relevant ecological baseline information, the analysis of the potential impacts, the qualifying interests/special conservation interests 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.

- 150 European sites have been grouped in the sub-sections below where the impact pathways, European sites' sensitivities, and potential effects are identical.
- 151 The assessment of the Proposed Scheme in combination with any other plans or projects on European sites is presented in Section 8.
- 152 By virtue of the proximity of South Dublin Bay and River Tolka Estuary SPA at Booterstown Marsh to the Proposed Scheme, the SPAs are firstly assessed owing to additional mitigation recommendations in respect of the protection of wintering birds.

7.1 South Dublin Bay and River Tolka Estuary SPA [004024]

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

- 153 The Natura 2000 Standard Data Form (NPWS, 2020a) 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 eelgrass *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.

7.1.2 Special Conservation Interests and Conservation Objectives of South Dublin Bay and River Tolka Estuary SPA

The Special Conservation interests of South Dublin Bay and River Tolka Estuary SPA, and the overall conservation objective, are listed in Table 8.

Table 8 Special Conservation Interests and Conservation Objectives of South Dublin Bay and River Tolka Estuary SPA

Special Conservation Interest(s)	Conservation Objective(s)
<p>South Dublin Bay and River Tolka Estuary SPA [004024]</p> <p>A046 Light-bellied Brent Goose <i>Branta bernicla hrota</i></p> <p>A130 Oystercatcher <i>Haematopus ostralegus</i></p> <p>A137 Ringed Plover <i>Charadrius hiaticula</i></p> <p>A141 Grey Plover <i>Pluvialis squatarola</i></p> <p>A143 Knot <i>Calidris canutus</i></p> <p>A144 Sanderling <i>Calidris alba</i></p> <p>A149 Dunlin <i>Calidris alpina</i></p> <p>A157 Bar-tailed Godwit <i>Limosa lapponica</i></p> <p>A162 Redshank <i>Tringa totanus</i></p> <p>A179 Black-headed Gull <i>Chroicocephalus ridibundus</i></p> <p>A192 Roseate Tern <i>Sterna dougallii</i></p> <p>A193 Common Tern <i>Sterna hirundo</i></p> <p>A194 Arctic Tern <i>Sterna paradisaea</i></p> <p>A999 Wetland and Waterbirds</p> <p><i>S.I. No. 212/2010 - European Communities (Conservation of Wild Birds (South Dublin Bay and River Tolka Estuary Special Protection Area 004024)) Regulations 2010.</i></p>	<p>To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA</p>

Special Conservation Interest(s)	Conservation Objective(s)
NPWS (2015) <i>Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024</i> . Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	

154 In conjunction with considering the generic conservation objective for this SPA “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 South Dublin Bay and River Tolka Estuary SPA also informed this assessment.

155 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the special conservation interests within the European site. Affecting the conservation condition of the special conservation interests 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 special conservation interests of South Dublin Bay and River Tolka Estuary SPA are presented in Section 7.1.3.7.

7.1.3 Examination and Analysis of Potential Direct and Indirect Impacts

156 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 qualifying interests of South Dublin Bay and River Tolka Estuary SPA, are:

- Habitat degradation/effects on QI/SCI species as a result of hydrological impacts;
- Habitat loss/fragmentation;
- Habitat degradation as a result of introducing/spreading non-native invasive species;
- Disturbance and displacement impacts;
- Habitat degradation as a result of air quality impacts; and
- Habitat degradation as a result of hydrogeological impacts

7.1.3.1 Habitat degradation/effects on QI/SCI species as a result of hydrological impacts

157 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 is hydrologically connected to Dublin Bay via the Dodder_050, Brewery Stream_010, Grand Canal, and Booterstown Marsh and Nutley Stream as well as a network of interconnecting and established surface or combined sewer/surface water pipes. 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 hydrological impacts.

158 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 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 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.

7.1.3.2 Habitat loss/fragmentation

159 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, golden plover, oystercatcher, curlew, black-headed gull and black-tailed godwit. There are two no. areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme, namely grassland adjacent to Booterstown Marsh, referred to as CBC1415WB001, and grassland at Blackrock Park, referred to as CBC1415WB002. CBC1415WB001 was not found to support wintering bird species.

The Proposed Scheme will result in the temporary loss of 0.07ha of GA2 habitat suitable to support breeding gull and wintering bird species at Blackrock Park (referred to as CBC1415WB002).

160 There is no potential for impacts to occur on inland feeding SCI populations associated with South Dublin Bay and Tolka Estuary SPA, in light of their conservation objectives, as a consequence of habitat loss/fragmentation from inland feeding/roosting sites due to habitat loss/fragmentation due to the following reasons:

- The absence or low frequency of occurrence of these SCI bird species recorded on lands located within the footprint of the Proposed Scheme, 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; and
- Land take in the proposed works area is temporary in nature and will be returned to GA2 habitat during the Operational Phase of the Proposed Scheme.

7.1.3.3 Habitat degradation as a result of introducing/spreading non-native invasive species

161 There is a single area of three-cornered garlic, a species listed on the Third Schedule of the (Birds and Natural Habitats) Regulations present within, or in close proximity to, the Proposed Scheme. During construction and/or routine maintenance/management work, this species could potentially spread or be introduced to terrestrial habitats located within downstream European sites via surface water features.

162 The presence of the coastal non-native common cordgrass on exposed marsh muds immediately outside the Proposed Scheme is also recognised. Disturbance to flowering plants brought about by excessive construction or operational related runoff could potentially dislodge seed and result in its establishment in other exposed muds to the detriment of Annex I saltmarsh habitats and in particular the *Salicornia* [1310] habitat.

163 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. The Proposed Scheme is hydrologically connected to the Dodder River and the Grand Canal both of which discharge into the River Liffey and thereafter Dublin Bay, as well as four other watercourses which discharge to South Dublin Bay. Therefore, (albeit unlikely) 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 the introduction of non-native invasive species.

7.1.3.4 Disturbance and displacement impacts

164 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 the 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. However, this impact remains pertinent due to the proximity of the site

compound adjacent to the European site itself. 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. Table 9 provides the indicative construction noise calculation associated with different construction activities of the Proposed Scheme at varying distances.

Table 9 Indicative Construction Noise Calculations at Varying Distances

Activity (dB)	Predicted CNL at Stated Distance from Edge of Works (dB L _{Aeq,12hr} Or L _{Aeq,4hr})								
	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
Bus Gate Construction	80	77	74	70	66	62	60	56	52
Urban realm & landscaping	79	76	73	69	65	61	59	55	51
Site 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
Additional Works ^{Note 1}	80	77	74	70	66	62	60	56	52

Note 1: Construction of additional works related to the relocation of archways and provision of substation outside the Gas Networks Ireland Above Ground Installation (AGI) between Gowan Motors and St Vincent’s University Hospital along the Blackrock Section of the Proposed Scheme, will require the use of different plant depending on the type of works involved. The more intrusive works i.e. road widening works with higher noise levels have already been assessed. For the purpose of the less intrusive additional works related to the archway and substation constructions, these are assessed under additional works.

165 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 areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme and there are several areas of suitable foraging and/or roosting habitat available for these SCI bird species within the disturbance ZOI of the Proposed Scheme, including the following sites, which have been returned from the desk study (Scott Cawley Ltd., 2017):

- Blackrock/Blackrock Park (High importance) overlaps the Proposed Scheme.
- Blackrock/Blackrock College (High importance) immediately adjacent to the Proposed Scheme.
- Blackrock/Williamstown Park (High importance) immediately adjacent to the Proposed Scheme. (This area includes a subsite for which the proposed construction compound is to be established. This territory is no longer suitable for wintering birds by virtue of reduction in grassed areas for occasional parking purposes and the current presence of a separate construction compound).
- Pembroke Cricket Club and Monkstown Rugby Club (High Importance) approximately 225m from the Proposed Scheme.
- St Andrews Playing Pitch (No data other than mention of droppings) approximately 265m from the Proposed Scheme.

166 Booterstown Marsh, which forms part of the SPA, is immediately adjacent to the Proposed Scheme. The removal of some non-wetland/screening vegetation at the north-western corner of Booterstown Marsh from derelict ground (part of pNHA rather than SPA) on a temporary basis is likely. While this ground is not itself suitable to support SCI bird species, any potential reduction in the screening, no matter how limited could result in impacts on SCI species using the marsh, owing to increased exposure to human and traffic noise and disturbance.

- 167 There is currently little vegetation screening Blackrock Park from the Rock Road where the Proposed Scheme overlooks the pond. A number of SCI birds have been returned from surveys as this area. Similarly, the potential removal of trees along the parts of the boundary at Blackrock College could result in additional noise and or pedestrian exposure to SCI bird species using the open playing grassland, which is known to support larger number of SCI wintering species.
- 168 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 (i.e., light-bellied Brent goose, oystercatcher and black-headed gull), 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, significant effects may 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:
- 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 12 months (representing a maximum of one winter season) during construction works and for approximately two years at the Construction Compound. Following the completion of construction, disturbance levels will over time return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.
 - The effect and timing of vegetation removal. Although the construction and/or removal of vegetation to facilitate construction will not have a long-term effect on SCI populations in terms of replacement planting and the nature and extent of the landtake, mitigation measures are proposed to ensure that works are in as far as is possible are undertaken outside the wintering bird season and that the reestablishment of the landscape and /or screening vegetation is undertaken in a timely manner. Furthermore, given the operation of the Construction Compound for the duration of the construction phase, additional measures are proposed to reduce disturbance impacts in close proximity to the SPA territory outside of the proposed footprint e.g. South Dublin Bay or adjacent ex-situ feeding sites e.g. Blackrock College.

7.1.3.5 Habitat degradation as a result of air quality impacts

- 169 A temporary 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 and heavy metals produced by engine, brake and tyre wear, can contribute to increased deposition of pollutants such as oxides of nitrogen (NO + NO₂), volatile organic compounds (VOCs), particulate matter (PM), heavy metals (HM) and ammonia (NH₄) 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.
- 170 The nature of air quality impacts from roads and their interaction/effects on ecology are set out in the TII guidance document Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes (National Roads Authority, 2011) and three UK reports: The Ecological Effects of Diffuse Air Pollution from Road Transport (Bignal *et al.*, 2004), The Ecological Effects of Air Pollution from Road Transport: An Updated Review (Natural England 2016), and Advice on Ecological Assessment of Air Quality Impacts (CIEEM 2021). Further guidance can also be found in the IAQM document A Guide To The Assessment Of Air Quality Impacts On Designated Nature Conservation Sites (IAQM 2020) and in the DMRB guidance LA105 Air Quality (UKHA 2019), both of which describe NO_x emissions as the most likely source of significant impacts from road traffic. Pollutants such as PM, CO₂, CO, SO₂, ammonia and volatile organic compounds are not considered in this guidance and have been scoped out of detailed assessment (refer to Appendix VI for the Air Quality Assessment and Methodology).
- 171 An assessment of the impact of the Proposed Scheme has been undertaken using the approach outlined in the IAQM guidance document A Guide to the Assessment of Air Quality Impacts on Designated Nature Conservation Sites (Version 1.1) (IAQM 2020). Vehicle-derived air emissions were modelled during the

Operational Phase of the Proposed Scheme at Rock Road which runs parallel to the SPA (refer to Appendix VI for full details). The mean worst-case predicted annual average NO_x (total Nitrogen Oxide (NO) and Nitrogen Dioxide (NO₂) concentrations within 200m of roads impacted by the Proposed Scheme exceed the 30µg/m³ limit value (see Table 10). In all cases where exceedances occur, the modelled future baseline environment is already in excess of this value and reduces below this critical level at 150m from Rock Road. During the Operational Phase of the Proposed Scheme (the Do Something Scenario), NO_x is modelled to reduce below the critical level at 160m from Rock Road, therefore resulting in additional territory within the SPA being subject to NO_x above the 30µg/m³ limit value as a result of the Proposed Scheme.

- 172 However, the contribution of the Operational Phase of the Proposed Scheme to the NO₂ dry deposition rate was modelled at Rock Road (see Table 11) and Nitrogen deposition levels have been compared to the lower and higher critical loads¹⁶ for terrestrial habitats. All sites are below the lower critical load of inland and surface water habitats of 5-10 Kg(N)/ha/yr (National Road Authority, 2011). It is not predicted therefore that there would be any harmful effects on vegetation within the SPA from NO and NO₂ and as a result there would not be any reduction in habitat area of the SCI wetland habitat nor any resulting change in the use of the wetland habitat as a resource for SCI species.
- 173 Amenity grassland habitats adjacent to the SPA, have the potential to be used by wintering birds as ex-situ sites. As a worst-case scenario, the annual average NO_x concentrations here will increase by 4% due to the Operational Phase of the Proposed Scheme (see , however NO₂ deposition will remain below the critical loads of inland and surface water habitats of 5-10 Kg(N)/ha/yr (National Road Authority 2011).
- 174 It is not predicted therefore that there will be any reduction in the permanent area occupied by the wetland habitat as specified by the conservation objectives for South Dublin Bay and River Tolka Estuary SPA, nor any change on how SCI birds utilise the SPA.

Table 10 Significance of Impacts at Key Ecological Receptors (NO_x Annual Mean Concentration In 2028)

Annual Mean NO _x In 2028 At Closest Point Within Ecological Site To Road							
Receptor	Receptor Location (ITM)	Do Minimum (mg/m ³)	Distance from road beyond which concentration is below critical level (30mg/m ³) (m)	Do Something (mg/m ³)	Distance from road beyond which concentration is below critical level (30mg/m ³) (m)	Impact (DS – DM) (mg/m ³)	Change as a percentage of critical level (30mg/m ³) (%)
South Dublin Bay and River Tolka Estuary SPA (Rock Road)	720508, 730155	32.1	>200m	31.1	190m	-1.0	-3%

¹⁶ Critical loads being defined as an estimate of an exposure to a given pollutant below which significant harmful effects on specified sensitive elements of the environment do not occur according to present knowledge (Nilsson & Grennfelt, 1988)

Table 11 Significance of Impacts at Key Ecological Receptors (NO₂ Deposition In 2028)

Annual Mean NO ₂ In 2028 At Closest Point Within Ecological Site To Road									
Receptor	Receptor Location (ITM)	Lower critical load for most sensitive feature (kgN/ha/yr)	Do Minimum (kgN/ha/yr)	Distance from road beyond which deposition is below critical load (m)	Do Something (kgN/ha/yr)	Distance from road beyond which deposition is below critical load (m)	Change relative to lower critical load (%)	Distance from road beyond which the change is <1% (m)	Change in deposition kgN/ha/yr
South Dublin Bay and River Tolka Estuary SPA (Rock Road)	720508, 730155	5	2.18	0m	2.13	0m	-1%	0m	-0.05

7.1.3.6 Habitat degradation as a result of hydrogeological impacts

175 An accidental pollution event during construction has the potential to affect groundwater quality locally. The unmitigated hydrogeological Zol of the Proposed Scheme is not considered to extend to any groundwater dependent terrestrial ecosystems linked to European sites. However it may extend into Booterstown Marsh wetland habitat, which is a constituent element of South Dublin Bay and River Tolka Estuary SPA. This Zol follows the professional judgement of the hydrogeology specialists.

176 The Proposed Scheme is located upgradient of the South Dublin Bay and River Tolka Estuary SPA, however, it will not interact directly with the underlying groundwater body as there will be no piling or other works that may affect groundwater. However, it is predicted that while there may be no direct impact on the groundwater regime, there is potential indirect impacts associated with the Proposed Scheme through surface water interaction. Since impacts from surface water interactions are expected to be limited and localised and temporary, the magnitude of this impact is considered negligible, and therefore, there is no possibility of the proposed development undermining the conservation objectives of the SCI species of South Dublin Bay and River Tolka Estuary SPA, either alone or in combination with other plans or projects, as a result of hydrogeological effects.

7.1.3.7 Summary

177 Table 12 presents a summary of the potential impacts of the Proposed Scheme on the Special Conservation Interests of South Dublin Bay and River Tolka Estuary SPA, and how these impacts relate to affecting the site’s conservation objectives.

Table 12 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			
<p>Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046], Oystercatcher (<i>Haematopus ostralegus</i>) [A130], Ringed Plover (<i>Charadrius hiaticula</i>) [A137], Knot (<i>Calidris canutus</i>) [A143], Sanderling (<i>Calidris alba</i>) [A144], Dunlin (<i>Calidris alpina alpina</i>) [A149], Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157], Redshank (<i>Tringa totanus</i>) [A162], Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]</p> <p>Note: Grey Plover (<i>Pluvialis squatarola</i>) [A141] is proposed for removal from the list of SCI's for the site so no site-specific conservation objective is included for the species</p> <p>To maintain the favourable conservation condition of the special conservation interests of the SPA, which is defined as follows:</p>			
Population trend/Percentage change/Long term population trend stable or increasing	Yes	Yes	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	<p>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 special conservation interest 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.</p> <p>The introduction and/or spread of 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. This</p>	<p>The mitigation measures described in Section 7.1.4 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.</p> <p>The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of non-native invasive species to downstream European sites during construction and operation of the Proposed Scheme.</p> <p>The mitigation measures presented in Section 7.1.4 will reduce disturbance and prevent displacement during the</p>	

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
	<p>in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.</p> <p>The potential for habitat loss/fragmentation could result in the loss of feeding habitat for SCI birds both within the SPA and in inland feeding sites. The removal of non-SCI screening vegetation e.g. screening woodland/scrub vegetation could result in increases to visual and noise disturbance. This could potentially affect the use of habitat areas by birds leading to displacement of feeding birds and/or abandonment of feeding sites and have long-term effects on the SPA populations.</p>	<p>construction of the Proposed Scheme.</p> <p>The mitigation measures presented in Section 7.1.4 in respect of re-establishing vegetative cover and/or feeding habitat will over time reduce the impact on SCI bird using the SPA territory and also ensure that inland feeding sites continue to be available for SCI bird species.</p>	
Roseate Tern (<i>Sterna dougallii</i>) [A192]			
To maintain the favourable conservation condition of the special conservation interests of the SPA, which is defined as follows:			
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 surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution	The mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during	
Prey biomass available/Kilogrammes/No significant decline			
Barriers to connectivity/Number; location; shape; area (hectares)/No significant increase			

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	<p>sources, could potentially affect the quantity and quality of prey fish and the quality the of intertidal/coastal habitats that support the special conservation interest 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.</p> <p>The introduction and/or spread of 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. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.</p>	<p>construction and operation of the Proposed Scheme.</p> <p>The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of invasive species to downstream European sites during construction and operation of the Proposed Scheme.</p>	
Common Tern (<i>Sterna hirundo</i>) [A193]			
To maintain the favourable conservation condition of the special conservation interests of the SPA, which is defined as follows:			
Breeding population abundance: apparently occupied nests (AONs)/Number/No significant decline	<p>Yes</p> <p>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</p>	<p>Yes</p> <p>The mitigation measures described in Section 7.1.4 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.</p>	<p>No</p>
Productivity rate: fledged young per breeding pair/Mean number/No significant decline			
Passage population: individuals/Number/No significant decline			
Distribution: breeding colonies/Number; location; area (Hectares)/No significant decline			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Distribution: roosting areas/Number; location; area (Hectares)/No significant decline	<p>quantity and quality of prey fish and the quality the of intertidal/coastal habitats that support the special conservation interest 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.</p> <p>The introduction and/or spread of non-native 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. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.</p>	<p>The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of invasive species to downstream European sites during construction and operation of the Proposed Scheme.</p>	
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			
<p>Arctic Tern (<i>Sterna paradisaea</i>) [A194] To maintain the favourable conservation condition of the special conservation interests of the SPA, which is defined as follows:</p>			
Passage population/Number of individuals/No significant decline	Yes	Yes	No
Distribution: roosting areas/Number; location; area (hectares)/No significant decline	<p>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</p>	<p>The mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during</p>	
Prey biomass available/Kilogrammes/No significant decline			
Barriers to connectivity/Number; location; shape; area (hectares)/No significant increase			

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	<p>sources, could potentially affect the quantity and quality of prey fish and the quality the of intertidal/coastal habitats that support the special conservation interest 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.</p> <p>The introduction and/or spread of 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. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.</p>	<p>construction and operation of the Proposed Scheme.</p> <p>The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of invasive species to downstream European sites during construction and operation of the Proposed Scheme.</p>	

Wetlands [A999]			
To maintain the favourable conservation condition of wetland habitats within the SPA, which is defined as follows:			
<p>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</p>	<p>Yes</p> <p>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 special conservation interest 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.</p> <p>The introduction and/or spread of 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. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.</p> <p>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.</p>	<p>Yes</p> <p>The mitigation measures described in Section 7.1.4 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.</p> <p>The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of invasive species to downstream European sites during Construction and Operation of the Proposed Scheme.</p> <p>The mitigation measures presented in Section 7.1.4 will reduce disturbance and prevent displacement during the Construction and Operation of the Proposed Scheme.</p> <p>The mitigation measures presented in Section 7.1.4 will prevent the introduction of construction dust into the European site.</p>	<p>No</p>

7.1.4 Mitigation Measures

178 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 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. Mitigation measures and associated Management Plans are included within 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.

179 The CEMP summarises the overall environmental management strategy that will be adopted and implemented during the construction phase of the proposed road development. 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 road development. The CEMP has been prepared in accordance with the following industry best practice guidance:

- 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, 4th Edition (CIRIA 2015).

180 The CEMP has been prepared in conjunction with the Environmental Impact Assessment (EIA) Report and Natura Impact Statement (NIS), with input from members of the BusConnects Infrastructure team. The CEMP supports the information already provided in the EIA Report 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.

181 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;
 - Construction Traffic Management Plan;
 - Invasive Species Management Plan (ISMP);
 - Surface Water Management Plan (SWMP);
 - Construction and Demolition Resource and Waste Management Plan; and
 - Environmental Incident Response Plan.

182 The CEMP has been prepared and is included as Appendix III of this NIS. 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).

- A number of sub-plans have also been prepared as part of the CEMP, including a SWMP and a 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 EIAR will be implemented in full by the appointed contractor to the satisfaction of the NTA.

Measures to Protect Surface Water Quality

183 This section presents the mitigation measures that will be implemented during construction and operation 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.

184 A CEMP, including an ISMP, have been submitted with the application documentation to An Bord Pleanála (see Appendix III of this NIS).

185 These measures have been developed in consideration of the following standard best international practice including but not limited to:

- Construction Industry Research and Information Association (CIRIA) (2005) *Environmental Good Practice on Site (C692)*;
- 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 C648: *Control of water pollution from linear construction projects: Technical guidance*;
- CIRIA (2006) *Control of water pollution from linear construction projects: Site guide (C648)*;
- 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
- BPGCS005, *Oil Storage Guidelines*.

Measures to Protect Surface Water Quality during Construction

186 The following specific mitigation measures, all of which are set out in the CEMP, shall be implemented to mitigate against the release of hydrocarbons, polluting chemicals, sediment/silt and contaminated waters control:

- 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 run-off 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 from any surface water drainage

features, 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 compound 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
 - The Personal Protective Equipment (PPE) required when using the material.
- Implementation of response measures to potential pollution incidents:
 - An Environmental Incident Response Plan has been included within section 5.6 of the CEMP and will be finalised prior to works commencing and 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 license, 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 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;
 - 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 licenced 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.

187 Following implementation of the mitigation measures outlined above, the majority of impacts will be not significant. There are a few activities, however that require additional measures to ensure that impacts are not significant.

188 For Booterstown Marsh, Nutley Stream and Dublin Bay, potentially significant impacts have been identified associated with the proposed Construction Compound which will be located at Booterstown car park, which is located within Blackrock Park. Activities within the Construction Compound will be largely controlled as set out in the generic mitigation measures in the Surface Water Management Plan (SWMP) in the CEMP (see Appendix III of this NIS). Given the proximity of Booterstown Marsh which connects directly to Dublin Bay, means additional measures are required, as follows:

- The silt drain in the centre of the car park will be sealed for the duration of the construction programme(it is assumed the construction compound will be retained for the full length of the construction programme);
- The appointed contractor will ensure that appropriate spill control equipment is available (e.g. a suitably sized floating boom), to control any spillages to the watercourses should a spillage occur;
- The existing gravel-like surface will be retained to reduce the likelihood of silty water runoff. Geotextile membranes will be installed in high-risk areas;
- Existing grassed areas which provide a buffer to the pond outlet will be retained;
- Silt fencing will be installed along the boundary to the pond outlet (as a defence against any overland runoff of silty water or spillages of chemicals or hydrocarbons);
- Fuel storage will be located on the western boundary of the construction compound – nearest the road and as far as possible from the slit drain or pond outlet. There is an existing wall here which will prevent any spillages reaching surface water drains in the road. All fuel will be stored in accordance with the SWMP;

- Storage of other materials will be located on the western boundary of the construction compound – nearest the road and as far as possible from the pond outlet;
- All potentially contaminating materials will be stored in covered areas;
- Wheel wash areas will be closed-cycle. There will be no discharge of wheel wash water to surface water drains. Off-site disposal of contaminated and silty water and sludge will be required; and
- Wastewater from cabins will be contained. Where discharge to the local sewer is required consent from the local authority will be obtained (a temporary permit).

189 The appointed contractor will undertake a risk assessment due to the close proximity of the existing surface water drainage system to the Construction Compound.

190 There is potential for significant impacts associated with the movement of an existing boundary wall in land to the north of Booterstown Marsh have been identified. These will be avoided and minimised through the following measures:

- If dewatering of the footings of the wall is required, water will be settled in a siltbuster tank (or similar) before being discharged as clean, uncontaminated surface water to local surface water systems;
- Surface water drains will be clearly identified and marked as such;
- Surface water drains in the road will be protected through the use of a silt curtain (or similar) to prevent silty water runoff from entering during construction. This will be placed as close to the works as is practicable and at the very least no further than alongside the footpath edge;
- No refuelling will take place at this location – refuelling of plant and machinery will be undertaken at the Construction Compound; and
- The generic mitigation measures outlined in the SWMP for the management of vehicles and plant will be implemented by the appointed contractor.

191 There is potential for significant impacts associated with the upgrading of the ramp on the Grand Canal tow path. These will be avoided and minimised through the following measures:

- Retaining wall:
 - The concrete for the foundations will be poured in dry weather only;
 - Silt fences will be used along the top of the bank to reduce the likelihood of silty water runoff and cement washings reaching the canal; and
 - Any water collected behind the silt fences will be settled using a siltbuster tank (or similar) and then discharged to the foul sewer (with permission from Dublin City Council).
- Oil filled cable:
 - Ground Investigation will be carried out in this location to determine whether there is contamination present. If any is detected, excavated materials will be removed to a licensed waste facility by a licensed contractor and will not be used in any landscaping or backfilling activities; and
 - A construction method statement detailing the measures taken to avoid the cable will be prepared by the appointed contractor in advance of construction works at the location.

Measures to Protect Surface Water and Groundwater Quality during Operation

192 During operation there will be a net increase of 3,797m² in the impermeable area ultimately discharging to Dublin Bay. This increase in impermeable area will be managed for the Proposed Scheme through a combination of bioretention areas, filtration drains and oversized pipes. SuDS solutions are summarised in Table 1.

193 Given the proposed SuDs drainage system, which have been designed in accordance with the Greater Dublin Strategic Drainage Study (GSDSDS, 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 II for Proposed Surface Water Drainage Works).

194 In the Operational Phase 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.

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

Confirmatory Pre-construction survey

195 The NTA will ensure that a confirmatory pre-construction invasive species survey will be undertaken by a suitably qualified specialist to confirm the absence and/or extent of all Third Schedule 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)

196 Where a pre-construction 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.

197 The ISMP for the Proposed Scheme will be implemented, including the detailed control measures contained within it, as advised by a suitably qualified specialist, in accordance with the Transport Infrastructure Ireland's (2020) *The Management of Invasive Alien Plant Species on National Roads - Technical Guidance* (2020a) and *The Management of Invasive Alien Plant Species on National Roads – Standard (2020b)* , and other species-specific guidance documents including those listed in the non-native ISMP, as necessary.

198 The NTA will ensure that all control measures specified in the Proposed Scheme non-native ISMP shall be implemented by a suitably qualified and licenced 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.

199 The site will be monitored by the appointed contractor in consultation with the suitably qualified and licensed specialist after the control measures have been implemented. Any re-growth, will be subsequently treated as detailed in the Proposed Scheme ISMP. The ISMP is contained within Appendix III to the NIS.

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

200 Once the Proposed Scheme is in operation, the Local Authorities will implement a maintenance and management regime subject to their management procedures, where any introduction of non-native invasive plant species will be managed. No additional mitigation is required.

Measures to Reduce Impacts to SCI birds due to Vegetation Loss during Construction

201 Where practicable, the removal of screening vegetation (e.g., hedgerows, trees, scrub, bankside vegetation and grassland) from Booterstown Marsh, Blackrock College and Blackrock Park will be undertaken outside of the breeding bird season (01 March to the 31 August) and before the arrival of the wintering birds; therefore clearance works at Booterstown Marsh, Blackrock College and Blackrock Park will commence in September and be concluded before the start of October.

202 However, where the construction programme does not allow these seasonal restrictions to be observed, then these areas will be inspected by a suitably qualified ecologist as engaged by the appointed contractor, for the presence of wintering birds prior to clearance. Where wintering birds are observed the suitably qualified ecologist will, in discussion with the appointed the contractor, advise how works will be appropriately undertaken.

Measures to Prevent to Disturbance and Displacement Impacts during Construction

203 Construction Compound - The location of the Construction Compound (estimated 2 years requirement) is in Booterstown car park in an open area adjacent to the South Dublin Bay and Tolka River SPA along the Rock Road. Given the proximity of the Construction Compound to the coastal SPA territory as well as being adjacent to known *ex situ* feeding sites at Blackrock College and Blackrock Park, the following measures should be put in place to minimise disturbance to SCI bird species at this location.

204 The following mitigation measures will be put in place at the Construction Compound to minimise disturbance to SCI bird species:

- The appointed contractor will undertake the establishment of the construction compound outside of the wintering bird season (October to March), where practicable. However, where the construction programme does not allow this seasonal restrictions to be observed, then the construction compound will be inspected by a suitably qualified ecologist as engaged by the appointed contractor, for the presence of wintering birds prior to establishment. Where wintering birds are observed the suitably qualified ecologist will, in discussion with the appointed the contractor, advise how works will be appropriately undertaken.
- Hoarding of the Construction Compound will be in place prior to the arrival of wintering birds and will be retained on all sides of the compound for the duration of the works.

205 The design of the lighting will ensure that light-spill will not occur in the direction of Dublin Bay. Mitigation measures to reduce light spill will include the following:

- The use of sensor/timer triggered lighting;
- LED luminaires to be used where practicable;
- Column heights to be considered to minimise light spill;
- Accessories such as baffles, hoods or louvres to be used to reduce light spill and direct it only where needed; and
- Where night time works are required the appointed contractor will liaise with the engaged suitably qualified and licenced ecologist(s) and implement measures to mitigate the impact of such works (especially works carried adjacent to watercourses with known bat activity).

Measures to Reduce Impacts to SCI birds due to Vegetation Loss during Operation

206 Planting of treeline, hedgerow and grassland habitats within the Proposed Scheme footprint will be carried out by the appointed contractor, in the appropriate season, as detailed in the landscaping design. Re-establishment of vegetation, including re-grassing, is to be done outside of the wintering bird season, but as soon as possible after completion of a section of works.

207 In line with the maintenance contract the appointed contractor will carry out annual post construction monitoring, over a two year period to ensure the successful re-establishment of vegetation within the Proposed Scheme.

Measures to Prevent Air Quality Impacts to QI/SCI Species Habitat during Construction

208 In order to ensure that no dust nuisance occurs on European sites in the vicinity of the Proposed Scheme, a series of mitigation measures that are applicable to the construction of the Proposed Scheme will be implemented and are set out within the CEMP. In summary, the mitigation measures will include:

- Public roads affected by the Proposed Scheme works will be regularly inspected for soiling associated with the construction activities and cleaned as necessary;
- Material handling systems and stockpiling of materials will be designed and laid out to minimise exposure to wind. Water misting or sprays (or similar dust suppression methods) will be used as required if particularly dusty activities associated with the construction contract are necessary during dry or windy periods;
- During movement of dust generating materials both on and off-site, trucks will be covered with tarpaulin, and before entrance onto public roads, trucks will be checked to ensure the tarpaulins are properly in place; and
- The appointed contractor will provide a site hoarding of 2.4m height along sensitive boundaries, at a minimum, at the Construction Compound, which will assist in minimising the potential for dust impacts off-site.

209 The appointed contractor will keep the effectiveness of the mitigation measures under review and revise them as necessary. In the event of dust nuisance associated with the Proposed Scheme occurring outside the works boundary, movements of materials likely to raise dust will be curtailed and satisfactory procedures implemented to rectify the problem.

7.1.5 Residual Impacts

210 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 special conservation interests and supporting wetland habitat 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 Water Framework Directive 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.

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

211 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the qualifying interests of South Dublin Bay and River Tolka Estuary SPA, the potential impacts, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the special conservation interests, 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.

7.2 North Bull Island SPA [004006]

7.2.1 Ecological Baseline Description for North Bull Island SPA

212 The Natura 2000 Standard Data Form (NPWS,2020b) 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 Special Conservation Interests 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, disturbance from activities such as sailing, walkers and dogs.

7.2.2 Special Conservation Interests and Conservation Objectives of North Bull Island SPA

213 The special conservation interests of North Bull Island SPA, and the overall conservation objective, are listed Table 13.

Table 13 Special Conservation Interests and Conservation Objectives of North Bull Island SPA

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

214 In conjunction with considering the generic conservation objective for this SPA “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 North Bull Island SPA also informed this assessment.

215 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the qualifying interests within the European site. Affecting the conservation condition of the qualifying interests/special conservation interests 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 qualifying interests of North Bull Island SPA are presented in Section 7.2.3.5.

7.2.3 Examination and Analysis of Potential Direct and Indirect Impacts

216 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 special conservation interests of North Bull Island SPA, are:

- Habitat degradation/effects on QI/SCI species as a result of hydrological impacts;
- Habitat degradation as a result of introducing/spreading non-native invasive species;
- Disturbance and displacement impacts; and

- Habitat loss/fragmentation.

7.2.3.1 Habitat degradation/effects on QI/SCI species as a result of hydrological impacts

217 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 is hydrologically connected to Dublin Bay via the Dodder_050, Brewery Stream_010, Grand Canal, and Booterstown Marsh and Nutley Stream as well as a network of interconnecting and established surface or combined sewer/surface water pipes. 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 hydrological impacts.

7.2.3.2 Habitat degradation as a result of introducing/spreading non-native invasive species

218 There is one area of three-cornered garlic, a species listed on the Third Schedule of the (Birds and Natural Habitats) Regulations, present within, or in close proximity to, the Proposed Scheme. During construction and/or routine maintenance/management work, this 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 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 is hydrologically connected to the Dodder River and the Grand Canal both of which discharge into the River Liffey and thereafter Dublin Bay, as well as four other watercourses which discharge directly to South Dublin Bay. 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 Bull Island SPA as a result of non-native invasive species spread.

7.2.3.3 Disturbance and displacement impacts

219 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. However, this impact remains pertinent due to the proximity of the site compound adjacent to South Dublin Bay and River Tolka Estuary SPA which species from this European site may utilise due to its location in Dublin Bay. 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. Table 9 in Section 7.1.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

220 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 areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme and there are several areas of suitable foraging and/or roosting habitat available for these SCI bird species within the disturbance ZOI of the Proposed Scheme including three known inland sites wintering bird feeding sites: Booterstown Marsh, Grounds of Blackrock College and Blackrock Park (Scott Cawley Ltd. 2017).

- 221 As discussed above in Section 7.1.3.4 there is screening vegetation removal at Booterstown Marsh and Blackrock College which may temporarily increase disturbance levels within these areas.
- 222 Significant effects may occur on any SCI bird species populations 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:
- 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 12 months (representing a maximum of one winter season) during construction works and for an approximate two year period at the Construction Compound. Following the completion of construction, disturbance levels will over time return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.
 - The effect and timing of vegetation removal. Although the construction and/or removal of vegetation to facilitate construction will not have a long-term effect on SCI populations in terms of replacement planting and the nature and extent of the land take, mitigation measures are proposed to ensure that works are in as far as is possible are undertaken outside the wintering bird season and that the reestablishment of the landscape and /or screening vegetation is undertaken in a timely manner. Furthermore, given the operation of the Construction Compound for the duration of the construction phase, additional measures are proposed to reduce disturbance impacts in close proximity to the SPA territory outside of the proposed footprint e.g. South Dublin Bay or adjacent *ex-situ* feeding sites e.g. Blackrock College.

7.2.3.4 Habitat loss/fragmentation

- 223 North Bull Island SPA is designated for wintering SCI species that are known to forage and/or roost at sites across Dublin, such as amenity grasslands and playing pitches. In respect of the Proposed Scheme, these species include light-bellied Brent goose, golden plover, oystercatcher, curlew, black-headed gull and black-tailed godwit. There are a number of areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme.
- 224 There are two no. areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme, namely grassland adjacent to Booterstown Marsh, referred to as CBC1415WB001, and grassland at Blackrock Park, referred to as CBC1415WB002. CBC1415WB001 was not found to support wintering bird species.
- 225 The Proposed Scheme will result in the temporary loss of 0.07ha of GA2 habitat suitable to support breeding gull and wintering bird species at Blackrock Park (referred to as CBC1415WB002).
- 226 There is no potential for impacts to occur on inland feeding SCI populations associated with North Bull Island SPA, in light of their conservation objectives, as a consequence of habitat loss/fragmentation from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:
- The absence or low frequency of occurrence of these SCI bird species recorded on lands located within the footprint of the Proposed Scheme, 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;
 - Land take in the proposed works area is temporary in nature and will be returned to GA2 habitat during the Operational Phase of the Proposed Scheme.

7.2.3.5 Summary

- 227 Table 14 presents a summary of the potential impacts of the Proposed Scheme on the qualifying interests of North Bull Island SPA, and how these impacts relate to affecting the site's conservation objectives.

Table 14 Potential Impacts/Effects on the Conservation Objectives of North Bull Island SPA

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
North Bull Island SPA			
<p>Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046], Shelduck (<i>Tadorna tadorna</i>) [A048], Teal (<i>Anas crecca</i>) [A052], Pintail (<i>Anas acuta</i>) [A054], Shoveler (<i>Anas clypeata</i>) [A056], Oystercatcher (<i>Haematopus ostralegus</i>) [A130], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Grey Plover (<i>Pluvialis squatarola</i>) [A141], Knot (<i>Calidris canutus</i>) [A143], Sanderling (<i>Calidris alba</i>) [A144], Dunlin (<i>Calidris alpina alpina</i>) [A149], Black-tailed Godwit (<i>Limosa limosa</i>) [A156], Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157], Curlew (<i>Numenius arquata</i>) [A160], Redshank (<i>Tringa totanus</i>) [A162], Turnstone (<i>Arenaria interpres</i>) [A169], Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]</p>			
To restore the favourable conservation condition of the special conservation interests of the SPA, which is defined as follows:			
Population trend/Percentage change/Long term population trend stable or increasing	Yes	Yes	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	<p>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 special conservation interest 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.</p> <p>The introduction and/or spread of 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</p>	<p>The mitigation measures described in Section 7.1.4 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.</p> <p>The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of invasive species to downstream European sites during construction and operation of the Proposed Scheme.</p> <p>The mitigation measures presented in Section 7.1.4 with regard to works adjacent to SPA territory and/or inland feeding sites will reduce</p>	

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
	<p>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.</p> <p>There is 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.</p>	<p>disturbance and prevent displacement during the Construction of the Proposed Scheme.</p>	
<p>Wetlands [A999] To maintain the favourable conservation condition of wetland habitats within the SPA, which is defined as follows:</p>			
<p>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</p>	<p>Yes</p> <p>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 special conservation interest 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.</p>	<p>Yes</p> <p>The mitigation measures described in Section 7.1.4 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.</p> <p>The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of invasive species to downstream European sites during Construction and Operation of the Proposed Scheme.</p>	<p>No</p>

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
	<p>The introduction and/or spread of 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. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.</p>		

7.2.4 Mitigation Measures

228 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 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

229 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

230 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during operation of the Proposed Scheme.

Measures to Reduce Impacts to SCI Birds due to vegetation loss during Construction

231 The mitigation measures presented in Section 7.1.4 will ensure that impacts from vegetation loss are minimised as far as is practical.

Measures to Prevent to Disturbance and Displacement Impact to SCI Species during Construction

232 The mitigation measures presented in Section 7.1.4 with regard to works adjacent to SPA territory and/or inland feeding sites will reduce disturbance and prevent displacement during the construction of the Proposed Scheme.

Measures to prevent to Disturbance and Displacement Impacts to SCI Bird species during Operation

233 The Mitigation measures presented in Section 7.1.4 will over time reduce the Disturbance and Displacement Impacts to SCI birds associated with the SPA.

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

234 The mitigation measures presented above in Section 7.1.4 will prevent the spread of non-native invasive species to downstream European sites.

7.2.5 Residual Impacts

235 With the inclusion of appropriate mitigation, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the special conservation interests 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.

7.2.6 Conclusion of Assessment for North Bull Island SPA

236 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the special conservation interests of North Bull Island SPA, the potential impacts, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the special conservation interests, 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.

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

7.3.1 Ecological Baseline Description for Howth Head Coast SPA

237 The Natura 2000 Standard Data Form (NPWS, 2020c) 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 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 *Falco peregrinus*, a species listed on Annex I of the EU Birds Directive. Threats to the site include walking, horse-riding and non-motorised vehicles as well as fire and fire suppression.

7.3.2 Ecological Baseline Description for Dalkey Islands SPA

238 The Natura 2000 Standard Data Form (NPWS, 2020d) lists the site as an important site for both breeding and staging terns. 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. 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.

7.3.3 Ecological Baseline Description for Rockabill SPA

239 The Natura 2000 Standard Data Form (NPWS, 2018) lists the site as an internationally tern colony. It supports the largest population of roseate tern *Sterna dougallii* in north-west Europe and the largest colony of *Sterna hirundo* in the country, as well as a significant colony of Arctic tern *Sterna paradisaea*. 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*.

7.3.4 Special Conservation Interests and Conservation Objectives of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA

240 The special conservation interests of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA, and the overall conservation objective, are listed in Table 15.

Table 15 Special Conservation Interests and Conservation Objectives of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA

Special Conservation Interest(s)	Conservation Objective(s)
<p>Howth Head Coast SPA [004113] A188 Kittiwake <i>Rissa tridactyla</i></p> <p><i>S.I. No. 185/2012 - European Communities (Conservation of Wild Birds (Howth Head Coast Special Protection Area 004113)) Regulations 2012.</i></p> <p>NPWS (2021) <i>Conservation objectives for Howth Head Coast SPA [004113].</i> Generic Version 8.0. Department of Housing, Local Government and Heritage.</p>	<p>To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.</p>
<p>Dalkey Islands SPA [004172] A192 Roseate Tern <i>Sterna dougallii</i></p>	<p>To maintain or restore the favourable conservation condition of the bird species</p>

Special Conservation Interest(s)	Conservation Objective(s)
<p>A193 Common Tern <i>Sterna hirundo</i> A194 Arctic Tern <i>Sterna paradisaea</i></p> <p><i>S.I. No. 238/2010 - European Communities (Conservation of Wild Birds (Dalkey Islands Special Protection Area 004172)) Regulations 2010</i></p> <p>NPWS (2021) <i>Conservation objectives for Dalkey Islands SPA [004172]</i>. Generic Version 8.0. Department Housing, Local Government and Heritage.</p>	<p>listed as Special Conservation Interests for this SPA.</p>
<p>Rockabill SPA [004014]</p> <p>A148 Purple Sandpiper <i>Calidris maritima</i> A192 Roseate Tern <i>Sterna dougallii</i> A193 Common Tern <i>Sterna hirundo</i> A194 Arctic Tern <i>Sterna paradisaea</i></p> <p><i>S.I. No. 94/2012 - European Communities (Conservation of Wild Birds (Rockabill Special Protection Area 004014)) Regulations 2012.</i></p> <p>NPWS (2013) <i>Conservation Objectives: Rockabill SPA 004014</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	<p>To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.</p>

241 In conjunction with considering the generic conservation objective for this SPA “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.

242 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the qualifying interests within the European site. Affecting the conservation condition of the special conservation interests 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 special conservation interests of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA are presented in Section 7.3.5.2.

7.3.5 Examination and Analysis of Potential Direct and Indirect Impacts

243 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 qualifying interests of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA is:

- Habitat degradation/effects on SCI species as a result of hydrological impacts.

7.3.5.1 Habitat degradation/effects on SCI species as a result of hydrological impacts

244 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 is hydrologically connected to Dublin Bay via the Dodder_050, Brewery Stream_010, Grand Canal, and Booterstown Marsh and Nutley Stream as well as a network of interconnecting and established surface or combined sewer/surface water pipes.

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 Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA.

7.3.5.2 Summary

245 Table 16 presents a summary of the potential impacts of the Proposed Scheme on the qualifying interests of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA, and how these impacts relate to affecting the site's conservation objectives.

Table 16 Potential Impacts/Effects on the Conservation Objectives of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Howth Head Coast SPA			
Kittiwake [A188]			
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 kittiwake in the Saltee Islands SPA [004002] (NPWS, 2011).			
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 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 of intertidal/coastal habitats that support the special conservation interest 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 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/ Mean number/ No significant decline			
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 the breeding site/ Level of impact/ No significant increase			
Dalkey Islands SPA			
Roseate Tern (<i>Sterna dougallii</i>) [A192]			
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 roseate tern in the South Dublin Bay and River Tolka Estuary SPA [004024] (NPWS, 2018g).			
Passage population: individuals/Number/No significant decline	Yes	Yes	No

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
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 along or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality and suitability of roosting sites within the SPA.	The mitigation measures described in Section 7.1.4 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			
Barriers to connectivity/Number; location; shape; area (hectares)/No significant increase			
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			
Common Tern (<i>Sterna hirundo</i>) [A193]			
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 common tern in the South Dublin Bay and River Tolka Estuary SPA [004024] (NPWS 2018g).			
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 accidental pollution event of a sufficient magnitude, either along or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality and suitability of roosting sites within the SPA.	Yes The mitigation measures described in Section 7.1.4 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			
Passage population: individuals/Number/No significant decline			
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			

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 common tern among the post-breeding aggregation of terns			
Arctic Tern (<i>Sterna paradisaea</i>) [A194]			
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 arctic tern in the South Dublin Bay and River Tolka Estuary SPA [004024] (NPWS 2018g).			
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 along or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality and suitability of roosting sites within the SPA.	The mitigation measures described in Section 7.1.4 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			
Barriers to connectivity/Number; location; shape; area (hectares)/No significant increase			
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			
Rockabill SPA			
Purple Sandpiper (<i>Calidris maritima</i>) [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	No	No	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	There is no pathway for impacts to occur on this SCI species as it is located a significant distance from the Proposed Scheme, and on the far side of the Howth peninsula, separated by a large marine waterbody.		

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Roseate Tern (<i>Sterna dougallii</i>) [A192]			
To maintain the favourable conservation condition of Roseate Tern in Rockabill 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 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 decline in the quantity and quality of prey fish species.	Yes The mitigation measures described in Section 7.1.4 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			
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			
Common Tern (<i>Sterna hirundo</i>) [A193]			
To maintain the favourable conservation condition of Common Tern in Rockabill 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 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 decline in the	Yes The mitigation measures described in Section 7.1.4 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			
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			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Disturbance at breeding site/ Level of impact/ Human activities should occur at levels that do not adversely affect the breeding common tern population	quantity and quality of prey fish species.		
Arctic Tern (<i>Sterna paradisaea</i>) [A194]			
To maintain the favourable conservation condition of Arctic Tern in Rockabill 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 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 decline in the quantity and quality of prey fish species.	Yes The mitigation measures described in Section 7.1.4 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			
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 common tern population			

7.3.6 Mitigation Measures

246 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 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

247 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

248 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during operation of the Proposed Scheme.

7.3.7 Residual Impacts

249 With the inclusion of appropriate mitigation, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of special conservation interests 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.

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

250 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the qualifying interests of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA, the potential impacts, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the qualifying interests, 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.

7.4 Baldoye Bay SPA [004016]

7.4.1 Ecological Baseline Description for Baldoye Bay SPA

251 The Natura 2000 Standard Data Form (NPWS, 2020e) 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.

7.4.2 Special Conservation Interests and Conservation Objectives of Baldoye Bay SPA

252 The special conservation interests of Baldoye Bay SPA, and the overall conservation objective, are listed in Table 17.

Table 17 Special Conservation Interests and Conservation Objectives of Baldoyle Bay SPA

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

253 In conjunction with considering the generic conservation objective for this SPA “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 Baldoyle Bay SPA also informed this assessment.

254 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the special conservation interests within the European site. Affecting the conservation condition of the special conservation interests 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 special conservation interests of Baldoyle Bay SPA are presented in Section 7.4.3.4.

7.4.3 Examination and Analysis of Potential Direct and Indirect Impacts

255 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 special conservation interests of Baldoyle Bay SPA, are:

- Habitat degradation/effects on SCI species as a result of hydrological impacts;
- Disturbance and displacement impacts; and
- Habitat loss/fragmentation.

7.4.3.1 Habitat degradation/effects on SCI species as a result of hydrological impacts

256 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 is hydrologically connected to Dublin Bay via the Dodder_050, Brewery Stream_010, Grand Canal, and Booterstown Marsh and Nutley Stream as well as a network of interconnecting and established surface or combined sewer/surface water pipes.

257 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 SPA.

7.4.3.2 Disturbance and displacement impacts

258 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. However, this impact remains pertinent due to the proximity of the site compound adjacent to South Dublin Bay and River Tolka Estuary SPA which species from this European site may utilise due to its location in Dublin Bay. 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. Table 9 in Section 7.1.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

259 Baldoyle Bay 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 e.g. light-bellied Brent goose and golden plover. There are areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme as well as several areas of suitable foraging and/or roosting habitat available for these SCI bird species within the disturbance ZoI of the Proposed Scheme including Blackrock Park and the grounds of Blackrock College, as well as Booterstown marsh, which forms part of the South Dublin Bay and River Tolka Estuary SPA. 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 (see Table 4).

260 As discussed above in Section 7.1.3.4 there is screening vegetation removal at Booterstown Marsh and Blackrock College which may temporarily increase disturbance levels within these areas.

261 Significant effects may occur on any SCI bird species populations of Baldoyle Bay 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:

- 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 12 months (representing a maximum of one winter season) during construction works and for an approximate two year period at the Construction Compound. Following the completion of construction, disturbance levels will over time return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.
- The effect and timing of vegetation removal. Although the construction and/or removal of vegetation to facilitate construction will not have a long-term effect on SCI populations in terms of replacement planting and the nature and extent of the landtake, mitigation measures are proposed to ensure that works are in as far as is possible are undertaken outside the wintering bird season and that the reestablishment of the landscape and/or screening vegetation is undertaken in a timely manner. Furthermore, given the operation of the Construction Compound for the duration of the construction phase, additional measures are proposed to reduce disturbance impacts in close proximity to the SPA territory outside of the proposed footprint e.g. South Dublin Bay or adjacent ex-situ feeding sites e.g. Blackrock College.

7.4.3.3 Habitat loss/fragmentation

262 Baldoyle SPA is designated for wintering SCI species that are known to forage and /or roost at sites across Dublin, such as amenity grasslands and playing pitches. In respect of the Proposed Scheme, these species

include light-bellied Brent goose, ringed plover and golden plover. There are a number of areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme.

263 There are two no. areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme, namely grassland adjacent to Booterstown Marsh, referred to as CBC1415WB001, and grassland at Blackrock Park, referred to as CBC1415WB002. CBC1415WB001 was not found to support wintering bird species.

264 The Proposed Scheme will result in the temporary loss of 0.07ha of GA2 habitat suitable to support breeding gull and wintering bird species at Blackrock Park (referred to as CBC1415WB002).

265 There is no potential for impacts to occur on inland feeding SCI populations associated with Baldoyle Bay SPA, in light of their conservation objectives, as a consequence of habitat loss/fragmentation from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:

- The absence or low frequency of occurrence of these SCI bird species recorded on lands located within the footprint of the Proposed Scheme, 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.
- Land take in the proposed works area is temporary in nature and will be returned to GA2 habitat during the Operational Phase of the Proposed Scheme.

7.4.3.4 Summary

266 Table 18 presents a summary of the potential impacts of the Proposed Scheme on the special conservation interests of Baldoyle Bay SPA, and how these impacts relate to affecting the site's conservation objectives.

Table 18 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>) [A046], Shelduck (<i>Tadorna tadorna</i>) [A048], Ringed Plover (<i>Charadrius hiaticula</i>) [A137], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Grey Plover (<i>Pluvialis squatarola</i>) [A141], Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]			
To restore the favourable conservation condition of the special conservation interests of the SPA, which is defined as follows:			
Population trend/Percentage change/Long term population trend stable or increasing	Yes	Yes	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	<p>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 of intertidal/coastal habitats that support the special conservation interest 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.</p> <p>There is potential for impacts to occur on any SCI bird species population of Baldoyle Bay 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.</p>	<p>Yes</p> <p>The mitigation measures described in Section 7.1.4 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.</p> <p>The mitigation measures presented in Section 7.1.4 with regard to works adjacent to SPA territory and/or inland feeding sites will reduce disturbance and prevent displacement during the Construction of the Proposed Scheme.</p>	

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
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 and not significantly less than the area of 263ha, other than that occurring from natural patterns of variation	No 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 the Baldoyle Bay.	No	No

7.4.4 Mitigation Measures

267 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 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

268 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

269 The mitigation measures presented above in section 7.1.4 will protect surface water quality during operation of the Proposed Scheme.

Measures to Reduce Impacts to SCI Birds due to vegetation loss during Construction

270 The mitigation measures presented in Section 7.1.4 will ensure that impacts from vegetation loss are minimised as far as is practical.

Measures to Prevent to Disturbance and Displacement Impact to SCI Species during Construction

271 The mitigation measures presented in Section 7.1.4 with regard to works adjacent to SPA territory and/or inland feeding sites will reduce disturbance and prevent displacement during the construction of the Proposed Scheme.

Measures to prevent to Disturbance and Displacement Impacts to SCI Bird species during Operation

272 The Mitigation measures presented in Section 7.1.4 will over time reduce the Disturbance and Displacement Impacts to SCI birds associated with the SPA.

7.4.5 Residual Impacts

273 With the inclusion of appropriate mitigation, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the special conservation interests and supporting wetland habitat 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.

7.4.6 Conclusion of Assessment for Baldoyle Bay SPA

274 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the special conservation interests of Baldoyle Bay SPA, 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.

7.5 Malahide Estuary SPA [004025]

7.5.1 Ecological Baseline Description for Malahide Estuary SPA

275 Malahide Estuary SPA comprises the estuary of the River Broadmeadow. According to the Natura 2000 Standard Data Form for the site (NPWS, 2020f), the estuary comprises, 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.

7.5.2 *Special Conservation Interests and Conservation Objectives of Malahide Estuary SPA*

276 The special conservation interests of Malahide Estuary SPA, and the overall conservation objective, are listed in Table 19.

Table 19 Special Conservation Interests and Conservation Objectives of Malahide Estuary SPA

Special Conservation Interest(s)	Conservation Objective(s)
<p>Malahide Estuary SPA [004025]</p> <p>A005 Great Crested Grebe <i>Podiceps cristatus</i></p> <p>A046 Light-bellied Brent Goose <i>Branta bernicla hrota</i></p> <p>A048 Shelduck <i>Tadorna tadorna</i></p> <p>A054 Pintail <i>Anas acuta</i></p> <p>A067 Goldeneye <i>Bucephala clangula</i></p> <p>A069 Red-breasted Merganser <i>Mergus serrator</i></p> <p>A130 Oystercatcher <i>Haematopus ostralegus</i></p> <p>A140 Golden Plover <i>Pluvialis apricaria</i></p> <p>A141 Grey Plover <i>Pluvialis squatarola</i></p> <p>A143 Knot <i>Calidris canutus</i></p> <p>A149 Dunlin <i>Calidris alpina</i></p> <p>A156 Black-tailed Godwit <i>Limosa limosa</i></p> <p>A157 Bar-tailed Godwit <i>Limosa lapponica</i></p> <p>A162 Redshank <i>Tringa totanus</i></p> <p>A999 Wetland and Waterbirds</p> <p><i>S.I. No. 285/2011 - European Communities (Conservation of Wild Birds (Malahide Estuary Special Protection Area 004025)) Regulations 2011.</i></p> <p>NPWS (2013) <i>Conservation Objectives: Malahide Estuary SPA 004025</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	<p>To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.</p>

277 In conjunction with considering the generic conservation objective for this SPA “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 Malahide Estuary SPA also informed this assessment.

278 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the special conservation interests within the European site. Affecting the conservation condition of the special conservation interests 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 special conservation interests of Malahide Estuary SPA are presented in Section 7.5.3.4.

7.5.3 *Examination and Analysis of Potential Direct and Indirect Impacts*

279 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 qualifying interests of Malahide Estuary SPA, are:

- Habitat degradation/effects on SCI species as a result of hydrological impacts;
- Disturbance and displacement impacts; and

- Habitat loss/fragmentation.

7.5.3.1 Habitat degradation/effects on SCI species as a result of hydrological impacts

280 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 is hydrologically connected to Dublin Bay via the Dodder_050, Brewery Stream_010, Grand Canal, and Booterstown Marsh and Nutley Stream as well as a network of interconnecting and established surface or combined sewer/surface water pipes.

281 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 SPA.

7.5.3.2 Disturbance/displacement impacts

282 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. However, this impact remains pertinent due to the proximity of the site compound adjacent to South Dublin Bay and River Tolka Estuary SPA which species from this European site may utilise due to its location in Dublin Bay. 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. Table 9 in Section 7.1.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

283 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 several areas of suitable foraging and/or roosting habitat available for these SCI bird species within the disturbance ZoI of the Proposed Scheme including Blackrock Park and the grounds of Blackrock College, as well as Booterstown Marsh, which forms part of the South Dublin Bay and River Tolka Estuary SPA. It is possible that SCI bird species associated with the Malahide Estuary SPA currently utilise these and other suitable lands in the wider area.

284 As discussed above in Section 7.1.3.4 there is screening vegetation removal at Booterstown Marsh and Blackrock College which may temporarily increase disturbance levels within these areas.

285 Significant effects may occur on any SCI bird species populations 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:

- 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 12 months (representing a maximum of one winter season) during construction works and for an approximate two year period at the Construction Compound. Following the completion of construction, disturbance levels will over time return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.

- The effect and timing of vegetation removal. Although the construction and/or removal of vegetation to facilitate construction will not have a long-term effect on SCI populations in terms of replacement planting and the nature and extent of the landtake, mitigation measures are proposed to ensure that works are in as far as is possible are undertaken outside the wintering bird season and that the reestablishment of the landscape and /or screening vegetation is undertaken in a timely manner. Furthermore, given the operation of the Construction Compound for the duration of the construction phase, additional measures are proposed to reduce disturbance impacts in close proximity to the SPA territory outside of the proposed Footprint e.g. South Dublin Bay or adjacent ex-situ feeding sites e.g. Blackrock College.

7.5.3.3 Habitat loss/fragmentation

286 Malahide Estuary SPA is designated for wintering SCI species that are known to forage and /or roost at sites across Dublin, such as amenity grasslands and playing pitches. In respect of the Proposed Scheme, these species include light-bellied Brent goose and black-headed gull. There are a number of areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme. There are two no. areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme, namely grassland adjacent to Booterstown Marsh, referred to as CBC1415WB001, and grassland at Blackrock Park, referred to as CBC1415WB002. CBC1415WB001 was not found to support wintering bird species.

287 The Proposed Scheme will result in the temporary loss of 0.07ha of GA2 habitat suitable to support breeding gull and wintering bird species at Blackrock Park (referred to as CBC1415WB002).

288 There is no potential for impacts to occur on inland feeding SCI populations associated with Malahide Estuary SPA, in light of their conservation objectives, as a consequence of habitat loss/fragmentation from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:

- The absence or low frequency of occurrence of these SCI bird species recorded on lands located within the footprint of the Proposed Scheme, 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;
- Land take in the proposed works area is temporary in nature and will be returned to GA2 habitat during the Operational Phase of the Proposed Scheme.

7.5.3.4 Summary

289 Table 20 presents a summary of the potential impacts of the Proposed Scheme on the special conservation interests of Malahide Estuary SPA, and how these impacts relate to affecting the site's conservation objectives.

Table 20 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			
Great Crested Grebe (<i>Podiceps cristatus</i>) [A005], Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046], Shelduck (<i>Tadorna tadorna</i>) [A048], Pintail (<i>Anas acuta</i>) [A054], Goldeneye (<i>Bucephala clangula</i>) [A067], Red-breasted Merganser (<i>Mergus serrator</i>) [A069], Oystercatcher (<i>Haematopus ostralegus</i>) [A130], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Grey Plover (<i>Pluvialis squatarola</i>) [A141], Knot (<i>Calidris canutus</i>) [A143], Dunlin (<i>Calidris alpina alpina</i>) [A149], Black-tailed Godwit (<i>Limosa limosa</i>) [A156], Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157], Redshank (<i>Tringa totanus</i>) [A162]			
To restore the favourable conservation condition of the special conservation interests of the SPA, which is defined as follows:			
Population trend/Percentage change/Long term population trend stable or increasing	Yes	Yes	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	<p>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 special conservation interest 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.</p> <p>There is potential for impacts to 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.</p>	<p>The mitigation measures described in Section 7.1.4 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.</p> <p>The mitigation measures presented in Section 7.1.4 with regard to works adjacent to SPA territory and/or inland feeding sites will reduce disturbance and prevent displacement during the Construction of the Proposed Scheme.</p>	

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 and not significantly less than the area of 765ha, other than that occurring from natural patterns of variation	No There is no pathway 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

7.5.4 Mitigation Measures

290 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 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

291 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

292 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during operation of the Proposed Scheme.

Measures to Reduce Impacts to SCI Birds due to vegetation loss during Construction

293 The mitigation measures presented in Section 7.1.4 will ensure that impacts from vegetation loss are minimised as far as is practical.

Measures to Prevent to Disturbance and Displacement Impact to SCI Species during Construction

294 The mitigation measures presented in Section 7.1.4 with regard to works adjacent to SPA territory and/or inland feeding sites will reduce disturbance and prevent displacement during the construction of the Proposed Scheme.

Measures to prevent to Disturbance and Displacement Impacts to SCI Bird species during Operation

295 The Mitigation measures presented in Section 7.1.4 will over time reduce the Disturbance and Displacement Impacts to SCI birds associated with the SPA.

7.5.5 Residual Impacts

296 With the inclusion of appropriate mitigation, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the special conservation interests and supporting wetland habitat 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.

7.5.6 Conclusion of Assessment for Malahide Estuary SPA

297 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the special conservation interests of Malahide Estuary SPA, 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.

7.6 Rogerstown Estuary SPA [004015]

7.6.1 Ecological Baseline Description for Rogerstown Estuary SPA

298 The Natura Standard Data Form (NPWS, 2020g) lists Rogerstown Estuary SPA as a relatively small estuarine system in north County Dublin. It has salt marsh and sand dune habitats, as well as agricultural fields which are of 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, invasive species, disposal of industrial waste, fertilisation and landfill, land reclamation and drying out.

7.6.2 *Special Conservation Interests and Conservation Objectives of Rogerstown Estuary SPA*

299 The special conservation interests of Rogerstown Estuary SPA, and the overall conservation objective, are listed in Table 21.

Table 21 Special Conservation Interests and Conservation Objectives of Rogerstown Estuary SPA

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

300 In conjunction with considering the generic conservation objective for this SPA “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 Rogerstown Estuary SPA also informed this assessment.

301 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the special conservation interests within the European site. Affecting the conservation condition of the qualifying interests/special conservation interests 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 special conservation interests of Rogerstown Estuary SPA are presented in Section 7.6.3.4.

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

302 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 special conservation interests of Rogerstown Estuary SPA, are:

- Habitat degradation/effects on SCI species as a result of hydrological impacts;
- Disturbance and displacement impacts; and
- Habitat loss and fragmentation.

7.6.3.1 Habitat degradation/effects on SCI species as a result of hydrological impacts.

- 303 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 is hydrologically connected to Dublin Bay via the Dodder_050, Brewery Stream_010, Grand Canal, and Booterstown Marsh and Nutley Stream as well as a network of interconnecting and established surface or combined sewer/surface water pipes.
- 304 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.

7.6.3.2 Disturbance and Displacement impacts

- 305 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 c. 300m, as noise levels associated with general construction activities would attenuate to close to background levels at that distance and beyond. However, this impact remains pertinent due to the proximity of the site compound adjacent to South Dublin Bay and River Tolka Estuary SPA which species from this European site may utilise due to its location in Dublin Bay. 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. Table 9 in Section 7.1.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.
- 306 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 and oystercatcher and black-tailed godwit. There are also a number of areas of suitable foraging and/or roosting habitat available for these SCI bird species within the disturbance ZoI of the Proposed Scheme including Blackrock Park and the grounds of Blackrock College, as well as Booterstown marsh, which forms part of the South Dublin Bay and River Tolka Estuary SPA.
- 307 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.
- 308 As discussed above in Section 7.1.3.4 there is screening vegetation removal at Booterstown Marsh and Blackrock College which may temporarily increase disturbance levels within these areas.
- 309 Significant effects may occur on any SCI bird species populations of Rogerstown 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:
- 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 12 months (representing a maximum of one winter season) during construction works and for an approximately two year period at the Construction Compound. Following the completion of construction, disturbance levels will over time return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.

- The effect and timing of vegetation removal. Although the construction and/or removal of vegetation to facilitate construction will not have a long-term effect on SCI populations in terms of replacement planting and the nature and extent of the landtake, mitigation measures are proposed to ensure that works are in as far as is possible are undertaken outside the wintering bird season and that the reestablishment of the landscape and /or screening vegetation is undertaken in a timely manner. Furthermore, given the operation of the Construction Compound for the duration of the construction phase, additional measures are proposed to reduce disturbance impacts in close proximity to the SPA territory outside of the proposed Footprint e.g. South Dublin Bay or adjacent ex-situ feeding sites e.g. Blackrock College.

7.6.3.3 Habitat loss and fragmentation

- 310 Rogerstown Estuary SPA is designated for wintering SCI species that are known to forage and/or roost at sites across Dublin, such as amenity grasslands and playing pitches. In respect of the Proposed Scheme, these species include light-bellied Brent goose. There are a number of areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme.
- 311 There are two no. areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme, namely grassland adjacent to Booterstown Marsh, referred to as CBC1415WB001, and grassland at Blackrock Park, referred to as CBC1415WB002. CBC1415WB001 was not found to support wintering bird species.
- 312 The Proposed Scheme will result in the permanent loss of 0.03ha of GA2 habitat suitable to support breeding gull and wintering bird species at Blackrock Park (referred to as CBC1415WB002).
- 313 There is no potential for impacts to occur on inland feeding SCI populations associated Rogerstown Estuary SPA, in light of their conservation objectives, as a consequence of habitat loss/fragmentation from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:
- The absence or low frequency of occurrence of these SCI bird species recorded on lands located within the footprint of the Proposed Scheme, 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;
 - Land take in the proposed works area is temporary in nature and will be returned to GA2 habitat during the Operational Phase of the Proposed Scheme.

7.6.3.4 Summary

- 314 Table 22 presents a summary of the potential impacts of the Proposed Scheme on the special conservation interests of Rogerstown Estuary SPA, and how these impacts relate to affecting the site's conservation objectives.

Table 22 Potential Impacts/Effects on the Conservation Objectives of Rogerstown Estuary SPA

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Rogerstown Estuary SPA			
<p>Greylag Goose [A043], Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046], Shelduck (<i>Tadorna tadorna</i>) [A048], Shoveler (<i>Anas clypeata</i>) [A056], Oystercatcher (<i>Haematopus ostralegus</i>) [A130], Ringed Plover (<i>Charadrius hiaticula</i>) [A137], Grey Plover (<i>Pluvialis squatarola</i>) [A141], Knot (<i>Calidris canutus</i>) [A143], Dunlin (<i>Calidris alpina alpina</i>) [A149], Black-tailed Godwit (<i>Limosa limosa</i>) [A156] and Redshank (<i>Tringa tetanus</i>) [A162]</p> <p>To restore the favourable conservation condition of the special conservation interests of the SPA, which is defined as follows:</p>			
<p>Population trend/Percentage change/Long term population trend stable or increasing</p>	<p>Yes</p> <p>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 of the of intertidal/coastal habitats that support the special conservation interest 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.</p> <p>There is potential for impacts to occur on any SCI bird species population of Rogerstown 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</p>	<p>Yes</p> <p>The mitigation measures described in Section 7.1.4 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.</p> <p>The mitigation measures presented in Section 7.1.4 with regard to works adjacent to SPA territory and/or inland feeding sites will reduce disturbance and prevent displacement during the Construction of the Proposed Scheme.</p>	<p>No</p>

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
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 and not significantly less than the area of 646ha, other than that occurring from natural patterns of variation	No There is no pathway 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

7.6.4 Mitigation Measures

315 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 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

316 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

317 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during operation of the Proposed Scheme.

Measures to Reduce Impacts to SCI Birds due to vegetation loss during Construction

318 The mitigation measures presented in Section 7.1.4 will ensure that impacts from vegetation loss are minimised as far as is practical.

Measures to Prevent to Disturbance and Displacement Impact to SCI Species during Construction

319 The mitigation measures presented in Section 7.1.4 with regard to works adjacent to SPA territory and/or inland feeding sites will reduce disturbance and prevent displacement during the construction of the Proposed Scheme.

Measures to prevent to Disturbance and Displacement Impacts to SCI Bird species during Operation

320 The Mitigation measures presented in Section 7.1.4 will over time reduce the Disturbance and Displacement Impacts to SCI birds associated with the SPA.

7.6.5 Residual Impacts

321 With the inclusion of appropriate mitigation, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the special conservation interests 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.

7.6.6 Conclusion of Assessment for Rogerstown Estuary SPA

322 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the special conservation interests of Rogerstown Estuary SPA, 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.

7.7 Skerries Islands SPA [004122]

7.7.1 Ecological Baseline Description for Skerries Islands SPA

323 The Natura Standard Data Form (NPWS, 2020h) 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.

7.7.2 *Special Conservation Interests and Conservation Objectives of Skerries Islands SPA*

324 The special conservation interests of Skerries Islands SPA, and the overall conservation objective, are listed in Table 23.

Table 23 Special Conservation Interests and Conservation Objectives of Skerries Islands SPA

Special Conservation Interest(s)	Conservation Objective(s)
<p>Skerries Islands SPA [004122]</p> <p>A017 Cormorant <i>Phalacrocorax carbo</i></p> <p>A018 Shag <i>Phalacrocorax aristotelis</i></p> <p>A046 Light-bellied Brent Goose <i>Branta bernicla hrota</i></p> <p>A148 Purple Sandpiper <i>Calidris maritima</i></p> <p>A169 Turnstone <i>Arenaria interpres</i></p> <p>A184 Herring Gull <i>Larus argentatus</i></p> <p><i>S.I. No. 245/2010 - European Communities (Conservation of Wild Birds (Skerries Islands Special Protection Area 004122)) Regulations 2010.</i></p> <p>NPWS (2021) <i>Conservation objectives for Skerries Islands SPA [004122].</i> Generic Version 8.0. Department of Housing, Local Government and Heritage.</p>	<p>To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA</p>

325 In conjunction with considering the generic conservation objective for this SPA “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 Skerries Islands SPA also informed this assessment.

326 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the special conservation interests within the European site. Affecting the conservation condition of the special conservation interests 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 special conservation interests of Skerries Islands SPA are presented in Section 7.7.3.4.

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

327 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 special conservation interests of Skerries Islands SPA, are:

- Habitat degradation/effects on SCI species as a result of hydrological impacts;
- Disturbance and displacement impacts; and
- Habitat loss and fragmentation.

7.7.3.1 *Habitat degradation/effects on SCI species as a result of hydrological impacts*

328 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 is hydrologically connected to Dublin Bay via the Dodder_050,

Brewery Stream_010, Grand Canal, and Booterstown Marsh and Nutley Stream as well as a network of interconnecting and established surface or combined sewer/surface water pipes.

329 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.

7.7.3.2 Disturbance and displacement impacts

330 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. However, this impact remains pertinent due to the proximity of the site compound adjacent to South Dublin Bay and River Tolka Estuary SPA which species from this European site may utilise due to its location in Dublin Bay. 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. Table 9 in Section 7.1.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

331 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 are several areas of suitable foraging and/or roosting habitat available for these SCI bird species within the disturbance Zol of the Proposed Scheme including Blackrock Park and the grounds of Blackrock College, as well as Booterstown Marsh, which forms part of the South Dublin Bay and River Tolka Estuary SPA.

332 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.

333 As discussed above in Section 7.1.3.4 there is screening vegetation removal at Booterstown Marsh and Blackrock College which may temporarily increase disturbance levels within these areas.

334 Significant effects may occur on any SCI bird species populations 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:

- 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 12 months (representing a maximum of one winter season) during construction works and for an approximate two year period at the Construction Compound. Following the completion of construction, disturbance levels will over time return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.
- The effect and timing of vegetation removal. Although the construction and/or removal of vegetation to facilitate construction will not have a long-term effect on SCI populations in terms of replacement planting and the nature and extent of the landtake, mitigation measures are proposed to ensure that works are in as far as is possible are undertaken outside the wintering bird season and that the reestablishment of the landscape and /or screening vegetation is undertaken in a timely manner. Furthermore, given the operation of the Construction Compound for the duration of the construction phase, additional measures are proposed to reduce

disturbance impacts in close proximity to the SPA territory outside of the proposed Footprint e.g. South Dublin Bay or adjacent ex-situ feeding sites e.g. Blackrock College.

7.7.3.3 Habitat loss and fragmentation

335 Skerries Islands SPA is designated for wintering SCI species that are known to forage and/or roost at sites across Dublin, such as amenity grasslands and playing pitches. In respect of the Proposed Scheme, these species include light-bellied Brent goose. There are a number of areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme.

336 There are two no. areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme, namely grassland adjacent to Booterstown Marsh, referred to as CBC1415WB001, and grassland at Blackrock Park, referred to as CBC1415WB002.

The Proposed Scheme will result in the permanent loss of 0.03ha of GA2 habitat suitable to support breeding gull and wintering bird species at the Proposed Blackrock Park compound.

337 There is no potential for impacts to occur on inland feeding SCI populations associated with Skerries Islands SPA, in light of their conservation objectives, as a consequence of habitat loss/fragmentation from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:

- The absence or low frequency of occurrence of these SCI bird species recorded on lands located within the footprint of the Proposed Scheme, 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.
- Land take in the proposed works area is temporary in nature and will be returned to GA2 habitat during the Operational Phase of the Proposed Scheme.

7.7.3.4 Summary

338 Table 24 presents a summary of the potential impacts of the Proposed Scheme on the special conservation interests of Skerries Islands SPA, and how these impacts relate to affecting the site's conservation objectives.

Table 24 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			
<p>Cormorant (<i>Phalacrocorax carbo</i>) [A017], Shag (<i>Phalacrocorax aristotelis</i>) [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]</p> <p>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 Estuary SPA [004015]</p>			
Population trend/Percentage change/Long term population trend stable or increasing	<p>Yes</p> <p>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 special conservation interest 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.</p> <p>There is 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.</p>	<p>Yes</p> <p>The mitigation measures described in Section 7.1.4 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.</p> <p>The mitigation measures presented in Section 7.1.4 with regard to works adjacent to SPA territory and/or inland feeding sites will reduce disturbance and prevent displacement during the Construction of the Proposed Scheme.</p>	No

7.7.4 Mitigation Measures

339 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 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

340 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

341 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during operation of the Proposed Scheme.

Measures to Reduce Impacts to SCI Birds due to vegetation loss during Construction

342 The mitigation measures presented in Section 7.1.4 will ensure that impacts from vegetation loss are minimised as far as is practical.

Measures to Prevent to Disturbance and Displacement Impact to SCI Species during Construction

343 The mitigation measures presented in Section 7.1.4 with regard to works adjacent to SPA territory and/or inland feeding sites will reduce disturbance and prevent displacement during the construction of the Proposed Scheme.

Measures to prevent to Disturbance and Displacement Impacts to SCI Bird species during Operation

344 The Mitigation measures presented in Section 7.1.4 will over time reduce the Disturbance and Displacement Impacts to SCI birds associated with the SPA.

7.7.5 Residual Impacts

345 With the inclusion of appropriate mitigation, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the special conservation interests 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.

7.7.6 Conclusion of Assessment for Skerries Islands SPA

346 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the special conservation interests of Skerries Islands SPA, 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.

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

7.8.1 Ecological Baseline Description for Ireland's Eye SPA

347 According to the Natura 2000 Standard Data Form (NPWS, 2020i), 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.

7.8.2 Ecological Baseline Description for Lambay Island SPA

348 According to the Natura 2000 Standard Data Form (NPWS, 2020j), 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.

7.8.3 Special Conservation Interests and Conservation Objectives of Ireland’s Eye SPA and Lambay Island SPA

349 The special conservation interests of Ireland’s Eye SPA and Lambay Island SPA, and the overall conservation objectives, are listed in Table 25.

Table 25 Special Conservation Interests and Conservation Objectives of Ireland’s Eye SPA and Lambay Island SPA

Special Conservation Interest(s)	Conservation Objective(s)
<p>Ireland’s Eye SPA [004117] A017 Cormorant <i>Phalacrocorax carbo</i> A184 Herring Gull <i>Larus argentatus</i> A188 Kittiwake <i>Rissa tridactyla</i> A199 Guillemot <i>Uria aalge</i> A200 Razorbill <i>Alca torda</i></p> <p><i>S.I. No. 240/2010 – European Communities (Conservation of Wild Birds (Ireland’s Eye Special Protection Area 004117) Regulations 2010.</i></p> <p>NPWS (2021) <i>Conservation objectives for Ireland’s Eye SPA [004117].</i> Generic Version 8.0. Department of Housing, Local Government and Heritage.</p>	<p>To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA</p>
<p>Lambay Island SPA [004069] A009 Fulmar <i>Fulmarus glacialis</i> A017 Cormorant <i>Phalacrocorax carbo</i> A018 Shag <i>Phalacrocorax aristotelis</i> A043 Greylag Goose <i>Anser anser</i> A183 Lesser Black-backed Gull <i>Larus fuscus</i> A184 Herring Gull <i>Larus argentatus</i> A188 Kittiwake <i>Rissa tridactyla</i> A199 Guillemot <i>Uria aalge</i> A200 Razorbill <i>Alca torda</i> A204 Puffin <i>Fratercula arctica</i></p> <p><i>S.I. No. 242/2010 – European Communities (Conservation of Wild Birds (Lambay Island Special Protection Area 004069)) Regulations 2010.</i></p> <p>NPWS (2021) <i>Conservation objectives for Lambay Island SPA [004069].</i> Generic Version 8.0. Department of Housing, Local Government and Heritage.</p>	<p>To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA</p>

350 In conjunction with considering the generic conservation objective for this SPA “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 documents for Ireland’s Eye SPA and Lambay Island SPA also informed this assessment.

351 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the special conservation interests within the European site. Affecting the conservation condition of the special conservation interests 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 special conservation interests of Ireland’s Eye SPA and Lambay Island SPA are presented in Section 7.8.4.3.

7.8.4 Examination and Analysis of Potential Direct and Indirect Impacts

352 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 special conservation interests of Ireland’s Eye SPA and Lambay Island SPA, are:

- Habitat degradation/effects on SCI species as a result of hydrological impacts;
- Disturbance and displacement impacts; and
- Habitat loss and fragmentation.

7.8.4.1 Habitat degradation/effects on SCI species as a result of hydrological impacts

353 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 is hydrologically connected to Dublin Bay via the Dodder_050, Brewery Stream_010, Grand Canal, and Booterstown Marsh and Nutley Stream as well as a network of interconnecting and established surface or combined sewer/surface water pipes.

354 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.

7.8.4.2 Disturbance and displacement impacts

355 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. However, this impact remains pertinent due to the proximity of the site compound adjacent to South Dublin Bay and River Tolka Estuary SPA which species from this European site may utilise due to its location in Dublin Bay. 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. Table 9 in Section 7.1.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

- 356 Ireland's Eye SPA and Lambay Island SPA are 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 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 are several areas of suitable foraging and/or roosting habitat available for these SCI bird species within the disturbance ZoI of the Proposed Scheme including Blackrock Park and the grounds of Blackrock College, as well as Booterstown Marsh, which forms part of the South Dublin Bay and River Tolka Estuary SPA.
- 357 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), it is considered to be possible that SCI species associated with Ireland's Eye SPA and Lambay Island SPA currently utilise these and other suitable lands in the wider area.
- 358 As discussed above in Section 7.1.3.4 there is screening vegetation removal at Booterstown Marsh and Blackrock College which may temporarily increase disturbance levels within these areas.
- 359 Significant effects may occur on any SCI bird species populations of Ireland's Eye SPA and 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:
- 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 12 months (representing a maximum of one winter season) during construction works and for an approximate two year period at the Construction Compound. Following the completion of construction, disturbance levels will over time return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.
 - The effect and timing of vegetation removal. Although the construction and/or removal of vegetation to facilitate construction will not have a long-term effect on SCI populations in terms of replacement planting and the nature and extent of the landtake, mitigation measures are proposed to ensure that works are in as far as is possible are undertaken outside the wintering bird season and that the reestablishment of the landscape and /or screening vegetation is undertaken in a timely manner. Furthermore, given the operation of the Construction Compound for the duration of the construction phase, additional measures are proposed to reduce disturbance impacts in close proximity to the SPA territory outside of the proposed footprint e.g. South Dublin Bay or adjacent ex-situ feeding sites e.g. Blackrock College.

7.8.4.3 Habitat loss and fragmentation

- 360 Ireland's Eye SPA and Lambay Island SPA are designated for wintering SCI species that are known to forage and/or roost at sites across Dublin, such as amenity grasslands and playing pitches. In respect of the Proposed Scheme, these species include herring gull. There are a number of areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme.
- 361 There are two no. areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme, namely grassland adjacent to Booterstown Marsh, referred to as CBC1415WB001, and grassland at Blackrock Park, referred to as CBC1415WB002.
- 362 The Proposed Scheme will result in the temporary loss of 0.07ha of GA2 habitat suitable to support breeding gull and wintering bird species at Blackrock Park (referred to as CBC1415WB002)
- 363 There is no potential for impacts to occur on inland feeding SCI populations associated with Ireland's Eye SPA and Lambay Island SPA, in light of their conservation objectives, as a consequence of habitat loss/fragmentation from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:
- The absence or low frequency of occurrence of these SCI bird species recorded on lands located within the footprint of the Proposed Scheme, 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.

- Land take in the proposed works area is temporary in nature and will be returned to GA2 habitat during the Operational Phase of the Proposed Scheme.

7.8.4.4 Summary

364 Table 26 presents a summary of the potential impacts of the Proposed Scheme on the qualifying interests of Ireland's Eye SPA and Lambay Island SPA, and how these impacts relate to affecting the site's conservation objectives.

Table 26 Potential Impacts/Effects on the Conservation Objectives of Ireland’s Eye SPA and Lambay Island SPA

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Ireland’s Eye SPA			
Cormorant [A017], Herring Gull [A184], Kittiwake [A188], Guillemot [A199], Razorbill [A200]			
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 Estuary SPA [004015]			
Population trend/Percentage change/Long term population trend stable or increasing	<p>Yes</p> <p>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 special conservation interest 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.</p> <p>There is potential for impacts to occur on any SCI bird species population of Ireland’s Eye SPA and 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.</p>	<p>Yes</p> <p>The mitigation measures described in Section 7.1.4 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.</p> <p>The mitigation measures presented in Section 7.1.4 with regard to works adjacent to SPA territory and/or inland feeding sites will reduce disturbance and prevent displacement during the Construction of the Proposed Scheme.</p>	No

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			
Lambay Island SPA			
Fulmar [A009], Cormorant [A017], Shag [A018], Greylag Goose [A043], Lesser Black-backed Gull [A183], Herring Gull [A184], Kittiwake [A188], Guillemot [A199], Razorbill [A200], Puffin [A204]			
Population trend/Percentage change/Long term population trend stable or increasing	Yes	Yes	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	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 of the intertidal/coastal habitats that support the special conservation interest 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 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.	
	There is potential for impacts to occur on any SCI bird species population of Ireland's Eye SPA and 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.	The mitigation measures presented in Section 7.1.4 with regard to works adjacent to SPA territory and/or inland feeding sites will reduce disturbance and prevent displacement during the Construction of the Proposed Scheme.	

7.8.5 Mitigation Measures

365 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 Ireland's Eye SPA and 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

366 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

367 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during operation of the Proposed Scheme.

Measures to Reduce Impacts to SCI Birds due to vegetation loss during Construction

368 The mitigation measures presented in Section 7.1.4 will ensure that impacts from vegetation loss are minimised as far as is practical.

Measures to Prevent to Disturbance and Displacement Impact to SCI Species during Construction

369 The mitigation measures presented in Section 7.1.4 with regard to works adjacent to SPA territory and/or inland feeding sites will reduce disturbance and prevent displacement during the construction of the Proposed Scheme.

Measures to prevent to Disturbance and Displacement Impacts to SCI Bird species during Operation

370 The Mitigation measures presented in Section 7.1.4 will over time reduce the Disturbance and Displacement Impacts to SCI birds associated with the SPA.

7.8.6 Residual Impacts

371 With the inclusion of appropriate mitigation, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the special conservation interests 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.

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

372 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the qualifying interests of Ireland's Eye SPA or Lambay Island SPA, the potential impacts, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the special conservation interests, it has been concluded that the Proposed Scheme does not pose a risk of adversely affecting (either directly or indirectly) the integrity of Ireland's Eye SPA or Lambay Island SPA.

7.9 The Murrough SPA [004186]

7.9.1 Ecological Baseline Description for The Murrough SPA

373 According to the Natura 2000 Standard Data Form (NPWS, 2020k), this SPA comprises a coastal wetland complex stretching for 13km from Kilcoole train station southwards towards Wicklow town. The site extends between the 200metre 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.

7.9.2 Special Conservation Interests and Conservation Objectives for The Murrough SPA

374 The special conservation interests of The Murrough SPA and the overall conservation objectives are listed in Table 27.

Table 27 Special Conservation Interests and Conservation Objectives of The Murrough SPA

Special Conservation Interests	Conservation Objective(s)
<p>The Murrough SPA [004186]</p> <p>A001 Red-throated Diver <i>Gavia stellata</i></p> <p>A043 Greylag Goose <i>Anser anser</i></p> <p>A046 Light Bellied Brent Goose <i>Branta bernicla hrota</i></p> <p>A050 Wigeon <i>Anas penelope</i></p> <p>A052 Teal <i>Anas crecca</i></p> <p>A179 Black-headed Gull <i>Chroicocephalus ridibundus</i></p> <p>A162 Herring Gull <i>Larus argentatus</i></p> <p>A195 Little Tern <i>Sterna albifrons</i></p> <p>A999 Wetlands</p> <p><i>S.I. No. 298/2011 - European Communities (Conservation of Wild Birds (The Murrough Special Protection Area 004186)) Regulations 2011.</i></p> <p><i>NPWS (2020) Conservation Objectives for the Murrough SPA [004186]. Generic Version 7.0. Department of Culture, Heritage and the Gaeltacht.</i></p>	<p>To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.</p> <p>To maintain or restore to favourable conservation condition of the wetland habitat at The Murrough SPA as a resource for the regularly occurring migratory waterbirds that utilise it.</p>

375 In conjunction with considering the generic conservation objective for this SPA “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 documents for a number of European sites (identified in Table 31) also informed this assessment.

376 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the Special Conservation Interests within the European site. Affecting the conservation condition of the SCI 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 SCI’s in respect of The Murrough SPA are presented in Section 7.9.3.3.

7.9.3 Examination and Analysis of Potential Direct and Indirect Impacts

377 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 SCI for The Murrough SPA are:

- Habitat degradation/effects on SCI species as a result of hydrological impacts;
- Disturbance and displacement impacts; and

- Habitat loss and fragmentation.

7.9.3.1 Habitat degradation/effects on SCI species as a result of hydrological impacts

378 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 is hydrologically connected to Dublin Bay via the Dodder_050, Brewery Stream_010, Grand Canal, and Booterstown Marsh and Nutley Stream as well as a network of interconnecting and established surface or combined sewer/surface water pipes.

379 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.

7.9.3.2 Disturbance and Displacement impacts

380 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. However, this impact remains pertinent due to the proximity of the site compound adjacent to South Dublin Bay and River Tolka Estuary SPA which species from this European site may utilise due to its location in Dublin Bay. 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. Table 9 in Section 7.1.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

381 The Murrough SPA is designated for a number of wintering SCI species that it is considered (precautionary approach in light of absence of survey data) could forage and/or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied Brent goose, Greylag Goose, Wigeon, Teal and gull species including Black headed and Herring gull.

382 There are areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme and there are several areas of suitable foraging and/or roosting habitat available for these SCI bird species within the disturbance ZoI of the Proposed Scheme including Blackrock Park and the grounds of Blackrock College, as well as Booterstown marsh, which forms part of the South Dublin Bay and River Tolka Estuary SPA.

383 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 could utilise these and other suitable lands in the wider area.

384 As discussed above in Section 7.1.3.4 there is screening vegetation removal at Booterstown Marsh and Blackrock College which may temporarily increase disturbance levels within these areas.

385 Significant effects may occur on any SCI bird species populations 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:

- 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 12 months (representing a maximum of one winter season) during construction works and for an approximate two year period at the Construction Compound. Following the completion of construction, disturbance levels will over time return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.
- The effect and timing of vegetation removal. Although the construction and/or removal of vegetation to facilitate construction will not have a long-term effect on SCI populations in terms of replacement planting and the nature and extent of the landtake, mitigation measures are proposed to ensure that works are in as far as is possible are undertaken outside the wintering bird season and that the reestablishment of the landscape and /or screening vegetation is undertaken in a timely manner. Furthermore, given the operation of the Construction Compound for the duration of the construction phase, additional measures are proposed to reduce disturbance impacts in close proximity to the SPA territory outside of the proposed Footprint e.g. South Dublin Bay or adjacent ex-situ feeding sites e.g. Blackrock College.

7.9.3.3 Habitat Loss and Fragmentation

386 The Murrough SPA is designated for wintering SCI species that are known to forage and/or roost at sites across Dublin, such as amenity grasslands and playing pitches. In respect of the Proposed Scheme, these species include light-bellied Brent goose and black headed gull. There are a number of areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme.

387 There are two no. areas of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme, namely grassland adjacent to Booterstown Marsh, referred to as CBC1415WB001, and grassland at Blackrock Park, referred to as CBC1415WB002. CBC1415WB001 was not found to support wintering bird species.

388 The Proposed Scheme will result in the temporary loss of 0.07ha of GA2 habitat suitable to support breeding gull and wintering bird species at Blackrock Park (referred to as CBC1415WB002).

389 There is no potential for impacts to occur on inland feeding SCI populations associated The Murrough SPA, in light of their conservation objectives, as a consequence of habitat loss/fragmentation from inland feeding/roosting sites due to increased levels of disturbance due to the following reasons:

- The absence or low frequency of occurrence of these SCI bird species recorded on lands located within the footprint of the Proposed Scheme, 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; and
- Land take in the proposed works area is temporary in nature and will be returned to GA2 habitat during the Operational Phase of the Proposed Scheme.

7.9.3.4 Summary

390 Table 28 presents a summary of the potential impacts of the Proposed Scheme on the SCIs of the Murrough SPA, and how these impacts relate to affecting the site's conservation objectives.

Table 28 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			
<p>Red-throated Diver [A001]; Greylag Goose [A043]; Light-Bellied Brent Goose [A046]; Wigeon [A050]; Teal [A052]; Black-Headed Gull [179]; Herring Gull [184];</p> <p>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 The Raven SPA [004019] (NPWS, 2012a); Rogerstown Estuary SPA [004015] (NPWS, 2013); South Dublin Bay and River Tolka Estuary SPA [004024] (NPWS, 2015); Wexford Harbour and Slobs SPA [004076] (NPWS, 2012b); North Bull Island SPA [004006] (NPWS, 2015); and Boyne Estuary SPA [004080] (NPWS, 2013b)</p>			
Population trend/% change/Long term population trend stable or increasing	Yes	Yes	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	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	The mitigation measures described in Section 7.1.4 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/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			
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			

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	<p>quantity and quality of prey fish species and the quality the of intertidal/coastal habitats that support the special conservation interest 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.</p> <p>There is 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.</p>	inland feeding sites will reduce disturbance and prevent displacement during the Construction of the Proposed Scheme.	
<p>Little Tern [195]</p> <p>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 Little Tern in Boyne Estuary SPA [004080] (NPWS, 2013b)</p>			
Breeding population abundance: apparently occupied nests (AONs)/Number/No significant decline	<p>No</p> <p>There is no potential for impacts to occur on this SCI bird species population at The Murrough SPA, in light of its conservation objectives, as a consequence of disturbance to areas used by these birds due to increased levels of distal disturbance impacts</p>	No	No
Productivity rate: fledged young per breeding pair/Mean number/No significant decline			
Distribution: breeding colonies/Number; location; area (ha)/No significant decline			
Prey biomass available/Kg's/No significant decline			
Barriers to connectivity/Number; location; shape; area (ha)/No significant decline			
Disturbance at the breeding site/Level of impact/Human activities should occur at levels that do not adversely affect the breeding little tern population			

7.9.4 Mitigation Measures

391 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 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

392 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

393 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during operation of the Proposed Scheme.

Measures to Reduce Impacts to SCI Birds due to vegetation loss during Construction

394 The mitigation measures presented in Section 7.1.4 will ensure that impacts from vegetation loss are minimised as far as is practical.

Measures to Prevent to Disturbance and Displacement Impact to SCI Species during Construction

395 The mitigation measures presented in Section 7.1.4 with regard to works adjacent to SPA territory and/or inland feeding sites will reduce disturbance and prevent displacement during the construction of the Proposed Scheme.

Measures to prevent to Disturbance and Displacement Impacts to SCI Bird species during Operation

396 The Mitigation measures presented in Section 7.1.4 will over time reduce the Disturbance and Displacement Impacts to SCI birds associated with the SPA.

7.9.5 Residual Impacts

397 With the inclusion of appropriate mitigation, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the special conservation interests 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 Water Framework Directive Assessment for the Proposed Scheme (refer to Appendix IV), 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 The Murrough SPA

398 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the special conservation interests including its supporting wetland habitat of The Murrough SPA, the potential impacts, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the special conservation interests, 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.

7.10 North Dublin Bay SAC [000206] and South Dublin Bay SAC [000210]

7.10.1 Ecological Baseline Descriptions for North Dublin Bay SAC and South Dublin Bay SAC

399 North Dublin Bay SAC

400 The Natura 2000 Standard Data Form (NPWS, 2020i) 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 few in Ireland

that is suggested to be actively accreting. Saltmarsh habitats are well represented at the site with particularly good zonation evident. Of note, is the occurrence of Petalwort *Petallophyllum ralfsii*, a QI plant species, with its only known location away from the western seaboard being on Bull Island. Threats to the site include pollution from Dublin Port, commercial bait digging, recreational activities and water abstraction by golf clubs.

South Dublin Bay SAC

401 According to the Natura 2000 standard data form for South Dublin Bay SAC (NPWS, 2020m), 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.

7.10.2 *Qualifying Interests and Conservation Objectives of North Dublin Bay SAC & South Dublin Bay SAC*

402 The qualifying interests of North Dublin Bay SAC and South Dublin Bay SAC, and the overall conservation objectives, are listed in Table 29.

Table 29 Qualifying Interests and Conservation Objectives of North Dublin Bay SAC & South Dublin Bay SAC

Qualifying Interest(s)	Conservation Objective(s)
<p>North Dublin Bay SAC [000206]</p> <p>1140 Mudflats and sandflats not covered by seawater at low tide</p> <p>1210 Annual vegetation of drift lines</p> <p>1310 <i>Salicornia</i> and other annuals colonising mud and sand</p> <p>1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)</p> <p>1395 Petalwort <i>Petallophyllum ralfsii</i></p> <p>1410 Mediterranean salt meadows (<i>Juncetalia maritimi</i>)</p> <p>2110 Embryonic shifting dunes</p> <p>2120 Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes)</p> <p>2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)*</p> <p>2190 Humid dune slacks</p> <p><i>S.I. No. 524/2019 - European Union Habitats (North Dublin Bay Special Area of Conservation 000206) Regulations 2019</i></p> <p>NPWS (2013) <i>Conservation Objectives: North Dublin Bay SAC 000206</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	<p>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.</p>
<p>South Dublin Bay SAC [000210]</p>	<p>To maintain or restore the favourable conservation condition of the Annex I</p>

Qualifying Interest(s)	Conservation Objective(s)
1140 Mudflats and sandflats not covered by seawater at low tide 1210 Annual vegetation of drift lines 1310 <i>Salicornia</i> and other annuals colonising mud and sand 2110 Embryonic shifting dunes <i>S.I. No. 525/2019 - European Union Habitats (South Dublin Bay Special Area of Conservation 000210) Regulations 2019</i> NPWS (2013) <i>Conservation Objectives: South Dublin Bay SAC 000210</i> . Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	habitat(s) and/or the Annex II species for which the SAC has been selected.

403 In conjunction with considering the generic conservation objective for this SAC “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.

404 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the qualifying interests within the European site. Affecting the conservation condition of the qualifying interests 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 qualifying interests of North Dublin Bay SAC and South Dublin Bay SAC are presented in Section 7.10.3.4.

7.10.3 Examination and Analysis of Potential Direct and Indirect Impacts

405 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 qualifying interests of North Dublin Bay SAC and South Dublin Bay SAC, are:

- Habitat degradation/effects on QI species as a result of hydrological impacts;
- Habitat degradation as a result of introducing/spreading non-native invasive species; and
- Habitat degradation as a result of air quality impacts (South Dublin Bay SAC only).

7.10.3.1 Habitat degradation/effects on QI species as a result of hydrological impacts

406 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 is hydrologically connected to Dublin Bay via the Dodder_050, Brewery Stream_010, Grand Canal, and Booterstown Marsh and Nutley Stream as well as a network of interconnecting and established surface or combined sewer/surface water pipes. 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 hydrological impacts.

7.10.3.2 Habitat degradation as a result of introducing/spreading non-native invasive species

407 There is one area of Three-cornered garlic *Allium triquetrum*, a species listed on the Third Schedule of the (Birds and Natural Habitats) Regulations present within, or in close proximity to, the Proposed Scheme. During construction and/or routine maintenance/management work, this species could potentially, albeit

unlikely, spread or be introduced to terrestrial habitats located within downstream European sites via surface water features. The introduction and/or spread of this 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 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 is hydrologically connected to the Dodder River and the Grand Canal both of which discharge into the River Liffey and thereafter Dublin Bay, as well as four other watercourses which discharge directly to South Dublin Bay. Therefore, there is potential, albeit unlikely, 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 invasive species spread.

7.10.3.3 Habitat Degradation as a result of air quality impacts

- 408 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.
- 409 As discussed above in Section 7.1.3.5 an assessment of the impact of the Proposed Scheme has been
- 410 undertaken using the approach outlined in the IAQM guidance document A Guide to the Assessment of Air Quality Impacts on Designated Nature Conservation Sites (Version 1.1) (IAQM 2020). Vehicle-derived air emissions were modelled during the Operational Phase of the Proposed Scheme at Rock Road which runs parallel to the SPA (refer to Appendix VI for full details). The mean worst-case predicted annual average NO_x (total Nitrogen Oxide (NO) and Nitrogen Dioxide (NO₂)) concentrations within 200m of roads impacted by the Proposed Scheme exceed the 30µg/m³ limit value (see Table 30). In all cases where exceedances occur, the modelled future baseline environment is already in excess of this value and reduces below this critical level at 150m from Rock Road. During the Operational Phase of the Proposed Scheme (the Do Something Scenario), NO_x is modelled to reduce below the critical level at 160m from Rock Road, therefore resulting in additional territory within the SAC being subject to NO_x above the 30µg/m³ limit value as a result of the Proposed Scheme.
- 411 However, the contribution of the Operational Phase of the Proposed Scheme to the NO₂ dry deposition rate was modelled at Rock Road (see Table 31) and Nitrogen deposition levels have been compared to the lower and higher critical loads¹⁷ for terrestrial habitats. All sites are below the lower critical load of inland and surface water habitats of 5-10 Kg(N)/ha/yr (National Road Authority, 2011). It is not predicted therefore that there would be any harmful effects on vegetation within the SAC from NO and NO₂ and as a result there would not be any reduction in habitat area of the SCI wetland habitat nor any resulting change in the use of the wetland habitat as a resource for SCI species of other European sites.
- 412 It is not predicted therefore that there will be any reduction in the permanent area occupied by the wetland habitat as specified by the conservation objectives for South Dublin Bay SAC.

¹⁷ Critical loads being defined as an estimate of an exposure to a given pollutant below which significant harmful effects on specified sensitive elements of the environment do not occur according to present knowledge (Nilsson & Grennfelt, 1988)

Table 30 Significance of Impacts at Key Ecological Receptors (NO_x Annual Mean Concentration In 2028)

		Annual Mean NO_x In 2028 At Closest Point Within Ecological Site To Road					
Receptor	Receptor Location (ITM)	Do Minimum (mg/m^3)	Distance from road beyond which concentration is below critical level ($30mg/m^3$) (m)	Do Something (mg/m^3)	Distance from road beyond which concentration is below critical level ($30mg/m^3$) (m)	Impact (DS – DM) (mg/m^3)	Change as a percentage of critical level ($30mg/m^3$) (%)
South Dublin Bay SAC (Rock Road)	717088, 733235	31.2	>200m	30.5	190m	-0.7	-2%

Table 31 Significance of Impacts at Key Ecological Receptors (NO_2 Deposition In 2028)

		Annual Mean NO_2 In 2028 At Closest Point Within Ecological Site To Road							
Receptor	Receptor Location (ITM)	Lower critical load for most sensitive feature ($kgN/ha/yr$)	Do Minimum ($kgN/ha/yr$)	Distance from road beyond which deposition is below critical load (m)	Do Something ($kgN/ha/yr$)	Distance from road beyond which deposition is below critical load (m)	Change relative to lower critical load (%)	Distance from road beyond which the change is <1% (m)	Change in deposition $kgN/ha/yr$
South Dublin Bay SAC (Rock Road)	717088, 733235	5	2.14	0m	2.10	0m	-1%	0m	-0.04

7.10.3.4 Summary

413 Table 32 presents a summary of the potential impacts of the Proposed Scheme on the qualifying interests of North Dublin Bay SAC and South Dublin Bay SAC, and how these impacts relate to affecting the sites' conservation objectives.

Table 32 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 [1140]			
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 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 physical structural integrity of the habitat.	Yes The mitigation measures described in Section 7.1.4 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 described in Section 7.1.4 will prevent the introduction and/or spread of invasive species to downstream European sites during construction and operation of the Proposed Scheme.	No
Community extent/Hectares/Maintain the extent of the <i>Mytilus edulis</i> -dominated community, subject to natural processes			
Community structure: <i>Mytilus edulis</i> density/Individuals/m ² /Conserve the high quality of the <i>Mytilus edulis</i> 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 habitat in the SAC, which is defined as follows:			
Habitat area/Hectares/Area increasing, subject to natural processes, including erosion and succession	Yes	Yes	No

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Habitat distribution/Occurrence/No decline, or change in habitat distribution, subject to natural processes	<p>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 along or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area/distribution of intertidal/coastal habitats.</p> <p>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 other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.</p>	<p>The mitigation measures described in Section 7.1.4 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.</p> <p>The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of invasive species to downstream European sites during construction and operation of the Proposed Scheme.</p>	
Physical structure: functionality and sediment supply/Presence/ absence of physical barriers/Maintain the natural circulation of sediment 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: 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.)			
Vegetation composition: negative indicator species/Percentage cover/Negative indicator species (including non-natives) to represent less than 5% cover			
<p>Salicornia and other annuals colonising mud and sand [1310]</p> <p>To restore the favourable conservation condition of the habitat in the SAC, which is defined as follows:</p>			
Habitat area/Hectares/Area stable or increasing, subject to natural processes, including erosion and succession	Yes	Yes	No
Habitat distribution/Occurrence/No decline, or change in habitat distribution, subject to natural processes	<p>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 along or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and</p>	<p>The mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction</p>	
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			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Physical structure: creeks and pans / Occurrence/Maintain creek and pan structure, subject to natural processes, including erosion and succession	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 impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	and operation of the Proposed Scheme. The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of invasive species to downstream European sites during construction and operation of the Proposed Scheme.	
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			
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 - <i>Spartina anglica</i> /Hectares/No significant expansion of common cordgrass (<i>Spartina anglica</i>), with an annual spread of less than 1%			
Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330]			
To maintain the favourable conservation condition of the habitat in the SAC, which is defined as follows:			
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 pollution event of a sufficient magnitude, either along or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and	Yes The mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction	No
Habitat distribution/Occurrence/No decline, or change in habitat distribution, subject to natural processes			
Physical structure: sediment supply/Presence/ absence of physical barriers/Maintain natural circulation of sediments and organic matter, without any physical obstructions			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Physical structure: creeks and pans/Occurrence/Maintain creek and pan structure, subject to natural processes, including erosion and succession	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 impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	and operation of the Proposed Scheme. The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of invasive species to downstream European sites during construction and operation of the Proposed Scheme.	
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			
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 - <i>Spartina anglica</i> /Hectares/No significant expansion of common cordgrass (<i>Spartina anglica</i>), with an annual spread of less than 1%			
Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]			
To maintain the favourable conservation condition of the habitat in the SAC, which is defined as follows:			
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	Yes The mitigation measures described in Section 7.1.4 to protect water quality in the receiving	No
Habitat distribution/Occurrence/No decline, or change in habitat distribution, subject to natural processes			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Physical structure: sediment supply/Presence/ absence of physical barriers/Maintain natural circulation of sediments and organic matter, without any physical obstructions	<p>accidental pollution event of a sufficient magnitude, either along or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area/distribution of intertidal/coastal habitats.</p> <p>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.</p>	<p>environment will ensure that surface water quality in Dublin Bay is protected during construction and operation of the Proposed Scheme.</p> <p>The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of invasive species to downstream European sites during construction and operation of the Proposed Scheme.</p>	
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			
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 - <i>Spartina anglica</i> /Hectares/No significant expansion of common cordgrass (<i>Spartina anglica</i>), with an annual spread of less than 1%			
Embryonic shifting dunes [2110]			
To restore the favourable conservation condition of the habitat in the SAC, which is defined as follows:			
Habitat area/Hectares/Area stable or increasing, subject to natural processes, including erosion and succession.	Yes	Yes	No

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Habitat distribution/Occurrence/No decline, or change in habitat distribution, subject to natural processes.	<p>Terrestrial habitats above the high tide line are not at risk of effects from water pollution in Dublin Bay.</p> <p>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.</p>	<p>The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of invasive species to downstream European sites during construction and operation of the Proposed Scheme.</p>	
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 (<i>Elytrigia juncea</i>) and/or lyme-grass (<i>Leymus arenarius</i>) 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 arenarius</i>)			
Vegetation composition: negative indicator species/Percentage cover/Negative indicator species (including non-native species) to represent less than 5% cover			
<p>Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120]</p> <p>To restore the favourable conservation condition of the habitat in the SAC, which is defined as follows:</p>			
Habitat area/Hectares/Area stable or increasing, subject to natural processes, including erosion and succession	<p>Yes</p> <p>Terrestrial habitats above the high tide line are not at risk of effects from water pollution in Dublin Bay.</p> <p>The introduction and/or spread of invasive species to downstream European sites could</p>	<p>Yes</p> <p>The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of invasive species to downstream European sites during construction</p>	<p>No</p>
Habitat distribution/Occurrence/No decline, or change in habitat distribution, subject to natural processes			
Physical structure: functionality sediment supply/Presence/ absence of physical barriers/Maintain natural circulation of sediments and organic matter, without any physical obstructions			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Vegetation structure: zonation/Occurrence/Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession	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.	and operation of the Proposed Scheme.	
Vegetation composition: plant health of dune grasses/Percentage cover/95% of marram grass (<i>Ammophila arenaria</i>) and/or lyme-grass (<i>Leymus arenarius</i>) 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 dominated by marram grass (<i>Ammophila arenaria</i>) and/or lymegrass (<i>Leymus arenarius</i>)			
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 dunes) [2130] *			
To restore the favourable conservation condition of the habitat in the SAC, which is defined as follows:			
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. 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,	Yes The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of 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			
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 structure: bare ground/Percentage cover/Bare ground should not exceed 10% of fixed dune habitat, subject to natural processes			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Vegetation structure: sward height/Centimetres/Maintain structural variation in the sward	diversity and abundance and the physical structural integrity of the habitat.		
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 <i>et al.</i> (2013)			
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 habitat 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 from water pollution in Dublin Bay. 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.	Yes The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of 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			
Physical structure: functionality sediment supply/Presence/ absence of physical barriers/Maintain natural circulation of sediments and organic matter, without any physical obstructions			
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			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Vegetation structure: vegetation height/Centimetres/Maintain structural variation within 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 <i>et al.</i> , (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 <i>Petalophyllum ralfsii</i> [1395] To maintain the favourable conservation condition of the species in the SAC, which is defined as follows:			
Distribution of populations/Number and geographical spread of populations/No decline	No As a terrestrial flora species of damp calcareous dune slacks, found above the high tide line, it is not at risk of effects from water pollution in Dublin Bay. The introduction and/or spread of invasive species to downstream European sites could	No	No
Population size/Number of individuals/No decline			
Area of suitable habitat/Hectares/No decline			
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			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
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	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.		
South Dublin Bay SAC			
Mudflats and sandflats not covered by water at low tide [1140]			
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
Community extent/Hectares/Maintain the extent of the <i>Zostera</i> 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 along or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and	The mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction	
Community structure: <i>Mytilus edulis</i> density/Individuals/m ² /Conserve the high quality of the <i>Zostera</i> dominated community, subject to natural processes			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Community distribution/Hectares/Conserve the following community type in a natural condition: Fine sands with <i>Angulus tenuis</i> community complex	<p>composition) and area/distribution of intertidal/coastal habitats.</p> <p>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.</p> <p>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.</p>	<p>and operation of the Proposed Scheme.</p> <p>The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of invasive species to downstream European sites during construction and operation of the Proposed Scheme.</p> <p>The mitigation measures described in Section 7.1.4 will prevent the introduction of construction dust.</p>	
<p>Annual Vegetation of drift lines [1210]</p> <p>To restore the favourable conservation condition of the habitat in the SAC, which is defined as follows:</p>			
Habitat area/Hectares/Area increasing, subject to natural processes, including erosion and succession	<p>Yes</p> <p>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 along or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and</p>	<p>Yes</p> <p>The mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction</p>	<p>No</p>
Habitat distribution/Occurrence/No decline, or change in habitat distribution, subject to natural processes			
Physical structure: functionality and sediment supply/Presence/ absence of physical barriers/Maintain the natural circulation of sediment and organic matter, without any physical obstructions			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Vegetation structure: zonation/Occurrence/Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession	composition) and area/distribution of intertidal/coastal habitats.	and operation of the Proposed Scheme.	
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.)	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 described in Section 7.1.4 will prevent the introduction and/or spread of invasive species to downstream European 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	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.	The mitigation measures described in Section 7.1.4 will prevent the introduction of construction dust.	
Salicornia and other annuals colonising mud and sand [1310]			
To restore the favourable conservation condition of the habitat in the SAC, which is defined as follows:			
Habitat area/Hectares/Area stable or increasing, subject to natural processes, including erosion and succession	Yes	Yes	No
Habitat distribution/Occurrence/No decline, or change in habitat distribution, 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 along or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and	The mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment will ensure that surface water quality in Dublin Bay is protected during construction	
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			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Physical structure: creeks and pans/Occurrence/Maintain creek and pan structure, subject to natural processes, including erosion and succession	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 impacting the species composition, diversity and abundance and the physical structural integrity of the habitat. 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.	and operation of the Proposed Scheme. The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of invasive species to downstream European sites during construction and operation of the Proposed Scheme. The mitigation measures described in Section 7.1.4 will prevent the introduction of construction dust.	
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			
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 - <i>Spartina anglica</i> /Hectares/No significant expansion of common cordgrass (<i>Spartina anglica</i>), with an annual spread of less than 1%			
Embryonic shifting dunes [2110]			
To restore the favourable conservation condition of the habitat in the SAC, which is defined as follows:			
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. The introduction and/or spread of invasive species to downstream European sites could	Yes The mitigation measures described in Section 7.1.4 will prevent the introduction and/or spread of invasive species to downstream European sites during construction	No
Habitat distribution/Occurrence/No decline, or change in habitat distribution, subject to natural processes.			
Physical structure: functionality sediment supply/Presence/ absence of physical barriers/Maintain natural circulation of sediments and organic matter, without any physical obstructions			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Vegetation structure: zonation/Occurrence/Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession	<p>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.</p> <p>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.</p>	<p>and operation of the Proposed Scheme.</p> <p>The mitigation measures described in Section 7.1.4 will prevent the introduction of construction dust.</p>	
Vegetation composition: plant health of foredune grasses/Percentage cover/More than 95% of sand couch (<i>Elytrigia juncea</i>) and/or lyme-grass (<i>Leymus arenarius</i>) 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 arenarius</i>)			
Vegetation composition: negative indicator species/Percentage cover/Negative indicator species (including non-native species) to represent less than 5% cover			

7.10.4 Mitigation Measures

414 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.

Measures to Protect Surface Water Quality during Construction

415 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during the Construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

416 The mitigation measures presented above in Section 7.1.4 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

417 The mitigation measures presented above in Section 7.1.4 will ensure that the spread on Non-native Invasive Species will not spread into adjacent European sites during the Construction and operation of the Proposed Scheme.

418 A copy of the project non-native ISMP which includes the assessment for three cornered garlic is included in Appendix III.

7.10.5 Residual Impacts

419 With the inclusion of appropriate mitigation, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the qualifying interest habitats 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.

7.10.6 Conclusion of Assessment for North Dublin Bay SAC and South Dublin Bay SAC

420 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the qualifying interests of North Dublin Bay SAC and South Dublin Bay SAC, the potential impacts, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the qualifying interests, 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.

7.11 Howth Head SAC [000202], Rockabill to Dalkey Island SAC [003000] and Lambay Island SAC [000204]

7.11.1 Ecological Baseline Description for Howth Head SAC

421 According to the Natura 2000 Standard Data Form (NPWS, 2018). 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.

7.11.2 Ecological Baseline Description for Rockabill to Dalkey Island SAC

422 According to the Natura 2000 Standard Data Form (NPWS, 2019), 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 qualifying interest 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.

7.11.3 Ecological Baseline Description for Lambay Island SAC

423 In the Natura 2000 Standard Data Form (NPWS, 2019), 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 rest 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.

7.11.4 Qualifying Interests and Conservation Objectives of Howth Head SAC, Rockabill to Dalkey Island SAC and Lambay Island SAC

424 The qualifying interests of Howth Head SAC and Rockabill to Dalkey Island SAC, and the overall conservation objectives, are listed in Table 33.

Table 33 Qualifying Interests and Conservation Objectives of Howth Head SAC, Rockabill to Dalkey Island SAC and Lambay Island SAC

Qualifying Interest(s)	Conservation Objective(s)
<p>Howth Head SAC [000202] 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts 4030 European dry heaths</p> <p><i>S.I. No. 524/2021 - European Union Habitats (Howth Head Special Area of Conservation 000202) Regulations 2021</i> NPWS (2016) <i>Conservation Objectives: Howth Head SAC 000202</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.</p>	<p>To maintain the favourable conservation condition of the Annex I habitats for which the SAC has been selected</p>
<p>Rockabill to Dalkey Island SAC [003000] 1170 Reefs 1351 Harbour porpoise <i>Phocoena phocoena</i></p> <p><i>S.I. No. 94/2019 - European Union Habitats (Rockabill to Dalkey Island Special Area of Conservation 003000) Regulations 2019</i> NPWS (2013) <i>Conservation Objectives: Rockabill to Dalkey Island SAC 003000</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	<p>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</p>
<p>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></p> <p><i>S.I. No. 294/2019 – European Union Habitats (Lambay Island Special Area Of Conservation 000204) Regulations 2019</i></p>	<p>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</p>

Qualifying Interest(s)	Conservation Objective(s)
NPWS (2013) <i>Conservation Objectives: Lambay Island SAC 000204</i> . Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	

425 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 Howth Head SAC, Rockabill to Dalkey Island SAC and Lambay Island SAC also informed this assessment.

426 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the qualifying interests within the European site. Affecting the conservation condition of the qualifying interests 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 qualifying interests of Howth Head SAC, Rockabill to Dalkey Island SAC and Lambay Island SAC are presented in Section 7.11.4.2.

7.11.5 Examination and Analysis of Potential Direct and Indirect Impacts

427 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 qualifying interests of Howth Head SAC, Rockabill to Dalkey Island SAC and Lambay Island SAC is:

- Habitat degradation as a result of hydrological impacts.

7.11.5.1 Habitat degradation as a result of hydrological impacts

428 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 is hydrologically connected to Dublin Bay via the Dodder_050, Brewery Stream_010, Grand Canal, and Booterstown Marsh and Nutley Stream as well as a network of interconnecting and established surface or combined sewer/surface water pipes. Therefore, there is potential for the Proposed Scheme to result in significant effects which could have implications for the conservation objectives of Howth Head SAC, Rockabill to Dalkey Island SAC and Lambay Island SAC as a result of hydrological impacts.

7.11.5.2 Summary

429 Table 34 presents a summary of the potential impacts of the Proposed Scheme on the qualifying interests of Howth Head SAC, Rockabill to Dalkey Island SAC and Lambay Island SAC, and how these impacts relate to affecting the site’s conservation objectives.

Table 34 Potential Impacts/Effects on the Conservation Objectives of Howth Head SAC and Rockabill to Dalkey Island 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	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 along 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 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
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 the high tide line are not at risk of effects from water pollution in Dublin Bay.		
Ecosystem function: soil nutrients/Soil pH and appropriate nutrient levels at a representative number of monitoring stops/Maintain soil nutrient status within natural range			
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			
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%			
Rockabill to Dalkey 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
Habitat distribution/ Occurrence/ Distribution is stable or increasing, 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 along or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area/distribution of intertidal/coastal habitats.	The mitigation measures described in Section 7.1.4 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.	
Community structure/Biological composition/Conserve the following community types in a natural condition: Intertidal reef community complex; and Subtidal reef community complex			
Harbour porpoise <i>Phocoena phocoena</i> [1351]			
To maintain the favourable conservation condition of Harbour porpoise in Rockabill to Dalkey 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	Yes	No
Disturbance/Level of impact/Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site	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 along or cumulatively with other pollution sources, could potentially affect the quality of the intertidal/marine habitats which support harbour porpoise and fish prey species.	The mitigation measures described in Section 7.1.4 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 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	No There is no potential for impacts to occur on any habitats associated with the Lambay Island SAC as it is located a significant distance from the Proposed Scheme, and on the far side of the Howth peninsula.	No	
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; <i>Laminaria</i> -dominated community complex			
Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]			
To maintain the favourable conservation condition of Vegetated sea cliffs of the Atlantic and Baltic coasts in Lambay Island SAC, which is defined as follows:			
Habitat length Kilometres Area stable, subject to natural processes, including erosion	No There is no potential for impacts to occur on any habitats associated with the Lambay Island SAC as it is located a significant distance from the Proposed Scheme, and on the far side of the Howth peninsula.	No	
Habitat distribution/ Occurrence/ No decline, subject to natural processes			
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			
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 <i>Halichoerus grypus</i> [1364]			
To maintain the favourable conservation condition of Grey Seal 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 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 grey seal.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.	
Breeding behaviour/ Breeding sites /The breeding sites should be maintained in a natural condition			
Moulting behaviour/ Moulting haul-out sites/ The moulting 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 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 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 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 seal.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.	

7.11.6 Mitigation Measures

430 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 Howth Head SAC, 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

431 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

432 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during operation of the Proposed Scheme.

7.11.7 Residual Impacts

433 With the inclusion of appropriate mitigation, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the qualifying interest habitats of Howth Head SAC, 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 Howth Head SAC, Rockabill to Dalkey Island SAC and Lambay Island SAC.

7.11.8 Conclusion of Assessment for Howth Head SAC, Rockabill to Dalkey Island SAC and Lambay Island SAC

434 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the qualifying interests of Howth Head SAC and Rockabill to Dalkey Island SAC, the potential impacts, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the qualifying interests, 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 SAC, Rockabill to Dalkey Island SAC and Lambay Island SAC.

7.12 Wicklow Mountains SAC [002122]

7.12.1 Ecological Baseline Description for Wicklow Mountains SAC

435 The Natura 2000 Standard Data Form (NPWS, 2018n) notes that this is an extensive upland site comprising much of the Wicklow Mountains. Most of the site is 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 *Falco peregrinus* (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.

7.12.2 Qualifying Interests and Conservation Objectives of Wicklow Mountains SAC

436 The qualifying interests of Wicklow Mountains SAC, and the overall conservation objectives, are listed in Table 35.

Table 35 Qualifying Interests and Conservation Objectives of Wicklow Mountains SAC

Qualifying Interest(s)	Conservation Objective(s)
<p>Wicklow Mountains SAC [002122]¹⁸</p> <p>1355 Otter <i>Lutra lutra</i></p> <p>3110 Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>)</p> <p>3130 Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i></p> <p>3160 Natural dystrophic lakes and ponds</p> <p>4010 Northern Atlantic wet heaths with <i>Erica tetralix</i></p> <p>4030 European dry heaths</p> <p>4060 Alpine and Boreal heaths</p> <p>6130 Calaminarian grasslands of the <i>Violetalia calaminariae</i></p> <p>6230 Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)*</p> <p>7130 Blanket bogs (* if active bog)</p> <p>8110 Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>)</p> <p>8210 Calcareous rocky slopes with chasmophytic vegetation</p> <p>8220 Siliceous rocky slopes with chasmophytic vegetation</p> <p>91A0 Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles</p> <p>NPWS (2017) <i>Conservation Objectives: Wicklow Mountains SAC 002122</i>. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.</p>	<p>To maintain the favourable conservation condition of the Annex I habitats for which the SAC has been selected</p>

437 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.

438 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the qualifying interests within the European site. Affecting the conservation condition of the qualifying interests 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 qualifying interests of Wicklow Mountains SAC are presented in Section 7.12.3.3.

¹⁸ Wicklow Mountains SAC has been included due to potential effects on the otter population (a mobile species). Qualifying Interest 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. Habitats associated with the Wicklow Mountains SAC are not considered further in this report.

7.12.3 Examination and Analysis of Potential Direct and Indirect Impacts

439 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 qualifying interests of Wicklow Mountains SAC, are:

- Habitat degradation as a result of hydrological impacts; and
- Disturbance and displacement Impacts.

7.12.3.1 Habitat degradation as a result of hydrological impacts

440 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 species are undermined.

441 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 as a result of hydrological impacts.

7.12.3.2 Disturbance and displacement impacts

442 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 present in the vicinity of the Proposed Scheme. Such disturbance effects would not be expected to extend beyond a distance of approximately 150m¹⁹ 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 replanning/resurfacing at watercourse crossings. Albeit temporary, these potential impacts could occur to such a degree that the conservation objectives of the Wicklow Mountains SAC are undermined.

443 Therefore, there is 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.

7.12.3.3 Summary

444 Table 36 presents a summary of the potential impacts of the Proposed Scheme on the qualifying interests of Wicklow Mountains SAC, and how these impacts relate to affecting the site's conservation objectives.

¹⁹ 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.

Table 36 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 SAC²⁰			
Otter			
To maintain the favourable conservation condition of Otter in Wicklow Mountains 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 operation could affect surface water downstream. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the otter population through direct contact with pollutants or a decline in fish prey. Construction disturbance in the vicinity of the River Dodder and Grand Canal could result in disturbance to and potentially displacement of otter, particularly if works are undertaken at night-time.	The mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment will ensure that surface water quality in the downstream environment is protected during construction and operation of the Proposed Scheme. Additional mitigation measures described in Section 7.12.4 specifically to protect otter from disturbance/displacement impacts will ensure that local QI otter population are protected during the construction of the Proposed Scheme.	
Extent of freshwater (river) habitat/ Kilometres/ No significant decline.			
Extent of freshwater (lake) habitat/ Hectare/s No significant decline			
Couching sites and holts/ Number/ No significant decline			
Fish biomass available/ Kilograms/ No significant decline			
Barriers to connectivity/ Number/ No significant increase			

²⁰ As Annex I Qualifying Interest 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 the summary table.

7.12.4 Mitigation Measures

445 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 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 otter.

Measures to Protect Surface Water Quality during Construction

446 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during construction of the Proposed Scheme.

Measures to Protect Surface Water Quality during Operation

447 The mitigation measures presented above in Section 7.1.4 will protect surface water quality during operation of the Proposed Scheme.

Measures to Reduce the Loss of Breeding/Resting Sites

448 Although there were no signs of otter recorded during field surveys, otter could potentially establish new holt or couch sites within the ZOI of the Proposed Scheme. Therefore, the NTA will ensure that a confirmatory pre-construction check of all suitable otter habitat will be completed within 12 months prior to any construction works commencing. 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, 2006b).

Measures to Prevent Injury/Mortality Impacts

449 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.

450 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.

451 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 Compound and other working areas which are in close proximity to significant watercourses and have suitable roaming territory for otter.

Measures to Reduce Lighting Impacts

452 Security lighting at the Construction Compound or 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.

7.12.5 Residual Impacts

453 With the inclusion of appropriate mitigation, the Proposed Scheme poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the qualifying interest species of Wicklow Mountains SAC (the remaining QI habitats being upstream and of sufficient distance removed that

no impact is predicted), 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.

7.12.6 Conclusion of Assessment for Wicklow Mountains SAC

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

8 Summary of Mitigation Measures and Residual Impacts

8.1 Summary of Mitigation Measures

455 This section summarises the mitigation measures that will be implemented during the construction and operation 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 37, identifying the specific mitigation measures required for each relevant European site.

456 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, all of which shall, at a minimum, be implemented during the Construction Phase of the Proposed Scheme.

Table 37 Matrix of Mitigation Measures and Residual Impacts

European site	Potential Impacts												Any adverse effect on the integrity of European sites (post mitigation)
	Construction						Operation						
	Habitat Loss and Fragmentation	Hydrology	Hydro-geology	Invasive Species	Air Quality	Disturbance / Displacement	Habitat Loss and Fragmentation	Hydrology	Hydro-geology	Invasive Species	Air Quality	Disturbance / Displacement	
<i>South Dublin Bay and River Tolka Estuary SPA</i>	X	✓ Section 7.1.4 / Section 5.4 in CEMP	X	✓ Section 7.1.4 / Section 5.3 in CEMP	X	✓ Section 7.1.4 / Section 5.1.9 in CEMP	X	✓ Section 7.1.4 / Section 5.4 in CEMP	X	✓ Section 7.1.4 / Section 5.3 in CEMP	X	X	No
<i>North Bull Island SPA</i>	X	✓ Section 7.2.4 / Section 5.4 in CEMP	X	✓ Section 7.2.4 / Section 5.3 in CEMP	X	✓ Section 7.2.4 / Section 5.1.9 in CEMP	X	✓ Section 7.2.4 / Section 5.4 in CEMP	X	✓ Section 7.2.4 / Section 5.3 in CEMP	X	X	No
<i>Howth Head Coast SPA</i>	X	✓ Section 7.3.6 / Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.3.6 / Section 5.4 in CEMP	X	X	X	X	No
<i>Dalkey Islands SPA</i>	X	✓ Section 7.3.6 / Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.3.6 / Section 5.4 in CEMP	X	X	X	X	No
<i>Rockabill SPA</i>	X	✓ Section 7.3.6 / Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.3.6 / Section 5.4 in CEMP	X	X	X	X	No

European site	Potential Impacts												Any adverse effect on the integrity of European sites (post mitigation)
	Construction						Operation						
	Habitat Loss and Fragmentation	Hydrology	Hydro-geology	Invasive Species	Air Quality	Disturbance / Displacement	Habitat Loss and Fragmentation	Hydrology	Hydro-geology	Invasive Species	Air Quality	Disturbance / Displacement	
<i>Baldoye Bay SPA</i>	X	✓ Section 7.4.4 / Section 5.4 in CEMP	X	X	X	✓ Section 7.4.4 / Section 5.1.9 in CEMP	X	✓ Section 7.4.4 / Section 5.4 in CEMP	X	X	X	X	No
<i>Malahide Estuary SPA</i>	X	✓ Section 7.5.4 / Section 5.4 in CEMP	X	X	X	✓ Section 7.5.4 / Section 5.1.9 in CEMP	X	✓ Section 7.5.4 / Section 5.4 in CEMP	X	X	X	X	No
<i>Rogerstown Estuary SPA</i>	X	✓ Section 7.6.4 / Section 5.4 in CEMP	X	X	X	✓ Section 7.6.4 / Section 5.1.9 in CEMP	X	✓ Section 7.6.4 / Section 5.4 in CEMP	X	X	X	X	No
<i>Skerries Islands SPA</i>	X	✓ Section 7.7.4 / Section 5.4 in CEMP	X	X	X	✓ Section 7.7.4 / Section 5.1.9 in CEMP	X	✓ Section 7.7.4 / Section 5.4 in CEMP	X	X	X	X	No
<i>Islands Eye SPA</i>	X	✓ Section 7.8.5 / Section 5.4 in CEMP	X	X	X	✓ Section 7.8.5 / Section 5.1.9 in CEMP	X	✓ Section 7.8.5 / 7.1.4.1 Section 5.4 in CEMP	X	X	X	X	No
<i>Lambay Island SPA</i>	X	✓ Section 7.8.5 / Section 5.4 in CEMP	X	X	X	✓ Section 7.8.5 / Section 5.1.9 in CEMP	X	✓ Section 7.8.5 / Section 5.4 in CEMP	X	X	X	X	No

European site	Potential Impacts												Any adverse effect on the integrity of European sites (post mitigation)
	Construction						Operation						
	Habitat Loss and Fragmentation	Hydrology	Hydro-geology	Invasive Species	Air Quality	Disturbance / Displacement	Habitat Loss and Fragmentation	Hydrology	Hydro-geology	Invasive Species	Air Quality	Disturbance / Displacement	
<i>The Murrough SPA</i>	X	✓ Section 7.9.4 / Section 5.4 in CEMP	X	X	X	✓ Section 7.9.4 / Section 5.1.9 in CEMP	X	✓ Section 7.9.4 / Section 5.4 in CEMP	X	X	X	X	No
<i>North Dublin Bay SAC</i>	X	✓ Section 7.10.4 / Section 5.4 in CEMP	X	✓ Section 7.10.4 / Section 5.3 in CEMP	X	X	X	✓ Section 7.10.4 / Section 5.4 in CEMP	X	✓ Section 7.10.4 / Section 5.3 in CEMP	X	X	No
<i>South Dublin Bay SAC</i>	X	✓ Section 7.10.4 / Section 5.4 in CEMP	X	✓ Section 7.10.4 / Section 5.3 in CEMP	X	X	X	✓ Section 7.10.4 / Section 5.4 in CEMP	X	✓ Section 7.10.4 / Section 5.3 in CEMP	X	X	No
<i>Howth Head SAC</i>	X	✓ Section 7.11.5 / Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.11.5 / Section 5.4 in CEMP	X	X	X	X	No
<i>Rockabill to Dalkey Island SAC</i>	X	✓ Section 7.11.5 / Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.11.5 / Section 5.4 in CEMP	X	X	X	X	No

European site	Potential Impacts												Any adverse effect on the integrity of European sites (post mitigation)
	Construction						Operation						
	Habitat Loss and Fragmentation	Hydrology	Hydro-geology	Invasive Species	Air Quality	Disturbance / Displacement	Habitat Loss and Fragmentation	Hydrology	Hydro-geology	Invasive Species	Air Quality	Disturbance / Displacement	
<i>Lambay Island SAC</i>	X	✓ Section 7.11.5 / Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.11.5 / Section 5.4 in CEMP	X	X	X	X	No
<i>Wicklow Mountains SAC</i>	X	✓ Section 7.12.4 / Section 5.4 in CEMP	X	x	X	✓ Section 7.12.4 / Section 5.1.9 in CEMP	X	✓ Section 7.12.4 / Section 5.4 in CEMP	X	x	X	X	No

8.2 Summary of Residual Impacts

457 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 qualifying interest 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. As is confirmed by the Water Framework Directive 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. A matrix identifying those aspects which will be subject to mitigation measures and the residual impacts post mitigation is provided in Table 37 for the relevant European sites.

9 In-Combination Assessment

458 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 zone of influence (Zoi).

459 There are 18 European sites within the Zoi of the Proposed Scheme are:

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

460 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

461 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.

462 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 38.

The potential cumulative impacts on those European sites within the ZoI of the Proposed Scheme from the Proposed Scheme in combination with the plans and projects listed in Table 38 were identified and assessed. This assessment is presented below in Table 39 and Table 40.

Table 38 Land Use Plans and Programmes Considered for the In-Combination Assessment

National Plans
National Energy & Climate Plan 2021-2030
National Spatial Strategy for Ireland 2002-2020
Project Ireland 2040 – Building Ireland’s Future ²¹
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) Draft 2019
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
Greater Dublin Area Cycle Network Plan 2013
Eastern Catchment Flood Risk Assessment and Management (CFRAM) study 2011-2016
County/Local Plans
Fingal Development Plan 2017-2023
Fingal Biodiversity Action Plan 2010-2015
Fingal County Council Climate Action Plan 2019-2024
<ul style="list-style-type: none"> • 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 2016-2022
Dublin City Biodiversity Action Plan 2015-2020
Dublin City Council Climate Action Plan 2019-2024
<ul style="list-style-type: none"> • Clongriffin-Belmayne Local Area Plan 2012-2018 • George’s Quay Local Area Plan 2012-2022

²¹ Together the National Development Plan and the National Framework are referred to as Project Ireland 2040: Building Ireland’s Future

- Ballymun Local Area Plan 2017
- The Liberties Local Area Plan 2009-2020
- Naas Road Local Area Plan 2013-2023
- Park West- Cherry Orchard Local Area Plan 2019

South Dublin County Council Development Plan 2016-2022

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
- Liffey Valley Town Centre Local Area Plan 2008

Dún Laoghaire- Rathdown Development Plan 2016-2022; Dún Laoghaire- Rathdown Development Plan (2022-2028)- Draft for public consultation

Dún Laoghaire- Rathdown Biodiversity Plan 2009-2013; Dún Laoghaire- Rathdown Biodiversity Plan (current draft under review)

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

- Deansgrange Local Area Plan 2010-2020
- Stillorgan Local Area Plan 2018-2024
- Blackrock Local Area Plan 2015-2021
- Woodbrook-Shanganagh Local Area Plan 2017-2024

Wicklow County Development Plan 2016-2022

Wicklow Biodiversity Plan 2010-2015

Wicklow County Council Climate Change Adaptation Strategy 2019

- Bray Municipal District Local Area Plan 2018-2024
- Bray & Environs Transport Study 2019
- Bray Town Development Plan 2011-2017

Projects

- Southern Port Access Route (SPAR)
- Widening of the M7 between Junction 9 (Naas North) and Junction 11 (M7/M9) to provide an additional lane in each direction
- 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
- 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 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
- DART+ Programme Coastal North
- 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+ Coastal South Project
- R126 Donabate Relief Road: R132 to Portrane Demesne
- 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
- Greater Dublin Drainage (GDD)
- Cycling: Greater Dublin Area Cycle Network Plan (excluding Radial Core Bus Corridor elements)
- Dublin Array - offshore windfarm
- Air insulated switchgear 110kV transmission substation. Platin, Duleek
- Construction of a new distributor road and junction to the southwest of Kells town centre. Kells
- 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.
- Alternations to a permitted double circuit 110kV electricity transmission line development between substations. Darndale / Belcamp
- 110kV onsite electrical substation with associated electrical plant, electrical equipment, welfare facilities and waste water holding tank and security fencing. 110kV overhead line grid connection cabling, upgrade of existing tracks and provision of new site access roads with all associated site development and ancillary works. Timahoe East
- 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 Gas Insulated Switchgear (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.
- Aviation fuel pipeline. Location: Inlet Station: Team CV, Bond Drive, Dublin Port, Dublin 1 to Dublin Airport, Co. Dublin
- Park development project at the Racecourse Park
- 2 no. 110kV transmission lines and a 110kV Gas Insulated Switchgear (GIS) substation
- 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
- Templeogue / Rathfarnham to City Centre Core Bus Corridor Scheme
- Kimmage to City Centre Core Bus Corridor Scheme
- Bray 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
- A range of Irish Water Projects

Table 39 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
<p>National Energy & Climate Plan 2021-2030</p> <p>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.</p> <p>In relation to transport the plan aims to:</p> <ul style="list-style-type: none"> • 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. 	<p>No potential impact pathways to European sites.</p> <p>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 Zone of Influence (ZoI) of the proposed scheme.</p>	<p>No in combination impact.</p> <p>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.</p>
<p>National Development Plan Ireland 2021-2030</p> <p>As part of Project Ireland 2040 the National Development Plan sets out the Government’s overarching 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.</p>	<p>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.</p>	<p>No in combination impact.</p> <p>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</p>

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
		<p>CDP (2017-2023), Dublin City CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022; 2022-2028 draft for public consultation), and Wicklow CDP (2016-2022).</p> <p>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.</p> <p>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).</p> <p>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.</p>
<p>Project Ireland 2040 – Building Ireland’s Future</p> <p>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</p>	<p>Objectives of the NPF are implemented through relevant local authorities and statutory bodies i.e. Fingal CDP (2017-2023), Dublin City CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022; 2022-2028 draft for public consultation), and</p>	<p>No in combination impact.</p> <p>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</p>

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
<p>Dublin City and the following surrounding lands and counties: Dun Laoghaire/Rathdown, Fingal, Kildare, Meath, South Dublin and Wicklow) such as the DART expansion programme, Bus Connects Scheme, and investment at Dublin Port, amongst others. Key objectives of the plan include:</p> <ul style="list-style-type: none"> • Managing sustainable growth of cities, towns and villages • Providing accessibility between key urban centres <p>Enhance public transport in a sustainable manner</p>	<p>Wicklow CDP (2016-2022), NTA and TII. Any future developments implemented through the NSS have the potential to lie within these European sites, or be situated in a location where these European sites may be within their Zol.</p> <p>Potential impacts include:</p> <ul style="list-style-type: none"> • Habitat loss / fragmentation • Hydrological impacts <p>Therefore, there is the potential that developments implemented under the NPF could affect European sites within the GDA.</p>	<p>of the 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 CDP (2017-2023), Dublin City CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022; 2022-2028 draft for public consultation), and Wicklow CDP (2016-2022).</p> <p>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.</p> <p>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).</p> <p>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 integrity of any European sites in combination with the Proposed Scheme.</p>
<p>National Transport Authority Integrated Implementation Plan 2019-2024</p>	<p>There is the potential that developments implemented under this plan could affect European sites within the Zol of the Proposed Scheme. The potential impact pathways</p>	<p>No in combination impact.</p>

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
<p>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.</p>	<p>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.</p>	<p>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 CDP (2017-2023), Dublin City CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022; 2022-2028 draft for public consultation), and Wicklow CDP (2016-2022).</p> <p>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.</p> <p>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).</p> <p>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.</p>

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
<p>Smarter Travel a Sustainable Transport Future 2009-2020</p> <p>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.</p>	<p>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.</p>	<p>No in combination impact.</p> <p>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 CDP (2017-2023), Dublin City CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022; 2022-2028 draft for public consultation), and Wicklow CDP (2016-2022).</p> <p>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.</p> <p>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).</p> <p>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</p>

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
		adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
<p>National Biodiversity Action Plan 2017-2021</p> <p>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.</p>	<p>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</p>	<p>No in combination impact</p> <p>As the National Biodiversity Action Plan aims to halt biodiversity loss, no likely significant in-combination effects are predicted</p>
<p>River Basin Management Plan 2018-2021</p> <p>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.</p>	<p>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 ZoI. Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites.</p>	<p>No in combination impact</p> <p>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.</p>
<p>National Air Pollution Control Programme (NAPCP) Draft 2019</p> <p>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</p>	<p>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 sites within its ZoI. Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites.</p>	<p>No in combination impact</p> <p>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.</p>

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
<p>emission reduction commitments for 2020-2029 and 2030 onwards are met.</p>		
<p>National Marine Planning Framework 2018</p> <p>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.</p>	<p>There is the potential that developments implemented under the National Marine Planning Framework could affect European sites within the ZoI 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, 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 ZoI of those European sites.</p>	<p>No in combination impact.</p> <p>Any projects required to achieve the objectives of the National Marine Planning Framework 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.). 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 CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022; 2022-2028 draft for public consultation), and Wicklow CDP (2016-2022).</p> <p>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.</p> <p>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).</p> <p>Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely</p>

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
		affect the integrity of any European sites, the National Marine Planning Framework poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
<p>Water Services Strategic Plan 2015</p> <p>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; supporting social and economic growth; and investing in our future.</p>	<p>There is the potential that developments implemented under the Water Services Strategic Plan could affect European sites within the Zol of the Proposed Scheme. The Water Services Strategic Plan 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 Water Services Strategic Plan 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.</p>	<p>No in combination impact.</p> <p>Any projects required to achieve the objectives of the Water Services Strategic 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 Zol of the Proposed Scheme, the overarching land use plans are Fingal CDP (2017-2023), Dublin City CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022; 2022-2028 draft for public consultation), and Wicklow CDP (2016-2022).</p> <p>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.</p> <p>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).</p>

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
		<p>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, Water Services Strategic Plan poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.</p>
<p>Regional Spatial & Economic Strategy for the Eastern and Midland Region 2019-2031</p> <p>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.</p>	<p>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 Zol 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 Zol of those European sites.</p>	<p>No in combination impact.</p> <p>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 Zol of the Proposed Scheme, the overarching land use plans are Fingal CDP (2017-2023), Dublin City CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022; 2022-2028 draft for public consultation), and Wicklow CDP (2016-2022).</p> <p>All of these land use plans contain objectives and policies to ensure the protection of European</p>

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
		<p>sites from any projects proposed within the plan area. These are presented in Section 9.2.</p> <p>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).</p> <p>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.</p>
<p>Greater Dublin Area Cycle Network Plan 2013</p> <p>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.</p>	<p>The Proposed Scheme lies partly within the functional area of the Dublin City Development Plan 2016-2022 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.</p> <p>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</p>	<p>No in combination impact.</p> <p>The Greater Dublin Area Cycle Network Plan 2013 has undergone AA and therefore, subject to the mitigation proposed in the NIR being incorporated, there would be no adverse effects on any European sites as a result of implementation of the plan.</p> <p>The Greater Dublin Area Cycle Network Plan 2013 contains objectives and policies to ensure the protection of European sites, including surface</p>

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
	<p>measurable in some way, but themselves will not affect the conservation objectives of European sites including:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland’s Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland’s Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); • Habitat degradation as a result of air quality impacts (for example South Dublin Bay and River Tolka Estuary SPA will be adjacent to Rock Road at risk of increased traffic flows); and, 	<p>water quality, from any projects proposed within the plan area. These are presented in Section 9.2.</p> <p>Considering the protective environmental policies contained within the Greater Dublin Area Cycle Network Plan 2013, 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.</p> <p>Any projects required to achieve the objectives of the Greater Dublin Area Cycle Network Plan 2013 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 CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022; 2022-2028 draft for public consultation), and Wicklow CDP (2016-2022).</p> <p>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.</p> <p>This assessment has identified those land use plans that have the potential to act in combination</p>

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 style="list-style-type: none"> 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland’s Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	<p>with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below).</p> <p>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 Cycle Network Plan 2013 poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.</p>
<p>Eastern Catchment Flood Risk Assessment and Management (CFRAM) study 2011-2016</p> <p>This study includes the following main elements within the Eastern catchment:</p> <ol style="list-style-type: none"> Flood Risk Assessments Flood Risk Mapping Flood Risk Management Plans 	<p>There is the potential that developments implemented under the Eastern Catchment Flood Risk Assessment and Management (CFRAM) study 2011-2016 could affect European sites within the ZoI of the Proposed Scheme. Given the nature of the study, future developments implemented through CFRAM 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.</p>	<p>No in combination impact.</p> <p>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.). 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 CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022; 2022-2028 draft for public consultation), and Wicklow CDP (2016-2022). All of these land use plans contain objectives and policies to ensure the protection of European sites from any projects</p>

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
		<p>proposed within the plan area. These are presented in Section 9.2.</p> <p>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).</p> <p>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.</p>
<p>Fingal Development Plan 2017-2023</p> <p>The Fingal CDP makes reference to residential development, zoning and infrastructure targets/obligations.</p>	<p>The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan (2016-2022; 2022-2028 draft for public consultation) and Dublin City Development Plan 2016-2022, however many of the objectives and policies of the Fingal Development Plan 2017-2023, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.</p> <p>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</p>	<p>No in combination impact.</p> <p>The Fingal Development Plan 2017-2023 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.</p> <p>The Fingal Development Plan 2017-2023 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.</p>

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
	<p>measurable in some way, but themselves will not affect the conservation objectives of European sites</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland’s Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland’s Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); • 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 Malahide Estuary SPA, 	<p>Considering the protective environmental policies contained within the Fingal Development Plan 2017-2023, 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.</p>

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
	Baldoye Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA)	
<p>Fingal Biodiversity Action Plan 2010-2015</p> <p>The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems.</p>	<p>No, there are no potential impact pathways to European sites.</p> <p>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.</p>	<p>No in combination impact.</p> <p>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.</p>
<p>Fingal County Council Climate Action Plan 2019-2024</p> <p>The purpose of this action plan is to improve the council's energy efficiency, reduce their greenhouse emissions and create a climate resilient Dublin.</p>	<p>No, there are no potential impact pathways to European sites.</p> <p>This plan will contribute towards improving the climate change resilience 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.</p>	<p>No in combination impact.</p> <p>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.</p>
<p>Donabate Local Area Plan 2016</p> <p>The LAP makes reference to phased housing development targets/obligations.</p>	<p>The Proposed Scheme lies with the functional area of the Dún Laoghaire-Rathdown County Development Plan (2016-2022; 2022-2028 draft for public consultation) and Dublin City Development Plan 2016-2022 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.</p> <p>As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in</p>	<p>No in combination impact.</p> <p>The Donabate Local Area Plan 2016 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 Donabate Local Area Plan 2016 contains objectives and policies to ensure the protection of European sites, including</p>

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
	<p>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</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland’s Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland’s Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and 	<p>surface water quality, from any projects proposed within the plan area.</p> <p>Considering the protective environmental policies contained within the Donabate Local Area Plan 2016, 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.</p>

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 style="list-style-type: none"> 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA. 	
<p>Rivermeade Local Area Plan 2018</p> <p>The LAP makes reference to 11 development area targets / obligations and the creation of a link road to connect Rivermeade to Swords.</p>	<p>The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan (2016-2022; 2022-2028 draft for public consultation) and Dublin City Development Plan 2016-2022 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.</p> <p>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</p> <ul style="list-style-type: none"> Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); 	<p>No in combination impact.</p> <p>The Rivermeade Local Area Plan 2018 was subject to AA screening prior to its adoption. The AA screening confirmed that the plan did not have the potential to result in likely significant effects on European sites, therefore an NIS was not required. 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.</p> <p>Considering the protective environmental policies contained within the Rivermeade Local Area Plan 2018, 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.</p>

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 style="list-style-type: none"> • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland’s Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species(for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland’s Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA) 	
<p>Barnhill Local Area Plan 2019</p>	<p>The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan (2016-2022; 2022-2028 draft for public consultation) and</p>	<p>No in combination impact.</p> <p>The Barnhill Local Area Plan 2019 was subject to AA screening prior to its adoption. The AA</p>

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
<p>The LAP makes reference to residential development targets / obligations.</p>	<p>Dublin City Development Plan 2016-2022, 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.</p> <p>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</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland’s Eye SPA and The Murrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland’s Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, 	<p>screening confirmed that the plan did not have the potential to result in likely significant effects on European sites, therefore an NIS was not required. Therefore, there will be no adverse effects on any European sites as a result of implementation of the plan.</p> <p>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.</p> <p>Considering the protective environmental policies contained within the Barnhill Local Area Plan 2019, 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.</p>

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
	<p>Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA. 	
<p>Kinsaley Local Area Plan 2019</p> <p>The LAP makes reference to commercial and residential development targets/obligations.</p>	<p>The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan (2016-2022; 2022-2028 draft for public consultation) and Dublin City Development Plan 2016-2022 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.</p> <p>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</p>	<p>No in combination impact.</p> <p>The Kinsaley Local Area Plan 2019 was subject to AA screening prior to its adoption. The AA screening confirmed that the plan did not have the potential to result in likely significant effects on European sites, therefore an NIS was not required. Therefore, there will be no adverse effects on any European sites as a result of implementation of the plan.</p> <p>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.</p>

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
	<p>measurable in some way, but themselves will not affect the conservation objectives of European sites</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland’s Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland’s Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 	<p>Considering the protective environmental policies contained within the Kinsaley Local Area Plan 2019, 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.</p>

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
	<p>ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA.</p>	
<p>Dublin Airport Local Area Plan 2020</p> <p>The LAP makes reference to airside and landside infrastructure targets/obligations.</p>	<p>The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan (2016-2022; 2022-2028 draft for public consultation) and Dublin City Development Plan 2016-2022 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.</p> <p>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</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); • 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 	<p>No in combination impact.</p> <p>The Dublin Airport Local Area Plan 2020 was subject to AA screening prior to its adoption. The AA screening confirmed that the plan did not have the potential to result in likely significant effects on European sites, therefore an NIS was not required. Therefore, there will be no adverse effects on any European sites as a result of implementation of the plan.</p> <p>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.</p> <p>Considering the protective environmental policies contained within the Dublin Airport Local Area Plan 2020, 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.</p>

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
	<p>aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA. 	
<p>Dublin City Development Plan 2016-2022</p> <p>The Dublin City CDP 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.</p>	<p>The Proposed Scheme lies partially within the functional area of the Dublin City Development Plan 2016-2022 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.</p>	<p>No in combination impact.</p> <p>The Dublin City Development Plan 2016 - 2022 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</p>

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
	<p>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:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland’s Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland’s Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species(for example to downstream European sites North Dublin 	<p>adverse effects on any European sites as a result of implementation of the plan.</p> <p>The Dublin City Development Plan 2016-2022 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.</p> <p>Considering the protective environmental policies contained within the Dublin City Development Plan 2016-2022, 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.</p>

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
	<p>Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of air quality impacts (for example South Dublin Bay and River Tolka Estuary SPA will be adjacent to Rock Road at risk of increased traffic flows); 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA. 	
<p>Dublin City Biodiversity Action Plan 2015-2020</p> <p>The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems.</p>	<p>No, there are no potential impact pathways to European sites.</p> <p>This plan 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.</p>	<p>No in combination impact.</p> <p>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.</p>
<p>Dublin City Council Climate Action Plan 2019-2024</p> <p>The purpose of this action plan is to improve the council's energy efficiency, reduce their greenhouse emissions and create a climate resilient Dublin.</p>	<p>This plan will contribute towards improving the climate change resilience of the European sites within their ZoI. 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</p>	<p>No in combination impact.</p> <p>The plan is intended to improve the quality of the environment within its ZoI.</p> <p>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</p>

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
	<p>a variety of potential impact pathways, to affect European sites.</p> <p>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:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland’s Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland’s Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species(for 	<p>requirements, including those of any 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 CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022; 2022-2028 draft for public consultation), and Wicklow CDP (2016-2022).</p> <p>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.</p> <p>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).</p> <p>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.</p>

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
	<p>example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and</p> <ul style="list-style-type: none"> 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland’s Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA. 	
<p>Clongriffin-Belmayne Local Area Plan 2012-2018</p> <p>The LAP makes reference to commercial and residential development targets/obligations, and targets associated with interconnecting walking, cycling and public transport routes.</p>	<p>The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan (2016-2022; 2022-2028 draft for public consultation) and Dublin City Development Plan 2016-2022 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.</p> <p>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:</p> <ul style="list-style-type: none"> Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull 	<p>No in combination impact.</p> <p>The Clongriffin-Belmayne Local Area Plan 2012-2018 was subject to AA screening, and 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.</p> <p>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.</p> <p>Considering the protective environmental policies contained within the Clongriffin-Belmayne Local Area Plan 2012-2018, 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</p>

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
	<p>Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland’s Eye SPA and The Murrrough SPA);</p> <ul style="list-style-type: none"> • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland’s Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species(for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); • 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland’s Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	<p>Scheme to adversely affect the integrity of any European sites.</p>

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
<p>George’s Quay Local Area Plan 2012-2022</p> <p>The LAP makes reference to mixed use development targets/obligations, and targets associated with the improvement of pedestrian and cycling infrastructure.</p>	<p>The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan (2016-2022; 2022-2028 draft for public consultation) and Dublin City Development Plan 2016-2022 and some of the objectives and policies of the George’s Quay Local Area Plan 2012-2022, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.</p> <p>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:</p> <ul style="list-style-type: none"> • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland’s Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species(for 	<p>No in combination impact.</p> <p>The George’s Quay Local Area Plan 2012-2022 was subject to AA screening prior to its adoption. The AA screening confirmed that the plan did not have the potential to result in likely significant effects on European sites, therefore an NIS was not required. Therefore, there will be no adverse effects on any European sites as a result of implementation of the plan.</p> <p>The George’s Quay Local Area Plan 2012-2022 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.</p> <p>Considering the protective environmental policies contained within the George’s Quay Local Area Plan 2012-2022, 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.</p>

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
	<p>example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA);</p>	
<p>Ballymun Local Area Plan 2017</p> <p>The LAP makes reference to residential development targets/obligations, and targets associated with the development of M50 lands and construction of outstanding road infrastructure e.g. Metro North.</p>	<p>The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan (2016-2022; 2022-2028 draft for public consultation) and Dublin City Development Plan 2016-2022 and some of the objectives and policies of the Ballymun Local Area Plan 2017, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.</p> <p>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:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland’s Eye SPA and The Murrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head 	<p>No in combination impact.</p> <p>The Ballymun Local Area Plan 2017 was subject to AA screening prior to its adoption. The AA screening confirmed that the plan did not have the potential to result in likely significant effects on European sites, therefore an NIS was not required. Therefore, there will be no adverse effects on any European sites as a result of implementation of the plan.</p> <p>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.</p> <p>Considering the protective environmental policies contained within the Ballymun Local Area Plan 2017, 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.</p>

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
	<p>Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species(for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA. 	
<p>The Liberties Local Area Plan 2009-2020</p> <p>This LAP makes reference to increasing local authority housing, installing new infrastructure, and targets/obligations associated with creating new routes for pedestrians and cyclists.</p>	<p>The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan (2016-2022; 2022-2028 draft for public consultation) and Dublin City Development Plan 2016-2022 and some of the objectives and policies of the Liberties Local Area Plan 2009-2020, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.</p>	<p>No in combination impact.</p> <p>The liberties Local Area Plan 2009-2020 lies within the administrative boundaries of Dublin City Council, therefore, any plans or projects arising from the LAP will also require to abide by the protective environmental policies contained within the Dublin City Development Plan 2016-2022 and will be subject to any mitigation identified in the NIS undertaken for the DCC plan.</p>

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
	<p>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:</p> <ul style="list-style-type: none"> • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland’s Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrugh SPA); and • Habitat degradation as a result of introducing/spreading non-native invasive species(for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). 	<p>Any future projects arising from the LAP will also be subject to project specific AA planning requirements.</p> <p>The Dublin City Development Plan 2016-2022 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.</p> <p>Considering the protective environmental policies contained within the Dublin City Development Plan 2016-2022, in the AA the plan was subject to, 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.</p>
<p>Naas Road Local Area Plan 2013-2023</p> <p>This LAP makes reference to the creation of four strategic development regeneration areas and targets/obligations associated making improvements</p>	<p>The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan (2016-2022; 2022-2028 draft for public consultation) and Dublin City Development Plan 2016-2022 and some of the objectives and policies of the Naas Road Local Area Plan</p>	<p>No in combination impact.</p> <p>The Naas Road Local Area Plan 2013-2023 was subject to AA screening prior to its adoption thereby finding the plan did not have the potential to result in likely significant effects on</p>

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
<p>to pedestrian, cycling and public transport infrastructure.</p>	<p>2013-2023, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.</p> <p>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:</p> <ul style="list-style-type: none"> • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland’s Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); and • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). 	<p>European sites, and that an NIS was not required. Therefore, there will be no adverse effects on any European sites as a result of implementation of the plan.</p> <p>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.</p> <p>Considering the protective environmental policies contained within the Naas Road Local Area Plan 2013-2023, 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.</p>
<p>Park West- Cherry Orchard Local Area Plan 2019</p>	<p>The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan</p>	<p>No in combination impact.</p>

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
<p>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.</p>	<p>(2016-2022; 2022-2028 draft for public consultation) and Dublin City Development Plan 2016-2022 and some of the objectives and policies of 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.</p> <p>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:</p> <ul style="list-style-type: none"> • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland’s Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Dalkey Islands SPA and The Murrough SPA); and • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin 	<p>The Park West- Cherry Orchard Local Area Plan 2019 was subject to AA screening prior to its adoption. The AA screening confirmed that the plan did not have the potential to result in likely significant effects on European sites, therefore an NIS was not required. Therefore, there will be no adverse effects on any European sites as a result of implementation of the plan.</p> <p>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.</p> <p>Considering the protective environmental policies contained within the Park West- Cherry Orchard Local Area Plan 2019, 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.</p>

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
	Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	
<p>South Dublin County Council Development Plan 2016-2022</p> <p>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.</p>	<p>The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan (2016-2022; 2022-2028 draft for public consultation) and Dublin City Development Plan 2016-2022, however some of the objectives and policies of the South Dublin County Council Development Plan 2016-2022, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.</p> <p>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:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland’s Eye SPA and The Murrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head 	<p>No in combination impact.</p> <p>The South Dublin County Council Development Plan 2016-2022 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.</p> <p>The South Dublin County Council Development Plan 2016-2022 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.</p> <p>Considering the protective environmental policies contained within the South Dublin County Council Development Plan 2016-2022, 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.</p>

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
	<p>Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA. 	
<p>Biodiversity Action Plan for South Dublin County (2020-2026)- Draft for public consultation</p> <p>The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems.</p>	<p>No, there are no potential impact pathways to European sites.</p> <p>This plan 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.</p>	<p>No in combination impact.</p> <p>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.</p>

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
<p>South Dublin County Council Climate Change Action Plan 2019-2024</p> <p>The purpose of this action plan is to improve the council's energy efficiency, reduce their greenhouse emissions and create a climate resilient Dublin.</p>	<p>No, there are no potential impact pathways to European sites.</p> <p>No, there are no potential impact pathways to European sites.</p> <p>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 Zol of the Proposed Scheme.</p>	<p>No in combination impact.</p> <p>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.</p>
<p>Tallaght Town Centre Local Area Plan 2020</p> <p>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.</p>	<p>The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan (2016-2022; 2022-2028 draft for public consultation) and Dublin City Development Plan 2016-2022, 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.</p> <p>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:</p> <ul style="list-style-type: none"> Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, 	<p>No in combination impact.</p> <p>The Tallaght Town Centre Local Area Plan 2020 was subject to AA screening, and 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.</p> <p>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.</p> <p>Considering the protective environmental policies contained within the Tallaght Town Centre Local Area Plan 2020, 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</p>

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
	<p>Skerries Islands SPA, Lambay Island SPA, Ireland’s Eye SPA and The Murrough SPA);</p> <ul style="list-style-type: none"> • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland’s Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland’s Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA). 	<p>adversely affect the integrity of any European sites.</p>

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
<p>Liffey Valley Town Centre Local Area Plan 2008</p> <p>This LAP makes reference to commercial and residential development targets/obligations, and targets to provide an integrated public transport network, and secure pedestrian and cycle networks.</p>	<p>The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan (2016-2022; 2022-2028 draft for public consultation) and Dublin City Development Plan 2016-2022, however some of the objectives and policies of the Liffey Valley Town Centre Local Area Plan 2008, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.</p> <p>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:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland’s Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle 	<p>No in combination impact.</p> <p>The Liffey Valley Town Centre Local Area Plan 2008 lies within the administrative boundaries of South Dublin County Council, therefore, any plans or projects arising from the LAP will also be required to abide by the protective environmental policies contained within the South Dublin County Development Plan 2016-2022 and will be subject to any mitigation identified in the NIS undertaken for the SDCC plan. Any future projects arising from the LAP will also be subject to project specific AA requirements.</p> <p>The South Dublin County Development Plan 2016-2022 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.</p> <p>Considering the protective environmental policies contained within the South Dublin County Development Plan 2016-2022, the AA that the plan was subject to, 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.</p>

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
	<p>Bay SAC, Baldoyle Bay SPA, Ireland’s Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); • Habitat degradation as a result of air quality impacts (for example South Dublin Bay and River Tolka Estuary SPA will be adjacent to Rock Road at risk of increased traffic flows); 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland’s Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	
<p>Dún Laoghaire- Rathdown Development Plan 2016-2022; Dún Laoghaire- Rathdown Development Plan (2022-2028)- Draft for public consultation</p> <p>The Dún Laoghaire- Rathdown CDP makes reference to commercial and residential development (including Cherrywood SDZ) targets/obligations, and</p>	<p>The Proposed Scheme lies partially within the functional area of the Dún Laoghaire-Rathdown County Development Plan (2016-2022; 2022-2028 draft for public consultation) 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.</p>	<p>No in combination impact.</p> <p>The Dún Laoghaire- Rathdown Development Plan 2016-2022 was subject to AA screening, and 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.</p>

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
<p>targets associated with providing suitable community infrastructure.</p>	<p>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:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland’s Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland’s Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species(for example to downstream European sites North Dublin 	<p>The Dún Laoghaire- Rathdown Development Plan 2016-2022 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.</p> <p>Considering the protective environmental policies contained within the Dún Laoghaire- Rathdown Development Plan 2016-2022, 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.</p>

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
	<p>Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of air quality impacts (for example South Dublin Bay and River Tolka Estuary SPA will be adjacent to Rock Road at risk of increased traffic flows); 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA. 	
<p>Dún Laoghaire- Rathdown Biodiversity Plan 2009-2013; Dún Laoghaire- Rathdown Biodiversity Plan (current draft under review)</p> <p>The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems.</p>	<p>No, there are no potential impact pathways to European sites.</p> <p>This plan 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.</p>	<p>No in combination impact.</p> <p>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.</p>
<p>Dún Laoghaire-Rathdown County Council Climate Change Action Plan 2019-2024</p> <p>The purpose of this action plan is to improve the council's energy efficiency, reduce their greenhouse emissions and create a climate resilient Dublin.</p>	<p>No, there are no potential impact pathways to European sites.</p> <p>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.</p>	<p>No in combination impact.</p> <p>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.</p>

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
<p>Deansgrange Local Area Plan 2010-2020</p> <p>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.</p>	<p>The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan (2016-2022; 2022-2028 draft for public consultation) and Dublin City Development Plan 2016-2022, however some of the objectives and policies of the Deansgrange Local Area Plan 2010-2020, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.</p> <p>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:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland’s Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle 	<p>No in combination impact.</p> <p>The Deansgrange Local Area Plan 2010-2020 lies within the administrative boundaries of Dún Laoghaire Rathdown, therefore, any plans or projects arising from the LAP will also require to abide by the protective environmental policies contained within the Dún Laoghaire Rathdown Development Plan 2016-2022 and will be subject to any mitigation identified in the NIS undertaken for the DLCC plan. Any future projects arising from the LAP will also be subject to project specific AA requirements.</p> <p>The Dún Laoghaire Rathdown Development Plan 2016-2022 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.</p> <p>Considering the protective environmental policies contained within the Dún Laoghaire Rathdown Development Plan 2016-2022, the AA that the plan was subject, 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.</p>

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
	<p>Bay SAC, Baldoyle Bay SPA, Ireland’s Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland’s Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA. 	
<p>Stillorgan Local Area Plan 2018-2024</p> <p>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.</p>	<p>The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan (2016-2022; 2022-2028 draft for public consultation) and Dublin City Development Plan 2016-2022, however 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.</p> <p>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</p>	<p>No in combination impact.</p> <p>The Stillorgan Local Area Plan 2018-2024 was subject to AA screening prior to its adoption. The AA screening confirmed that the plan did not have the potential to result in likely significant effects on European sites, therefore an NIS was not required. Therefore, there will be no adverse effects on any European sites as a result of implementation of the plan.</p> <p>The Stillorgan Local Area Plan 2018-2024 contains objectives and policies to ensure the protection of</p>

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
	<p>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:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland’s Eye SPA and The Murrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland’s Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and • Disturbance and displacement impacts (for example ex-situ inland feeding sites which are utilised by SCI 	<p>European sites, including surface water quality, from any projects proposed within the plan area.</p> <p>Considering the protective environmental policies contained within the Stillorgan Local Area Plan 2018-2024, 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.</p>

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
	<p>wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA.</p>	
<p>Blackrock Local Area Plan 2015-2021</p> <p>This LAP makes reference to redevelopment of Frascati and Blackrock shopping centres, residential development targets/obligations, and targets associated with the improvement of infrastructure connecting pedestrians, cycling and public transport.</p>	<p>The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan (2016-2022; 2022-2028 draft for public consultation) and Dublin City Development Plan 2016-2022, however some of the objectives and policies of the Blackrock Local Area Plan 2015-2021, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.</p> <p>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:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); • 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 	<p>No in combination impact.</p> <p>The Blackrock Local Area Plan 2015-2021 was subject to AA screening prior to its adoption. The AA screening confirmed that the plan did not have the potential to result in likely significant effects on European sites, therefore an NIS was not required. Therefore, there will be no adverse effects on any European sites as a result of implementation of the plan.</p> <p>The Blackrock Local Area Plan 2015-2021 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.</p> <p>Considering the protective environmental policies contained within the Blackrock Local Area Plan 2015-2021, 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.</p>

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
	<p>affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA. 	
<p>Woodbrook-Shanganagh Local Area Plan 2017-2024</p> <p>This LAP makes reference to residential development targets/obligations, and targets associated with the improvement of infrastructure connecting pedestrians, cycling and public transport.</p>	<p>The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan (2016-2022; 2022-2028 draft for public consultation) and Dublin City Development Plan 2016-2022, however some of the objectives and policies of the Woodbrook-Shanganagh Local Area Plan 2017-2024, have the</p>	<p>No in combination impact.</p> <p>The Woodbrook-Shanganagh Local Area Plan 2017-2024 was subject to AA screening prior to its adoption. The AA screening confirmed that the plan did not have the potential to result in likely significant effects on European sites, therefore an</p>

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
	<p>potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.</p> <p>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:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland’s Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland’s Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); 	<p>NIS was not required. Therefore, there will be no adverse effects on any European sites as a result of implementation of the plan.</p> <p>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.</p> <p>Considering the protective environmental policies contained within the Woodbrook-Shanganagh Local Area Plan 2017-2024, 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.</p>

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 style="list-style-type: none"> Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and <p>Disturbance and displacement impacts (for example ex-situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance Zol of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland’s Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.</p>	
<p>Wicklow County Development Plan 2016-2022</p> <p>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.</p>	<p>The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan (2016-2022; 2022-2028 draft for public consultation) and Dublin City Development Plan 2016-2022, however some of the objectives and policies of the Wicklow County Development Plan 2016-2022, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.</p> <p>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:</p>	<p>No in combination impact.</p> <p>The Wicklow County Development Plan 2016-2022 was subject to AA screening, and 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.</p> <p>The Wicklow County Development Plan 2016-2022 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.</p> <p>Considering the protective environmental policies contained within the Wicklow County Development Plan 2016-2022, and that alone the</p>

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 style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	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.
<p>Wicklow Biodiversity Plan 2010-2015</p> <p>The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems.</p>	<p>No, there are no potential impact pathways to European sites.</p> <p>This plan 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.</p>	<p>No in combination impact.</p> <p>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.</p>
<p>Wicklow County Council Climate Change Adaptation Strategy 2019</p> <p>The purpose of this action plan is to improve the council's energy efficiency, reduce their greenhouse emissions and create a climate resilient Wicklow.</p>	<p>No, there are no potential impact pathways to European sites.</p> <p>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.</p>	<p>No in combination impact.</p> <p>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.</p>

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
<p>Bray Municipal District Local Area Plan 2018-2024</p> <p>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.</p>	<p>The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan (2016-2022; 2022-2028 draft for public consultation) and Dublin City Development Plan 2016-2022, however 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.</p> <p>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:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland’s Eye SPA and The Murrrough 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland’s Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	<p>No in combination impact.</p> <p>The Bray Municipal District Local Area Plan 2018-2024 was subject to AA screening, and iAA, 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.</p> <p>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.</p> <p>Considering the protective environmental policies contained within the Bray Municipal District Local Area Plan 2018-2024, 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.</p>

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
<p>Bray Town Development Plan 2011-2017</p> <p>This LAP makes reference to redevelopment of residential and industrial areas, and mixed-use development targets/obligations. It also mentions targets to provide an integrated network for walking, cycling and public transport, and facilitation of a LUAS connection to Bray.</p>	<p>The Proposed Scheme lies within the functional area of the Dún Laoghaire-Rathdown County Development Plan (2016-2022; 2022-2028 draft for public consultation) and Dublin City Development Plan 2016-2022, however some of the objectives and policies of the Bray Town Development Plan 2011-2017, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites.</p> <p>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:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland’s Eye SPA and The Murrrough 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland’s Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	<p>No in combination impact.</p> <p>The Bray Town Development Plan 2011-2017 lies within the administrative boundaries of Wicklow City Council therefore, any plans or projects arising from the LAP will also require to abide by the protective environmental policies contained within the Wicklow County Development Plan 2016-2022 and will be subject to any mitigation identified in the NIS undertaken for the WCC plan. Any future projects arising from the LAP will also be subject to project specific AA requirements.</p> <p>The Wicklow County Development Plan 2016-2022 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area.</p> <p>Considering the protective environmental policies contained within the Wicklow County Development Plan 2016-2022, the AA that the plan was subject to, 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.</p>

Table 40 In-Combination Assessment of Major Projects

Application Reference	Applicant for 'Other Development' and 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	<p>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.</p> <p>As these works are completed and there is no physical overlap between the Proposed Scheme and this project, there is limited potential for in-combination effects to arise.</p> <p>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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA.</p>	<p>No in-combination effect.</p> <p>The proposed M7 widening 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 M7 widening 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, the two projects will not generate any in combination effects which could adversely affect the integrity of any European sites.</p> <p>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 M7 widening works and has included mitigation in that regard to prevent any such adverse effects.</p>

Application Reference	Applicant for 'Other Development' and 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?
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 Zol of the Proposed Scheme.	No in-combination effect.
MP03	N3 Castaheany Interchange Upgrade	<p>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.</p> <p>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:</p> <ul style="list-style-type: none"> 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands 	<p>No in-combination effect.</p> <p>The proposed N3 Castaheaney 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 development Plan. This land use plan contains objectives and policies to ensure the protection of European sites.</p> <p>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 Castaheaney Interchange Upgrade project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); and</p> <ul style="list-style-type: none"> Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). 	<p>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.</p> <p>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.</p>
MP04	<p>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</p>	<p>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.</p> <p>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:</p> <ul style="list-style-type: none"> 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 North Dublin Bay SAC, South Dublin 	<p>No in-combination effect.</p> <p>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.</p> <p>The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); and</p> <ul style="list-style-type: none"> Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). 	<p>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 not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.</p> <p>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.</p>
MP05	N3-N4: Barnhill to Leixlip Interchange	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example 	<p>No in-combination effect.</p> <p>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.</p> <p>The proposed reconfiguration works will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); and</p> <ul style="list-style-type: none"> Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). 	<p>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.</p> <p>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, in its own right, nor in combination with other projects, including the proposed N30N4 Barnhill to Leixlip Interchange and has included mitigation in that regard to prevent any such adverse effects.</p>
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.	<p>No in-combination effect.</p> <p>The proposed the 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</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). 	<p>contain objectives and policies to ensure the protection of European sites.</p> <p>The proposed reconfiguration works will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>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.</p> <p>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.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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?
MP07	Clonburris SDZ roads development	<p>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.</p> <p>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:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, 	<p>No in-combination effect.</p> <p>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 of the relevant Development Plan. This land use plan contains objectives and policies to ensure the protection of European sites.</p> <p>The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>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.</p> <p>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.</p> <p>The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA. 	<p>combination with other projects, including the proposed Clonburris SDZ roads development and has included mitigation in that regard to prevent any such adverse effects.</p>
MP08	DART+ Programme West	<p>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.</p>	<p>No in-combination effect.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay 	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and</p> <ul style="list-style-type: none"> 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA. 	
MP09	Porterstown Distributor Link Road	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands 	<p>No in-combination effect.</p> <p>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.</p> <p>The proposed link road will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>In granting permission for the link road, 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.</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA);</p> <ul style="list-style-type: none"> • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands 	<p>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.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA.	
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	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); and 	<p>No in-combination effect.</p> <p>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.</p> <p>The proposed N3 widening will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>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.</p> <p>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</p>

Application Reference	Applicant for 'Other Development' and 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 style="list-style-type: none"> Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). 	<p>project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.</p> <p>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.</p>
MP11	Lucan LUAS	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands 	<p>No in-combination effect.</p> <p>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.</p> <p>The proposed Lucan LUAS will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>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.</p> <p>Considering the lack of physical overlap between the Proposed Scheme and the proposed Lucan LUAS project, the environmental protection policies included within</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); and</p> <ul style="list-style-type: none"> Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). 	<p>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.</p> <p>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.</p>
MP12	DART+ Programme South West	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands 	<p>No in-combination effect.</p> <p>The proposed DART + South West project must comply with statutory licencing 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.</p> <p>The proposed DART + 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.</p> <p>The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA);</p> <ul style="list-style-type: none"> • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands 	<p>In granting permission for the DART + 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.</p> <p>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 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.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA).	
MP13	Junction upgrades and other capacity improvements on the M1 motorway, including additional lanes south of Drogheda, where required	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay 	<p>No in-combination effect.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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 will not adversely affect the integrity of any</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	<p>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.</p> <p>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 Junction upgrades and other capacity improvements on the M1 motorway and has included mitigation in that regard to prevent any such adverse effects.</p>
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	<p>No in-combination effect.</p> <p>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</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>way, but themselves will not affect the conservation objectives of European sites.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European 	<p>Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.</p> <p>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.</p> <p>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.</p> <p>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 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.</p> <p>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 Finglas LUAS extension and has included mitigation in that regard to prevent any such adverse effects.</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and</p> <ul style="list-style-type: none"> 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	
MP15	DART+ Tunnel Element (Kildare Line to Northern Line)	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> 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 North Dublin Bay SAC, South Dublin 	<p>No in-combination effect.</p> <p>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, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.</p> <p>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.</p> <p>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</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); and</p> <ul style="list-style-type: none"> Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). 	<p>from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.</p> <p>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.</p> <p>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.</p>
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.	<p>No in-combination effect.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay 	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and</p> <ul style="list-style-type: none"> 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	
MP17	LUAS Cross City incorporating LUAS Green Line Capacity Enhancement - Phase 1	<p>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.</p> <p>As these works are completed and there is no physical overlap between the Proposed Scheme and this project, there is limited potential for in-combination effects to arise.</p> <p>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 North Dublin Bay SAC,</p>	<p>No in-combination effect.</p> <p>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, the two projects will not generate any in combination effects</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA).</p>	<p>which could adversely affect the integrity of any European sites.</p> <p>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</p>
MP18	Oldtown-Mooretown Western Distributor Link Road	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example 	<p>No in-combination effect.</p> <p>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.</p> <p>The proposed link road will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>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.</p> <p>Considering the lack of physical overlap between the Proposed Scheme and the proposed Oldtown-Mooretown Western Distributor Link Road, the</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA. 	<p>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.</p> <p>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 Link Road and has included mitigation in that regard to prevent any such adverse effects.</p>

Application Reference	Applicant for 'Other Development' and 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?
MP19	Potential Metro South alignment: Charlemont to Sandyford	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill 	<p>No in-combination effect.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	<p>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</p>
MP20	Poolbeg LUAS	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p>	<p>No in-combination effect.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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 style="list-style-type: none"> • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); and • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). 	<p>The proposed LUAS will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>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.</p> <p>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.</p> <p>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.</p>
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	<p>No in-combination effect.</p> <p>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</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>way, but themselves will not affect the conservation objectives of European sites.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); and • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). 	<p>Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.</p> <p>The proposed link road will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>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.</p> <p>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.</p> <p>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.</p>
MP22	Development of a road link connecting from the southern end	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site	No in-combination effect.

Application Reference	Applicant for 'Other Development' and 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?
	of the Dublin Port Tunnel to the South Port area, which will serve the South Port and adjoining development areas	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and 	<p>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.</p> <p>The proposed link road will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>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.</p> <p>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.</p> <p>The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in</p>

Application Reference	Applicant for 'Other Development' and 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 style="list-style-type: none"> Habitat degradation as a result of air quality impacts (for example South Dublin Bay and River Tolka Estuary SPA will be adjacent to Rock Road at risk of increased traffic flows). 	<p>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.</p>
MP23	Poolbeg SDZ roads development	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast 	<p>No in-combination effect.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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 Proposed Scheme to avoid significant impacts and that alone the</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); • 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	<p>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.</p> <p>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.</p>
MP24	Glenamuck District Distributor Road	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.

Application Reference	Applicant for 'Other Development' and 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?
MP25	DART+ Programme Coastal North	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill 	<p>No in-combination effect.</p> <p>The proposed DART+ Programme Coastal North 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.</p> <p>The proposed DART+ Programme Coastal North will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>In granting permission for DART+ Programme Coastal North 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.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	<p>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 Coastal North and has included mitigation in that regard to prevent any such adverse effects.</p>
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	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p>	<p>No in-combination effect.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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 style="list-style-type: none"> • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); and • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). 	<p>The proposed M50 widening will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>In granting permission for the 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.</p> <p>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 Proposed Scheme to have an adverse effect on the integrity of any European sites.</p> <p>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.</p>
MP27	Cherrywood SDZ roads development	There is no physical overlap between the Proposed Scheme and this project and there are no potential	No in-combination effect.

Application Reference	Applicant for 'Other Development' and 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?
		impact pathways by which this project could adversely affect the integrity of any European sites within the Zol of the Proposed Scheme.	
MP28	DART+ Coastal South Project	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin 	<p>No in-combination effect.</p> <p>The proposed DART+ 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.</p> <p>The proposed DART+ Coastal South Project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>In granting permission for DART+ Coastal South 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.</p> <p>Considering the lack of physical overlap between the Proposed Scheme and the DART+ 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</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	<p>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+ Coastal South Project and has included mitigation in that regard to prevent any such adverse effects.</p>
MP29	R126 Donabate Relief Road: R132 to Portrane Demesne	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.	<p>No in-combination effect.</p> <p>The proposed relief 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</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay 	<p>contain objectives and policies to ensure the protection of European sites.</p> <p>The proposed relief road will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>In granting permission for the relief 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.</p> <p>Considering the lack of physical overlap between the Proposed Scheme and the R126 Donabate Relief Road: R132 to Portrane Demesne 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.</p> <p>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 R126 Donabate Relief Road: R132 to Portrane Demesne and has included mitigation in that regard to prevent any such adverse effects.</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and</p> <ul style="list-style-type: none"> 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA. 	
MP30	Extension of LUAS Green Line to Bray	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.
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 to cater for local traffic movements	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.
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	No in-combination effect. The proposed Metrolink project must comply with all applicable planning and environmental approval

Application Reference	Applicant for 'Other Development' and 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?
		<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); 	<p>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.</p> <p>The proposed MetroLink will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>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.</p> <p>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.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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 style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA. 	
MP33	Greater Dublin Drainage (GDD)	<p>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.</p> <p>The only potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown 	<p>No in-combination effect.</p> <p>The proposed Greater Dublin Drainage 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.</p> <p>The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>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,</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA);</p> <ul style="list-style-type: none"> • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 	<p>including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.</p> <p>Considering the lack of physical overlap between the Proposed Scheme and the proposed Greater Dublin Drainage 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.</p> <p>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 Greater Dublin Drainage Project and has included mitigation in that regard to prevent any such adverse effects.</p>

Application Reference	Applicant for 'Other Development' and 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?
		Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA.	
MP34	Cycling: Greater Dublin Area Cycle Network Plan (excluding Radial Core Bus Corridor elements)	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin 	<p>No in-combination effect.</p> <p>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 land use plans contain objectives and policies to ensure the protection of European sites.</p> <p>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.</p> <p>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.</p> <p>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</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	<p>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.</p> <p>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.</p>
MP35	Dublin Array - offshore windfarm	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	<p>No in-combination effect.</p> <p>The proposed Dublin Array - offshore windfarm project must comply with all applicable planning and environmental approval requirements and be in</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); and • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). 	<p>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.</p> <p>The proposed Dublin Array - offshore windfarm project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>In granting permission for the Dublin Array - offshore windfarm 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.</p> <p>Considering the lack of physical overlap between the Proposed Scheme and the proposed Dublin Array - offshore windfarm 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.</p> <p>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 Array - offshore windfarm and has included</p>

Application Reference	Applicant for 'Other Development' and 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?
			mitigation in that regard to prevent any such adverse effects.
MP36	<p>Southern Port Access Route (SPAR): proposed 1.6km (SPAR) includes an opening bridge across the Liffey east of 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.</p>	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin 	<p>No in-combination effect.</p> <p>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 etc.). These land use plans contain objectives and policies to ensure the protection of European sites.</p> <p>The proposed SPAR will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>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.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	<p>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.</p>
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	No in-combination effect.

Application Reference	Applicant for 'Other Development' and 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?
		(either hydrological, invasive species, air quality or disturbance/displacement to SCI species).	
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.
JA0040	Dublin Mountain Visitors Centre and all associated works. Killakee and Jamestown	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay 	<p>No in-combination effect.</p> <p>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.</p> <p>The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). 	<p>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.</p> <p>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.</p>
304624	FCC/12/0001 Broadmeadow Way.Greenway between Malahide Demesne and Newbridge Demesne to be known as 'Broadmeadow Way'. Malahide	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown 	<p>No in-combination effect.</p> <p>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 land use plans contain objectives and policies to ensure the protection of European sites.</p> <p>The proposed project has been subject to planning consent, including preparation of an EIAR and Natura Impact Statement.</p> <p>In granting permission for the project, it was necessary to determine that the project will not result in adverse</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA);</p> <ul style="list-style-type: none"> • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); • 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 	<p>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.</p> <p>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.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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?
		Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA).	
307073	Alternations to a permitted double circuit 110kV electricity transmission line development between substations. Darndale/Belcamp	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, 	<p>No in-combination effect.</p> <p>The proposed alterations to a permitted double circuit 110kV electricity transmission line development between substations must comply with all applicable planning and environmental approval requirement 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.</p> <p>The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>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.</p> <p>Considering the lack of physical overlap between the Proposed Scheme and the proposed alterations 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</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>Rogerstown Estuary SPA, and The Murrrough SPA); and</p> <ul style="list-style-type: none"> Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). 	<p>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.</p> <p>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 alterations 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.</p>
303249	110kV onsite electrical substation with associated electrical plant, electrical equipment, welfare facilities and waste water holding tank and security fencing. 110kV overhead line grid connection cabling, upgrade of existing tracks and provision of new site access roads with all associated site development and ancillary works. Timahoe East	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.
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	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	<p>No in-combination effect.</p> <p>The proposed Dublin Port 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</p>

Application Reference	Applicant for 'Other Development' and Brief Description	Potential for In-combination effect	Conclusion regarding In-combination effect
	yards to provide for various elements including new Ro-Ro jetty and consolidation of passenger terminal buildings. Dublin Port.	<p>receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and • Habitat degradation as a result of air quality impacts (for example South Dublin Bay and River 	<p>Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.</p> <p>The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>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.</p> <p>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 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.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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?
		Tolka Estuary SPA will be adjacent to Rock Road at risk of increased traffic flows).	
306583	A residential development with ancillary commercial uses (retail unit, café and cr�che) practically comprising a "Build to Rent" scheme on circa 9.69 hectares. The townlands of Shanganagh, Cork Little and Shankill, Co. Dublin.	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland’s Eye SPA and The Murrrough SPA); • 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland’s Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA. 	<p>No in-combination effect.</p> <p>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.</p> <p>The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>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.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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 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 for heavy good vehicles, cars and bicycles. Gates, signage and all ancillary site works. Dublin Port.	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, 	<p>No in-combination effect.</p> <p>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.</p> <p>The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>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.</p> <p>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</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>Rogerstown Estuary SPA, Dalkey Islands SPA and The Murrrough SPA); and</p> <ul style="list-style-type: none"> Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). 	<p>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.</p> <p>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.</p>
306834	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.	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.
307296	Construction of a 2 storey 110kV Gas Insulated Switchgear (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	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p>	<p>No in-combination effect.</p> <p>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.</p> <p>The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p>

Application Reference	Applicant for 'Other Development' and 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 style="list-style-type: none"> 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Dalkey Islands SPA and The Murrough SPA); and Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). 	<p>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.</p> <p>Considering the lack of physical overlap between the Proposed Scheme and the proposed 110kV Gas Insulated Switchgear (GIS) substation and underground cable 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.</p> <p>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 Gas Insulated Switchgear (GIS) substation and underground cable and has included mitigation in that regard to prevent any such adverse effects.</p>
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	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

Application Reference	Applicant for 'Other Development' and 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?
		<p>way, but themselves will not affect the conservation objectives of European sites.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European 	<p>use plans contain objectives and policies to ensure the protection of European sites.</p> <p>The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>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.</p> <p>Considering the lack of physical overlap between the Proposed 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.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA);</p> <ul style="list-style-type: none"> 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	
245738 (DCC ref: 2552/15)	Aviation Fuel Pipeline. Location: Inlet Station: Bond Drive, Dublin Port, Dublin 1 to Dublin Airport, Co. Dublin	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> Habitat fragmentation (for example European sites at risk of <i>ex-situ</i> habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands 	<p>No in-combination effect.</p> <p>The proposed Aviation Fuel Pipeline 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.</p> <p>The proposed SID will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>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</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA);</p> <ul style="list-style-type: none"> • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); • Habitat degradation as a result of air quality impacts (for example South Dublin Bay and River Tolka Estuary SPA will be adjacent to Rock Road at risk of increased traffic flows); and, 	<p>previous column in this table, either alone or in combination with the Proposed Scheme.</p> <p>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.</p> <p>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 Aviation Fuel Pipeline and has included mitigation in that regard to prevent any such adverse effects.</p>

Application Reference	Applicant for 'Other Development' and 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 style="list-style-type: none"> Disturbance and displacement impacts (for example ex-situ inland feeding sites which are utilised by SCI wintering bird species within the potential disturbance Zol of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	
311315	Park development project at the Racecourse Park	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example 	<p>No in-combination effect.</p> <p>The proposed Park Development project at Racecourse Park 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.</p> <p>The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>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.</p> <p>Considering the lack of physical overlap between the Proposed Scheme and the proposed Park Development project at Racecourse Park, the environmental</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	<p>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.</p> <p>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 Park development project at Racecourse Park and has included mitigation in that regard to prevent any such adverse effects.</p>

Application Reference	Applicant for 'Other Development' and 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?
309146, 309773	2 no. 110kV transmission lines and a 110kV Gas Insulated Switchgear (GIS) substation	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); and Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay 	<p>No in-combination effect.</p> <p>The proposed project to install 2 no. 110kV transmission lines and a 110kV Gas Insulated Switchgear (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.</p> <p>The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>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.</p> <p>Considering the lack of physical overlap between the Proposed Scheme and the proposed project to install 2 no. 110kV transmission lines and a 110kV Gas Insulated Switchgear (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.</p>

Application Reference	Applicant for 'Other Development' and 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, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 development of 2 no. 110kV transmission lines and a 110kV Gas Insulated Switchgear (GIS) substation and has included mitigation in that regard to prevent any such adverse effects.
-	Clongriffin to City Centre Core Bus Corridor Scheme	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); • 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 	<p>No in-combination effect.</p> <p>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.</p> <p>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.</p> <p>In granting permission for 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.</p> <p>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</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); • 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	<p>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.</p> <p>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.</p>
-	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	<p>No in-combination effect.</p> <p>The proposed Swords to City Centre Core Bus Corridor Scheme project must comply with all applicable planning</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); 	<p>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.</p> <p>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.</p> <p>In granting permission for 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.</p> <p>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.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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 style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); • 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA). 	
-	Ballymun/Finglas to City Centre Core Bus Corridor Scheme	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of <i>ex-situ</i> habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown 	<p>No in-combination effect.</p> <p>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.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA);</p> <ul style="list-style-type: none"> • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); • 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 	<p>In granting permission for 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.</p> <p>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 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.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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?
		Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA).	
-	Blanchardstown to City Centre Core Bus Corridor Scheme	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, 	<p>No in-combination effect.</p> <p>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.</p> <p>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.</p> <p>In granting permission for 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.</p> <p>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</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>Rogerstown Estuary SPA, and The Murrrough SPA); and</p> <ul style="list-style-type: none"> Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). 	<p>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.</p> <p>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.</p>
-	Lucan to City Centre Core Bus Corridor Scheme	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin 	<p>No in-combination effect.</p> <p>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.</p> <p>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.</p> <p>In granting permission for 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.</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Dalkey Islands SPA and The Murrrough SPA); and</p> <ul style="list-style-type: none"> Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). 	<p>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.</p> <p>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.</p>
-	Liffey Valley to City Centre Core Bus Corridor Scheme	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining 	<p>No in-combination effect.</p> <p>The proposed Liffey Valley to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental 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.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). 	<p>In granting permission for 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.</p> <p>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.</p> <p>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 Liffey Valley to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.</p>
-	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	<p>No in-combination effect.</p> <p>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</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>way, but themselves will not affect the conservation objectives of European sites.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European 	<p>Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.</p> <p>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.</p> <p>In granting permission for 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.</p> <p>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.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA);</p> <ul style="list-style-type: none"> 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	
-	Templeogue/Rathfarnham to City Centre Core Bus Corridor Scheme	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> Habitat fragmentation (for example European sites at risk of <i>ex-situ</i> habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands 	<p>No in-combination effect.</p> <p>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.</p> <p>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.</p> <p>In granting permission for 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,</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA);</p> <ul style="list-style-type: none"> • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands 	<p>including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.</p> <p>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.</p> <p>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.</p>

Application Reference	Applicant for 'Other Development' and 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, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA).	
-	Kimmage to City Centre Core Bus Corridor Scheme	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, Dalkey Islands SPA and The Murrrough SPA); and 	<p>No in-combination effect.</p> <p>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.</p> <p>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.</p> <p>In granting permission for 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.</p> <p>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</p>

Application Reference	Applicant for 'Other Development' and 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 style="list-style-type: none"> Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). 	<p>combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.</p> <p>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.</p>
-	Bray to City Centre Core Bus Corridor Scheme	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining 	<p>No in-combination effect.</p> <p>The proposed Bray 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.</p> <p>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.</p> <p>In granting permission for 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.</p> <p>Considering the lack of physical overlap between the Proposed Scheme and the Bray to City Centre Core Bus Corridor Scheme, the environmental protection policies</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	<p>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.</p> <p>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 Bray to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.</p>
-	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	No in-combination effect.

Application Reference	Applicant for 'Other Development' and 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?
		<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, 	<p>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.</p> <p>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.</p> <p>In granting permission for 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.</p> <p>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.</p> <p>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</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); • 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	<p>included mitigation in that regard to prevent any such adverse effects.</p>
	<p>SHDs (<i>Impact dependent on proximity to Proposed Scheme</i>)</p>	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p>	<p>No in-combination effect.</p> <p>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.</p> <p>Proposed SHD projects will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p>

Application Reference	Applicant for 'Other Development' and 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 style="list-style-type: none"> • Habitat fragmentation (for example European sites at risk of ex-situ habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough SPA); • 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 North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrough SPA); • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA); and 	<p>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.</p> <p>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.</p> <p>The Proposed SHD Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed SHD schemes and has included mitigation in that regard to prevent any such adverse effects.</p>

Application Reference	Applicant for 'Other Development' and 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 style="list-style-type: none"> 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 Zol of the Proposed Scheme for Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	
	<p>Irish Water Projects (<i>Impact dependent on proximity to Proposed Scheme</i>).</p> <p>Larger scale Irish Water infrastructure projects are described separately under major projects</p>	<p>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.</p> <p>The potential for in-combination effects could be as a result of:</p> <ul style="list-style-type: none"> Habitat fragmentation (for example European sites at risk of <i>ex-situ</i> habitat losses; Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, North Bull Island SPA and South Dublin Bay and River Tolka SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrrough SPA); Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example 	<p>No in-combination effect.</p> <p>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.</p> <p>Proposed Irish Water projects will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required.</p> <p>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.</p> <p>Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to</p>

Application Reference	Applicant for 'Other Development' and 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?
		<p>reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, Lambay Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Baldoyle Bay SAC, Baldoyle Bay SPA, Ireland's Eye SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA, Malahide Estuary SPA, Rogerstown Estuary SPA, and The Murrrough SPA);</p> <ul style="list-style-type: none"> • Habitat degradation as a result of introducing/spreading non-native invasive species (for example to downstream European sites North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary 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 Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrrough SPA). 	<p>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.</p> <p>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.</p>

9.2 Plan Level Environmental Protection Policies and Objectives

463 This section lists the overarching plan level environmental protection policies from the following plans Fingal County Development Plan 2017 – 2023, Dublin City Development Plan 2016 – 2022, South Dublin County Council Development Plan 2016 – 2022, Wicklow County Development Plan 2016 – 2022 and Dun Laoghaire-Rathdown County Development Plan 2016 – 2022.

464 The Proposed Scheme is compliant with all of the plan level biodiversity protection policies and objectives described above, including those within the Fingal County Development Plan 2017 – 2023, the Dublin City Development Plan 2016 – 2022, the South Dublin County Council Development Plan 2016 – 2022, the Wicklow County Development Plan 2016 – 2022 and the Dún Laoghaire-Rathdown County Development Plan 2016 – 2022. 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 County Development Plan 2017 – 2023

Objective NH15: 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 period of this Plan.

Objective NH16: Protect the ecological integrity of proposed Natural Heritage Areas (pNHAs), Natural Heritage Areas (NHAs), Statutory Nature Reserves, Refuges for Fauna, and Habitat Directive Annex I sites.

Objective NH17: 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.

Dublin City Development Plan 2016 - 2022

GI2: That any plan/project, either individually or in combination with other plans or projects that has the potential to give rise to significant effect on the integrity of any European site(s), shall be subject to an appropriate assessment in accordance with Article 6(3) and 6(4) of the EU Habitats Directives.

GI23: To protect flora, fauna and habitats, which have been identified by Articles 10 and 12 of Habitats Directive, Birds Directive, Wildlife Acts 1976–2012, the Flora (Protection) Order 2015 S.I. No. 356 of 2015, European Communities (Birds and Natural Habitats) Regulations 2011 to 2015.

GI24: To conserve and manage all Natural Heritage Areas, Special Areas of Conservation and Special Protection Areas designated, or proposed to be designated, by the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

South Dublin County Council Development Plan 2016 - 2022

Heritage, Conservation and Landscapes (HCL) Policy 12 Natura 2000 Sites: It is the policy of the Council to support the conservation and improvement of Natura 2000 Sites and to protect the Natura 2000 network from any plans and projects that are likely to have a significant effect on the coherence or integrity of a Natura 2000 Site.

- HCL12 Objective 1: To prevent development that would adversely affect the integrity of any Natura 2000 site located within and immediately adjacent to the County and promote favourable conservation status of habitats and protected species including those listed under the Birds Directive, the Wildlife Acts and the Habitats Directive.
- HCL12 Objective 2: To ensure that projects that give rise to significant direct, indirect or secondary impacts on Natura 2000 sites, either individually or in combination with other plans or projects, will not

be permitted unless the following is robustly demonstrated in accordance with Article 6(4) of the Habitats Directive and S.177AA of the Planning and Development Act (2000 – 2010) or any superseding legislation: 1. There are no less damaging alternative solutions available; and 2. There are imperative reasons of overriding public interest (as defined in the Habitats Directive) requiring the project to proceed; and 3. Adequate compensatory measures have been identified that can be put in place.

Heritage, Conservation and Landscapes (HCL) Policy 13 Natural Heritage Areas: It is the policy of the Council to protect the ecological, visual, recreational, environmental and amenity value of the County's proposed Natural Heritage Areas and associated habitats.

- HCL13 Objective 1: To ensure that any proposal for development within or adjacent to a proposed Natural Heritage Area (pNHA) is designed and sited to minimise its impact on the biodiversity, ecological, geological and landscape value of the pNHA particularly plant and animal species listed under the Wildlife Acts and the Habitats and Birds Directive including their habitats.
- HCL13 Objective 2: To restrict development within a proposed Natural Heritage Area to development that is directly related to the area's amenity potential subject to the protection and enhancement of natural heritage and visual amenities including biodiversity and landscapes.

Wicklow County Development Plan 2016 - 2022

NH2: No projects giving rise to significant cumulative, direct, indirect or secondary impacts on Natura 2000 sites 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 be permitted on the basis of this plan (either individually or in combination with other plans or projects).

NH3: To contribute, as appropriate, towards the protection of designated ecological sites including candidate Special Areas of Conservation (cSACs) 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). To contribute towards compliance with relevant EU Environmental Directives and applicable National Legislation, Policies, Plans and Guidelines, including 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 (85/337/EEC, as amended), the Water Framework Directive (2000/60/EC) and the Strategic Environmental Assessment Directive (2001/42/EC).
- National legislation, including the Wildlife Act 1976, the European Communities (Environmental Impact Assessment) Regulations 1989 (SI No. 349 of 1989) (as amended), 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) and the European Communities (Environmental Liability) Regulations 2008.
- National policy guidelines (including any clarifying Circulars or superseding versions of same), including the Landscape and Landscape Assessment Draft Guidelines 2000, the Environmental Impact Assessment Sub-Threshold Development Guidelines 2003, Strategic Environmental Assessment Guidelines 2004 and the Appropriate Assessment Guidance 2010.
- Catchment and water resource management Plans, including Eastern and South Eastern River Basin Management Plan 2009-2015 (including any superseding versions of same). Biodiversity Plans and guidelines, including Actions for Biodiversity 2011-2016: Ireland's 2nd National Biodiversity Plan (including any superseding version of same).

- Ireland's Environment 2014 (EPA, 2014, including any superseding versions of same), and to make provision where appropriate to address the report's goals and challenges.

NH4: All projects and plans arising from this plan (including any associated improvement works or associated infrastructure) will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive. A plan or project will only be authorised after the competent authority has ascertained, based on scientific evidence, Screening for Appropriate Assessment, and a Stage 2 Appropriate Assessment where necessary, that:

- 1) The Plan or project will not give rise to significant adverse direct, indirect or secondary effects on the integrity of any European site (either individually or in combination with other plans or projects); or
- 2) The Plan or project will have significant adverse effects on the integrity of any European site (that does not host a priority natural habitat type and/or a priority species) but there are no alternative solutions, and the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000; or
- 3) The Plan or project will have a significant adverse effect on the integrity of any European site (that hosts a natural habitat type and/or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons for overriding public interest, restricted to reasons of human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000.

NH5: To maintain the conservation value of all proposed and future Natural Heritage Areas (NHAs) and to protect other designated ecological sites in Wicklow.

NH6: 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.

Dun Laoghaire-Rathdown County Development Plan 2016 - 2022

Policy LHB19: Protection of Natural Heritage and the Environment* It is Council policy 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, candidate Special Areas of Conservation, proposed Natural Heritage Areas and Ramsar sites - as well as non-designated areas of high nature conservation value which serve as 'Stepping Stones' for the purposes of Article 10 of the Habitats Directive.

Policy LHB20: Habitats Directive* It is Council policy 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.

Policy LHB22: Designated Sites* It is Council policy to protect and preserve areas designated as proposed Natural Heritage Areas, candidate 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

9.3 Conclusion of In Combination Assessment

- 465 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.
- 466 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 report, no adverse effects on European site integrity will arise from the implementation of the Proposed Scheme.
- 467 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.
- 468 As the Proposed Scheme will not affect the integrity of European sites within the ZOI 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.
- 469 Table 39 and Table 40 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.
- 470 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.
- 471 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

- 472 This NIS has examined and analysed, in light of the best scientific knowledge, with respect to those European sites within the zone of influence of the Proposed Scheme, the potential impact sources and pathways, how these could impact on the sites' special conservation interest species and whether the predicted impacts would adversely affect the integrity of North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Rockabill to Dalkey Islands SAC, Wicklow Mountains SAC, Lambay Island SAC, South Dublin Bay and River Tolka Estuary SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA, North Bull Island SPA, Dalkey Islands SPA, Baldoyle Bay SPA, Howth Head Coast SPA, Malahide estuary SPA, Rogerstown Estuary SPA, Rockabill SPA and The Murrough SPA. There are no other European sites at risk of effects from the Proposed Scheme.
- 473 Avoidance, design requirements and mitigation measures are set out within this NIS (and its appendices) and they ensure that any impacts on the conservation objectives of European sites will be avoided during the construction and operation of the Proposed Scheme such that there will be no risk of adverse effects on these European sites.
- 474 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 with the 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.

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