Liffey Valley to City Centre Core Bus Corridor Scheme

June 2022

Natura Impact Statement

Main Report

BUS CONNECTS

SUSTAINABLE TRANSPORT FOR A BETTER CITY.

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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 Liffey Valley to City Centre Core Bus Corridor Scheme (hereafter referred to as the Proposed Scheme). The Proposed Scheme aims to provide enhanced walking, cycling and bus infrastructure on this key access corridor in the Dublin region, which will enable and deliver efficient, safe, and integrated sustainable transport movement along the corridor

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 sites[1] 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 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.

6 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 not have a significant effect on some European site(s) in view of their conservation objectives.

7 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.

8 The Proposed Scheme is neither connected with nor necessary to the management of any European sites.

9 It is the considered view of the authors of this NIS (Scott Cawley Ltd.) that, following the implementation of the mitigation measures proposed in Sections 7.1.4 and 8.1, the Proposed Scheme will not, individually

[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* – as defined under the Planning and Development Acts and/or Birds and Habitats Regulations as (a) a candidate site of Community importance, (b) a site of Community importance, (ba) a candidate special area of conservation, (c) a special area of conservation, (d)a candidate special protection area, or (e) a special protection area. They are commonly referred to in Ireland as candidate Special Areas of Conservation (cSACs) and Special Protection Areas (SPAs).

or in combination with other plans or projects, have any adverse effect on the integrity of any European sites in view of their conservation objectives.

2 Legislative Context

10 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.'*

11 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.'*

12 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.

13 In the latter context, subsection 177T(1) and (2) provide that:

14 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*'.

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

3 Description of the Proposed Scheme

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

17 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.).

18 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 site's QIs or SCIs.

3.1 Overview

19 The Proposed Scheme is approximately 9.2km long from end to end and will commence on the Fonthill Road at the tie in point with the new Liffey Valley Shopping Centre Bus Interchange and Road Improvement Scheme. The route will continue along the distributor road to the west and south of Liffey Valley Shopping Centre in a southerly direction towards Coldcut Road. From here it will join the R833 Coldcut Road and continue to the bridge over the M50, subsequently turning onto the R833 Ballyfermot Road. The Proposed Scheme will travel through Ballyfermot Village and continue onto the Sarsfield Road, whilst city bound general traffic will be diverted via Le Fanu Road and Kylemore Road back to Ballyfermot Road.

20 The Proposed Scheme will continue along Ballyfermot Road and Sarsfield Road, turning right at the junction with Con Colbert Road before turning right again onto Grattan Crescent. At the intersection of Grattan Crescent and Emmet Road the Proposed Scheme will travel along Emmet Road, Old Kilmainham, Mount Brown and James's Street. From here the Proposed Scheme will join Thomas Street, Cornmarket and go along High Street to the junction with Nicholas Street and Winetavern Street where it will join the existing traffic management regime in the City Centre and terminates at the end of High Street. See Appendix I for the general arrangement drawings in respect of the layout, and Appendix IV for the surface water drainage design drawings showing surface water connections for the Proposed Scheme.

21 For the purposes of describing the Proposed Scheme it has been split into three main sections which have also been sub-divided as follows:

- Section 1: Liffey Valley to Le Fanu Road;
- Section 2: Le Fanu Road to Sarsfield Road; and
- Section 3: Sarsfield Road to City Centre.

22 The Proposed Scheme includes a substantial increase in the level of bus and cycle priority provided along the corridor, including the provision of additional lengths of bus lane and cycle lane, both inbound and outbound. Bus stops will be enhanced throughout the Proposed Scheme to improve the overall journey experience for bus passengers.

23 The main characteristics of the construction stage of the Proposed Scheme that have potential for ecological impact are:

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

3.2 Structural Works

24 There are no major structural works proposed as part of this Proposed Scheme, although there are a number of minor structural works, including the construction of three no. retaining walls.

3.3 Surface Water Drainage Infrastructure

25 It is proposed to connect proposed drainage infrastructure into the existing surface water drainage system. There are three existing surface water catchments within the Proposed Scheme. Surface waters will drain to the Quarryvale Stream (Liffey_180), the River Liffey (Liffey_180 & Liffey_190) and, to Liffey_190. Camac_040 and Ringsend WWTP, via a combined sewer. The Proposed Scheme also crosses the River Camac (Camac_040) at Emmet Road, Kilmainham.

26 The drainage system for the Proposed Scheme will discharge to three waterbodies, the Liffey_180 and Liffey_190; and to the Camac_040 and Ringsend WwTP (which ultimately discharges to Liffey Estuary

Lower, Dublin Bay, post treatment). All drainage outfall discharges to surface waters represent point discharges.

27 Runoff will discharge through existing surface water outfalls to the Liffey_180, Liffey_190 and Camac_040, or through the existing combined drainage system to Ringsend WwTP. There will be a net increase in impermeable area draining to the Liffey_180 of 9,188m^2 , which equates to a 10% increase. There will also be a net increase in impermeable area draining to the Liffey_190 of 5,847m^2 , which also equates to a 10% increase. There is no direct hydrological connection from the Proposed Scheme to the Liffey Estuary Upper and Camac_040. Indirect impacts could occur as a result of increased frequency and duration in the operation of SWOs which discharge to the waterbody from the combined sewer in Catchment 3 (Section 3: Sarsfield Road to City Centre); however, there is no increase in impermeable area draining to Ringsend WwTP and so there will be no impacts.

28 Notwithstanding this, the drainage design principles ensure that there will be no net increase in the surface water flow discharged to these receptors.

29 Particular aspects of relevance to this assessment include the existing and proposed drainage and the construction aspects of the Proposed Scheme. The Proposed Scheme is hydrologically connected to Dublin Bay and it is proposed to connect the proposed drainage infrastructure into the existing surface water network. Surface waters from the Proposed Scheme will drain to Dublin Bay via the Liffey_180, Liffey_190, Camac_040 and Ringsend WWTP The Proposed Scheme will increase the amount of impermeable surface area through widening of carriageways. Drainage of these newly paved areas will include SuDS measures to treat and attenuate any additional runoff. These measures will ensure that there is no increase in existing runoff rates from newly paved areas and appropriate treatment to ensure runoff quality. SuDS measures proposed for this scheme include relocation and addition of drainage gullies, permeable paving, bio retention area, rain gardens, green roofs, filter drains and tree pits which will be installed in suitable locations along the Proposed Scheme (e.g. in the central median and along road verges).

Table 1 Proposed SuDs and Impermeable Area Changes

Existing Catchment Reference	Waterbody	Approx. Impermeable Surface Area m^2			SuDS Measures Proposed
		Existing	Additional	Percentage change	
R7-1	Liffey_180	90,849	9,188	10%	Swales, UAT, Bio retention systems, OSP, Dry Detention Basins, Rain Garden
R7-2	Liffey_180. Liffey_190	56,879	5,847	10%	OSP, UAT, Attenuation Pond, FD
R7-3	Camac_040, Liffey estuary Upper	72,564	0	0%	None

3.4 Construction Compounds

30 There will be three no. construction compounds on the Proposed Scheme. They will be located in;

- the Fonthill Road, within the grounds of the Liffey Valley Shopping Centre;
- at lands adjacent to the Eir exchange building on the Coldcut Road, between Cloverhill Road and Ballyfermot Road; and
- at lands along Con Colbert Road, before the junction with Chapelizod Bypass, within Liffey Gaels Park for the duration of the construction works (30 months).

3.5 Estimated Project Duration

31 The duration of the construction phase is estimated to be of the duration of 30 months. Given the significance of this existing transport corridor, individual works areas are sufficiently independent of one another so as that the traffic impact of the construction works will be minimized.

3.6 Operational Phase

32 The main characteristics of the operational stage 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

33 This NIS was authored primarily by Kristie Watkin-Bourne, Laura Higgins and Eoin Cussen of Scott Cawley Ltd., and reviewed by Niamh Burke of Coiscéim ecology. The background and experience of the author and contributors to this report are set out below.

Kristie Watkin-Bourne

34 Kristie Watkin-Bourne is a Senior Consultant Ecologist at Scott Cawley Ltd. She holds a first-class honours degree in Physical Geography from Swansea University, and a first-class master's degree in Applied Environmental Science from University College Dublin. She is a CIEEM Member (Qualifying) and is experienced in conducting a range of terrestrial and aquatic ecological surveys for habitat and site appraisals, species monitoring, and impact assessment. With five years consultancy experience, Kristie has a wide range of experience in Appropriate Assessment, Ecological Impact Assessment, Cumulative Impact Assessment, and Strategic Environmental Assessment of plans and projects within the Irish planning environment. Kristie has worked on behalf of public sector bodies including Irish Water, The National Transport Authority, and several County Councils in addition to private developers across infrastructure, renewable energy, and residential development projects.

Laura Higgins

35 Laura Higgins is a Senior Ecologist with Scott Cawley Ltd. and has worked at the company since 2018. She holds a first class honours degree in Natural Sciences, with a specialisation in Zoology from Trinity College Dublin. Laura has worked on a wide range of residential, commercial, and infrastructural projects across Ireland, and her current role involves project management and survey management of complex projects. She regularly carries out assessments and prepares reports including Ecological Impact Assessments, Environmental Impact Assessment Report chapters and Appropriate Assessment reports. Her ecological field survey experience includes habitat, invasive species, amphibian, bird, mammal and bat surveys.

Eoin Cussen

36 Eoin Cussen is a Senior Consultant Ecologist with Scott Cawley Ltd. Eoin holds a BSc (Hons) in Zoology from University College Cork and MSc (Hons) in Ecological Assessment from the same institution. Eoin is an experienced ecologist with over 4 years' professional postgraduate experience in ecological consultancy including planning related casework for state and non-governmental organisations within Ireland and the UK, input to and preparation of Appropriate Assessment (AA) screenings, Natura Impact Statements, Preliminary Ecological Assessments and Ecological Impact Assessments, and a wide range of experience of ecological surveys for protected habitats and species including otters, bats, birds.

Niamh Burke

37 Niamh Burke is Principal Ecologist with Coiscéim Ecology. She holds a BSc (Hons) in Natural Sciences with Environmental Science and a PhD in salmonid ecology. She is a Chartered Environmentalist (CEnv) with the Society for the Environment (Soc Env) and a Full Member of the CIEEM. Niamh is a senior scientist with academic research and consulting experience in terrestrial ecology, aquatic ecology and fluvial geomorphology. She is an experienced project manager with a full working knowledge of EIA, the planning process and relevant environmental legislation, both national and European. With a specialism in aquatic habitats, she also has experience of terrestrial species' surveys and mitigation approaches. In her extensive consultancy roles she has acted as reviewer for all ecological reporting, ensuring consistency of standards and approach, and currently acts as an external reviewer for Scott Cawley Ltd.

4.2 Guidance and Approach

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

European Commission Guidance

- *Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC* (European Commission, 2021)
- *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)[2]
- *Nature and Biodiversity Cases – Ruling of the European Court of Justice* (European Commission 2006)
- EC (2013) Interpretation Manual of European Union Habitats. Version EUR 28. European Commission.
- *Article 6 of the Habitats Directive – Rulings of the European Court of Justice* (European Commission Final Draft September 2014)

Irish Guidance

- *Appropriate Assessment Screening for Development Management: OPR Practice Note PN01 (OPR, 2021)*
- *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities* (Department of Environment, Heritage and Local Government 2010 revision)

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

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

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

- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. *Circular NPW 1/10 & PSSP 2/10* (NPWS, 2010)

39 In addition, regard has been had to guidance in characterising impacts, including determining magnitude and significance of impacts, as relevant in the application to Appropriate Assessment and European sites:

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

4.3 Assessment Methodology

40 The Proposed Scheme was analysed and appraised to identify the potential impacts that could affect the ecological environment.

41 From this, the ecological 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.

42 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.

43 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).

44 The identification of a source-pathway-receptor risk does not mean that significant effects will arise. Rather the likelihood of significant effects will depend upon the characteristics of the source (e.g. extent and duration of construction works), the characteristics of the pathway (e.g. direction and strength of prevailing winds for air borne pollution) and the characteristics of the receptor (e.g. the sensitivities of the European site and its QIs / SCIs). However, identification of the risk does mean that there is a possibility of an effect on the environment, with the significance of the effect depending upon the nature and exposure to the risk and the characteristics of the receptor. In this case. Where there is any uncertainty, the precautionary principle has been applied.

45 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.

46 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".

47 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

48 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

49 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.

50 In the case of Irelands Eye SPA, Howth Head Coast SPA, Lambay Island 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.

51 In the case of some QIs / SCIs in certain European sites, the conservation objective is to restore rather than maintain conservation condition and this distinction is taken into account in the assessment; as is any legacy damage to European sites that has occurred since their designation, insofar as possible.

52 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

53 The desktop data sources used to inform the assessment presented in this report are as follows (accessed in November 2020 and updated in February 2022). The results of which are shown in Appendix II:

- Online data available on European sites and on Natural Heritage Areas (NHAs) or proposed Natural Heritage Areas (pNHAs) from www.npws.ie[3], including conservation objectives documents;
- Online data records available on National Biodiversity Data Centre Database (NBDC Online Database 2022);
- Ordnance Survey Ireland (OSI) orthophotography for the Proposed Scheme study area available from www.osi.ie;
- Records of rare and / or protected species for the 10km grid squares O03, O13 and O23, held by the NPWS;
- Habitat and species GIS datasets provided by the NPWS, including Article 12 and Article 17 data[4];
- Records from the Botanical Society of Britain and Ireland (BSBI);

[3] The following SAC and SPA GIS boundary datasets are the most recently available at the time of writing: SAC_ITM_2022_02 and SPA_ITM_2021_10.

[4] 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.

- Information contained within the *Flora of County Dublin*[5];
- Environmental information / data for the area available from the EPA website www.epa.ie;
- Information on the status of EU protected habitats and species in Ireland[6];
- Information on light-bellied brent goose inland feeding sites from the Natura Impact Statement prepared for a Proposed Residential Development, St. Paul's College, Sybill Hill, Raheny, Dublin 57;
- The results of ecological surveys undertaken as part of the Environmental Impact Assessment (EIA) studies for the proposed Project (see Section 5 below for details); and
- Information on the location, nature and design of the Proposed Scheme supplied by the applicant's design team.

4.5 Consultations

Table 2 outlines the Appropriate Assessment issues raised during consultation.

Table 2 Principal AA Issues Raised During Consultation

Consultee	Phase / Date of Consultation	Issues Raised	Relevant Section of the NIS where the issues raised in consultation are addressed
Department of Housing, Local Government and Heritage (formerly Department of Culture, Heritage and the Gaeltacht	30th July 2019 Ref. G Pre00165/2019	The Department recommend identification, description, and assessment of direct and indirect impacts of the Proposed Scheme on the following features: • 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	Section 5.1 European Sites, Section 3.6 Baseline, Section 7 Assessment of Effects on European Sites

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

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

7 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.*

Consultee	Phase / Date of Consultation	Issues Raised	Relevant Section of the NIS where the issues raised in consultation are addressed
		Detailed bird surveys should be undertaken at all times of the year to establish areas of the Proposed Scheme used by birds should be included in the AA.	Section 3.6 Baseline,
		The Department requires that the Appropriate Assessment addresses the issue of invasive alien plant and animal species and include detailed methods to ensure accidental introduction or spreading does not occur. The Department recommended that an Invasive Species Action Plan should form part of the planning application.	Section 6.3 Habitat degradation as a result of introducing/spreading non-native invasive species.
		Department recommended that the Cumulative impacts of the Proposed Scheme be considered, to include interaction between different and / or approved plans and projects in the same area as the Proposed Scheme.	Section 1 Introduction, 2 Legislative Context, 6.4 Disturbance and Displacement Impacts
		The Department recommended that the Proposed Scheme be subject to Appropriate Assessment in respect of potential to impact Natura 2000 sites either alone or in combination with other plans or projects, and must contain complete (contain no lacunae), precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the works proposed on the protected site concerned. To assess mitigations, the following tasks must be completed: • List each of the measures to be introduced (e.g. noise bunds, tree planting). • Explain how the measures will avoid the adverse impacts on the site. • Explain how the measures will reduce the adverse impacts on the site. Then, for each of the listed mitigation measures: • Provide evidence of how they will be secured and implemented and by whom. • Provide evidence of the degree of confidence in their likely success. • Provide a timescale, relative to the project or plan, when they will be implemented. Where residual impacts remain, further mitigation measures may be required: • Evidence should be provided of how mitigation measures will be monitored. • Monitoring should take place immediately down-stream of the Proposed Scheme. • The applicant should not use any proposed post construction monitoring as mitigation to supplement inadequate information in the assessment.	The Proposed Scheme has been subject to Screening for AA and the production of a Natura Impact statement, which accompanies the planning submission. Section 6 Potential Impacts, Zone of Influence and Identifying European Sites at Risk of Effects

4.6 Baseline Surveys

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

4.6.1 Habitats and Flora

55 Habitat surveys were carried out by Scott Cawley Ltd., between June and August 2018 along the then Proposed Scheme alignment (See Figure 1). Confirmatory surveys were subsequently undertaken on the Proposed Scheme again in August 2020 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 Fossitt[8] and in accordance with Best Practice Guidance for Habitat Survey and Mapping[9]. 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 2011 Birds and 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 Edition[10].

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

4.6.2 Fauna Surveys

57 Ecological surveys relevant to this NIS 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 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 32km 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 50km south-west of the Proposed Scheme in the River Barrow catchment, River Nore catchment and River Ballyteigue-Bannow catchment. There is no hydrological connectivity between the Proposed Scheme and these European sites.

4.6.2.1 Otter

58 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 2020. 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

[8] Fossitt, J.A. (2000) A Guide to Habitats in Ireland. Heritage Council, Kilkenny.

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

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

observation. In addition, the study area was surveyed for the presence of otter holts. Where present, any evidence of use was recorded.

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

4.6.2.2 Kingfisher

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

4.6.2.3 Other Birds

61 The results of the desk study have informed the assessment of potential impacts on breeding bird species arising from the Proposed Scheme.

62 A desk study was carried out to identify any potential suitable inland feeding and / or roosting sites for winter birds located within or directly adjacent to the Proposed Scheme. This included a review of recent aerial photography and known inland feeding sites for the SCI bird species light-bellied brent goose *Branta bernicla hrota*[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.

63 The desk study identified three sites adjacent to the Proposed Scheme with potential for wintering birds that would be subject to direct habitat loss. These sites are located adjacent to Ballyfermot College of Further Education (BCFE) on R112 / Kylemore Road referred to as CBC0007WB001, at Longmeadow's Park on Sarsfield Road, referred to as CBC0007WB002 and along Con Colbert Road, before the junction with Chapelizod Bypass, within Liffey Gaels Park, referred to as CBC0007WB003. A field survey was carried out to confirm the suitability or presence of wintering birds at CBC0007WB001, CBC0007WB002 and CBC0007WB003; which were found to be suitable for wintering birds and were surveyed twice a month, between the months of October 2020 to March 2021, and October 2021 to 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. Winter bird transect Locations are shown in Figure 2.

64 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, 2010) to confirm identification (where necessary), and were recorded using the British Trust for Ornithology (BTO) species codes. The total flock size of birds present, their general location within the site and any activity exhibited were also recorded. Evidence of bird droppings were recorded at pre-defined transect lines. The length of the transect line varied per site. Transect lines were only completed at sites where no bird species were present, to avoid any potential disturbance.

5 Overview of the Receiving Environment

5.1 European Sites

65 The Proposed Scheme does not overlap with any European site. The nearest European site to the Proposed Scheme is South Dublin Bay and River Tolka Estuary SPA, which is located approximately 3.3km away. The nearest European site with a hydrological connection to the Proposed Scheme is South Dublin Bay and River Tolka Estuary SPA, which is located approximately 5.6km downstream of the Proposed Scheme terminus at Winetavern Street. This is followed by South Dublin Bay SAC, which is located approximately 6.5km downstream of the Proposed Scheme terminus at Winetavern Street.

66 There are eight European sites located in Dublin Bay that are hydrologically connected to the Proposed Scheme. These European Sites are 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 SPA, Howth Head Coast SPA, and Dalkey Island SPA. European sites will be hydrologically connected to the Proposed Scheme via three watercourses i.e. the Liffey_180, Liffey_190 and the Camac_040, and the Ringsend WWTP.

67 There are thirteen SPAs designated for SCI species that are known to forage and / or roost at inland sites across Dublin City. These are Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA, Ireland's Eye SPA, Lambay Island SPA, Howth Head Coast SPA, Dalkey Islands SPA, Rockabill SPA, Wicklow Mountains SPA and The Murrough SPA.

68 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.

69 The European sites present in the vicinity of the Proposed Scheme are listed in Table 3 along with their qualifying interests and proximity to the Proposed Scheme and shown on Figure 4.

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)	
South Dublin Bay SAC [000210] 1140 Mudflats and sandflats not covered by seawater at low tide 1210 Annual vegetation of drift lines 1310 *Salicornia* and other annuals colonising mud and sand 2110 Embryonic shifting dunes *S.I. No. 525/2019 - European Union Habitats (South Dublin Bay Special Area of Conservation 000210) Regulations 2019* NPWS (2013a) *Conservation Objectives: South Dublin Bay SAC 000210.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	Approximately 4km from the Proposed Scheme
North Dublin Bay SAC [000206] 1140 Mudflats and sandflats not covered by seawater at low tide 1210 Annual vegetation of drift lines 1310 *Salicornia* and other annuals colonising mud and sand 1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) 1395 Petalwort *Petalophyllum ralfsii* 1410 Mediterranean salt meadows (Juncetalia maritimi) 2110 Embryonic shifting dunes 2120 Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)* 2190 Humid dune slacks *S.I. No. 524/2019 - European Union Habitats (North Dublin Bay Special Area of Conservation 000206) Regulations 2019* NPWS (2013b) *Conservation Objectives: North Dublin Bay SAC 000206.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	Approximately 6.3km from 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)
Rye Water Valley/Carton SAC [003198] 7220 Petrifying springs with tufa formation (*Cratoneurion*) 1014 Narrow-mouthed Whorl Snail *Vertigo angustior* 1016 Desmoulin's Whorl Snail *Vertigo moulinsiana* S.I. No. 494/2018 - European Union Habitats (Rye Water Valley/Carton Special Area of Conservation 001398) Regulations 2018 NPWS (2021a) *Conservation Objectives for Rye Water Valley/Carton SAC* [003198]. Version 1	Approximately 6.5km from the Proposed Scheme
Glenasmole Valley SAC [001209] 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) 6410 *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) 7220 Petrifying springs with tufa formation (*Cratoneurion*)* *S.I. No. 345/2021 – European Union Habitats (Glenasmole Valley Special Area of Conservation 001209) Regulations 2021* NPWS (2021b) *Conservation objectives for Glenasmole Valley SAC [001209].* Generic Version 8.0. Department of Housing, Local Government and Heritage.	Approximately 9.3km from the Proposed Scheme
Baldoyle Bay SAC [000199] 1140 Mudflats and sandflats not covered by seawater at low tide 1310 *Salicornia* and other annuals colonizing mud and sand 1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) 1410 Mediterranean salt meadows (Juncetalia maritimi) *S.I. No. 472/2021 - European Union Habitats (Baldoyle Bay Special Area of Conservation 000199) Regulations 2021* NPWS (2012) *Conservation Objectives: Baldoyle Bay SAC 000199.* Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht	Approximately 11.2km from 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)
Wicklow Mountains SAC [002122] 3110 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) 3160 Natural dystrophic lakes and ponds 4010 Northern Atlantic wet heaths with *Erica tetralix* 4030 European dry heaths 4060 Alpine and Boreal heaths 6130 Calaminarian grasslands of the Violetalia calaminariae 6230 Species-rich *Nardus* grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) 7130 Blanket bogs (* if active bog) 8110 Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) 8210 Calcareous rocky slopes with chasmophytic vegetation 8220 Siliceous rocky slopes with chasmophytic vegetation 91A0 Old sessile oak woods with *Ilex* and Blechnum in the British Isles 1355 *Lutra lutra* (Otter) NPWS (2017) *Conservation Objectives: Wicklow Mountains SAC 002122.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	Approximately 11.4km from the Proposed Scheme
Howth Head SAC [000202] 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts 4030 European dry heaths *S.I. No. 524/2021 - European Union Habitats (Howth Head Special Area of Conservation 000202) Regulations 2021.* NPWS (2016) *Conservation Objectives: Howth Head SAC 000202.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	Approximately 12km from the Proposed Scheme
Rockabill to Dalkey Island SAC [003000] 1170 Reefs 1351 Harbour porpoise *Phocoena phocaena* *S.I. No. 94/2019 - European Union Habitats (Rockabill To Dalkey Island Special Area of Conservation 003000) Regulations 2019* NPWS (2013c) *Conservation Objectives: Rockabill to Dalkey Island SAC 003000.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	Approximately 12.1km from 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)
Malahide Estuary SAC [000205] 1140 Mudflats and sandflats not covered by seawater at low tide 1310 Salicornia and other annuals colonising mud and sand 1320 *Spartina* swards (Spartinion maritimae)[11] 1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) 1410 Mediterranean salt meadows (Juncetalia maritimi) 2120 Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)* *S.I. No. 91/2019 - European Union Habitats (Malahide Estuary Special Area Of Conservation 000205) Regulations 2019* NPWS (2013d) *Conservation Objectives: Malahide Estuary SAC 000205.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	Approximately 13.8km from the Proposed Scheme
Rogerstown Estuary SAC [000208] 1130 Estuaries 1140 Mudflats and sandflats not covered by seawater at low tide 1310 *Salicornia* and other annuals colonising mud and sand 1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) 1410 Mediterranean salt meadows (Juncetalia maritimi) 2120 Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)* *S.I. No. 286/2018 - European Union Habitats (Rogerstown Estuary Special Area of Conservation 000208) Regulations 2018* NPWS (2013e) *Conservation Objectives: Rogerstown Estuary SAC 000208*. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	Approximately 18.4km from the Proposed Scheme

[11] 1320 *Spartina* swards (Spartinion maritimae) habitat is included within the conservation objectives document for Malahide Estuary SAC, but not within the Statutory Instruments document. NPWS note that *Spartina* swards are now considered non-native species and as such no targets are set in in respect of this habitat nor is necessary to assess the likely effects of plans or projects against this Annex I habitat at this site.

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)
Lambay Island SAC [000204] 1170 Reefs 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts 1364 Grey seal *Halichoerus grypus* 1365 Harbour seal *Phoca vitulina* *S.I. No. 294/2019 - European Union Habitats (Lambay Island Special Area of Conservation 000204) Regulations 2019* NPWS (2013f) *Conservation Objectives: Lambay Island SAC 000204. Version 1*. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	Approximately 22.5km from the Proposed Scheme
Special Protection Area (SPA)	
South Dublin Bay and River Tolka Estuary SPA [004024] A046 Light-bellied Brent Goose *Branta bernicla hrota* A130 Oystercatcher *Haematopus ostralegus* A137 Ringed Plover *Charadrius hiaticula* A141 Grey Plover *Pluvialis squatarola* A143 Knot *Calidris canutus* A144 Sanderling *Calidris alba* A149 Dunlin *Calidris alpina* A157 Bar-tailed Godwit *Limosa lapponica* A162 Redshank *Tringa totanus* A179 Black-headed Gull *Chroicocephalus ridibundus* A192 Roseate Tern *Sterna dougallii* A193 Common Tern *Sterna hirundo* A194 Arctic Tern *Sterna paradisaea* A999 Wetland and Waterbirds *S.I. No. 212/2010 - European Communities (Conservation of Wild Birds (South Dublin Bay and River Tolka Estuary Special Protection Area 004024)) Regulations 2010.* NPWS (2015a) *Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024*. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	Approximately 3.4km from 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)
North Bull Island SPA [004006] A046 Light-bellied Brent Goose *Branta bernicla hrota* A048 Shelduck *Tadorna tadorna* A052 Teal *Anas crecca* A054 Pintail *Anas acuta* A056 Shoveler *Anas clypeata* A130 Oystercatcher *Haematopus ostralegus* A140 Golden Plover *Pluvialis apricaria* A141 Grey Plover *Pluvialis squatarola* A143 Knot *Calidris canutus* A144 Sanderling *Calidris alba* A149 Dunlin *Calidris alpina* A156 Black-tailed Godwit *Limosa limosa* A157 Bar-tailed Godwit *Limosa lapponica* A160 Curlew *Numenius arquata* A162 Redshank *Tringa totanus* A169 Turnstone *Arenaria interpres* A179 Black-headed Gull *Chroicocephalus ridibundus* A999 Wetlands & Waterbirds *S.I. No. 211/2010 - European Communities (Conservation of Wild Birds (North Bull Island Special Protection Area 004006)) Regulations 2010.* NPWS (2015b) *Conservation Objectives: North Bull Island SPA 004006.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	Approximately 6.3km from the Proposed Scheme
Baldoyle Bay SPA [004016] A046 Light-bellied Brent Goose *Branta bernicla hrota* A048 Shelduck *Tadorna tadorna* A137 Ringed Plover *Charadrius hiaticula* A140 Golden Plover *Pluvialis apricaria* A141 Grey Plover *Pluvialis squatarola* A157 Bar-tailed Godwit *Limosa lapponica* A999 Wetland and Waterbirds *S.I. No. 275/2010 - European Communities (Conservation of Wild Birds (Baldoyle Bay Special Protection Area 004016)) Regulations 2010.* NPWS (2013g) *Conservation Objectives: Baldoyle Bay SPA 004016. Version 1.* National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	Approximately 11.4km from 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)
Wicklow Mountains SPA [004040] A098 Merlin *Falco columbarius* A103 Peregrine *Falco peregrinus* *S.I. No. 586/2012 - European Communities (Conservation of Wild Birds (Wicklow Mountains Special Protection Area 004040)) Regulations 2012.* NPWS (2022a) *Conservation objectives for Wicklow Mountains SPA [004040].* Generic Version 8.0. Department of Housing, Local Government and Heritage.	Approximately 11.7km from the Proposed Scheme
Dalkey Islands SPA [004172] A192 Roseate Tern *Sterna dougallii* A193 Common Tern *Sterna hirundo* A194 Arctic Tern *Sterna paradisaea* *S.I. No. 238/2010 - European Communities (Conservation of Wild Birds (Dalkey Islands Special Protection Area 004172)) Regulations 2010* NPWS (2022b) *Conservation objectives for Dalkey Islands SPA [004172].* Generic Version 8.0. Department of Housing, Local Government and Heritage.	Approximately 13.8km from the Proposed Scheme
Malahide Estuary SPA [004025] A005 Great Crested Grebe *Podiceps cristatus* A046 Light-bellied Brent Goose *Branta bernicla hrota* A048 Shelduck *Tadorna tadorna* A054 Pintail *Anas acuta* A067 Goldeneye *Bucephala clangula* A069 Red-breasted Merganser *Mergus serrator* A130 Oystercatcher *Haematopus ostralegus* A140 Golden Plover *Pluvialis apricaria* A141 Grey Plover *Pluvialis squatarola* A143 Knot *Calidris canutus* A149 Dunlin *Calidris alpina* A156 Black-tailed Godwit *Limosa limosa* A157 Bar-tailed Godwit *Limosa lapponica* A162 Redshank *Tringa totanus* A999 Wetland and Waterbirds *S.I. No. 285/2011 - European Communities (Conservation of Wild Birds (Malahide Estuary Special Protection Area 004025)) Regulations 2011.* NPWS (2013h) *Conservation Objectives: Malahide Estuary SPA 004025.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	Approximately 13.9km from 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)
Howth Head Coast SPA [004113] A188 Kittiwake *Rissa tridactyla* *S.I. No. 185/2012 - European Communities (Conservation of Wild Birds (Howth Head Coast Special Protection Area 004113)) Regulations 2012.* NPWS (2022c) *Conservation objectives for Howth Head Coast SPA [004113].* Generic Version 8.0. Department of Housing, Local Government and Heritage.	Approximately 14.6km from the Proposed Scheme
Ireland's Eye SPA [004117] A017 Cormorant *Phalacrocorax carbo* A184 Herring Gull *Larus argentatus* A188 Kittiwake *Rissa tridactyla* A199 Guillemot *Uria aalge* A200 Razorbill *Alca torda* *S.I. No. 240/2010 - European Communities (Conservation of Wild Birds (Ireland's Eye Special Protection Area 004117)) Regulations 2010.* NPWS (2022d) *Conservation objectives for Ireland's Eye SPA [004117].* Generic Version 8.0. Department of Housing, Local Government and Heritage.	Approximately 15km from the Proposed Scheme
Rogerstown Estuary SPA [004015] A043 Greylag Goose *Anser anser* A046 Brent Goose *Branta bernicla hrota* A048 Shelduck *Tadorna tadorna* A056 Shoveler *Anas clypeata* A130 Oystercatcher *Haematopus ostralegus* A137 Ringed Plover *Charadrius hiaticula* A141 Grey Plover *Pluvialis squatarola* A143 Knot *Calidris canutus* A149 Dunlin *Calidris alpina alpina* A156 Black-tailed Godwit *Limosa limosa* A162 Redshank *Tringa totanus* A999 Wetlands *S.I. No. 271/2010 - European Communities (Conservation of Wild Birds (Rogerstown Estuary Special Protection Area 004015) Regulations 2010.* NPWS (2013i) *Conservation Objectives: Rogerstown Estuary SPA 004015*. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	Approximately 18.4km from 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)
Lambay Island SPA [004069] A009 Fulmar *Fulmarus glacialis* A017 Cormorant *Phalacrocorax carbo* A018 Shag *Phalacrocorax aristotelis* A043 Greylag Goose *Anser anser* A183 Lesser Black-backed Gull *Larus fuscus* A184 Herring Gull *Larus argentatus* A188 Kittiwake *Rissa tridactyla* A199 Guillemot *Uria aalge* A200 Razorbill *Alca torda* A204 Puffin *Fratercula arctica* *S.I. No. 242/2010 - European Communities (Conservation of Wild Birds (Lambay Island Special Protection Area 004069)) Regulations 2010.* NPWS (2022e) *Conservation objectives for Lambay Island SPA [004069].* Generic Version 8.0. Department of Housing, Local Government and Heritage.	Approximately 22.4km from the Proposed Scheme
Rockabill SPA [004014] A148 Purple Sandpiper *Calidris maritima* A192 Roseate Tern *Sterna dougallii* A193 Common Tern *Sterna hirundo* A194 Arctic Tern *Sterna paradisaea* *S.I. No. 94/2012 - European Communities (Conservation of Wild Birds (Rockabill Special Protection Area 004014)) Regulations 2012.* NPWS (2013j) Conservation Objectives: Rockabill SPA [004014]. Version 1. Department of Arts, Heritage and the Gaeltacht.	Approximately 22.5km from the Proposed Scheme
Skerries Islands SPA [004122] A017 Cormorant *Phalacrocorax carbo* A018 Shag *Phalacrocorax aristotelis* A046 Brent Goose *Branta bernicla hrota* A148 Purple Sandpiper *Calidris maritima* A169 Turnstone *Arenaria interpres* A184 Herring Gull *Larus argentatus* *S.I. No. 245/2010 - European Communities (Conservation of Wild Birds (Skerries Islands Special Protection Area 004122)) Regulations 2010.* NPWS (2022f) *Conservation objectives for Skerries Islands SPA [004122].* Generic Version 8.0. Department of Housing, Local Government and Heritage.	Approximately 27.9km from 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)
The Murrough SPA [004186] A001 Red-throated Diver *Gavia stellata* A043 Greylag Goose *Anser anser* A046 Light-bellied Brent Goose *Branta bernicla hrota* A050 Wigeon *Anas penelope* A052 Teal *Anas crecca* A179 Black-headed Gull *Chroicocephalus ridibundus* A184 Herring Gull *Larus argentatus* A195 Little Tern *Sterna albifrons* *S.I. No. 298/2011 - European Communities (Conservation of Wild Birds (The Murrough Special Protection Area 004186)) Regulations 2011.* NPWS (2022g) *Conservation objectives for The Murrough SPA [004186].* Generic Version 8.0. Department of Housing, Local Government and Heritage.	Approximately 32km from the Proposed Scheme

5.2 Habitats

70 The Proposed Scheme is located in a highly urbanised environment. 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);
- Tidal rivers (CW2);
- Exposed sand, gravel or till (ED1)
- Spoil and bare ground (ED2);
- Recolonising bare ground (ED3);
- Depositing / lowland rivers (FW2);
- Amenity Grassland (Improved) (GA2);
- Dry meadows and grassy verges (GS2);
- Residential;
- (Mixed) broadleaved woodland (WD1);
- Scattered trees and parkland (WD5);
- Hedgerows (WL1);
- Treelines (WL2);
- Scrub (WS1); and
- Ornamental / non-native shrub (WS3).

71 The habitat type tidal rivers (CW2) corresponds with the Annex I habitat Estuaries [1130] and is present in the Liffey Estuary Upper, downstream of the Proposed Scheme.

5.3 Flora and Fauna Species

5.3.1 Flora

72 No records of any Annex II plant species were recorded within the footprint of the Proposed Scheme during field surveys.

73 The desk study returned records of a total of 19 species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 across the wider study area (i.e. Grid Squares O03 and O13). Records within close proximity to the Proposed Scheme include *Canadian waterweed Elodea canadensis*, curly waterweed *Lagarosiphon major,* bohemian knotweed *Reynoutria japonica x sachalinensis = R. x bohemica,* giant knotweed *Reynoutria sachalinensis*, Himalayan balsam *Impatiens glandulifera*, Japanese knotweed *Reynoutira japonica*, parrot's-feather *Myriophyllum aquaticum*, rhododendron *Rhododendron ponticum* and three-cornered garlic *Allium triquetum.* These species were not present within the footprint of the Proposed Scheme.

74 There were four areas of the non-native invasive plant species Japanese Knotweed listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 identified along or adjacent to the Proposed Scheme. These locations are summarised below in Table 4.

Table 4 Non-native Invasive Plant Species listed in the Third Schedule of the Birds and Habitats Regulations 2011 recorded along or adjacent to the Proposed Scheme

Reference	Species	Location
CBC0007IAPS001	Japanese knotweed *Reynoutria japonica*	Stand observed in a private property along St. Laurence's Road.
CBC0007IAPS002	Japanese knotweed *Reynoutria japonica*	Stand observed in a private property along St. Laurence's Road.
CBC0007IAPS003	Japanese knotweed *Reynoutria japonica*	Stand observed in a private property along St. Laurence's Road.
CBC0007IAPS004	Japanese knotweed *Reynoutria japonica*	Stand observed in a private property opposite Liffey Gaels GAA Club, Kilmainham adjacent to Sarsfields Road R833.

5.3.2 Otter

75 The desk study found that otter are known to occur within 1km of the Proposed Scheme. The desk study did not return records for otter along the River Camac within close proximity to the Proposed Scheme. Otter are known to utilize upstream sections of the river at sites adjacent to Lansdowne Valley Park. The desk study did not return records for otter along the River Poddle within close proximity to the Proposed Scheme. Otter are known to utilize upstream sections of the river at Tymon Park, approximately 8.6km upstream of the Proposed Scheme. The River Liffey is known to support a local otter population with clusters of otter activity observed upstream of the Proposed Scheme at Waterstown Park, Palmerstown (Grid O088357), near Heuston Station (O136343), on Usher's Quay (O145342), and adjacent to the Proposed Scheme at War memorial gardens (Grid O121342). Otter have been recorded along Grand Canal between Devoy Road (Grid O115329) and Inchicore at Suir Road (Grid O127331). No evidence of otter activity (e.g. sprainting posts), holts or couch sites were recorded during the multi-disciplinary surveys carried out along the Proposed Scheme. The nearest European site for which this species is designated is the Wicklow Mountains SAC, which is located approximately 11.4km south (as the crow flies) of the Proposed Scheme.

5.3.3 Marine mammals

76 The Proposed Scheme is hydrologically connected to the Dublin Bay via the Liffey_180, Liffey_190 and Camac_040, and the Ringsend WWTP. 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 22.5km from the Proposed Scheme. The nearest European site for which harbour porpoise has been designated is Rockabill to Dalkey Island SAC located approximately 12km from the Proposed Scheme.

5.3.4 Kingfisher

77 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. In particular, the River Liffey is known to support a population of kingfisher[12]. There are also records of kingfisher on the Grand Canal, which is within 1km of the Proposed Scheme[13].

78 No kingfisher were recorded during surveys within the footprint of the Proposed Scheme.

79 The nearest European site for which this species is designated is River Boyne and River Blackwater SPA, which is located approximately 32.2km from the Proposed Scheme. Kingfisher populations within close proximity to the Proposed Scheme are not SCI species.

5.3.5 Other Birds

80 The desk study returned records of a total of 38 wintering bird species, including 19 species with breeding and wintering populations in the wider study area (i.e. Grid Squares O03 and O13). Records included 26 species listed under Annex I of the Birds Directive and 54 SCI species. The majority of wintering birds identified in the desk study are typically found in coastal, estuarine and intertidal habitats including the Liffey Estuary and Dublin Bay. A desk study of lands within 300m of the Proposed Scheme returned records of five SCI wintering bird species which may use inland amenity grassland feeding sites, including light-bellied brent goose, lapwing, black-headed gull, herring gull and lesser black-backed gull.

81 A review of a study into light-bellied brent goose inland feeding sites (Benson, 2009) has identified no known inland wintering bird feeding sites in the footprint of the Proposed Scheme. There is one known inland wintering bird feeding sites within approximately 300m of the Proposed Scheme i.e. the disturbance ZoI[14]: Ballyfermot / Le Fanu Park, located approximately 150m from the Proposed Scheme.

82 Wintering bird surveys were carried out for the Proposed Scheme at three locations, Ballyfermot College of Further Education (BCFE) on R112 / Kylemore Road (referred to as CBC0007WB001), at Longmeadows Park on Sarsfield Road (referred to as CBC0007WB002) and within the Liffey Gaels Park on Con Colbert Road (referred to as CBC0007WB003), between October 2020 and March 2021, and October 2021 and March 2022. Wintering bird surveys were terminated mid-season 2020/2021 for CBC0007WB001 following removal of this site as a potential construction compound. **Table 5** provides a summary of the findings of the winter bird surveys with respect to those species which are of highest conservation concern and were recorded within winter bird survey sites. Survey results are also shown in Figure 5.

[12] DCC (2015) *Dublin City Biodiversity Action Plan 2015-2020.* Dublin City Council.

[13] FERS Ltd. (2018). *Ecological survey of Clonburris Strategic Development Zone, Clondalkin, Co. Dublin.*

[14] 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.

Table 5 Wintering Birds of Conservation Concern Recorded at Sites CBC0007WB001, CBC0007WB002 and CBC0007WB003 during the Wintering Bird Surveys

Common Name / Scientific Name / BTO Code	Site: Peak Count and Activity in the Study Area (2020/2021)	Site: Peak Count and Activity in the Study Area (2021/2022)	Conservation Importance			Nearest SPA Designated for SCI Species
			BoCCI (B – Breeding / W - Wintering)	Annex I	SCI	
Herring gull *Larus argentatus* (HG)	Two individuals feeding on the grassland adjacent to the BCFE at CBC0007WB001	12 individuals foraging on grassland within Liffey Gaels Park at CBC0007WB003 (21/12/2021)	Amber (B/W)	-	✓	Ireland's Eye SPA c.15.9km
Black-headed gull *Chroicocephalus ridibundus* (BH)	Two individuals foraging on grassland within Liffey Gaels Park at CBC0007WB003	19 birds loafing within Liffey Gaels Park at CBC0007WB003 (09/03/2022)	Amber (B/W)	-	✓	South Dublin Bay and River Tolka Estuary SPA c.3.3km
Common Gull *Larus canus* (CM)	Single individual foraging on grassland within Liffey Gaels Park at CBC0007WB003	Nine birds foraging on grassland within Liffey Gaels Park at CBC0007WB003 (28/02/2022)	Amber (B/W)	-	✓	Dundalk Bay SPA c.58.5km

83 Site conditions at BCFE (CBC0007WB001) were characterised by well-maintained ground conditions managed through regular cutting. Longmeadow (CBC0007WB002) was not regularly maintained by cutting and the site was partly covered by asphalt during the survey season. There was no access into this site and observations were made with binoculars through the fencing. No birds were recorded at CBC0007WB002 throughout the survey period. Liffey Gaels Park (CBC0007WB003) comprised recreational pitches, maintained through regular cutting. Disturbance was noted as high on this site due to animals (dogs off leash and horse grazing/walking), evidence of vehicles (motocross and quad bikes) and public disorder activities (fireworks and large material littering) being frequent.

84 Wintering bird activity was low across all visits. A total of 294 light-bellied Brent goose droppings were recorded on CBC0007WB003 on the 21/12/2021 and 16 light-bellied Brent goose droppings were recorded here on 28/02/2022. No goose droppings were recorded here during the 2020-2021 survey season. This data suggests that the Liffey Gaels GAA pitches have recently started to be used on an infrequent basis by irregular numbers of light-bellied Brent geese, for foraging/ loafing purposes. The inconsistency of recorded use of the site suggests that it is not a significant inland foraging resource for this SCI bird species and is more likely to be used sporadically / infrequently. **Table 6** compares peak counts identified across surveys to their national and international populations.

Table 6 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	Peak Count (2020/2021)	Peak Count (2021/2022)	Associated European sites within the ZoI	1% of International Population	1% of National Population
Herring gull *Larus argentatus* (HG)	2	12	Ireland's Eye SPA Lambay Island SPA Skerries Islands SPA	14,400	n/a
Black-headed gull *Chroicocephalus ridibundus* (BH)	2	19	South Dublin Bay and River Tolka Estuary SPA c.3.3km	31,000	n/a
Common Gull *Larus canus* (CM)	1	9	Dundalk Bay SPA c.58.5km	16,400	n/a

5.4 Hydrology

85 The Proposed Scheme crosses one watercourse: the Camac_040. The catchment details available for the Proposed Scheme indicate that surface waters for the Proposed Scheme largely discharge directly to the Liffey_180 and Liffey_190 via the existing surface water drainage system. Closer to the city centre, there is a combination of surface water sewers and combined foul and surface water sewers which drain to Liffey_190, Camac_040 and Ringsend WwTP, which ultimately discharges to the Liffey Estuary Lower and Dublin Bay. Hydrological connectivity from the proposed scheme is shown in Figure 3.

86 The proposed drainage system for the Proposed Scheme will discharge to the Liffey_180 and Liffey 190. There will be a net increase in impermeable area draining to the Liffey_180 of 9,188m^2, which equates to a 10% increase. There will be a net increase in impermeable area draining to the Liffey_190 of 5,847m^2, which also equates to a 10% increase. There is no direct hydrological connection from the Proposed Scheme to the Liffey Estuary Upper. Indirect impacts could occur as a result of increased frequency and duration in the operation of SWOs which discharge to the waterbody from the combined sewer in Catchment 3 (Section 3: Sarsfield Road to City Centre); however, there is no increase in impermeable area draining to Ringsend WwTP. Notwithstanding this, the drainage design principles ensure that there will be no net increase in the surface water flow discharged to these receptors.

87 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 7 below.

Table 7 Water Quality of Watercourses / Waterbodies in the vicinity of the Proposed Scheme

Watercourse	Location in relation to the Proposed Scheme	EPA Q-Values	Watercourse
River Camac (Camac_40)	One existing crossing point on Emmet Road, Inchicore.	Q3 Camac Close Emmet Road Poor *'At risk'*	It enters the Liffey Estuary Upper (classified as "*Eutrophic*") adjacent to Heuston Station. It then enters the Liffey Estuary Lower transitional waterbody (classified as "*Unpolluted*") at Grand Canal Dock, which ultimately drains to Dublin Bay coastal waterbody (classified as "*Unpolluted*").

Watercourse	Location in relation to the Proposed Scheme	EPA Q-Values	Watercourse
Quarryvale Stream (Liffey_180)	Hydrologically connected to the Proposed Scheme via the receiving surface water system.	Q-Value Score not applicable Unassigned *'Not aAt risk'*	It flows into the River Liffey (classified as "*Unpolluted*") at Quarryvale, which drains to the Liffey Estuary Upper (classified as *'Eutrophic'*)
River Liffey (Liffey_180) (Liffey_190)	Hydrologically connected to the Proposed Scheme via the receiving surface water network.	Q3 Liffey- Mill Lane Studio, Liffey- 1km u/s Chapelizod Bridge (Gleanaulin Park), Liffey- 0.2km d/s Chapelizod Bridge (Lynch's Lane) Poor *'At risk'*	It flows into the Liffey Estuary Upper at the War Memorial Garden (classified as "*Eutrophic*"). It then enters the Liffey Estuary Lower transitional waterbody (classified as "*Unpolluted*") at Grand Canal Dock, which ultimately drains to Dublin Bay coastal waterbody (classified as "*Unpolluted*").
Liffey Estuary Upper	Hydrologically connected to the Proposed Scheme via the River Liffey (Liffey_180 and Liffey_190)	Q-Value Score not applicable Good *'At risk'*	It flows into the Liffey Estuary Lower transitional waterbody (classified as "*Unpolluted*") at Grand Canal Dock, which ultimately drains to Dublin Bay coastal waterbody (classified as "*Unpolluted*").
Liffey Estuary Lower	Hydrologically connected to the Proposed Scheme via the Liffey Estuary Upper	Q-Value Score not applicable Good *'At risk'*	The Liffey Estuary Lower transitional waterbody (classified as "*Unpolluted*") at Grand Canal Dock, which ultimately drains to Dublin Bay coastal waterbody (classified as "*Unpolluted*").
Dublin Bay	Hydrologically connected to the Proposed Scheme via receiving surface water system, including Ringsend WwTP.	Q-Value Score not applicable Good *'Not at risk'*	The Dublin Bay coastal waterbody is classified as "*Unpolluted*".

5.5 Hydrogeology

88 Geological Survey of Ireland (GSI) data indicates that the bedrock formation 1:500k in the Proposed Scheme is "*Dark-grey argillaceous & cherty limestone and shale (Calp)"*. The region is predominantly underlain by Carboniferous Limestones comprised of Lucan Formation and Ballysteen Formation. The majority of the Dublin City area was a deep marine basin known as the Dublin Basin where these sedimentary rocks were deposited.

89 The Proposed Scheme transverses one ground waterbody. Environmental data sourced from the EPA for this ground waterbody is presented below:

Dublin Groundwater body

- For the majority of this area, it is considered to be of "*Good*" Groundwater body WFD Status (2010-2015) and "*not at risk*" of failing the WFD groundwater quality objectives for the majority of its area;
- The aquifers located within this groundwater body and where the Proposed Scheme transverses are classified as "*locally important aquifer - moderately productive only in local zones*"

The vulnerability of the Dublin groundwater body to human activities ranges from "*Rock at or Near Surface*", "*Extreme*", "*High*", "*Moderate*" to "*Low*" within the footprint of the Proposed Scheme.

5.6 Soils & Geology

90 The 1:100,000 GSI bedrock geology map[15] of the area indicates that the underlying bedrock along the Proposed Scheme comprises of predominantly of Carboniferous Limestones. The subsoils within the study area, as classified by the GSI Quaternary mapping (GSI 2016) are predominately glacial tills. Additionally, there are areas of made ground (Urban), alluvial deposits, gravels and shallow bedrock.

5.7 Air Quality

91 With regard to NO2, continuous monitoring data from the EPA at locations in close proximity to the Proposed Scheme was reviewed. The stations reviewed included Ballyfermot, St. John's Road, Davitt Road and Winetavern Street. The Davitt Road station was opened on 20 November 2018 and St. John's Road was opened on 28 November 2018 and thus limited data is currently available. Average annual concentrations in 2019 for these stations were 24µg/m^3 and 43µg/m^3 respectively. Sufficient data was available for the station in Ballyfermot, which is located roughly 200m from the Proposed Scheme, to review long-term trends over a five-year period (2015 to 2019) as shown in Table 7.15. Long-term annual average levels at Ballyfermot range from 16µg/m^3 to 20µg/m^3 over the period 2015 to 2019, with an average concentration of 20µg/m^3 in 2019.

92 Continuous PM10 monitoring carried out at the suburban locations of Ballyfermot, Dún Laoghaire, Tallaght and Phoenix Park showed annual average levels ranging from 11µg/m^3 to 15µg/m^3 in 2019, with a maximum of seven exceedances of the 24-hour limit value of 50µg/m^3 (35 exceedances are permitted per year). Longer term averages from 2015 to 2019 show annual average concentrations of between 11µg/m^3 to 16µg/m^3.

93 Continuous PM2.5 monitoring carried out at the Zone A locations of Finglas, Rathmines and Marino showed average levels of 9.3µg/m^3 in 2019. The annual average level measured in Finglas in 2019, was 9µg/m^3 compared to an annual mean limit value of 25µg/m^3. Longer term averages from 2015 to 2019 show annual average concentrations of between from 6µg/m^3 to 9µg/m^3.

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

94 Considering the baseline and receiving ecological environment and the nature and characteristics of the Proposed Scheme the following potential impacts have been identified:

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

[15] Accessible at https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0ab2fbde2aaac3c228

- Disturbance and displacement impacts.

6.1 Habitat loss and fragmentation

95 The Proposed Scheme does not overlap with any European sites and the nearest European site is South Dublin Bay and River Tolka Estuary SPA, which is located in Dublin Bay, approximately 6km downstream of the proposed crossing point on the River Poddle. Therefore, there is no potential for direct habitat loss and fragmentation to occur. Habitat loss may occur indirectly as a consequence of severe habitat degradation arising from a reduction in water quality and / or a change to the hydrological regime, as described in the section below.

96 Special Conservation Interest (SCI) for which SPAs in the vicinity of the Proposed Scheme have been designated for, 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, Dalkey Islands SPA, Rockabill SPA, Ireland's Eye SPA, Lambay Island SPA). The Proposed Scheme will result in the loss of one inland site within the Proposed Scheme footprint suitable to support breeding gull and wintering bird species i.e. within Liffey Gaels Park on Con Colbert Road (referred to as CBC0007WB003). As the wintering bird surveys recorded only small numbers of species utilising this study area whose numbers were not significant with respect to their national and international populations, and the infrequent nature of the recorded use of the site by light-bellied brent goose, the CBC0007WB003 site is not deemed to be a significant inland foraging resource for these species. Nonetheless, the Proposed Scheme will result (for the duration of the construction period) in the loss of sites suitable to support breeding and wintering SCI bird species.

97 Therefore, there is potential 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.

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, North Bull Island SPA, South Dublin Bay and River Tolka SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA and Lambay Island SPA.

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

98 The Proposed Scheme is hydrologically connected to Dublin Bay via the Ringsend WWTP, Liffey_180, Liffey_190 and Camac_040. 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.

99 The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge point and therefore impact downstream waterbodies, i.e. Dublin Bay, within which European sites are located: North Dublin Bay SAC, South Dublin Bay SAC, Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA and Dalkey Islands SPA. This reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within these European sites, which in turn would negatively affect the 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 the conservation objectives of the 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, Dalkey Islands SPA and Howth Head Coast SPA are undermined.

100 In a potential worst case scenario, in the absence of mitigation measures, the release of contaminated surface water runoff and/or an accidental spillage or pollution event into any surface water features during construction, or operation, also has the potential to affect mobile SCI bird species and QI mammal species that commute, forage and loaf in Dublin Bay *i.e.* birds associated with 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, Malahide Estuary SPA, Baldoyle Bay SPA, Rogerstown Estuary SPA, Dalkey Islands SPA, The Murrough 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 within downstream European sites, which in turn would negatively affect the SCI bird species that rely upon these habitats as foraging and/or roosting habitat. It could also negatively affect the quantity and quality of prey available to SCI and QI populations.

101 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 hydrological impacts, there is also the potential for in combination effects to occur in association with other activities / plans / projects.

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

6.3 Habitat degradation as a result of hydrogeological impacts

102 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.

103 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. These types of aquifers are associated with low permeability which decreases with depth. An upper shallow zone of higher permeability may exist in the top few meters and is associated with relatively short flow paths. Therefore, any influence on the groundwater as a result of the proposed works will be localised a will not extend to any groundwater dependant habitats which are all located over 400m from any proposed work. The unmitigated hydrogeological ZoI of the Proposed Scheme does not extend to any groundwater dependent terrestrial ecosystems linked to European sites. This ZoI is determined by the professional judgement of the design team hydrogeology specialists.

104 In summary therefore, the Proposed Scheme does not have the potential to result in habitat degradation of the qualifying/special conservation interest species of any European site as the result of hydrogeological impacts.

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

105 There are four areas of Japanese knotweed, a species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 present within, or in close proximity to, the Proposed Scheme. In the absence of mitigation, there is potential for this to spread or be introduced, during construction and / or routine maintenance / management works, to terrestrial habitat areas in European sites downstream in Dublin Bay (i.e. North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA). The introduction and / or spread of these invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in

particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat. This in turn could undermine the conservation objectives of these European sites.

106 It is considered unlikely that invasive species could spread to European sites which are located a significant distance from the outfall locations of the Liffey_180, Liffey_190, Camac_040, Liffey Estuary Upper, Liffey Estuary Lower or Ringsend WWTP, and separated by a large marine waterbody (i.e. Howth Head SAC, Howth Head Coast SPA, Rockabill to Dalkey Island SAC and Dalkey Islands SPA).

107 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 also the potential for in combination effects to occur in association with other activities / plans / projects.

The ZoI of this impact is potentially any habitats crossed by, immediately adjacent to, or downstream of the Proposed Scheme or along any of the proposed construction routes are at risk from contaminated soil/material and includes European sites associated with Dublin Bay (i.e. 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

108 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 (NOx, NOs), 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.

109 The unmitigated ZoI for air quality effects arising from the Proposed Scheme has the potential to extend 50m from the Proposed Scheme boundary, and 500m from 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.

110 As the Proposed Scheme does not have the potential to result in habitat degradation of the Qualifying / Special Conservation Interest species of any European site as the result of air quality impacts, either during the construction phase or the operational phase, there is no potential for in combination effects to occur in that regard.

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

6.6 Disturbance and displacement impacts

111 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 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 250m[16]. For birds, disturbance effects would not be expected to extend beyond a distance of approximately 300m[17], as noise levels associated with general construction activities would attenuate to close to background levels at that distance. There are no European sites within the disturbance ZoI of the Proposed Scheme.

112 Although no signs of otter were recorded during field surveys of the Proposed Scheme, the River Liffey, River Camac and the Grand Canal (i.e. watercourses within 1km of the Proposed Scheme) are known to support otter, an Annex II and IV mammal species. The nearest SAC to the proposed development site for which otter has been designated is Wicklow Mountains SAC which is located approximately 11.3km south, as the crow flies. Research carried out by Ó Néill *et al.* (2009) on ranging behaviours of otter on river systems in Ireland found that female otter ranges averaged 7.5km while male otter home ranges varied between 7-19km. The Proposed Scheme is largely located within Liffey_SC_090 catchment, with a small portion located within Liffey_SC_100 catchment, while the eastern part of the scheme extends into the Dodder_SC_010 sub-catchment, in which part of the Wicklow Mountains SAC is also located. While the River Liffey and tributaries is known to support otter, current guidance in respect of the hydrological distance that territorial otters roam suggest a maximum territorial range of 21km for otter along suitable watercourses. Thus, watercourses in proximity to the Proposed Works are not considered to be associated with QI populations associated with the Wicklow Mountains SAC, by virtue of distance and differing catchments.

113 Although marine mammals associated with European sites may commute and forage within the Liffey Estuary, it is not considered to be likely that there will be any impacts on these species as a result of the Proposed Scheme as the terminus of the Proposed Scheme is located approximately 170m south of the Liffey Estuary Upper, at High Street in a highly urbanised environment and where water levels can drop diurnally reducing the likelihood of marine mammals venturing this far up-river. In addition to this, the scale of works proposed in the vicinity of the Liffey Estuary are considered to be minor.

114 Although no signs of kingfisher were recorded during field surveys of the Proposed Scheme, kingfisher, an Annex I bird species, are known to be present in the wider study area, in particular, along the River Liffey, River Camac and the Grand Canal. Any kingfisher populations which are present in the vicinity of the Proposed Scheme are not considered to be associated with the SCI populations of any European site. Kingfisher territories can extend over approximately 3-5km of a river catchment[18]. The nearest SPA for which kingfisher has been designated is the River Boyne and Blackwater SPA which is located in a separate catchment approximately 32.2km away, therefore, any kingfisher present in the vicinity of the Proposed Scheme are not associated with an SPA population.

115 There are a number of SPAs which are designated for SCI species that are known to forage and / or roost at inland sites across Dublin, such as amenity grassland playing pitches (i.e. 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). Five of these species were returned from the desk study and include light-bellied brent goose, lapwing, blacked-headed gull, herring gull and lesser black-backed gull. Suitable inland foraging / roosting sites, which these bird species utilise,

[16] 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.

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

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

are located within the potential ZoI of the Proposed Scheme (See Section 3.2.3 above) Therefore, there is potential for the Proposed Scheme to result in the disturbance / displacement of SCI bird species associated with SPA populations.

116 In summary therefore, the Proposed Scheme has the potential to result in the disturbance / displacement of the Qualifying / Special Conservation Interest species of any European site.

> The ZoI for disturbance associated with general construction activities for mammal species such as otter, is 250m, while for wintering birds, disturbance effects would not be expected to extend beyond a distance of approximately 300m. There are no European sites within the disturbance ZoI of the Proposed Scheme, however SCI species are known to forage and /or roost in close proximity to the ZoI.

6.7 Summary

117 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, North Bull Island SPA, South Dublin Bay and River Tolka Estuary SPA, Dalkey Islands SPA, Malahide Estuary SPA, Rockabill SPA Baldoyle Bay SPA, Rogerstown Estuary SPA, Skerries Islands SPA, Ireland's Eye SPA, Lambay Island SPA and the Murrough SPA.

118 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 8.

Table 8 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 *ex situ* inland feeding sites used by SCI wintering bird species (for the duration of the construction works).	Yes There are European sites at risk of potential loss of *ex situ* inland feeding sites used by SCI wintering bird species. 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 Habitats and species downstream of the Proposed Scheme and the associated surface water drainage discharge points, and downstream of offsite wastewater treatment plants.	Yes There are European sites at risk of downstream hydrological effects associated with the Proposed Scheme. 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 and 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.

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 degradation as a result of hydrogeological impacts Groundwater-dependant habitats, and the species those habitats support, in the local area that lie downgradient of the Proposed Scheme.	No There are no European sites at risk of hydrogeological effects associated with the Proposed Scheme
Habitat degradation as a result of introducing / spreading non-native invasive species Habitat areas within, adjacent to, and potentially downstream of the Proposed Scheme.	Yes There are non-native invasive species present within or adjacent to the Proposed Scheme and, therefore, a risk associated with the Proposed Scheme to downstream European sites from the spread / introduction of non-native invasive species North Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA
Air quality impacts Potentially up to 200m from the Proposed Scheme boundary.	No There are no European sites at risk of air quality effects associated with the Proposed Scheme
Disturbance and displacement impacts 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	Yes There are no European sites within the potential zone of influence of disturbance effects associated with the construction or operation of the Proposed Scheme. However, there are *ex situ* inland feeding sites which may be utilised by SCI wintering bird species within the potential disturbance ZoI of the Proposed Scheme. 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 effects associated with the construction or operation of the Proposed Scheme.

7 Assessment of Potential Effects on European Sites

119 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.

120 European sites have been grouped in the sub-sections below where the impact pathways, European sites' sensitivities, and potential effects are identical.

121 The assessment of the Proposed Scheme in combination with any other plans or projects on European sites is presented in Section 8.

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

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

North Dublin Bay SAC

122 The Natura 2000 Standard Data Form (NPWS, 2020a) 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 actively accreting. Saltmarsh habitat is well represented at the site with particularly good zonation evident. Of note is the occurrence of Petalwort (*Petallophyllum ralfsi*), a Qualifying Interest plant species, with its only known location away from the western seaboard. Threats to the site include pollution from Dublin Port, commercial bait digging, recreational activities and water abstraction by golf clubs.

South Dublin Bay SAC

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

7.1.2 Qualifying Interests and Conservation Objectives of North Dublin Bay SAC and South Dublin Bay SAC

124 The qualifying interests of North Dublin Bay SAC and South Dublin Bay SAC, and the overall conservation objectives, are listed below in Table 9.

Table 9 Qualifying Interests and Conservation Objectives of North Dublin Bay SAC & South Dublin Bay SAC

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

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

125 In conjunction with considering the generic conservation objective for these SACs "To maintain or restore the favourable conservation condition of the Annex I habitat(s) and / or the Annex II species for which the SAC has been selected", the site-specific conservation objectives document for North Dublin Bay SAC and South Dublin Bay SAC also informed this assessment.

126 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the qualifying interests within these European sites. Affecting the conservation condition of the Qualifying Interests would constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the qualifying interests of North Dublin Bay SAC and South Dublin Bay SAC are presented in Section 7.1.3.3.

7.1.3 Examination and Analysis of Potential Direct and Indirect Impacts

127 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 / SCI species as a result of hydrological impacts
- Habitat degradation as a result of introducing / spreading non-native invasive species

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

128 The release of contaminated surface water runoff and /or an accidental spillage or pollution event into any surface water features during construction or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants into receiving waters. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses two watercourses: the Camac_040 and the Poddle_010; and is hydrologically connected to the Camac_040, Liffey_180, Liffey_190, the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WWTP all of which drain to Dublin Bay.

129 Therefore, (albeit unlikely) there is potential for the Proposed Scheme to result in significant effects which could have implications for the conservation objectives of North Dublin Bay SAC and South Dublin Bay SAC as a result of hydrological impacts.

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

130 There are four areas of Japanese knotweed, a species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 present within, or in close proximity to, the

Proposed Scheme. During construction and / or routine maintenance / management work, these species could potentially spread or be introduced to terrestrial habitats located within downstream European sites via surface water features. The introduction and / or spread of these invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat. This in turn could undermine the conservation objectives of these European sites. The Proposed Scheme crosses two watercourses: the Camac_040 and the Poddle_010; and is hydrologically connected to the Camac_040, Liffey_180, Liffey_190, the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WWTP all of which drain to Dublin Bay.

131 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 invasive species spread.

7.1.3.3 Summary

132 Table 10 below presents a summary of the potential impacts and effects of the Proposed Scheme on the qualifying interests and conservation objectives of North Dublin Bay SAC and South Dublin Bay SAC.

Table 10 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 See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment. See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and / or spread of invasive species to downstream European sites during the construction and operation of the Proposed Scheme.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
Community extent / Hectares / Maintain the extent of the *Mytilus edulis*-dominated community, subject to natural processes			
Community structure: *Mytilus edulis* density / Individuals/m^2 / Conserve the high quality of the *Mytilus edulis* dominated community, subject to natural processes			
Community distribution / Hectares / Conserve the following community types in a natural condition: Fine sand to sandy mud with *Pygospio elegans* and *Crangon crangon* community complex; Fine sand with *Spio martinensis* 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	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area / distribution of intertidal / coastal habitats. 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.	See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment. See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and/or spread of invasive species to downstream European sites during the construction and operation of the Proposed Scheme.	With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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 (*Cakile maritima*), sea sandwort (*Honckenya peploides*), prickly saltwort (*Salsola kali*) and oraches (*Atriplex* spp.)			
Vegetation composition: negative indicator species / Percentage cover / Negative indicator species (including non-natives) to represent less than 5% cover			
***Salicornia* and other annuals colonising mud and sand [1310]** To restore the favourable conservation condition of the 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 alone or cumulatively with other	Yes See the relevant mitigation measures described in Section 7.1.4 to protect	No With the effective implementation of the mitigation measures outlined
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, or where necessary restore, natural circulation of sediments and organic matter, without any physical obstructions	pollution sources, could potentially affect the quality (vegetation structure and composition) and area / distribution of intertidal / coastal habitats. The introduction and / or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	water quality in the receiving environment. See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and/or spread of invasive species to downstream European sites during the construction and operation of the Proposed Scheme.	in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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 subcommunities / Percentage cover / Maintain the presence of species-poor communities listed in SMP (McCorry and Ryle, 2009)			
Vegetation structure: negative indicator species - *Spartina anglica* / Hectares / No significant expansion of common cordgrass (*Spartina anglica*), with an annual spread of less than 1%			

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts
Atlantic salt meadows *(Glauco-Puccinellietalia maritimae)* [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 alone or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area / distribution of intertidal / coastal habitats. The introduction and / or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment. See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and/or spread of invasive species to downstream European sites during the construction and operation of the Proposed Scheme.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
Habitat distribution / Occurrence / No decline, or change in habitat distribution, subject to natural processes			
Physical structure: sediment supplyPresence/ absence of physical barriers / Maintain natural circulation of sediments and organic matter, without any physical obstructions			
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			

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts
Vegetation composition: typical species and sub-communities / Percentage cover at a representative number of monitoring stops / Maintain the presence of species-poor communities listed in SMP (McCorry and Ryle, 2009)			
Vegetation structure: negative indicator species - Spartina anglica / Hectares / No significant expansion of common cordgrass (Spartina anglica), with an annual spread of less than 1%			
Mediterranean salt meadows (*Juncetalia maritimi*) [1410] To maintain the favourable conservation condition of the 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 alone or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area / distribution of intertidal / coastal habitats. The introduction and / or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment. See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and/or spread of invasive species to downstream European sites during the construction and	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there
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			
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			

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, diversity and abundance and the physical structural integrity of the habitat.	operation of the Proposed Scheme.	are no residual impacts which could adversely affect the integrity of the SAC
Vegetation structure: vegetation height / Centimetres / Maintain structural variation within sward			
Vegetation structure: vegetation cover / Percentage cover at a representative number of monitoring stops / Maintain more than 90% of area outside creeks vegetated			
Vegetation composition: typical species and sub-communities / Percentage cover at a representative number of monitoring stops / Maintain the presence of species-poor communities listed in SMP (McCorry and Ryle, 2009)			
Vegetation structure: negative indicator species - *Spartina anglica* / Hectares / No significant expansion of common cordgrass (*Spartina anglica*), with an annual spread of less than 1%			
Embryonic shifting dunes [2110] To restore the favourable conservation condition of the 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.	Yes See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and / or	No With the effective implementation of the mitigation measures outlined
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: functionality sediment supply / Presence/ absence of physical barriers / Maintain natural circulation of sediments and organic matter, without any physical obstructions	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.	spread of invasive species to downstream European sites during the construction and operation of the Proposed Scheme.	in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession			
Vegetation composition: plant health of foredune grasses / Percentage cover / More than 95% of sand couch (*Elytrigia juncea*) and/or lyme-grass (*Leymus arenarius*) should be healthy (i.e. green plant parts above ground and flowering heads present)			
Vegetation composition: typical species and sub-communities / Percentage cover at a representative number of monitoring stops / Maintain the presence of species-poor communities with typical species: sand couch (*Elytrigia juncea*) and/or lyme-grass (*Leymus arenarius*)			
Vegetation composition: negative indicator species / Percentage cover / Negative indicator species (including non-native species) to represent less than 5% cover			
Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120] 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.	Yes See the mitigation measures described in Section 7.1.4 to prevent the introduction and / or	No With the effective implementation of the mitigation measures outlined
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: functionality sediment supply / Presence/ absence of physical barriers / Maintain natural circulation of sediments and organic matter, without any physical obstructions	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.	spread of invasive species to downstream European sites during the construction and operation of the Proposed Scheme.	in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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 dune grasses / Percentage cover / 95% of marram grass (*Ammophila arenaria*) and/or lyme-grass (*Leymus arenarius*) should be healthy (i.e. green plant parts above ground and flowering heads present)			
Vegetation composition: typical species and sub-communities / Percentage cover at a representative number of monitoring stops / Maintain the presence of species-poor communities dominated by marram grass (*Ammophila arenaria*) and/or lymegrass (*Leymus arenarius*)			
Vegetation composition: negative indicator species / Percentage cover / Negative indicator species (including non-native species) to represent less than 5% cover			
Fixed coastal dunes with herbaceous vegetation (grey 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.	Yes See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and / or	No With the effective implementation of the mitigation measures outlined
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: functionality sediment supply / Presence/ absence of physical barriers / Maintain natural circulation of sediments and organic matter, without any physical obstructions	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.	spread of invasive species to downstream European sites during the construction and operation of the Proposed Scheme.	in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
Vegetation structure: zonation / Occurrence / Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession			
Vegetation structure: bare ground / Percentage cover / Bare ground should not exceed 10% of fixed dune habitat, subject to natural processes			
Vegetation structure: sward height / Centimetres / Maintain structural variation in the sward			
Vegetation composition: typical species and sub-communities / Percentage cover at a representative number of monitoring stops / Maintain range of sub-communities with typical species listed in Delaney et al. (2013)			
Vegetation composition: negative indicator species (including *Hippophae rhamnoides*) / 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	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	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.	See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and / or spread of invasive species to downstream European sites during the construction and operation of the Proposed Scheme.	With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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			
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 et al. (2013)			
Vegetation composition: cover of Salix repens / Percentage cover; centimetres / Maintain less than 40% cover of creeping willow (Salix repens)			

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts
Vegetation composition: negative indicator species / Percentage cover / Negative indicator species (including non-native species) to represent less than 5% cover			
Vegetation composition: scrub/trees / Percentage cover / No more than 5% cover or under control			
Petalwort *Petalophyllum ralfsii* [1395] To maintain the favourable conservation condition of the species in the SAC, which is defined as follows:			
Distribution of populations / Number and geographical spread of populations / No decline	Yes As a terrestrial flora species of damp calcareous dune slacks, found 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 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 See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and / or spread of invasive species to downstream European sites during the construction and operation of the Proposed Scheme.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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			
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			

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts
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 An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area / distribution of intertidal / coastal habitats. 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 See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment. See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and/or spread of invasive species to downstream European sites during the construction and operation of the Proposed Scheme.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
Community extent / Hectares / Maintain the extent of the *Zostera* dominated community, subject to natural processes			
Community structure: *Mytilus edulis* density / Individuals/m^2 / Conserve the high quality of the *Zostera* dominated community, subject to natural processes			
Community distribution / Hectares / Conserve the following community type in a natural condition: Fine sands with *Angulus tenuis* 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	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area/distribution of intertidal / coastal habitats. 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.	See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment. See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and/or spread of invasive species to downstream European sites during the construction and operation of the Proposed Scheme.	With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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 (*Cakile maritima*), sea sandwort (*Honckenya peploides*), prickly saltwort (*Salsola kali*) and oraches (*Atriplex* spp.)			
Vegetation composition: negative indicator species / Percentage cover / Negative indicator species (including non-natives) to represent less than 5% cover			
***Salicornia* and other annuals colonising mud and sand [1310]** To restore the favourable conservation condition of the 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 alone or cumulatively with other	Yes See the relevant mitigation measures described in Section 7.1.4 to protect	No With the effective implementation of the mitigation measures outlined
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, or where necessary restore, natural circulation of sediments and organic matter, without any physical obstructions	pollution sources, could potentially affect the quality (vegetation structure and composition) and area / distribution of intertidal / coastal habitats. The introduction and / or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat.	water quality in the receiving environment See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and/or spread of invasive species to downstream European sites during the construction and operation of the Proposed Scheme.	in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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 subcommunities / Percentage cover / Maintain the presence of species-poor communities listed in SMP (McCorry and Ryle, 2009)			
Vegetation structure: negative indicator species - *Spartina anglica* / Hectares / No significant expansion of common cordgrass (*Spartina anglica*), with an annual spread of less than 1%			

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts
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 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 See the relevant mitigation measures described in Section 7.1.4 to prevent the introduction and/or spread of invasive species to downstream European sites during the construction and operation of the Proposed Scheme.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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 composition: plant health of foredune grasses / Percentage cover / More than 95% of sand couch (*Elytrigia juncea*) and/or lyme-grass (*Leymus arenarius*) should be healthy (i.e. green plant parts above ground and flowering heads present)			
Vegetation composition: typical species and sub-communities / Percentage cover at a representative number of monitoring stops / Maintain the presence of species-poor communities with typical species: sand couch (*Elytrigia juncea*) and/or lyme-grass (*Leymus arenarius*)			
Vegetation composition: negative indicator species / Percentage cover / Negative indicator species (including non-native species) to represent less than 5% cover			

7.1.4 Mitigation Measures

133 This section presents the mitigation measures that will be implemented during construction and operation to avoid or reduce the potential impacts of the Proposed Scheme on North Dublin Bay SAC and South Dublin Bay SAC. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment. Mitigation measures are outlined in full in the Construction Environmental Management Plan (CEMP) provided in Appendix III, all of which shall, at a minimum, be implemented during the construction phase of the Proposed Scheme.

134 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).

135 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.

136 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.

137 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).

138 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 NIS will be implemented in full by the appointed contractor to the satisfaction of the NTA.

Measures to Protect Surface Water Quality

139 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.

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

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) (2015) *Environmental Good Practice on Site. Fourth* Edition (*C741)*
- CIRIA (2001) *Control of Water Pollution from Construction Sites, Guidance for Consultants and Contractors (C532)*
- CIRIA (2000) *Environmental Handbook for Building and Civil Engineering Projects (C512)*
- CIRIA (2007) *The SUDS Manual (C697)*
- CIRIA (2006a) C648: *Control of water pollution from linear construction projects: Technical guidance*
- CIRIA (2006b) *Control of water pollution from linear construction projects: Site guide (C648)*
- IFI (2016) *Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters*
- *UK Pollution Prevention Guidelines (PPG)* UK Environment Agency, 2004
- BPGCS005, *Oil Storage Guidelines*

Measures to Protect Surface Water Quality during Construction

141 The following specific mitigation measures, all of which are incorporated into the CEMP, shall be implemented to mitigate against the release of hydrocarbons, polluting chemicals, sediment / silt and contaminated waters 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 any surface water drainage features, where feasible, to avoid accidental discharge to watercourses. Concrete trucks will not be washed out on site.

- Any fuels or chemicals (including hydrocarbons or any polluting chemicals) will be stored in a designated, secure bunded area(s) within the construction 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 they will be communicated, resourced and implemented for the duration of the works. The EIRP describes the procedures, lines of authority and processes that will be followed to ensure that incident response efforts are prompt, efficient, and suitable for particular circumstances. The EIRP details the procedures to be undertaken in the event of the release of any sediment into a watercourse, serious spillage of chemical, fuel or other hazardous wastes (e.g. concrete), non-compliance incident with any permit or 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 a built-on tarpaulin that will cover excavated material as it is being hauled off-site and wheel wash facilities will be provided at all site egress points.
- Measures to be implemented by the appointed contractor to minimise the risk of spills and contamination of soils and waters include:
    - Employing only a competent and experienced workforce, and site-specific training of site managers, foremen and workforce, including all subcontractors, in pollution risks and preventative measures;
    - Ensure that all areas where liquids (including fuel) are stored, or cleaning is carried out, are in designated impermeable areas that are isolated from the surrounding area and within a secondary containment system, e.g. by a roll-over bund, raised kerb, ramps or stepped access;

- The location of any fuel storage facilities will be considered in the design of the Construction Compound. These are to be designed in accordance with relevant guidelines and codes of best practice and will be fully bunded;
- Good housekeeping at the site (daily site clean-ups, use of disposal bins, etc.) during the entire Construction Phase;
- Potential pollutants to be adequately secured against vandalism;
- Provision of proper containment of potential pollutants according to codes of best practice;
- 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.

Measures to Protect Surface Water Quality during Operation

142 During Operation there will be a net increase in impermeable area draining to the River Liffey of 15,035m^2, encompassing an increase of 9,188m^2 to the Liffey_180 and an increase of 5,847m^2 to the Liffey_190 Ringsend WwTP receives surface water from combined sewers that drain the surface water mainly in the northern section of the corridor. The Proposed Scheme will not result in an increase in the impermeable area that drains to Ringsend WwTP. The proposed road drainage system incorporates a variety of drainage measures including, kerb and gully drainage, carrier drains, tree pits, permeable paving, bio-retention areas, rain gardens, green roofs filter drains, attenuation areas and pollution control as required in accordance with DMRB and CIRIA design standards.

143 Given the proposed SuDs drainage system, which have been designed in accordance with the Greater Dublin Strategic Drainage Study (GDSDS, 2005), will be implemented by the appointed contractor during the Construction Phase, mitigation for the Operational Phase has been built into the design of the Proposed Scheme. Where no new paved areas are proposed, the existing drainage network will be retained and utilised (See Appendix IV for Proposed Surface Water Drainage Works).

144 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

145 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)

146 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 (m^2), 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.

147 The ISMP for the Proposed Scheme will be implemented, including the assessment presented in the project non-native ISMP detailing the control measures, as advised by a suitably qualified specialist, in accordance with 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.

148 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.

149 The site will be monitored after control measures have been implemented and monitoring will take place again in the subsequent years following treatment. Any re-growth, will be subsequently treated as detailed in the Proposed Scheme non-native ISMP. The ISMP is contained within the CEMP, Appendix III to this NIS.

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

150 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.

7.1.5 Residual Impacts

151 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 Qualifying Interests of North Dublin Bay SAC and South Dublin Bay SAC, and there are, therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of North Dublin Bay SAC and South Dublin Bay SAC. As is confirmed by the Water Framework Directive 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 North Dublin Bay SAC and South Dublin Bay SAC

152 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 mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the Qualifying Interests, it is concluded that the Proposed Scheme will not have any adverse effect (either directly or indirectly) the integrity of North Dublin Bay SAC and South Dublin Bay SAC.

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

7.2.1 Ecological Baseline Description for Howth Head SAC

153 According to the Natura 2000 Standard Data Form (NPWS, 2021c), 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 diverse, there are records of several Red data book species and species of very restricted Irish distribution. The dry heath and sea cliff vegetation is extensive and well developed. Major threats to the site include walking, horse-riding and non-motorised vehicles, burning vegetation, mining and quarrying.

7.2.2 Ecological Baseline Description for Rockabill to Dalkey Island SAC

154 As set out in the Natura 2000 Standard Data Form (NPWS, 2019a), 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.

7.2.3 Ecological Baseline Description for Lambay Island SAC

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

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

156 The qualifying interests of Howth Head SAC, Rockabill to Dalkey Island SAC, and Lambay Island SAC and the overall conservation objectives, are listed below in Table 11.

Table 11 Qualifying Interests and Conservation Objectives of Howth Head SAC, Rockabill to Dalkey Island SAC and Lambay Island SAC

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

Qualifying Interest(s)	Conservation Objective(s)
Rockabill to Dalkey Island SAC [003000] 1170 Reefs 1351 Harbour porpoise *Phocoena phocaena* *S.I. No. 94/2019 - European Union Habitats (Rockabill To Dalkey Island Special Area Of Conservation 003000) Regulations 2019* NPWS (2013c) *Conservation Objectives: Rockabill to Dalkey Island SAC 003000.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	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
Lambay Island SAC [000204] 1170 Reefs 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts 1364 Grey seal *Halichoerus grypus* 1365 Harbour seal *Phoca vitulina* *S.I. No. 294/2019 - European Union Habitats (Lambay Island Special Area of Conservation 000204) Regulations 2019* *NPWS (2013f) Conservation Objectives: Lambay Island SAC 000204.* Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	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

157 In conjunction with considering the generic conservation objective for these SACs "To maintain the favourable conservation condition of the Annex I habitat(s) and / or the Annex II species for which the SAC has been selected", the site-specific conservation objectives documents for Howth Head SAC, Rockabill to Dalkey Island SAC and Lambay Island SAC also informed this assessment.

158 The site-specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the qualifying interests within these European sites. Affecting the conservation condition of the Qualifying Interests would constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the qualifying interests of Howth Head SAC, Rockabill to Dalkey Island SAC and Lambay Island SAC are presented in Section 7.2.4.2.

7.2.5 Examination and Analysis of Potential Direct and Indirect Impacts

159 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 SACand Lambay Island SAC are:

- Habitat degradation as a result of hydrological impacts

7.2.5.1 Habitat degradation as a result of hydrological impacts

160 The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses two watercourses: the Camac_040 and the Poddle_010; and is hydrologically connected to the Camac_040, Liffey_180, Liffey_190, the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WWTP all of which drain to Dublin Bay.

161 Therefore, (albeit unlikely) 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.

7.2.5.2 Summary

162 Table 12 presents a summary of the potential impacts and effects of the Proposed Scheme on the qualifying interests and conservation objectives of Howth Head SAC, Rockabill to Dalkey Island SAC and Lambay Island SAC.

Table 12 Potential Impacts / Effects on the Conservation Objectives of Howth Head SAC, Rockabill to Dalkey Island SAC and Lambay 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 In a worst case scenario, an accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area / distribution of intertidal / coastal habitats	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
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 *et al*., 2011)			
Vegetation composition: negative indicator species / Percentage/Negative indicator species (including non-natives) to represent less than 5% cover			

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts
Vegetation composition: bracken and woody species / Percentage/ Cover of bracken (*Pteridium aquilinum*) 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 Terrestrial habitats above the high tide line are not at risk of effects from water pollution in Dublin Bay.	No	No
Habitat distribution / Occurrence / No decline, subject to natural processes			
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 Campylopus and Polytrichum mosses			
Vegetation composition: number of positive indicator specie s/ Number of species at a representative number of 2m x 2m monitoring stops / Number of positive indicator species present at each monitoring stop is at least two			

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts
Vegetation composition: cover of positive indicator species / Percentage cover at a representative number of 2m 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 (Myrica gale), creeping willow (Salix repens) and western gorse (Ulex gallii) 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

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts
Habitat distribution / Occurrence / Distribution is stable or increasing, subject to natural processes Community structure / Biological composition / Conserve the following community types in a natural condition: Intertidal reef community complex; and Subtidal reef community complex	An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality (vegetation structure and composition) and area / distribution of intertidal / coastal habitats.	See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.	With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
Harbour porpoise *Phocoena phocoena* [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 Disturbance / Level of impact / Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site	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 porpoise and fish prey species.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI species of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts
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 pathway 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, separated by a large marine waterbody.	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; *Laminaria*-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 pathway 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, separated by a large marine waterbody.	No	No
Habitat distribution / Occurrence / No decline, subject to natural processes			
Physical structure: functionality and hydrological regime / Occurrence of artificial barriers / No alteration to natural 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			

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts
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 (Pteridium aquilinum) on grassland and / or heath less than 10%/ Cover of woody species on grassland and/or heath less than 20%			
Grey Seal *Halichoerus grypus* [1364] To maintain the favourable conservation condition of Grey 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.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable
Breeding behaviour / Breeding sites / The breeding sites should be maintained in a natural condition			
Moulting behaviour / Moult haul-out sites / The moult haul-out sites should be maintained in a natural condition			
Resting behaviour / Resting haul-out sites / The resting haul-out sites should be maintained in a natural condition			

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts
Disturbance / Level of impact / Human activities should occur at levels that do not adversely affect the grey seal population at the site			conservation condition of the QI species of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
Harbour Seal *Phoca vituline* [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.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats of this SAC and therefore there are no residual impacts which could adversely affect the integrity of the SAC
Breeding behaviour / Breeding sites / The breeding sites should be maintained in a natural condition			
Moulting behaviour / Moult haul-out sites / The moult haul-out sites should be maintained in a natural condition			
Resting behaviour / Resting haul-out sites / The resting haul-out sites should be maintained in a natural condition			
Disturbance / Level of impact / Human activities should occur at levels that do not adversely affect the harbour seal population at the site			

7.2.6 Mitigation Measures

163 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

164 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

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

7.2.7 Residual Impacts

166 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 Interests 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. 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.

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

167 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, Rockabill to Dalkey Island SAC and Lambay Island SAC, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the qualifying interests, it is concluded that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of Howth Head SAC, Rockabill to Dalkey Island SAC and Lambay Island SAC.

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

168 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 E.U. 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

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

7.3.3 Ecological Baseline Description for Rockabill SPA

170 The Natura 2000 Standard Data Form (NPWS, 20*20e*) lists the site as an internationally important tern colony. It supports the largest population of roseate tern *Sterna dougallii* in north-western Europe amounting to 1,093 pairs in 2010, and the largest colony of common tern *Sterna hirundo* in the country, with 1,940 pairs recorded in 2010. There is also a significant colony of Arctic tern *Sterna paradisaea*, with 250 pairs recorded in 2010. With management for the benefit of terns, numbers of all three species have been steadily increasing since 1989. Rockabill also supports a nationally important population of black guillemot *Cepphus grille* and a small colony of kittiwake *Rissa tridactyla*.

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

171 The special conservation interests of Howth Head Coast SPA, Dalkey Islands SPA, *and Rockabill SPA*and the overall conservation objective, are listed below in Table 13.

Table 13 Special Conservation Interests and Conservation Objectives of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA

Special Conservation Interest(s)	Conservation Objective(s)
Howth Head Coast SPA [004113] A188 Kittiwake *Rissa tridactyla* *S.I. No. 185/2012 - European Communities (Conservation of Wild Birds (Howth Head Coast Special Protection Area 004113)) Regulations 2012.* NPWS (2022c) *Conservation objectives for Howth Head Coast SPA [004113].* Generic Version 8.0. Department of Housing, Local Government and Heritage.	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.
Dalkey Islands SPA [004172] A192 Roseate Tern *Sterna dougallii* A193 Common Tern *Sterna hirundo* A194 Arctic Tern *Sterna paradisaea* *S.I. No. 238/2010 - European Communities (Conservation of Wild Birds (Dalkey Islands Special Protection Area 004172)) Regulations 2010* NPWS (2022b) *Conservation objectives for Dalkey Islands SPA [004172].* Generic Version 8.0. Department of Housing, Local Government and Heritage.	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.
Rockabill SPA [004014] A148 Purple Sandpiper *Calidris maritima* A192 Roseate Tern *Sterna dougallii* A193 Common Tern *Sterna hirundo* A194 Arctic Tern *Sterna paradisaea* *S.I. No. 94/2012 - European Communities (Conservation of Wild Birds (Rockabill Special Protection Area 004014)) Regulations 2012*. *NPWS (2013j) Conservation Objectives: Rockabill SPA 004014*. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

172 In conjunction with considering the generic conservation objective for these SPAs "To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA", the site-specific conservation objectives document for Rockabill SPA also informed this assessment.

173 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 these European sites. Affecting the conservation condition of the Special Conservation Interests would constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the special conservation interests of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA are presented in Section 7.4.4.2.

7.3.5 Examination and Analysis of Potential Direct and Indirect Impacts

174 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 are:

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

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

175 The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses two watercourses: the Camac_040 and the Poddle_010; and is hydrologically connected to the Camac_040, Liffey_180, Liffey_190, the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WWTP, all of which drain to Dublin Bay. In addition, the Proposed Scheme is hydrologically connected to Dublin Bay as a result of surface waters from the footprint of the Proposed Scheme which will join the public sewer and will be treated at the Irish Water Ringsend WWTP prior to subsequent discharge to Dublin Bay via the Liffey Estuary Lower.

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

7.3.5.2 Summary

177 Table 14 presents a summary of the potential impacts and effects of the Proposed Scheme on the Special Conservation Interests and conservation objectives of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA, and how these impacts relate to affecting the site's conservation objectives.

Table 14 Potential Impacts / Effects on the Conservation Objectives of Howth Head Coast SPA, Dalkey Islands SPA and Rockabil SPA.

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impact
Howth Head Coast SPA			
Kittiwake (*Rissa tridactyla*) [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 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.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
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 (*Sterna dougallii*) [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].:			
Passage population: individuals / Number / No significant decline	Yes An accidental pollution event during construction or operation could affect	Yes See the relevant mitigation measures described in	No With the effective implementation of the
Distribution: roosting areas / Number; location; area (hectares) / No significant decline			

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impact
Prey biomass available / Kilogrammes / No significant decline	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 and suitability of roosting sites within the SPA.	Section 7.1.4 to protect water quality in the receiving environment.	mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
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 (*Sterna hirundo*) [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].			
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 and suitability of roosting sites within the SPA.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely
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			

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impact
Disturbance at breeding site / Level of impact / Human activities should occur at levels that do not adversely affect the breeding common tern population			affect the integrity of the SPA
Disturbance at roosting site / Level of impact / Human activities should occur at levels that do not adversely affect the numbers of common tern among the post-breeding aggregation of terns			
Arctic Tern (*Sterna paradisaea*) [A194] There is 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].			
Passage population / Number of individuals / 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 and suitability of roosting sites within the SPA.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
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 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			

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impact
Rockabill SPA			
Purple Sandpiper (*Calidris maritima*) [A148] To maintain the favourable conservation condition of Purple Sandpiper in Rockabill SPA, which is defined as follows:			
Population trend / Percentage change / Long term population trend stable or increasing	No 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.	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			
Roseate Tern (*Sterna dougallii*) [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 See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
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			

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impact
Common Tern (*Sterna hirundo*) [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 quantity and quality of prey fish species.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
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			
Arctic Tern (*Sterna paradisaea*) [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	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives,
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			

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impact
Barriers to connectivity / Number; location; shape; area (hectares) / No significant increase	pollutants and / or a decline in the quantity and quality of prey fish species.		or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
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

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 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

179 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

180 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

181 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 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. 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.

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

182 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the Special Conservation Interests of Howth Head Coast SPA , Dalkey Islands SPA and Rockabill SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the special conservation interests, it is concluded that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of Howth Head Coast SPA, Dalkey Islands SPA and Rockabill SPA.

7.4 North Bull Island SPA [004006]

7.4.1 Ecological Baseline Description for North Bull Island SPA

183 The Natura 2000 Standard Data Form (NPWS,2020f) 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.

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

184 The special conservation interests of North Bull Island SPA, and the overall conservation objective, are listed below in Table 15.

Table 15 Special Conservation Interests and Conservation Objectives of North Bull Island SPA

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

185 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.

186 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 would constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the special conservation interests of North Bull Island SPA are presented in Section 7.5.3.4.

7.4.3 Examination and Analysis of Potential Direct and Indirect Impacts

187 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 Bull Island SPA, are:

- Habitat loss and fragmentation
- 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

7.4.3.1 Habitat loss and fragmentation

188 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 is one area of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme, namely Liffey Gaels Park on Con Colbert Road (referred to as CBC0007WB003).

189 The Proposed Scheme will result in the temporary loss of 0.442 ha of GA2 habitat suitable to support breeding gull and wintering bird species at the Proposed Liffey Gaels Park Construction Compound.

190 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:

- Small and infrequent numbers of SCI bird species, or evidence of use, were recorded on CBC0007WB003 during the 2020/21 and 2021/22 winter bird season, suggesting that the site is not deemed to be a significant inland foraging resource for light-bellied Brent goose, given the infrequent nature of the recorded use of the site by this species, and these species are likely to use other suitable sites available in the wider area on a similar or more regular basis. Therefore, the temporary loss of this site during the construction of the Proposed Scheme will not result in any likely significant effect on the conservation status of these species or undermine the conservation objectives of any SPAs in the vicinity which are designated for this species; and
- The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches. It is very likely that these SCI bird species currently utilise these and other suitable lands in the wider area to a similar and/or greater intensity.
- 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.

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

191 The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could

potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses two watercourses: the Camac_040 and the Poddle_010; and is hydrologically connected to the Camac_040, Liffey_180 and Liffey_190, the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WWTP, all of which drain to Dublin Bay. In addition, the Proposed Scheme is hydrologically connected to Dublin Bay as a result of surface waters from the footprint of the Proposed Scheme which will join the public sewer and will be treated at the Irish Water Ringsend WWTP prior to subsequent discharge to Dublin Bay via the Liffey Estuary Lower.

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

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

193 There are four areas of Japanese knotweed, a species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 present within, or in close proximity to, the Proposed Scheme. During construction and / or routine maintenance / management work, these species could potentially spread or be introduced to terrestrial habitats located within downstream European sites via surface water features. The introduction and / or spread of these invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat. This in turn could undermine the conservation objectives of these European sites The Proposed Scheme crosses two watercourses: the Camac_040 and the Poddle_010; and is hydrologically connected to the Camac_040, Liffey_180, Liffey_190, the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WWTP, all of which drain to Dublin Bay. Therefore, there is potential for the Proposed Scheme to result in significant effects which could have implications for the conservation objectives of North Bull Island SPA as a result of invasive species spread.

7.4.3.4 Disturbance and displacement impacts

194 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.

195 Table 16 provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

Table 16 Predicted Construction Noise Levels associated with the Proposed Scheme

Activity	Predicted CNL at Stated Distance from Edge of Works (dB $L_{Aeq,12hr}$ or $L_{Aeq,4hr}$)								
(dB)	10m	15m	20m	30m	50m	75m	100m	150m	250m
General Road works	79	76	73	69	65	61	59	55	51
Road Widening and Utility Diversion	83	80	77	73	69	65	63	59	55
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

196 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. This is supported by the findings of Wright *et al*. (2010) which found that noise levels above 60dB resulted in behavioural responses, with birds abandoning the site in response to noise levels above 70dB. Thus, in respect of known inland feeding sites, Construction Phase noise disturbance may be in or above the levels that could provoke a response from birds. However, given that all the identified feeding sites are separated by buildings and or vegetation to varying degrees from the existing road corridor and the fact that the construction disturbance would also be temporary and discrete operating along existing transport corridors, it is concluded that the birds will not be subject to any substantial and long-term change and would be considered habituated to existing activities in the urban / suburban transport corridor.

197 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.

198 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 is one area of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme: Construction Compound 3 at Liffey Gaels Park on Con Colbert Road (referred to as CBC0007WB003), and one area of suitable foraging and / or roosting habitat available for these SCI bird species within the disturbance ZoI of the Proposed Scheme. Suitable wintering bird sites within the disturbance ZoI of the Proposed Scheme include Ballyfermot / Le Fanu Park (located 150m from the Proposed Scheme), a site of major importance which was returned from the desk study (Scott Cawley, 2017).

199 As records of SCI bird species associated with the North Bull Island SPA have been returned from the desk study in the vicinity of the Proposed Scheme. It is possible that SCI bird species associated with the North Bull Island SPA currently utilise these and other suitable lands in the wider area. However, there is no potential for impacts to occur on any SCI bird species population of North Bull Island SPA, in light of their conservation objectives, as a consequence of the disturbance and / or displacement from inland feeding / roosting sites due to increased levels of disturbance due to the following reasons:

- Very small numbers of SCI bird species were recorded on CBC0007WB003, suggesting that these species do not regularly use or rely upon these lands as foraging and / or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- Noise modelling carried out for the Proposed Scheme found that at 150m, noise levels are below 60dB or, in most cases, are approaching the 50dB threshold. Therefore, noise produced as a result of construction activities would not provoke more than a moderate effect / level of response from birds at Ballyfermot / Le Fanu Park;

- The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as St. Anne's Park, Clontarf Golf Club and Royal Dublin and St. Anne's golf course on the Bull Island; and
- Impacts associated with increased levels of disturbance will likely result in the temporary displacement of these SCI species to other suitable available lands in the locality, for a maximum of 30 months during construction works. Following the completion of construction, disturbance levels will likely return to baseline conditions and as a result these lands will become available again as foraging and / or roosting habitat for these SCI species.

7.4.3.5 Summary

200 Table 17 presents a summary of the potential impacts and effects of the Proposed Scheme on the Special Conservation Interests and conservation objectives of North Bull Island SPA.

Table 17 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 Impact
North Bull Island SPA			
Light-bellied Brent Goose (*Branta bernicla hrota*) [A046], Shelduck (*Tadorna tadorna*) [A048], Teal (*Anas crecca*) [A052], Pintail (*Anas acuta*) [A054], Shoveler (*Anas clypeata*) [A056], Oystercatcher (*Haematopus ostralegus*) [A130], Golden Plover (*Pluvialis apricaria*) [A140], Grey Plover (*Pluvialis squatarola*) [A141], Knot (*Calidris canutus*) [A143], Sanderling (*Calidris alba*) [A144], Dunlin (*Calidris alpina alpina*) [A149], Black-tailed Godwit (*Limosa limosa*) [A156], Bar-tailed Godwit (*Limosa lapponica*) [A157], Curlew (*Numenius arquata*) [A160], Redshank (*Tringa totanus*) [A162], Turnstone (*Arenaria interpres*) [A169], Black-headed Gull (*Chroicocephalus ridibundus*) [A179] 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 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	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal / coastal habitats that support the 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 introduction and / or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment. See the mitigation measures described in Section 7.1.4 to prevent the introduction and / or spread of invasive species.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impact
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 1,713ha, other than that occurring from natural patterns of variation	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal / coastal habitats that support the 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 introduction and / or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment. See the mitigation measures described in Section 7.1.4 to prevent the introduction and / or spread of invasive species to downstream European sites.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA

7.4.4 Mitigation Measures

201 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

202 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

203 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

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

7.4.5 Residual Impacts

205 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 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. 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.

7.4.6 Conclusion of Assessment for North Bull Island SPA

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

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

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

207 The Natura 2000 Standard Data Form (NPWS, 2021d) states that the SPA possesses extensive intertidal flats, part of which are designated as South Dublin Bay SAC, and which supports wintering waterfowl as part of the wider Dublin Bay population. The site also supports an internationally important population of light-bellied brent geese, feeding on the stands of *Zostera*. It hosts nationally important numbers of six species, is an important site for wintering gulls and is an autumn roosting site for a significant number of terns. The main threat to the site is land reclamation, with other threats including oil pollution from Dublin Port, commercial bait digging and disturbance by walkers and dogs.

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

208 The special conservation interests of South Dublin Bay and River Tolka Estuary SPA, and the overall conservation objective, are listed below in Table 18.

Table 18 Special Conservation Interests and Conservation Objectives of South Dublin Bay and River Tolka Estuary SPA

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

209 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.

210 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 would constitute an adverse

effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the special conservation of South Dublin Bay and River Tolka Estuary SPA are presented in Section 7.6.3.4.

7.5.3 Examination and Analysis of Potential Direct and Indirect Impacts

211 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 South Dublin Bay and River Tolka Estuary SPA, are:

- Habitat loss and fragmentation
- 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

7.5.3.1 Habitat loss and fragmentation

212 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, black-headed gull and black-tailed godwit. There is one area of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme, namely Liffey Gaels Park on Con Colbert Road (referred to as CBC0007WB003).

213 The Proposed Scheme will result in the temporary loss of 0.442 ha of GA2 habitat suitable to support breeding gull and wintering bird species at the Proposed Liffey Gaels Park Construction Compound.

214 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 increased levels of disturbance due to the following reasons:

- Small and infrequent numbers of SCI bird species, or evidence of use, were recorded on CBC0007WB003 during the 2020/21 and 2021/22 winter bird season, 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. Therefore, the temporary loss of this site during the construction of the Proposed Scheme will not result in any likely significant effect on the conservation status of these species or undermine the conservation objectives of any SPAs in the vicinity which are designated for this species; and
- The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches. It is very likely that these SCI bird species currently utilise these and other suitable lands in the wider area to a similar and/or greater intensity.
- 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.

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

215 The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses two watercourses: the Camac_040 and Poddle_010; and is

hydrologically connected to the Camac_040, Liffey_180, Liffey_190, the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WWTP, all of which drain to Dublin Bay.

216 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.

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

217 There are four areas of Japanese knotweed, a species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 present within, or in close proximity to, the Proposed Scheme. During construction and / or routine maintenance / management work, these species could potentially spread or be introduced to terrestrial habitats located within downstream European sites via surface water features. The introduction and / or spread of these invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. These species may outcompete other native species present, negatively impacting the species composition, diversity and abundance and the physical structural integrity of the habitat. This in turn could undermine the conservation objectives of these European sites. The Proposed Scheme crosses two watercourses: the Camac_040 and the Poddle_010; and is hydrologically connected to the Camac_040, Liffey_180, Liffey_190, the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WWTP, all of which drain to Dublin Bay. Therefore, there is potential for the Proposed Scheme to result in significant effects which could have implications for the conservation objectives of South Dublin Bay and River Tolka Estuary SPA as a result of invasive species spread.

7.5.3.4 Disturbance and displacement impacts

218 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.

219 Table 16 in Section 7.4.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

220 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 is one area of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme: Construction Compound 3 at Liffey Gaels Park on Con Colbert Road (referred to as CBC0007WB003), and one area of suitable foraging and / or roosting habitat available for these SCI bird species within the disturbance ZoI of the Proposed Scheme. Suitable wintering bird sites within the disturbance ZoI of the Proposed Scheme include Ballyfermot / Le Fanu Park (located 150m from the Proposed Scheme), a site of major importance which was returned from the desk study (Scott Cawley Ltd., 2017).

221 As records of SCI bird species associated with the South Dublin Bay and River Tolka Estuary SPA have been returned from the desk study in the vicinity of the Proposed Scheme, it is likely that SCI bird species associated with the South Dublin Bay and River Tolka Estuary SPA currently utilise these and other suitable lands in the wider area. However, no significant effects will occur on any SCI bird species population of South Dublin Bay and River Tolka Estuary, in light of their conservation objectives, as a consequence of the disturbance and / or displacement from inland feeding / roosting sites due to increased levels of disturbance due to the following reasons:

- The small numbers of species recorded utilising CBC0007WB003 during field surveys suggesting that these species do not regularly use or rely upon these lands as foraging and / or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- Noise modelling carried out for the Proposed Scheme found that at 150m, noise levels are below 60dB or, in most cases, are approaching the 50dB threshold. Therefore, noise produced as a result of construction activities would not provoke more than a moderate effect / level of response from birds at Ballyfermot / Le Fanu Park;
- The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as St. Anne's Park, Clontarf Golf Club and Royal Dublin and St. Anne's golf course on the Bull Island; and
- Impacts associated with increased levels of disturbance will likely result in the temporary displacement of these SCI species to other suitable available lands in the locality, for a maximum of 30 months during construction works. Following the completion of construction, disturbance levels will likely return to baseline conditions and as a result these lands will become available again as foraging and / or roosting habitat for these SCI species.

7.5.3.5 Summary

222 Table 19 below presents a summary of the potential impacts and effects of the Proposed Scheme on the special conservation interests and conservation objectives of South Dublin Bay and River Tolka Estuary SPA.

Table 19 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			
Light-bellied Brent Goose (*Branta bernicla hrota*) [A046], Oystercatcher (*Haematopus ostralegus*) [A130], Ringed Plover (*Charadrius hiaticula*) [A137], Knot (*Calidris canutus*) [A143], Sanderling (*Calidris alba*) [A144], Dunlin (*Calidris alpina alpina*) [A149], Bar-tailed Godwit (*Limosa lapponica*) [A157], Redshank (*Tringa totanus*) [A162], Black-headed Gull (*Chroicocephalus ridibundus*) [A179] **Note: Grey Plover (*Pluvialis squatarola*) [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** To maintain 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 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	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal / coastal habitats that support the 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 introduction and / or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Yes The mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment. The mitigation measures described in Section 7.1.4 will prevent the introduction and / or spread of invasive species.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts
Roseate Tern (*Sterna dougallii*) [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 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 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	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 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. The introduction and / or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Yes The mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment. The mitigation measures described in Section 7.1.4 will prevent the introduction and / or spread of invasive species.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
Common Tern (*Sterna hirundo*) [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 Productivity rate: fledged young per breeding pair / Mean 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	Yes The mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts
Passage population: individuals / Number / No significant decline	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. 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. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.	The mitigation measures described in Section 7.1.4 will prevent the introduction and / or spread of invasive species.	Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
Distribution: breeding colonies / Number; location; area (Hectares) / No significant decline			
Distribution: roosting areas / Number; location; area (Hectares) / No significant decline			
Prey biomass available / Kilogrammes / No significant decline			
Barriers to connectivity / Number; location; shape; area (hectares) / No significant increase			
Disturbance at breeding site / Level of impact / Human activities should occur at levels that do not adversely affect the breeding common tern population			
Disturbance at roosting site / Level of impact / Human activities should occur at levels that do not adversely affect the numbers of common tern among the post-breeding aggregation of terns			
Arctic Tern (*Sterna paradisaea*) [A194] To maintain the favourable conservation condition of the special conservation interests of the SPA, which is defined as follows:			
Passage population / Number of individuals / 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 alone or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish and the quality the of intertidal / coastal habitats that support the 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 introduction and / or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.	The mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment. The mitigation measures described in Section 7.1.4 will prevent the introduction and / or spread of invasive species.	With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
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			

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 2,192ha, other than that occurring from natural patterns of variation	Yes An accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quality the of intertidal / coastal habitats that support the 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 introduction and / or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular coastal habitats not permanently or regularly inundated by seawater. This in turn could affect the use of habitat areas by birds and have long-term effects on the SPA populations.	Yes The mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment. The mitigation measures described in Section 7.1.4 will prevent the introduction and / or spread of invasive species.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI habitat of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA

7.5.4 Mitigation Measures

223 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.

Measures to Protect Surface Water Quality during Construction

224 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

225 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 Invasive Species to Downstream European Sites

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

7.5.5 Residual Impacts

227 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 Special Conservation Interests 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.

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

228 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the Special Conservation Interests of South Dublin Bay and River Tolka Estuary SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the special conservation interests, it is concluded that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of South Dublin Bay and River Tolka Estuary SPA.

7.6 Malahide Estuary SPA [004025]

7.6.1 Ecological Baseline Description for Malahide Estuary SPA

229 Malahide Estuary SPA comprises the estuary of the River Broadmeadow. According to the Natura 2000 Standard Data Form for the site (NPWS, 2021e), 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.

7.6.2 Special Conservation Interests and Conservation Objectives of Malahide Estuary SPA

230 The special conservation interests of Malahide Estuary SPA, and the overall conservation objective, are listed below in Table 20.

Table 20 Special Conservation Interests and Conservation Objectives of Malahide Estuary SPA

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

231 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.

232 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 would constitute an adverse

effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the special conservation interests of Malahide Estuary SPA are presented in Section 7.7.2.2.

7.6.3 Examination and Analysis of Potential Direct and Indirect Impacts

233 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 Malahide Estuary SPA, are:

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

7.6.3.1 Habitat loss and fragmentation

234 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, golden plover, oystercatcher, black-headed gull and black-tailed godwit. There is one area of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme, namely Liffey Gaels Park on Con Colbert Road (referred to as CBC0007WB003).

235 The Proposed Scheme will result in the temporary loss of GA2 habitat suitable to support breeding gull and wintering bird species at the Proposed Liffey Gaels Park compound.

236 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:

- Small numbers of SCI bird species, or evidence of use, were recorded on CBC0007WB003 during the 2020/21 and 2021/22 winter bird season, 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. Therefore, the temporary loss of this site during the construction of the Proposed Scheme will not result in any likely significant effect on the conservation status of these species or undermine the conservation objectives of any SPAs in the vicinity which are designated for this species; and
- The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches. It is very likely that these SCI bird species currently utilise these and other suitable lands in the wider area to a similar and / or greater intensity.
- 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.

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

237 The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses two watercourses: the Camac_040 and Poddle_010; and is hydrologically connected to the Camac_040, Liffey_180, Liffey_190, the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WWTP, all of which drain to Dublin Bay.

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

7.6.3.3 Disturbance and displacement impacts

239 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.

240 Table 16 in Section 7.4.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

241 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 is one area of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme: Liffey Gaels Park on Con Colbert Road (referred to as CBC0007WB003), and one area of suitable foraging and / or roosting habitat available for these SCI bird species within the disturbance ZoI of the Proposed Scheme. Suitable wintering bird sites within the disturbance ZoI of the Proposed Scheme include Ballyfermot / Le Fanu Park (located 150m from the Proposed Scheme), a site of major importance which was returned from the desk study (Scott Cawley Ltd., 2017).

242 It is possible that SCI bird species associated with the Malahide Estuary SPA currently utilise these and other suitable lands in the wider area. However, no significant effects will occur on any SCI bird species population of Malahide Estuary SPA, in light of their conservation objectives, as a consequence of the disturbance and / or displacement from inland feeding / roosting sites due to increased levels of disturbance due to the following reasons:

- The small numbers of species recorded utilising CBC0007WB003 during field surveys suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- Noise modelling carried out for the Proposed Scheme found that at 150m, noise levels are below 60dB or, in most cases, are approaching the 50dB threshold. Therefore, noise produced as a result of construction activities would not provoke more than a moderate effect / level of response from birds at Ballyfermot / Le Fanu Park;
- The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as St. Anne's Park, Clontarf Golf Club and Royal Dublin and St. Anne's golf course on the Bull Island; and
- Impacts associated with increased levels of disturbance will likely result in the temporary displacement of these SCI species to other suitable available lands in the locality, for a maximum of 30 months during construction works. Following the completion of construction, disturbance levels will likely return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.

7.6.3.4 Summary

243 Table 21 below presents a summary of the potential impacts and effects of the Proposed Scheme on the special conservation interests and conservation objectives of Malahide Estuary SPA.

Table 21 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 (*Podiceps cristatus*) [A005], Light-bellied Brent Goose (*Branta bernicla hrota*) [A046], Shelduck (*Tadorna tadorna*) [A048], Pintail (*Anas acuta*) [A054], Goldeneye (*Bucephala clangula*) [A067], Red-breasted Merganser (*Mergus serrator*) [A069], Oystercatcher (*Haematopus ostralegus*) [A130], Golden Plover (*Pluvialis apricaria*) [A140], Grey Plover (*Pluvialis squatarola*) [A141], Knot (*Calidris canutus*) [A143], Dunlin (*Calidris alpina alpina*) [A149], Black-tailed Godwit (*Limosa limosa*) [A156], Bar-tailed Godwit (*Limosa lapponica*) [A157], Redshank (*Tringa totanus*) [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 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.	Yes See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
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
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 potential for impacts to occur on any habitats associated with the Malahide Estuary SPA as the Proposed Scheme is not hydrologically connected to the Malahide Estuary.	No	No

7.6.4 Mitigation Measures

244 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

245 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

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

7.6.5 Residual Impacts

247 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 special conservation interests of Malahide Estuary SPA, and there are, therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of Malahide Estuary SPA. As is confirmed by the 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.

7.6.6 Conclusion of Assessment for Malahide Estuary SPA

248 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, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the special conservation interests, it is concluded that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of Malahide Estuary SPA.

7.7 Baldoyle Bay SPA [004016]

7.7.1 Ecological Baseline Description for Baldoyle Bay SPA

249 The Natura 2000 Standard Data Form (NPWS, 2020g) 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.

7.7.2 Special Conservation Interests and Conservation Objectives of Baldoyle Bay SPA

250 The special conservation interests of Baldoyle Bay SPA, and the overall conservation objective, are listed below in Table 22.

Table 22 Special Conservation Interests and Conservation Objectives of Baldoyle Bay SPA

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

251 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.

252 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 would constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the special conservation interests of Baldoyle Bay SPA are presented in Section 7.8.3.2.

7.7.3 Examination and Analysis of Potential Direct and Indirect Impacts

253 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 loss and fragmentation
- Habitat degradation / effects on QI / SCI species as a result of hydrological impacts

- Disturbance and displacement impacts

7.7.3.1 Habitat loss and fragmentation

254 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. These species include light-bellied brent goose, and golden plover. There is one area of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme, namely Liffey Gaels Park on Con Colbert Road (referred to as CBC0007WB003).

255 The Proposed Scheme will result in the temporary loss of 0.442ha of GA2 habitat suitable to support breeding gull and wintering bird species at the Proposed Liffey Gaels Park Construction Compound.

256 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:

- Small and infrequent numbers of SCI bird species, or evidence of use, were recorded on CBC0007WB003 during the 2020/21 and 2021/22 winter bird season, 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. Therefore, the temporary loss of this site during the construction of the Proposed Scheme will not result in any likely significant effect on the conservation status of these species or undermine the conservation objectives of any SPAs in the vicinity which are designated for this species; and
- The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches. It is very likely that these SCI bird species currently utilise these and other suitable lands in the wider area to a similar and / or greater intensity.
- 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.

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

257 The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses two watercourses: the Camac_040 and Poddle_010; and is hydrologically connected to the Camac_040, Liffey_180, Liffey_190, the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WWTP, all of which drain to Dublin Bay.

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

7.7.3.3 Disturbance and displacement impacts

259 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.

260 Table 16 in Section 7.4.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

261 Baldoyle Bay SPA is designated for a wintering SCI species that are known to forage and / or roost at inland sites across Dublin, such as amenity grassland playing pitches *e.g.* light-bellied brent goose and golden plover. There is one area of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme: at Liffey Gaels Park on Con Colbert Road (referred to as CBC0007WB003), and one area of suitable foraging and / or roosting habitat available for these SCI bird species within the disturbance ZoI of the Proposed Scheme. Suitable wintering bird sites within the disturbance ZoI of the Proposed Scheme include Ballyfermot / Le Fanu Park (located 150m from the Proposed Scheme), a site of major importance which was returned from the desk study (Scott Cawley Ltd., 2017).

262 As records of light-bellied brent goose have been returned from the desk study in the vicinity of the Proposed Scheme, it is considered to be possible that light-bellied brent goose associated with the Baldoyle Bay SPA currently utilise these and other suitable lands in the wider area. However, no significant effects will occur on any SCI bird species population of Baldoyle Bay, in light of their conservation objectives, as a consequence of the disturbance and / or displacement from inland feeding / roosting sites due to increased levels of disturbance due to the following reasons:

- The small number of species recorded utilising CBC0007WB003 during field surveys suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- Noise modelling carried out for the Proposed Scheme found that at 150m, noise levels are below 60dB or, in most cases, are approaching the 50dB threshold. Therefore, noise produced as a result of construction activities would not provoke more than a moderate effect / level of response from birds at Ballyfermot / Le Fanu Park;
- The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as St. Anne's Park, Clontarf Golf Club and Royal Dublin and St. Anne's golf course on the Bull Island; and
- Impacts associated with increased levels of disturbance will likely result in the temporary displacement of these SCI species to other suitable available lands in the locality, for a maximum of 30 months during construction works. Following the completion of construction, disturbance levels will likely return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.

7.7.3.4 Summary

263 Table 23 below presents a summary of the potential impacts and effects of the Proposed Scheme on the special conservation interests and conservation objectives of Baldoyle Bay SPA.

Table 23 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 (*Branta bernicla hrota*) [A046], Shelduck (*Tadorna tadorna*) [A048], Ringed Plover (*Charadrius hiaticula)* [A137], Golden Plover (*Pluvialis apricaria*) [A140], Grey Plover (*Pluvialis squatarola*) [A141], Bar-tailed Godwit (*Limosa lapponica*) [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 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	Yes In a worst case scenario, an accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay, which SCI birds may utilise outside of their core SPA foraging areas. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality the of intertidal / coastal habitats that support the 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 See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
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 Baldoyle Bay	No	No

7.7.4 Mitigation Measures

264 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

265 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

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

7.7.5 Residual Impacts

267 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 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.

268 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 special conservation interests of Baldoyle Bay SPA, and there are, therefore, no residual direct or indirect impacts associated with the Proposed Scheme that could adversely affect the integrity of Baldoyle Bay SPA. As is confirmed by the 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.

7.7.6 Conclusion of Assessment for Baldoyle Bay SPA

269 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, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the qualifying interests, it is concluded that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of Baldoyle Bay SPA.

7.8 Rogerstown Estuary SPA [004015]

7.8.1 Ecological Baseline Description for Rogerstown Estuary SPA

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

7.8.2 Special Conservation Interests and Conservation Objectives of Rogerstown Estuary SPA

271 The special conservation interests of Rogerstown Estuary SPA, and the overall conservation objective, are listed below in Table 24.

Table 24 Special Conservation Interests and Conservation Objectives of Rogerstown Estuary SPA

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

272 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.

273 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 would constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the special conservation interests of Rogerstown Estuary SPA are presented in Section 7.9.3.2.

7.8.3 Examination and Analysis of Potential Direct and Indirect Impacts

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

7.8.3.1 Habitat loss and fragmentation

275 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, golden plover, oystercatcher, and black-tailed godwit. There is one area of suitable foraging, and/or roosting habitat for these species within the footprint of the Proposed Scheme, namely Liffey Gaels Park on Con Colbert Road (referred to as CBC0007WB003).

276 The Proposed Scheme will result in the temporary loss of 0.442ha of GA2 habitat suitable to support breeding gull and wintering bird species at the Proposed Liffey Gaels Park compound.

277 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:

- Small and infrequent numbers of SCI bird species, or evidence of use, were recorded on CBC0007WB003 during the 2020/21 and 2021/22 winter bird season, 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. Therefore, the temporary loss of this site during the construction of the Proposed Scheme will not result in any likely significant effect on the conservation status of these species or undermine the conservation objectives of any SPAs in the vicinity which are designated for this specie; and
- The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches. It is very likely that these SCI bird species currently utilise these and other suitable lands in the wider area to a similar and/or greater intensity.
- 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.

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

278 The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses two watercourses: the Camac_040 and Poddle_010; and is hydrologically connected to the Camac_040, Liffey_180, Liffey_190, the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WWTP, all of which drain to Dublin Bay.

279 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.

7.8.3.3 Disturbance and displacement impacts

280 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.

281 Table 16 in Section 7.4.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

282 Rogerstown Estuary SPA is designated for wintering SCI species that are known to forage and / or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied brent goose, oystercatcher and black-tailed godwit. There is one area of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme: at Liffey Gaels Park on Con Colbert Road (referred to as CBC0007WB003), and one area of suitable foraging and / or roosting habitat available for these SCI bird species within the disturbance ZoI of the Proposed Scheme. Suitable wintering bird sites within the disturbance ZoI of the Proposed Scheme include Ballyfermot / Le Fanu Park (located 150m from the Proposed Scheme), a site of major importance which was returned from the desk study (Scott Cawley Ltd., 2017).

283 As records of light-bellied brent goose have been returned from the desk study in the vicinity of the Proposed Scheme, it is considered to be possible that light-bellied brent goose associated with the Rogerstown Estuary SPA currently utilise these and other suitable lands in the wider area. However, no significant effects will occur on any SCI bird species population of Rogerstown Estuary, in light of their conservation objectives, as a consequence of the disturbance and / or displacement from inland feeding / roosting sites due to increased levels of disturbance due to the following reasons:

- The small number of species recorded utilising CBC0007WB003 during field surveys suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- Noise modelling carried out for the Proposed Scheme found that at 150m, noise levels are below 60dB or, in most cases, are approaching the 50dB threshold. Therefore, noise produced as a result of construction activities would not provoke more than a moderate effect / level of response from birds at Ballyfermot / Le Fanu Park;
- The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as St. Anne's Park, Clontarf Golf Club and Royal Dublin and St. Anne's golf course on the Bull Island; and
- Impacts associated with increased levels of disturbance will likely result in the temporary displacement of these SCI species to other suitable available lands in the locality, for a maximum of 30 months during construction works. Following the completion of construction, disturbance levels will likely return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.

7.8.3.4 Summary

284 Table 25 below presents a summary of the potential impacts and effects of the Proposed Scheme on the special conservation interests and conservation objectives of Rogerstown Estuary SPA.

Table 25 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 Impact
Rogerstown Estuary SPA			
Greylag Goose [A043], Light-bellied Brent Goose (*Branta bernicla hrota*) [A046], Shelduck (*Tadorna tadorna*) [A048], Shoveler (*Anas clypeata*) [A056], Oystercatcher (*Haematopus ostralegus*) [A130], Ringed Plover (*Charadrius hiaticula*) [A137], Grey Plover (*Pluvialis squatarola*) [A141], Knot (*Calidris canutus*) [A143], Dunlin (*Calidris alpina alpina*) [A149], Black-tailed Godwit (*Limosa limosa*) [A156] and Redshank (*Tringa tetanus*) [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 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	Yes In a worst case scenario, an accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay, which SCI birds may utilise outside of their core SPA foraging areas. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality the of intertidal / coastal habitats that support the 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 See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
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 potential for impacts to occur on any habitats associated with the Rogertsown Estuary SPA as the Proposed Scheme is not hydrologically connected to Rogerstown Estuary.	No	No

7.8.4 Mitigation Measures

285 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

286 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

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

7.8.5 Residual Impacts

288 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 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. 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.

7.8.6 Conclusion of Assessment for Rogerstown Estuary SPA

289 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, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the special conservation interests, it is concluded that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of Rogerstown Estuary SPA.

7.9 Skerries Islands SPA [004122]

7.9.1 Ecological Baseline Description for Skerries Islands SPA

290 The Natura Standard Data Form (NPWS, 2020i) 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.

7.9.2 Special Conservation Interests and Conservation Objectives of Skerries Islands SPA

291 The special conservation interests of Skerries Islands SPA, and the overall conservation objective, are listed below in Table 26.

Table 26 Special Conservation Interests and Conservation Objectives of Skerries Islands SPA

Qualifying Interest(s)	Conservation Objective(s)
Skerries Islands SPA [004122] A017 Cormorant *Phalacrocorax carbo* A018 Shag *Phalacrocorax aristotelis* A046 Brent Goose *Branta bernicla hrota* A148 Purple Sandpiper *Calidris maritima* A169 Turnstone *Arenaria interpres* A184 Herring Gull *Larus argentatus* *S.I. No. 245/2010 - European Communities (Conservation of Wild Birds (Skerries Islands Special Protection Area 004122)) Regulations 2010.* NPWS (2022f) *Conservation objectives for Skerries Islands SPA [004122].* Generic Version 8.0. Department of Housing, Local Government and Heritage.	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA

292 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", site-specific conservation objectives documents have been compiled from other relevant European sites, including Rogerstown Estuary SPA (see Table 27) to inform this assessment.

293 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 would constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the special conservation interests of Skerries Islands SPA are presented in Section 7.10.3.2

7.9.3 Examination and Analysis of Potential Direct and Indirect Impacts

294 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 Skerries Islands SPA, are:

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

7.9.3.1 Habitat loss and fragmentation

295 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 is one area of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme, namely Liffey Gaels Park on Con Colbert Road (referred to as CBC0007WB003).

296 The Proposed Scheme will result in the temporary loss of 0.442 ha of GA2 habitat suitable to support breeding gull and wintering bird species at the Proposed Liffey Gaels Park compound.

297 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:

- Small and infrequent numbers of SCI bird species, or evidence of use, were recorded on CBC0007WB003 during the 2020/21 and 2021/22 winter bird season, 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. Therefore, the temporary loss of this site during the construction of the Proposed Scheme will not result in any likely significant effect on the conservation status of these species or undermine the conservation objectives of any SPAs in the vicinity which are designated for this specie;
- The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches. It is very likely that these SCI bird species currently utilise these and other suitable lands in the wider area to a similar and / or greater intensity; 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.

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

298 The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses two watercourses: the Camac_040 and Poddle_010; and is hydrologically connected to the Camac_040, Liffey_180, Liffey_190, the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WWTP, all of which drain to Dublin Bay.

299 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.

7.9.3.3 Disturbance and displacement impacts

300 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.

301 Table 16 in Section 7.4.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

302 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 is one area of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme: at Liffey Gaels Park on Con Colbert Road (referred to as CBC0007WB003), and one area of suitable foraging and / or roosting habitat available for these SCI bird species within the disturbance ZoI of the Proposed Scheme. Suitable wintering bird sites within the disturbance ZoI of the Proposed Scheme include Ballyfermot / Le Fanu Park (located 150m from the Proposed Scheme), a site of major importance which was returned from the desk study (Scott Cawley Ltd., 2017).

303 As records of SCI bird species associated with Skerries Islands SPA have been returned from the desk study in the vicinity of the Proposed Scheme (i.e. light-bellied brent goose and herring gull), it is considered to be possible that SCI species associated with Skerries Islands SPA currently utilise these and other suitable lands in the wider area. However, there is no potential for impacts to occur on any SCI bird species population of Skerries Islands SPA, in light of their conservation objectives, as a consequence of the disturbance and / or displacement from inland feeding / roosting sites due to increased levels of disturbance due to the following reasons:

- The small number of species recorded utilising CBC0007WB003 during field surveys suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- Noise modelling carried out for the Proposed Scheme found that at 150m, noise levels are below 60dB or, in most cases, are approaching the 50dB threshold. Therefore, noise produced as a result of construction activities would not provoke more than a moderate effect / level of response from birds at Ballyfermot / Le Fanu Park;
- The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as St. Anne's Park, Clontarf Golf Club and Royal Dublin and St. Anne's golf course on the Bull Island; and
- Impacts associated with increased levels of disturbance will likely result in the temporary displacement of these SCI species to other suitable available lands in the locality, for a maximum of 30 months during construction works. Following the completion of construction, disturbance levels will likely return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.

7.9.3.4 Summary

304 Table 27 below presents a summary of the potential impacts and effects of the Proposed Scheme on the special conservation interests and conservation objectives of Skerries Islands SPA.

Table 27 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 Impact
Skerries Islands SPA			
Cormorant (*Phalacrocorax* carbo) [A017], Shag *Phalacrocorax* aristotelis) [A018], Light-bellied Brent Goose (*Branta bernicla hrota*) [A046], Purple Sandpiper (*Calidris maritima*) [A148], Turnstone (*Arenaria interpres*) [A169] and Herring Gull (*Larus argentatus*) [A184] There is no site-specific conservation objectives document available for this SPA. Therefore, the attributes, measures and targets below have been developed based on the specific conservation objectives available for Rogerstown Estuary SPA [004015]			
Population trend / Percentage change / Long term population trend stable or increasing Distribution / Range, timing and intensity of use of areas / No significant decrease in the range, timing and intensity of use of areas by all of the above-named species, other than that occurring from natural patterns of variation	Yes In a worst case scenario, an accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay, which SCI birds may utilise outside of their core SPA foraging areas. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality the of intertidal / coastal habitats that support the 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 With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA

7.9.4 Mitigation Measures

305 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

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

Measures to Protect Surface Water Quality during Operation

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

7.9.5 Residual Impacts

308 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Scheme will not have any adverse effect on 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. 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.

7.9.6 Conclusion of Assessment for Skerries Islands SPA

309 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the qualifying interests of Skerries Islands SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the Special Conservation Interests, it is concluded that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of Skerries Island SPA.

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

7.10.1 Ecological Baseline Description for Ireland's Eye SPA

310 According to the Natura 2000 Standard Data Form (NPWS, 2020j), 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, horseriding and non-motorised vehicles and leisure fishing.

7.10.2 Ecological Baseline Description for Lambay Island SPA

311 According to the Natura 2000 Standard Data Form (NPWS, 2020k), 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.

7.10.3 Special Conservation Interests and Conservation Objectives of Ireland's Eye SPA and Lambay Island SPA

312 The special conservation interests of Ireland's Eye SPA and Lambay Island SPA, and the overall conservation objectives, are listed below in Table 28.

Table 28 Special Conservation Interests and Conservation Objectives of Ireland's Eye SPA and Lambay Island SPA

Qualifying Interest(s)	Conservation Objective(s)
Ireland's Eye SPA [004117] A017 Cormorant *Phalacrocorax carbo* A184 Herring Gull *Larus argentatus* A188 Kittiwake *Rissa tridactyla* A199 Guillemot *Uria aalge* A200 Razorbill *Alca torda* *S.I. No. 240/2010 - European Communities (Conservation of Wild Birds (Ireland's Eye Special Protection Area 004117)) Regulations 2010.* NPWS (2022d) *Conservation objectives for Ireland's Eye SPA [004117].* Generic Version 8.0. Department of Housing, Local Government and Heritage.	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA

Qualifying Interest(s)	Conservation Objective(s)
Lambay Island SPA [004069] A009 Fulmar *Fulmarus glacialis* A017 Cormorant *Phalacrocorax carbo* A018 Shag *Phalacrocorax aristotelis* A043 Greylag Goose *Anser anser* A183 Lesser Black-backed Gull *Larus fuscus* A184 Herring Gull *Larus argentatus* A188 Kittiwake *Rissa tridactyla* A199 Guillemot *Uria aalge* A200 Razorbill *Alca torda* A204 Puffin *Fratercula arctica* *S.I. No. 242/2010 - European Communities (Conservation of Wild Birds (Lambay Island Special Protection Area 004069)) Regulations 2010.* NPWS (2022e) *Conservation objectives for Lambay Island SPA [004069].* Generic Version 8.0. Department of Housing, Local Government and Heritage.	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA

313 In conjunction with considering the generic conservation objective for these SPAs "To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA", site-specific conservation objectives documents have been compiled from other relevant European sites (identified in Table 29) to inform this assessment

314 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 would constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the special conservation interests of Ireland's Eye SPA and Lambay Island SPA are presented in Section 7.11.4.2.

7.10.4 Examination and Analysis of Potential Direct and Indirect Impacts

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

7.10.4.1 Habitat loss and fragmentation

316 Irelands 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. Ireland's Eye SPA is designated for herring gull and Lambay Island SPA is designated for lesser black-backed gull, and herring gull. There is one area of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme, namely Liffey Gaels Park on Con Colbert Road (referred to as CBC0007WB003).

317 The Proposed Scheme will result in the temporary loss of 0.442ha of GA2 habitat suitable to support breeding gull and wintering bird species at the Proposed Liffey Gaels Park compound.

318 There is no potential for impacts to occur on inland feeding SCI populations associated with Ireland's Eye SPA or 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:

- Small and infrequent numbers of SCI bird species were recorded on CBC0007WB003 during the 2020/21 and 2021/22 winter bird season, 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. Therefore, the temporary loss of this site during the construction of the Proposed Scheme will not result in any likely significant effect on the conservation status of these species or undermine the conservation objectives of any SPAs in the vicinity which are designated for this species;
- The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches. It is very likely that these SCI bird species currently utilise these and other suitable lands in the wider area to a similar and / or greater intensity; 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.

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

319 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 pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses two watercourses: the Camac_040 and Poddle_010; and is hydrologically connected to the Camac_040, Liffey_180, Liffey_190, the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WWTP, all of which drain to Dublin Bay.

320 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.

7.10.4.3 Disturbance and displacement impacts

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

322 Table 16 in Section 7.4.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

323 Ireland's Eye SPA and Lambay Island SPA are designated for breeding SCI gull species that are known to forage and / or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include black-headed gull, herring gull and lesser black-backed gull. There is one area of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme: at Liffey Gaels Park

on Con Colbert Road (referred to as CBC0007WB003), and one area of suitable foraging and / or roosting habitat available for these SCI bird species within the disturbance ZoI of the Proposed Scheme. Suitable wintering bird sites within the disturbance ZoI of the Proposed Scheme include Ballyfermot / Le Fanu Park (located 150m from the Proposed Scheme), a site of major importance which was returned from the desk study (Scott Cawley Ltd., 2017).

324 As records of SCI bird species associated with Ireland's Eye SPA and Lambay Island SPA have been returned from the desk study in the vicinity of the Proposed Scheme (i.e. herring gull, black-headed gull and lesser black-backed gull), it is considered to be possible that these species currently utilise these and other suitable lands in the wider area. However, no significant effects will occur on any SCI bird species population of Ireland's Eye SPA or Lambay Island SPA, in light of their conservation objectives, as a consequence of the disturbance and / or displacement from inland feeding / roosting sites due to increased levels of disturbance due to the following reasons:

- The small number of species recorded utilising CBC0007WB003 during field surveys suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- Noise modelling carried out for the Proposed Scheme found that at 150m, noise levels are below 60dB or, in most cases, are approaching the 50dB threshold. Therefore, noise produced as a result of construction activities would not provoke more than a moderate effect / level of response from birds at Ballyfermot / Le Fanu Park;
- The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as St. Anne's Park, Clontarf Golf Club and Royal Dublin and St. Anne's golf course on the Bull Island; and
- Impacts associated with increased levels of disturbance will likely result in the temporary displacement of these SCI species to other suitable available lands in the locality, for a maximum of 30 months during construction works. Following the completion of construction, disturbance levels will likely return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.

7.10.4.4 Summary

325 Table 29 below presents a summary of the potential impacts and effects of the Proposed Scheme on the special conservation interests and conservation objectives of Ireland's Eye SPA and Lambay Island SPA.

Table 29 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	Yes In a worst case scenario, an accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay, which SCI birds may utilise outside of their core SPA foraging areas. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality the of intertidal / coastal habitats that support the 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 See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
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
Lambay Island SAC			
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] 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	Yes In a worst case scenario, an accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay, which SCI birds may utilise outside of their core SPA foraging areas. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality the of intertidal / coastal habitats that support the 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 See the mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA
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			

7.10.5 Mitigation Measures

326 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 or Lambay Island SPA. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

Measures to Protect Surface Water Quality during Construction

327 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

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

7.10.6 Residual Impacts

329 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 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. 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.

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

330 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the special conservation interests of Ireland's Eye SPA or Lambay Island SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the special conservation interests, it is concluded that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of Ireland's Eye SPA or Lambay Island SPA.

7.11 The Murrough SPA [004186]

7.11.1 Ecological Baseline Description for The Murrough SPA

331 According to the Natura 2000 Standard Data Form (NPWS, 2020l), this SPA comprises a coastal wetland complex stretching for 13km from Kilcoole train station southwards towards Wicklow town. The site extends between the 200 metre 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, horseriders and non-motorised vehicles.

7.11.2 Special Conservation Interests and Conservation Objectives for The Murrough SPA

332 The special conservation interests of The Murrough SPA and the overall conservation objectives are listed below in Table 30.

Table 30 Special Conservation Interests and Conservation Objectives of The Murrough SPA

Special Conservation Interest(s)	Conservation Objective(s)
The Murrough SPA [004186] A001 Red-throated Diver *Gavia stellata* A043 Greylag Goose *Anser anser* A046 Light Bellied Brent Goose *Branta bernicla hrota* A050 Wigeon *Anas penelope* A052 Teal *Anas crecca* A179 Black-headed Gull *Chroicocephalus ridibundus* A162 Herring Gull *Larus argentatus* A195 Little Tern *Sterna albifrons* A999 Wetlands *S.I. No. 298/2011 - European Communities (Conservation of Wild Birds (The Murrough Special Protection Area 004186)) Regulations 2011.* NPWS (2022g) *Conservation Objectives for the Murrough SPA [004186]. Generic Version 8.0.* Department of Housing, Local Government and Heritage.	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA. 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.

333 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 have been compiled from other relevant European sites (identified in Table 31) to inform this assessment.

334 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 would constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the special conservation interests in respect of The Murrough SPA are presented in Section 7.11.3.2.

7.11.3 Examination and Analysis of Potential Direct and Indirect Impacts

335 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 for The Murrough SPA are:

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

7.11.3.1 Habitat loss and fragmentation

336 The Murrough SPA is designated for wintering SCI species that are known to forage and/or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied brent goose, black-headed gull, and herring gull. There is one area of suitable foraging, and / or roosting habitat for these species within the footprint of the Proposed Scheme, namely Liffey Gaels Park on Con Colbert Road (referred to as CBC0007WB003).

337 The Proposed Scheme will result in the temporary loss of 0.442ha of GA2 habitat suitable to support breeding gull and wintering bird species at the Proposed Liffey Gaels Park compound.

338 There is no potential for impacts to occur on inland feeding SCI populations associated with 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:

- Small and infrequent numbers of SCI bird species, or evidence of use, were recorded on CBC0007WB003 during the 2020/21 and 2021/22 winter bird season, 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. Therefore, the temporary loss of this site during the construction of the Proposed Scheme will not result in any likely significant effect on the conservation status of these species or undermine the conservation objectives of any SPAs in the vicinity which are designated for this species; and
- The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches. It is very likely that these SCI bird species currently utilise these and other suitable lands in the wider area to a similar and / or greater intensity.
- 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.

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

339 The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge. The Proposed Scheme crosses two watercourses: the Camac_040 and Poddle_010; and is hydrologically connected to the Camac_040, Liffey_180, Liffey_190, the Liffey Estuary Upper and the Liffey Estuary Lower, and the Ringsend WWTP, all of which drain to Dublin Bay.

340 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.

7.11.3.3 Disturbance and displacement impacts

341 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 approx.300m , as noise levels associated with general construction activities would attenuate to close to background levels at that distance and beyond.

342 Table 16 in Section 7.4.3.4 of this NIS provides the predicted construction noise limits associated with different construction activities of the Proposed Scheme.

343 The Murrough SPA is designated for wintering SCI species that are known to forage and / or roost at inland sites across Dublin, such as amenity grassland playing pitches. These species include light-bellied brent goose, black-headed gull and herring gull. There is one area of suitable foraging, and / or roosting habitat for these species within the footprint of and adjacent to the Proposed Scheme: at Liffey Gaels Park on Con Colbert Road (referred to as CBC0007WB003), one area of suitable foraging and / or roosting habitat available for these SCI bird species within the disturbance ZoI of the Proposed Scheme. Suitable wintering bird sites within the disturbance ZoI of the Proposed Scheme include Ballyfermot / Le Fanu Park (located 150m from the Proposed Scheme), a site of major importance which was returned from the desk study (Scott Cawley Ltd., 2017).

344 As records of SCI bird species associated with The Murrough SPA have been returned from the desk study in the vicinity of the Proposed Scheme (i.e. light-bellied brent goose, black-headed gull and herring gull,), it is considered to be possible that SCI species associated with The Murrough SPA currently utilise these and other suitable lands in the wider area. However, there is no potential for impacts to occur on any SCI bird species population of The Murrough SPA, in light of their conservation objectives, as a consequence of the disturbance and / or displacement from inland feeding / roosting sites due to increased levels of disturbance due to the following reasons:

- The small numbers of species recorded utilising CBC0007WB003 during field surveys suggesting that these species do not regularly use or rely upon these lands as foraging and/or roosting habitat, and are likely to use other suitable sites available in the wider area on a similar or more regular basis;
- Noise modelling carried out for the Proposed Scheme found that at 150m, noise levels are below 60dB or, in most cases, are approaching the 50dB threshold. Therefore, noise produced as a result of construction activities would not provoke more than a moderate effect / level of response from birds at Ballyfermot / Le Fanu Park;
- The availability of large areas of suitable foraging and / or roosting habitat for these SCI bird species in the wider locality of the Proposed Scheme, including those in closer proximity to nearby SPAs. These include other similar public amenity grassland parks and sports pitches such as St. Anne's Park, Clontarf Golf Club and Royal Dublin and St. Anne's golf course on the Bull Island; and
- Impacts associated with increased levels of disturbance will likely result in the temporary displacement of these SCI species to other suitable available lands in the locality, for a maximum of 30months during construction works. Following the completion of construction, disturbance levels will likely return to baseline conditions and as a result these lands will become available again as foraging and/or roosting habitat for these SCI species.

7.11.3.4 Summary

345 Table 27 below presents a summary of the potential impacts and effects of the Proposed Scheme on the special conservation interests and conservation objectives of The Murrough SPA.

Table 31 Potential Impacts / Effects on the Conservation Objectives of The Murrough SPA

Conservation Objectives Attribute / Measure / Target	Potential Impacts Requiring Mitigation?	Are Mitigation Measures Required?	Residual Impacts
The Murrough SPA			
Red-throated Diver [A001]; Greylag Goose [A043]; Light-Bellied Brent Goose [A046]; Wigeon [A050]; Teal [A052]; Black-Headed Gull [179]; Herring Gull [184] Little Tern [A195]; 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)			
Population trend / % change / Long term population trend stable or increasing 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	Yes In a worst case scenario, an accidental pollution event during construction or operation could affect surface water downstream in Dublin Bay, which SCI birds may utilise outside of their core SPA foraging areas. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could potentially affect the quantity and quality of prey fish species and the quality the of intertidal / coastal habitats that support the 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 See the relevant mitigation measures described in Section 7.1.4 to protect water quality in the receiving environment.	No With the effective implementation of the mitigation measures outlined in Section 7.1.4 the Proposed Scheme will not have any adverse effect on the conservation objectives, or favourable conservation condition of the SCI species of this SPA and therefore there are no residual impacts which could adversely affect the integrity of the SPA

7.11.4 Mitigation Measures

346 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

347 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

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

7.11.5 Residual Impacts

349 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 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 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.

7.11.6 Conclusion of Assessment for The Murrough SPA

350 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the special conservation interests of The Murrough SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the special conservation interests, it is concluded that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of The Murrough SPA.

8 Summary of Mitigation Measures and Residual Impacts

8.1 Summary of Mitigation Measures

351 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 32, identifying the specific mitigation measures required for each relevant European site.

352 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 32 Matrix of Mitigation Measures and Residual Impacts

European Site	Potential Impacts and Mitigation Required												Any adverse effect on the integrity of European sies (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	
North Dublin Bay SAC	X	✓ Section 7.1.4 Section 5.4 in CEMP	X	✓ Section 7.1.4 Section 5.3 in CEMP	X	X	X	✓ Section 7.1.4 Section 5.4 in CEMP	X	✓ Section 7.1.4 Section 5.3 in CEMP	X	X	No
South Dublin Bay SAC	X	✓ Section 7.1.4 Section 5.4 in CEMP	X	✓ Section 7.1.4 Section 5.3 in CEMP	X	X	X	✓ Section 7.1.4 Section 5.4 in CEMP	X	✓ Section 7.1.4 Section 5.3 in CEMP	X	X	No
Howth Head SAC	X	✓ Section 7.2.6 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.2.6 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	No
Rockabill to Dalkey Island SAC	X	✓ Section 7.2.6 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.2.6 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	No

European Site	Potential Impacts and Mitigation Required												Any adverse effect on the integrity of European sies (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	
Lambay Island SAC	X	✓ Section 7.2.6 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.2.6 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	No
Howth Head Coast SPA	X	✓ Section 7.3.6 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.3.6 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	No
Dalkey Islands SPA	X	✓ Section 7.3.6 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.3.6 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	No
Rockabill SPA	X	✓ Section 7.3.6 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.3.6 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	No
North Bull Island SPA	X	✓ Section 7.4.4 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.4.4 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	No

European Site	Potential Impacts and Mitigation Required												Any adverse effect on the integrity of European sies (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	
South Dublin Bay and River Tolka Estuary SPA	X	✓ Section 7.5.4 / 7.1.4 Section 5.4 in CEMP	X	✓ Section 7.5.4 / 7.1.4 Section 5.3 in CEMP	X	X	X	✓ Section 7.5.4 / 7.1.4 Section 5.4 in CEMP	X	✓ Section 7.5.4 / 7.1.4 Section 5.3 in CEMP	X	X	No
Malahide Estuary SPA	X	✓ Section 7.6.4 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.6.4 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	No
Baldoyle Bay SPA	X	✓ Section 7.7.4 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.7.4 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	No
Rogerstown Estuary SPA	X	✓ Section 7.8.4 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.8.4 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	No
Skerries Islands SPA	X	✓ Section 7.9.4 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.9.4 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	No

European Site	Potential Impacts and Mitigation Required												Any adverse effect on the integrity of European sies (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	
Islands Eye SPA	X	✓ Section 7.10.5 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.10.5 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	No
Lambay Island SPA	X	✓ Section 7.10.5 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.10.5 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	No
The Murrough SPA	X	✓ Section 7.11.4 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	X	✓ Section 7.11.4 / 7.1.4 Section 5.4 in CEMP	X	X	X	X	No

8.2 Summary of Residual Impacts

353 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. A matrix identifying those aspects which will be subject to mitigation measures and the residual impacts post mitigation is provided in Table 32 for the relevant European sites.

9 In-Combination Assessment

354 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).

355 There are 17 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;
- 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 Murrough SPA.

356 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

357 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.

358 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 33.

Table 33 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[19]
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 • 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 • Clongriffin-Belmayne Local Area Plan 2012-2018 • George's Quay Local Area Plan 2012-2022 • 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

[19] Together the National Development Plan and the National Framework are referred to as Project Ireland 2040: Building Ireland's Future

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: refer to “Details” link
- 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: refer to “Details” link
- 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: refer to “Details” link
- 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: refer to “Details” link

- DART+ Programme Coastal South
- 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 lo
- 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 créche) partically 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
- Clongriffin 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

359 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 above were identified and assessed. This assessment is presented below in Table 34 and Table 35.

Table 34 In-Combination Assessment of Plans and Programmes

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
National Energy & Climate Plan 2021-2030 This National Energy and Climate Plan builds on previous national strategies and sets out in detail objectives regarding the five energy dimensions together with planned policies and measures to ensure that these objectives are achieved. It aims as a fundamental national objective to pursue a trajectory of emissions reduction which is in line with reaching net zero in Ireland by 2050. In relation to transport the plan aims to: • make growth less transport intensive through better planning, remote and home-working and modal shift to public transport • Increase the renewable biofuel content of motor fuels • Set targets for the conversion of public transport fleets to zero carbon alternatives.	No potential impact pathways to European sites. There are no specific spatial references in this policy document and therefore, no specific link (in terms of potential impact pathways) between it and European sites within the Zone of Influence (ZoI) of the Proposed Scheme.	No in combination impact Key to considering the on-going evolution of national climate policy included are the obligations of the State under EU law (e.g. the EU Habitats Directive), and the promotion of sustainable development. Considering that, this policy position poses no identifiable risk of resulting in adverse effects on the integrity of any European sites.
National Development Plan Ireland 2021-2030 **As part of Project Ireland 2040 the National Development Plan sets out the Government's over-arching investment strategy and budget for the period 2021-2030. The plan that aims to balance demand for public investment across all sectors and regions of Ireland with a major focus on the delivery of infrastructure projects.**	There is the potential that developments implemented under the National Development Plan could affect European sites within the ZoI of the Proposed Scheme. The potential impact pathways cannot be defined based on the level of detail included in the plan. However, future developments implemented through the National Development Plan have the potential to lie either within those European sites, or be situated in a location where they may be within the ZoI of those European sites.	No in combination impact. Any projects required to achieve the objectives of the National Development Plan must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the ZoI of the Proposed Scheme, the overarching land use plans are Fingal CDP (2017-2023), Dublin City CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022), 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 proposed within the plan area. These are presented in Section 9.2. This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below). Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the National Development Plan poses no identifiable risk of resulting in adverse

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
		effects on the integrity of any European sites in combination with the Proposed Scheme.
Project Ireland 2040 – National Planning Framework **The National Planning Framework is** a high-level strategic plan to guide future growth and development in Ireland. The NPF makes reference to delivering projects in Dublin (here Dublin refers to the Greater Dublin Area (GDA). This area includes Dublin City and the following surrounding lands and counties: Dun Laoghaire/Rathdown, Fingal, Kildare, Meath, South Dublin and Wicklow. Projects such as the DART expansion programme, Bus Connects Scheme, and investment at Dublin Port, amongst others are referenced. Key objectives of the plan include: • Managing sustainable growth of cities, towns and villages • Providing accessibility between key urban centres • **Enhance public transport in a sustainable manner**	There is the potential that developments implemented under Project Ireland 2040 could affect European sites within the ZoI of the Proposed Scheme. The potential impact pathways cannot be defined based on the level of detail included in the plan. However, future developments implemented through Project Ireland 2040 have the potential to lie either within those European sites, or be situated in a location where they may be within the ZoI of those European sites.	No in combination impact. Any projects required to achieve the objectives of Project Ireland 2040 Plan must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the ZoI of the Proposed Scheme, the overarching land use plans are Fingal CDP (2017-2023), Dublin City CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022), 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 proposed within the plan area. These are presented in Section 9.2. This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below). Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, Project Ireland 2040 poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
National Transport Authority Integrated Implementation Plan 2019-2024 An Infrastructure investment programme forms the core of this plan. There are four key investment areas: bus, light rail, heavy rail, and integration measures and sustainable transport. The NTA Integrated Implementation Plan refers to the delivery of projects in Dublin, such as the DART expansion program and GDA Cycle Network Plan, amongst others.	There is the potential that developments implemented under this plan could affect European sites within the ZoI of the Proposed Scheme. The potential impact pathways cannot be defined based on the level of detail included in the plan. However, future developments implemented through this plan have the potential to lie either within those European sites, or be situated in a location where they may be within the ZoI of those European sites.	No in combination impact. Any projects required to achieve the objectives of this plan must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the ZoI of the Proposed Scheme, the overarching land use plans are Fingal 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 proposed within the plan area. These are presented in Section 9.2. This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect

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
		European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below). Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this plan poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
Smarter Travel a Sustainable Transport Future 2009-2020 Smarter Travel is a government policy document outlining a strategy related to sustainable transport. It sets out actions to reduce overall travel demand, to maximise the efficiency of the transport network, to reduce reliance on fossil fuels, to reduce transport emissions, and to improve accessibility to transport.	There is the potential that developments implemented under Smarter Travel could affect European sites within the ZoI of the Proposed Scheme. Smarter Travel does not propose or support any specific development proposals in identified locations and the potential impact pathways cannot be defined. However, future developments implemented through Smarter Travel have the potential to lie either within those European sites, or be situated in a location where they may be within the ZoI of those European sites.	Any projects required to achieve the objectives of smarter travel must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the ZoI of the Proposed Scheme, the overarching land use plans are Fingal CDP (2017-2023), Dublin City CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022), 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 proposed within the plan area. These are presented in Section 9.2. This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below). Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, Smarter Travel poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
National Biodiversity Action Plan 2017-2021 The National Biodiversity Action Plan sets out 119 targeted actions, underpinned by seven strategic objectives aimed at ensuring that Irelands' biodiversity and ecosystems are conserved and restored, delivering benefits essential for all sectors of society and that Ireland contributes to efforts to halt the loss of biodiversity and the degradation of ecosystems in the EU and globally. The strategic objectives lay out a clear framework for Ireland's national approach to biodiversity.	The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems therefore, it will contribute towards maintaining or restoring the conservation condition of the European sites within their ZoI. Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites	No in combination impact As the National Biodiversity Action Plan aims to halt biodiversity loss, no likely significant in-combination effects are predicted

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
River Basin Management Plan 2018-2021 The River Basin Management Plan outlines the measures the State and other sectors will take to improve water quality in Ireland's groundwater, rivers, lakes, estuarine and coastal waters.	The purpose of this plan is to improve water quality in Ireland's groundwater, rivers, lakes, estuarine and coastal waters therefore, it will contribute towards maintaining or restoring the conservation condition of the European sites within their ZoI. Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites.	No in combination impact No potential for in combination impacts with the Proposed Scheme as such a plan is intended to improve the quality of the ecological environment within its ZoI.
National Air Pollution Control Programme (NAPCP) Draft 2019 The National Air Pollution Control Programme (Article 6 of Directive (EU) 2016/2284 – 'the NEC Directive') is the main governance instrument by which EU Member States must ensure that the emission reduction commitments for 2020-2029 and 2030 onwards are met.	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.	No in combination impact No potential for in combination impacts with the Proposed Scheme as such a plan is intended to improve the quality of the ecological environment within its ZoI.
National Marine Planning Framework 2018 This framework is the first formal step towards the preparation of a marine spatial plan for Ireland which will contribute to the effective management of marine activities e.g. fishing, shipping, leisure, aquaculture and renewable energy, and a more sustainable use of our marine resources.	There is the potential that any developments implemented under the National Marine Planning Framework could affect European sites within the 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, any future developments implemented through the National Marine Planning Framework have the potential to lie either within those European sites, or be situated in a location where they may be within the ZoI of those European sites.	No in combination impact Any projects required to achieve the objectives of the National Marine Planning Framework will be implemented by the relevant local or other consenting authorities and statutory bodies and must comply with the statutory planning or other legislative requirements, including those of any relevant land use plans. All of these plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2. This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below). Considering the environmental protection policies included within the National Marine Planning Framework 2018, and in the county and local level land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the National Marine Planning Framework 2018 poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
Water Services Strategic Plan 2015 Water Services Strategic Plan (WSSP) sets out strategic objectives for the delivery of water services over the next 25 years up to 2040. Its six strategic objectives include: meeting customer expectations; ensuring a safe and reliable water supply; providing effective management of wastewater;	Objectives of the WSSP 2015 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 Wicklow CDP (2016-2022), NTA and TII. There is the potential that developments implemented under the WSSP could affect European sites within the ZoI of the Proposed Scheme. The WSSP does	No in combination impact Any projects required to achieve the objectives of the Water Services Strategic Plan will be implemented locally by the relevant local authority and must comply with the statutory planning requirements, and those of the relevant land use plans.

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
protecting and enhancing the environment; supporting social and economic growth; and investing in our future.	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 WSSP have the potential to lie either within these European sites, or be situated in a location where these European sites may be within their ZoI.	All of these plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2. This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below). Considering the environmental protection policies included within the NPF, and in the county and local level land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the WSSP 2015 poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
Regional Spatial & Economic Strategy for the Eastern and Midland Region 2019-2031 A RSES is a strategic plan which identifies regional assets, opportunities and pressures and provides appropriate policy responses in the form of Regional Policy Objectives. One of its main aims is to provide a framework to better manage spatial planning and economic development throughout the Region.	There is the potential that developments implemented under the Regional Spatial & Economic Strategy for the Eastern and Midland Region could affect European sites within the ZoI of the Proposed Scheme. The Regional Spatial & Economic Strategy for the Eastern and Midland Region does not propose or support any specific development proposals in identified locations and the potential impact pathways cannot be defined. However, future developments implemented through the Regional Spatial & Economic Strategy for the Eastern and Midland Region have the potential to lie either within those European sites, or be situated in a location where they may be within the ZoI of those European sites.	No in combination impact. Any projects required to achieve the objectives of the Regional Spatial & Economic Strategy for the Eastern and Midland Region will be implemented locally by the relevant local authority and must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the ZoI of the Proposed Scheme, the overarching land use plans are Fingal CDP (2017-2023), Dublin City CDP (2016-2023), South Dublin CDP (2016-2022), Dún Laoghaire-Rathdown CDP (2016-2022), 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 proposed within the plan area. These are presented in Section 9.2. This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below). Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the Regional Spatial & Economic Strategy for the Eastern and Midland Region poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.

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
Greater Dublin Area Cycle Network Plan 2013 The Greater Dublin Area Cycle Network Plan sets out the goals to promote and provide cycling infrastructure across the Greater Dublin Area, and the actions to achieve these goals.	The Proposed Scheme lies partly within the functional 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. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: • Habitat 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); • Habitat degradation as a result of air quality impacts (for example South Dublin Bay and River Tolka Estuary SPA will be adjacent to Clontarf 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 Murrough SPA).	No in combination impact. The Greater Dublin Area Cycle Network Plan 2013has 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**.** The Greater Dublin Area Cycle Network Plan 2013contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. These are presented in Section 9.2. Considering the protective environmental policies contained within the Greater Dublin Area 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. 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). All of these land use plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2. This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below). Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the 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.

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
Eastern Catchment Flood Risk Assessment and Management (CFRAM) study 2011-2016 This study includes the following main elements within the Eastern catchment: 1. Flood Risk Assessments 2. Flood Risk Mapping 3. Flood Risk Management Plans	The Eastern Catchment Flood Risk Assessment and Management (CFRAM) Study will ultimately result in the development of catchment- based flood risk management plans. These may propose flood risk management measures which, through various potential impact pathways, could affect the conservation objectives supporting QI/SCI habitats and species of spatially relevant European sites. Potential impacts include: • Hydrological impacts e.g. reduction in water quality or changes to water flow • Habitat loss / fragmentation	No in combination impact CFRAM Studies and their product Flood Risk Management Plans have undergone AA. The AA of the CFRAMs considered the potential for impacts from hard engineering solutions and how they might affect hydrological connectivity and hydromorphological supporting conditions for protected habitats and species. Any projects required to achieve the objectives of CFRAM must comply with the requirements and obligations of EU and Irish planning and environmental law, including those of any relevant land use plans (Development Plans, Local Area Plans etc.). All of these land use plans contain objectives and policies to ensure the protection of European sites from any projects proposed within the plan area. These are presented in Section 9.2. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the CFRAM will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
Fingal Development Plan 2017-2023 The Fingal CDP makes reference to residential development, zoning and infrastructure targets / obligations.	The Proposed Scheme lies within the functional area of the 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. 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 • 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,	No in combination impact. 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. 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. 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.

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
	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); • 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.	
Fingal Biodiversity Action Plan 2010-2015 The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems.	No, there are no potential impact pathways to European sites. This plan will contribute towards maintaining or restoring the conservation condition of the European sites within their ZoI. Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites.	No in combination impact No potential for in combination impacts with the proposed scheme as such a plan is intended to improve the quality of the ecological environment within its ZoI.
Fingal County Council Climate Action Plan 2019-2024 The purpose of this action plan is to improve the council's energy efficiency, reduce their greenhouse emissions and create a climate resilient Dublin.	No, there are no potential impact pathways to European sites. This plan will contribute towards improving the climate change resilience of the European sites within their ZoI. Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites.	No in combination impact No potential for in combination impacts with the Proposed Scheme as such a plan is intended to improve the quality of the environment within its ZoI.
Donabate Local Area Plan 2016 The LAP makes reference to phased housing development targets / obligations.	The Proposed Scheme lies with the functional area of the Fingal County 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. 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 • 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);	No in combination impact. The Donabate LAP was subject to AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of the plan. The Donabate Local Area Plan 2016 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

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
	• 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.	
Rivermeade Local Area Plan 2018 The LAP makes reference to 11 development area targets / obligations and the creation of a link road to connect Rivermeade to Swords.	The Proposed Scheme lies within the functional area of the Fingal County 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. 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 • 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,	The Rivermeade LAP 2018 was subject to AA prior to its adoption and therefore, there will be no adverse effects on any European sites as a result of implementation of the plan. The Rivermeade Local Area Plan 2018 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	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)	
Barnhill Local Area Plan 2019 The LAP makes reference to residential development targets / obligations.	The Proposed Scheme lies within the functional area of the Fingal County 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. 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 • 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);	The Barnhill Local Area Plan 2019 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of the plan. The Barnhill Local Area Plan 2019 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	• 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.	
Kinsaley Local Area Plan 2019 The LAP makes reference to commercial and residential development targets / obligations.	The Proposed Scheme lies within the functional area of the Fingal County 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. 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 • 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	The Kinsaley Local Area Plan 2019 was subject to AA , prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of the LAP. The Kinsaley Local Area Plan 2019 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	• 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.	
Dublin Airport Local Area Plan 2020 The LAP makes reference to airside and landside infrastructure targets / obligations.	The Proposed Scheme lies within the functional area of the Fingal County 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. 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 • 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 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,	The Dublin Airport Local Area Plan was subject to AA, prior to its adoption and therefore, subject to any mitigation identified as being required , there will be no adverse effects on any European sites as a result of implementation of the LAP. The Dublin Airport Local Area Plan 2020 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA.	
Dublin City Development Plan 2016-2022 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.	The Proposed Scheme lies within the functional area of the Dublin City Administrative Area and many of the objectives and policies therein, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: • Habitat 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); • Habitat degradation as a result of air quality impacts (for example South Dublin Bay and River Tolka Estuary SPA will be adjacent to Clontarf 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 Murrough SPA.	The Dublin City Development Plan 2016 - 2022 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of the plan. The Dublin City Development Plan 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. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

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
Dublin City Biodiversity Action Plan 2015-2020 The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems.	No, there are no potential impact pathways to European sites. This plan will contribute towards maintaining or restoring the conservation condition of the European sites within their ZoI. Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites.	No in combination impact No potential for in combination impacts with the Proposed Scheme as such a plan is intended to improve the quality of the ecological environment within its ZoI.
Dublin City Council Climate Action Plan 2019-2024 The purpose of this action plan is to improve the council's energy efficiency, reduce their greenhouse emissions and create a climate resilient Dublin.	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 a variety of potential impact pathways, to affect European sites. • 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 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.	No in combination impact The plan is intended to improve the quality of the environment within its ZoI. Any projects required to achieve the objectives of plan will be implemented by the relevant local or other consenting authorities and must comply with the statutory planning or other legislative requirements, including those of any relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites within the 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 proposed within the plan area. These are presented in Section 9.2. This assessment has identified those land use plans that have the potential to act in combination with the Proposed Scheme to affect European sites, given their spatial jurisdiction (see discussions on the relevant land use plans in the sections below). Considering the environmental protection policies included within those land use plans, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, CFRAM poses no identifiable risk of resulting in adverse effects on the integrity of any European sites in combination with the Proposed Scheme.
Clongriffin-Belmayne Local Area Plan 2012-2018 The LAP makes reference to commercial and residential development targets / obligations, and targets associated	The Proposed Scheme lies within the functional area of the 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	The Clongriffin-Belmayne Local Area Plan 2012-2018 was subject to AA, prior to its adoption and therefore, subject to any mitigation

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
with interconnecting walking, cycling and public transport routes.	combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: • Habitat 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); • 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).	identified as being required, there will be no adverse effects on any European sites as a result of implementation of the plan. The Clongriffin-Belmayne Local Area Plan 2012-2018 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
George's Quay Local Area Plan 2012-2022 The LAP makes reference to mixed use development targets / obligations, and targets associated with the improvement of pedestrian and cycling infrastructure.	The Proposed Scheme lies within the functional area of the 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. 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	The George's Quay Local Area Plan 2012-2022 subject to AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of the plan. The George's Quay Local Area Plan 2012-2022 contains objectives and policies to ensure the protection of European sites, including

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
	combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in 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).	surface water quality, from any projects proposed within the plan area. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
Ballymun Local Area Plan 2017 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.	The Proposed Scheme lies within the functional area of the 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. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: • Habitat 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	The The Ballymun Local Area Plan 2017 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of the plan. The Ballymun Local Area Plan 2017 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

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
	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.	
The Liberties Local Area Plan 2009-2020 This LAP makes reference to increasing local authority housing, installing new infrastructure, and targets/obligations associated with creating new routes for pedestrians and cyclists.	The Proposed Scheme lies within the functional area of the 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. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in 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).	The Liberties Local Area Plan 2009-2020 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of the plan. The Liberties Local Area Plan 2009-2020 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
Naas Road Local Area Plan 2013-2023 This LAP makes reference to the creation of four strategic development regeneration areas and targets / obligations associated making improvements to pedestrian, cycling and public transport infrastructure.	The Proposed Scheme lies within the functional area of the Dublin City Development Plan 2016-2022 and some of the objectives and policies of the Naas Road Local Area Plan 2013-2023, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in 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).	The Naas Road Local Area Plan 2013-2023 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of the plan. The Naas Road Local Area Plan 2013-2023 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
Park West- Cherry Orchard Local Area Plan 2019 This LAP makes reference to residential and mixed-use development targets / obligations, and targets associated with the improvement of infrastructure connecting pedestrians, cycling and public transport.	The Proposed Scheme lies within the functional area of the 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. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in North Dublin Bay	The Park West- Cherry Orchard Local Area Plan 2019 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of the plan. The Park West- Cherry Orchard Local Area Plan 2019 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

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
	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).	
South Dublin County Council Development Plan 2016-2022 The South Dublin CDP makes reference to commercial and residential development (including Adamstown and Clonburris SDZs), and infrastructure targets / obligations aimed at increasing connectivity between pedestrian and cycle routes and public transport.	The Plan lies within the functional area of the South Dublin County Administrative Areas, 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. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: • Habitat 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	The South Dublin County Council Development Plan 2016-2022 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified as being required, there will be no adverse effects on any European sites as a result of implementation of South Dublin County Council Development. 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. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	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.	
Biodiversity Action Plan for South Dublin County (2020-2026)- Draft for public consultation The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems.	No, there are no potential impact pathways to European sites. This 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.	No in combination impact No potential for in combination impacts with the Proposed Scheme as such a plan is intended to improve the quality of the ecological environment within its ZoI.
South Dublin County Council Climate Change Action Plan 2019-2024 The purpose of this action plan is to improve the council's energy efficiency, reduce their greenhouse emissions and create a climate resilient Dublin.	No, there are no potential impact pathways to European sites. This plan will contribute towards improving the climate change resilience. There are no potential impact pathways by which it could adversely affect the integrity of any European sites sites within the ZoI of the Proposed Scheme.	No in combination impact No potential for in combination impacts with the Proposed Scheme as such a plan is intended to improve the quality of the environment within its ZoI.
Tallaght Town Centre Local Area Plan 2020 This LAP makes reference to residential and mixed-use development targets / obligations, and targets associated with the improvement of infrastructure connecting pedestrians, cycling and public transport.	The Proposed Scheme lies within the functional area of the South Dublin County 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. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: • Habitat 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	The Tallaght Town Centre Local Area Plan 2020 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified, there will be no adverse effects on any European sites as a result of implementation of the LAP. The Tallaght Town Centre Local Area Plan 2020 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	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).	
Liffey Valley Town Centre Local Area Plan 2008 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.	The Proposed Scheme lies within the functional area of the South Dublin County 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. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: • Habitat 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	No in combination impact. 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. 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. 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.

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
	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); • Habitat degradation as a result of air quality impacts (for example South Dublin Bay and River Tolka Estuary SPA will be adjacent to Clontarf 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 Murrough SPA).	
Dún Laoghaire- Rathdown Development Plan 2016-2022; Dún Laoghaire The Dún Laoghaire- Rathdown CDP makes reference to commercial and residential development (including Cherrywood SDZ) targets / obligations, and targets associated with providing suitable community infrastructure.	The Proposed Scheme lies within the functional area of the Dun Laoghaire – Rathdown Development Plan 2016-2022, however some of the objectives and policies of the Dún Laoghaire- Rathdown 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. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: • Habitat 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	The Dún Laoghaire- Rathdown Development Plan 2016-2022 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified, there will be no adverse effects on any European sites as a result of implementation of Dún Laoghaire-Rathdown CDP. The Dún Laoghaire- Rathdown 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. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the Dún Laoghaire- Rathdown CDP will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	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).	
Dún Laoghaire- Rathdown Biodiversity Plan 2009-2013; Dún Laoghaire- Rathdown Biodiversity Plan (current draft under review) The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems.	No, there are no potential impact pathways to European sites. This plan will contribute towards maintaining or restoring the conservation condition of the European sites within their ZoI. Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites.	No in combination impact No potential for in combination impacts with the Proposed Scheme as such a plan is intended to improve the quality of the ecological environment within its ZoI.
Dún Laoghaire-Rathdown County Council Climate Change Action Plan 2019-2024 The purpose of this action plan is to improve the council's energy efficiency, reduce their greenhouse emissions and create a climate resilient Dublin.	No, there are no potential impact pathways to European sites. This plan will contribute towards improving the climate change resilience. There are no potential impact pathways by which it could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme.	No in combination impact No potential for in combination impacts with the proposed scheme as such a plan is intended to improve the quality of the environment within its ZoI.
Deansgrange Local Area Plan 2010-2020 This LAP makes reference to residential and mixed-use development targets / obligations, and targets associated with the improvement of infrastructure connecting pedestrians, cycling and public transport.	The Proposed Scheme lies within the functional area of the Dun Laoghaire – Rathdown 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. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: • Habitat 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);	Although the Deansgrange Local Area Plan 2010-2020 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified, there will be no adverse effects on any European sites as a result of implementation of the plan. The Deansgrange Local Area Plan 2010-2020 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	• 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.	
Stillorgan Local Area Plan 2018-2024 This LAP makes reference to the redevelopment of five key sites, commercial and residential development targets / obligations, and targets associated with the improvement of infrastructure connecting pedestrians, cycling and public transport.	The Proposed Scheme lies within the functional area of the Dun Laoghaire - Rathdown 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. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: • Habitat 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	The Stillorgan Local Area Plan 2018-2024 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified, there will be no adverse effects on any European sites as a result of implementation of the plan. The Stillorgan Local Area Plan 2018-2024 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	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.	
Blackrock Local Area Plan 2015-2021 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.	The Proposed Scheme lies within the functional area of the Dun Laoghaire - Rathdown 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. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: • Habitat 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	The Blackrock Local Area Plan 2015-2021 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified, there will be no adverse effects on any European sites as a result of implementation of the plan. The 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. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	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.	
Woodbrook-Shanganagh Local Area Plan 2017-2024 This LAP makes reference to residential development targets / obligations, and targets associated with the improvement of infrastructure connecting pedestrians, cycling and public transport.	The Proposed Scheme lies within the functional area of the Dun Laoghaire - Rathdown Development Plan 2016-2022, however some of the objectives and policies of the Woodbrook-Shanganagh Local Area Plan 2017-2024, have the potential to act in combination with the Proposed Scheme, through a variety of potential impact pathways, to affect European sites. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: • Habitat 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	The Woodbrook-Shanganagh Local Area Plan 2017-2024 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified, there will be no adverse effects on any European sites as a result of implementation of the plan. The Woodbrook-Shanganagh Local Area Plan 2017-2024 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
	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.	
Wicklow County Development Plan 2016-2022 The Wicklow CDP makes reference to commercial and residential development targets / obligations, and targets associated with facilitating an extension of the LUAS and rail services, and facilitating the development of cycleways and walkways throughout the county.	The Plan lies within the functional area of the Wicklow County administrative Area, 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. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: • Habitat 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); 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).	The Wicklow County Development Plan 2016-2022 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified, there will be no adverse effects on any European sites as a result of implementation of Wicklow CDP. The Wicklow County Development Plan 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. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the Wicklow CDP will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
Wicklow Biodiversity Plan 2010-2015 The purpose of this action plan is to halt the loss of biodiversity and the degradation of ecosystems.	No, there are no potential impact pathways to European sites. This plan will contribute towards maintaining or restoring the conservation condition of the European sites within their ZoI. Consequently, there are no potential impact pathways by which it could adversely affect the integrity of any European sites.	No in combination impact No potential for in combination impacts with the Proposed Scheme as such a plan is intended to improve the quality of the ecological environment within its ZoI.
Wicklow County Council Climate Change Adaptation Strategy 2019	No, there are no potential impact pathways to European sites. This plan will contribute towards improving the climate change resilience. There are no potential impact pathways by which it could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme.	No in combination impact No potential for in combination impacts with the Proposed Scheme as such a plan is intended to improve the quality of the environment within its ZoI.

Plan Description	Are there potential impact pathways by which the Plan / Programme could act in combination with the Proposed Scheme to adversely impact European sites	Will the Plan/Programme act in combination with the Proposed Scheme to adversely affect the integrity of European sites
The purpose of this action plan is to improve the council's energy efficiency, reduce their greenhouse emissions and create a climate resilient Wicklow.		
Bray Municipal District Local Area Plan 2018-2024 This LAP makes reference to commercial and residential development targets / obligations, including the two key development areas of Fassaroe and the former Bray Golf Club, and targets associated with improving roads and transport infrastructure, and providing pedestrian, cycling and public transport routes.	The Proposed Scheme lies within the functional area of the Wicklow County Development Plan 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. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: • Habitat 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); 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).	The Bray Municipal District Local Area Plan 2018-2024 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified, there will be no adverse effects on any European sites as a result of implementation the LAP. The Bray Municipal District Local Area Plan 2018-2024 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.
Bray Town Development Plan 2011-2017 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.	The Proposed Scheme lies within the functional area of the Wicklow County 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. As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites including: • Habitat 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	The Bray Municipal District Local Area Plan 2018-2024 was subject to AA, prior to its adoption and therefore, subject to any mitigation identified there. will be no adverse effects on any European sites as a result of implementation the plan. The Bray Municipal District Local Area Plan 2018-2024 contains objectives and policies to ensure the protection of European sites, including surface water quality, from any projects proposed within the plan area. Considering this, and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, this land use plan will not act in combination with the Proposed Scheme to adversely affect the integrity of any European sites.

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
	SPA, Skerries Islands SPA, Lambay Island SPA, Ireland's Eye SPA and The Murrough 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).	

Table 35 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	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. As these works are completed and there is no physical overlap between the Proposed Scheme and this project, there is limited potential for in-combination effects to arise. The main potential for in-combination effects is habitat degradation/effects on QI/SCI species as a result of hydrological impacts; for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in 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.	No in-combination effect. 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. 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.
MP02	Enhancements of the N2/M2 national route inclusive of a bypass of Slane, to provide	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could	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?
	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	adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme.	
MP03	N3 Castaheany Interchange Upgrade	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. There is no physical overlap between the Proposed Scheme and this project and the only potential for in-combination effects could be as a result of: • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in 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).	No in-combination effect. The proposed N3 Castaheaney Interchange Upgrade project will comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant development Plan. This land use plan contains objectives and policies to ensure the protection of European sites. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the N3 Castaheany Interchange Upgrade project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed N3 Castaheany Interchange Upgrade and has included mitigation in that regard to prevent any such adverse effects.
MP04	Reconfiguration of the N7 from its junction with the M50 to Naas, to rationalise junctions and accesses in order to provide a higher level of service for strategic	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. There is no physical overlap between the Proposed Scheme and this project and the only potential for in-combination effects could be as a result of:	No in-combination effect. The proposed Reconfiguration of the N7 from its junction with the M50 to Naas project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant Development Plan. This land use plan contains objectives and policies to ensure the protection of European sites.

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?
	traffic travelling on the mainline	• 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, 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).	The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Reconfiguration of the N7 from its junction with the M50 to Naas, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Reconfiguration of the N7 from its junction with the M50 to Naas and has included mitigation in that regard to prevent any such adverse effects
MP05	N3–N4: Barnhill to Leixlip Interchange	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in 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	No in-combination effect. The proposed N3-N4 Barnhill to Leixlip Interchange project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed reconfiguration works will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the reconfiguration works it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and proposed N3-N4 Barnhill to Leixlip Interchange project,

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?
		Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	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.
MP06	Reconfiguration of the N4 from its junction with the M50 to Leixlip to rationalise accesses and to provide additional capacity at the Quarryvale junction	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in 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).	No in-combination effect. The proposed Reconfiguration of the N4 from its junction with the M50 to Leixlip must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed reconfiguration works will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the reconfiguration works it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the Reconfiguration of the N4 from its junction with the M50 to Leixlip, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Reconfiguration of the N4 from its junction with the M50 to Leixlip and has included mitigation in that regard to prevent any such adverse effects.

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	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. There is no physical overlap between the Proposed Scheme and this project and the only potential for in-combination effects could be as a result of: • Habitat 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 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	No in-combination effect. The proposed Clonburris SDZ roads development project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant Development Plan. This land use plan contains objectives and policies to ensure the protection of European sites. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Clonburris SDZ roads development, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Clonburris SDZ roads development and has included mitigation in that regard to prevent any such adverse effects.
MP08	DART+ Programme West	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of:	No in-combination effect. The proposed DART + Programme West project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.

Application Reference	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?
		• 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 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.	The proposed DART + Programme West will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the DART + Programme West it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the DART+ Programme West and has included mitigation in that regard to prevent any such adverse effects.
MP09	Porterstown Distributor Link Road	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat 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	No in-combination effect. The proposed Porterstown Distributor Link Road project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed link road will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the link road it will be necessary to demonstrate that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.

Application Reference	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, 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.	Considering the lack of physical overlap between the Proposed Scheme and the proposed Porterstown Distributor Link Road, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Porterstown Distributor Link Road and has included mitigation in that regard to prevent any such adverse effects.
MP10	Widening of the N3 between Junction 1 (M50) and Junction 4 (Clonee), plus related junction and necessary changes to the existing national road network	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in 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	No in-combination effect. The proposed N3 widening project between Junction 1 (M50) and Junction 4 (Clonee) must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed N3 widening will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the N3 widening it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed N3 widening project between Junction 1 (M50) and Junction 4 (Clonee), the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.

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 widening of the N3 between Junction 1 (M50) and Junction 4 (Clonee) and has included mitigation in that regard to prevent any such adverse effects.
MP11	Lucan LUAS	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • 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).	No in-combination effect. The proposed Lucan LUAS project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Lucan LUAS will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the Lucan LUAS, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Lucan LUAS project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Lucan LUAS project and has included mitigation in that regard to prevent any such adverse effects
MP12	DART+ Programme South West	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of:	No in-combination effect. 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.

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?
		• 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 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).	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. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the DART + South West it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed DART+ Programme South West project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the DART+ Programme South West and has included mitigation in that regard to prevent any such adverse effects.
MP13	Junction upgrades and other capacity improvements on the M1 motorway, including additional lanes south of Drogheda, where required	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat 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	No in-combination effect. The proposed M1 motorway upgrades project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites and surface water quality from any projects proposed within the plan area. The proposed M1 motorway upgrades will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the M1 motorway upgrades it will be necessary to determine that the project will not result in adverse

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?
		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).	effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed M1 motorway upgrades project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme 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 Junction upgrades and other capacity improvements on the M1 motorway and has included mitigation in that regard to prevent any such adverse effects.
MP14	Finglas LUAS (Green Line extension Broombridge to Finglas)	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat 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);	No in-combination effect. The proposed Finglas LUAS (Green Line extension Broombridge to Finglas) project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Finglas LUAS extension will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the Finglas LUAS extension project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Finglas LUAS project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project

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?
		• 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).	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 Finglas LUAS extension and has included mitigation in that regard to prevent any such adverse effects.
MP15	DART+ Tunnel Element (Kildare Line to Northern Line)	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in 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).	No in-combination effect. The proposed DART+ Tunnel element (Kildare Line to Northern Line) project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed DART + Tunnel element will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the DART + Tunnel element (Kildare Line to Northern Line) project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and proposed DART + Tunnel element (Kildare Line to Northern Line) project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed DART+ Tunnel Element (Kildare Line to Northern Line) project and has included mitigation in that regard to prevent any such adverse effects.

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?
MP16	Potential Metro South alignment: SW option	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat 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 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).	No in-combination effect. The proposed Metro South alignment SW option must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Metro South alignment will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the Metro South alignment it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the potential Metro South alignment: SW option , the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Potential Metro South alignment: SW option and has included mitigation in that regard to prevent any such adverse effects
MP17	LUAS Cross City incorporating LUAS Green Line Capacity Enhancement - Phase 1	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. As these works are completed and there is no physical overlap between the Proposed Scheme and this project, there is limited potential for in-combination effects to arise.	No in-combination effect. The proposed LUAS ss 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

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 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).	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. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the LUAS Cross City incorporating LUAS Green Line Capacity Enhancement - Phase 1 project and has included mitigation in that regard to prevent any such adverse effects
MP18	Oldtown-Mooretown Western Distributor Link Road	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • 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 wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary	No in-combination effect. The proposed Oldtown-Mooretown Western Distributor Link Road project must comply with all planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed link road will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the link road it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Oldtown-Mooretown Western Distributor Link Road, the environmental protection policies 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 Oldtown-Mooretown Western Distributor Link

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, 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.	Road and has included mitigation in that regard to prevent any such adverse effects.
MP19	Potential Metro South alignment: Charlemont to Sandyford	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat 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 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).	No in-combination effect. The proposed Metro South alignment - Charlemont to Sandyford project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Metro South alignment will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the Metro South alignment it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Metro South alignment - Charlemont to Sandyford project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Metro South alignment: Charlemont to Sandyford and has included mitigation in that regard to prevent any such adverse effects
MP20	Poolbeg LUAS	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites.	No in-combination effect. The proposed 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

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 potential for in-combination effects could be as a result of: • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in 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).	plans contain objectives and policies to ensure the protection of European sites. The proposed LUAS will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the LUAS it will be necessary to demonstrate that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Poolbeg LUAS and has included mitigation in that regard to prevent any such adverse effects.
MP21	Leopardstown Link Road Phase 2	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation 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	No in-combination effect. The proposed link road project must comply with all planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed link road will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the link road it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Leopardstown Link Road Phase 2 project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the

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?
		Dublin Bay SAC, South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).	Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Leopardstown Link Road Phase 2and has included mitigation in that regard to prevent any such adverse effects.
MP22	Development of a road link connecting from the southern end of the Dublin Port Tunnel to the South Port area, which will serve the South Port and adjoining development areas	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in 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 • 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).	No in-combination effect. The proposed development of a road link connecting the southern end of the Dublin Port Tunnel to the South Port area, project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed link road will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the link road it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed development of a road link connecting from the southern end of the Dublin Port Tunnel to the South Port area, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the development of a road link connecting the southern end of the Dublin Port Tunnel to the South Port area and

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?
			has included mitigation in that regard to prevent any such adverse effects.
MP23	Poolbeg SDZ roads development	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat 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); • 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).	No in-combination effect. The proposed Poolbeg SDZ roads development project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed SDZ roads development will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the SDZ roads development it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Poolbeg SDZ roads development project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Poolbeg SDZ roads development project and has included mitigation in that regard to prevent any such adverse effects.
MP24	Glenamuck District Distributor Road	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	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat 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 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).	No in-combination effect. 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. 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. 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. Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the DART+ Programme Coastal North and has included mitigation in that regard to prevent any such adverse effects.
MP26	Widening of the M50 to three lanes in each direction between Junction 14 (Sandyford) and Junction 17 (M11) plus related junction and other changes	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in	No in-combination effect. The proposed Widening of the M50 to three lanes in each direction between Junction 14 (Sandyford) and Junction 17 (M11) project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites.

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?
		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).	The proposed M50 widening will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for M50 widening it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed widening of the M50 to three lanes in each direction between Junction 14 (Sandyford) and Junction 17 (M11), the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the widening of the M50 to three lanes in each direction between Junction 14 (Sandyford) and Junction 17 (M11) and has included mitigation in that regard to prevent any such adverse effects.
MP27	Cherrywood SDZ roads development	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.
MP28	DART+ Programme Coastal South	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat 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);	No in-combination effect. The proposed DART+ Programme Coastal South project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed DART+ Programme Coastal South will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for DART+ Programme Coastal South it will be necessary to determine that the project will not result in adverse

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?
		• 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.	effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the DART+ Programme Coastal South project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed DART+ Programme Coastal South and has included mitigation in that regard to prevent any such adverse effects.
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. The potential for in-combination effects could be as a result of: • 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	No in-combination effect. 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 contain objectives and policies to ensure the protection of European sites. The proposed relief road will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the 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. 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

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, 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.	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 R126 Donabate Relief Road: R132 to Portrane Demesne and has included mitigation in that regard to prevent any such adverse effects.
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 lo	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 combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat 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);	No in-combination effect. The proposed Metrolink project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed MetroLink will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for MetroLink it will be necessary to determine that the project will not result in adverse effects on the integrity of

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?
		• 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.	any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the MetroLink project and has included mitigation in that regard to prevent any such adverse effects.
MP33	Greater Dublin Drainage (GDD)	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The only potential for in-combination effects could be as a result of: • 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	No in-combination effect. 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. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project it will be necessary to demonstrate that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and 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,

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, 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	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 Greater Dublin Drainage Project and has included mitigation in that regard to prevent any such adverse effects.
MP34 (TBC)	Cycling: Greater Dublin Area Cycle Network Plan (excluding Radial Core Bus Corridor elements)	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat 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 wintering bird species within the potential disturbance ZoI of the Proposed Scheme for Malahide Estuary	No in-combination effect. Proposals arising out of the cycle network plan must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. Proposals arising out of the cycle network plan will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for proposals arising out of the cycle network plan it will be necessary to determine that they will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Greater Dublin Area Cycle Network Plan elements and has included mitigation in that regard to prevent any such adverse effects.

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, 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).	
MP35 (TBC)	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 receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in 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).	No in-combination effect. The proposed Dublin Array - offshore windfarm project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed 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. 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. 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. 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 mitigation in that regard to prevent any such adverse effects.
MP36	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	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of:	No in-combination effect. The proposed 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

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	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.	• 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 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).	etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed SPAR will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for SPAR it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed SPAR project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Southern Port Access Route (SPAR and has included mitigation in that regard to prevent any such adverse effects.
303678	Air insulated switchgear 110kV transmission substation. Platin, Duleek	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme either via habitat fragmentation or habitat degradation impacts (either hydrological, invasive species, air quality or disturbance/displacement to SCI species).	No in-combination effect.
304799	Construction of a new distributor road and junction to the southwest of Kells town centre. Kells	There is no physical overlap between the Proposed Scheme and this project and there are no potential impact pathways by which this project could adversely affect the integrity of any European sites within the ZoI of the Proposed Scheme either via habitat fragmentation or habitat degradation impacts (either hydrological, invasive species, air quality or disturbance/displacement to SCI species).	No in-combination effect.
JA0040	Dublin Mountain Visitors Centre and all associated	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	No in-combination effect.

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	works. Killakee and Jamestown	will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in 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).	The proposed Dublin Mountain Visitors Centre project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the Dublin Mountain Visitors Centre it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Dublin Mountain Visitors Centre project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Dublin Mountain Visitors Centre and has included mitigation in that regard to prevent any such adverse effects.
304624	FCC/12/0001 Broadmeadow Way. Greenway between Malahide Demesne and Newbridge Demesne to be known as 'Broadmeadow Way'. Malahide	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat 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);	No in-combination effect. The proposed Broadmeadow Way Greenway must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed project has been subject to planning consent, including preparation of an EIAR and Natura Impact Statement. In granting permission for the project it was necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed

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?
		• 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); • 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).	in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the consented Broadmeadow Way Greenway project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the consented Broadmeadow Way Greenway and has included mitigation in that regard to prevent any such adverse effects.
307073	Alterations to a permitted double circuit 110kV electricity transmission line development between substations. Darndale/ Belcamp	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in 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).	No in-combination effect. The proposed alternations to a permitted double circuit 110kV electricity transmission line development between substations must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed project has been subject to planning consent, including preparation of an EIAR and Natura Impact Statement. In granting permission for the project it was necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the consented alternations to a permitted double circuit 110kV electricity transmission line development between substations project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures

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			included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the consented alternations to a permitted double circuit 110kV electricity transmission line development between substations and has included mitigation in that regard to prevent any such adverse effects.
303249	110kV 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 yards to provide for various elements including new Ro-Ro jetty and consolidation of passenger terminal buildings. Dublin Port.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in 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);	No in-combination effect. The proposed project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project it will be necessary to demonstrate that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and this project at Dublin Port, the environmental protection

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		• 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 Tolka Estuary SPA will be adjacent to Rock Road at risk of increased traffic flows).	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 developments around Dublin Port and has included mitigation in that regard to prevent any such adverse effects.
306583	A residential development with ancillary commercial uses (retail unit, café and créche) partially comprising a "Build to Rent" scheme on circa 9.69 hectares. The townlands of Shanganagh, Cork Little and Shankill, Co. Dublin.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat 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); • 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.	No in-combination effect. The proposed project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed residential in named townlands around Shankill project, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed residential development in named townlands around Shankill and has included mitigation in that regard to prevent any such adverse effects.

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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.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in 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).	No in-combination effect. The proposed project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed development for Brexit Infrastructure at Dublin Port, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed development for Brexit Infrastructure at Dublin Port and has included mitigation in that regard to prevent any such adverse effects.
306834	Provision of a double circuit 220kV transmission line and a 220kV 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	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	No in-combination effect. The proposed project must comply with all applicable planning and environmental approval requirements, and be in accordance with the

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?
	associated and ancillary site works. Former Clyde House, IDA Blanchardstown Business and Technology Park, Snugborough Road, Blanchardstown, Dublin 15	will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in 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).	objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed 110kV 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. 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.
306725	Flood alleviation works along and adjacent to the River Poddle extending from the upper reaches of the river. Tymon North, Tallaght to Merchant's Quay, Dublin.	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat 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	No in-combination effect. The proposed River Poddle flood alleviation works must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.

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, 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); • 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).	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. 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.
245738 (DCC ref: 2552/15)	Aviation Fuel Pipeline. Location: Inlet Station: Bond Drive, Dublin Port, Dublin 1 to Dublin Airport, Co. Dublin	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat 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	No in-combination effect. 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. The proposed SID will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other

Application Reference	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?
		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 Murrough SPA).	projects, including the Aviation Fuel Pipeline and has included mitigation in that regard to prevent any such adverse effects.
311315	Park development project at the Racecourse Park	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat 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 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,	No in-combination effect. 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. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed Park Development project at Racecourse Park, 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 Park development project at Racecourse Park and has included mitigation in that regard to prevent any such adverse effects.

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?
		Ireland's Eye SPA, Lambay Island SPA, North Bull Island SPA, South Dublin Bay and River Tolka SPA and The Murrough SPA).	
309146, 309773	2 no. 110kV transmission lines and a 110kV Gas Insulated Switchgear (GIS) substation	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation 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).	No in-combination effect. 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. The proposed project will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for the proposed project it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the proposed project to install 2 no. 110kV transmission lines and a 110kV 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. 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	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of:	No in-combination effect. The proposed 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

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?
		• 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); • 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).	Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Clongriffin to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
	Swords to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat 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	No in-combination effect. The proposed Swords to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.

Application Reference	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, 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); • 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).	Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Swords to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
	Ballymun-Finglas to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat 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	No in-combination effect. The proposed Ballymun/Finglas to City Centre Core Bus Corridor Scheme project must comply with with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the Ballymun/Finglas to City Centre Core Bus Corridor Scheme , the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites.

Application Reference	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?
		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 Murrough SPA).	The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Ballymun/Finglas to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
	Blanchardstown to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in 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).	No in-combination effect. The proposed Blanchardstown to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the Blanchardstown to City Centre Core Bus Corridor Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Blanchardstown to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
	Lucan to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme	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?
		will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat 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, Dalkey Islands 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).	The proposed Lucan to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of temporal overlap between the Proposed Scheme and the Lucan to City Centre Core Bus Corridor Scheme which will not be constructed at the same time, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the proposed Lucan to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
	Tallaght-Clondalkin to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • 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);	No in-combination effect. The proposed Tallaght/Clondalkin to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the

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?
		• 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); • 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).	integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the Tallaght/Clondalkin to City Centre Core Bus Corridor Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Tallaght/Clondalkin to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
	Templeogue-Rathfarnham to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat 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	No in-combination effect. The proposed Templeogue/Rathfarnham to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the 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

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, 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).	included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Templeogue/Rathfarnham to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
	Kimmage to City Centre to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat degradation/effects on QI/SCI species as a result of hydrological impacts (for example reduction in water quality in catchments draining to Dublin Bay affecting the conservation objectives supporting aquatic habitats and species in 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).	No in-combination effect. The proposed Kimmage to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. 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. Considering the lack of physical overlap between the Proposed Scheme and the Kimmage to City Centre Core Bus Corridor Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Kimmage to City Centre Core Bus Corridor

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 and has included mitigation in that regard to prevent any such adverse effects.
	Bray to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat 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 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).	No in-combination effect. 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. The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the Bray to City Centre Core Bus Corridor Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Bray to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
	Blackrock/Belfield to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of:	No in-combination effect. The proposed Kimmage to City Centre Core Bus Corridor Scheme project must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area

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?
		• 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).	Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the lack of physical overlap between the Proposed Scheme and the Kimmage to City Centre Core Bus Corridor Scheme, the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Kimmage to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
	Ringsend to City Centre Core Bus Corridor Scheme	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat 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,	No in-combination effect. The proposed Ringsend to City Centre Core Bus Corridor Scheme must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. The proposed Bus Corridor Scheme will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for Bus Corridor Scheme it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme.

Application Reference		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?
			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); • 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).	Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Ringsend to City Centre Core Bus Corridor Scheme and has included mitigation in that regard to prevent any such adverse effects.
		SHDs (*Impact dependent on proximity to Proposed Scheme*)	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • 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	No in-combination effect. Proposed SHD projects must comply with all applicable planning and environmental approval requirements, and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. Proposed SHD projects will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for proposed SHD projects it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and 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 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.

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?
			• 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).	
		Irish Water Projects (*Impact dependent on proximity to Proposed Scheme*) Larger scale Irish Water infrastructure projects are described separately under major projects	As assessed in Section 7, the Proposed Scheme will not adversely affect the integrity of any European site in isolation. Therefore, the potential for in combination effects to arise are limited to those effects the Proposed Scheme will have on the receiving environment that are measurable in some way, but themselves will not affect the conservation objectives of European sites. The potential for in-combination effects could be as a result of: • Habitat 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 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).	No in-combination effect. Proposed Irish Water projects must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). These land use plans contain objectives and policies to ensure the protection of European sites. Proposed Irish Water projects will be subject to planning consent, including preparation of an EIAR and AA Screening Report/Natura Impact Statement, if required. In granting permission for proposed Irish Water projects it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from any of the impact pathways listed in the previous column in this table, either alone or in combination with the Proposed Scheme. Considering the environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Scheme to avoid significant impacts and that alone the Proposed Scheme will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Scheme to have an adverse effect on the integrity of any European sites. The Proposed Scheme will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including Irish Water Projects and has included mitigation in that regard to prevent any such adverse effects.

9.2 Plan Level Environmental Protection Policies and Objectives

360 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 Pan 2016 – 2022 and Dun Laoghaire-Rathdown County Development Plan 2016 – 2022.

361 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 Pan 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

362 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.

363 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.

364 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

365 **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.

366 **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.

367 **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

368 **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.

369 **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.

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370 **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).

371 **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)7 , the Birds Directive (2009/147/EC)8 , the Environmental Liability Directive (2004/35/EC)9 , 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 197610, 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 200811.

- 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.

372 **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:

- 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

- 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

- 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.

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

374 **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.

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375 **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.

376 **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.

377 **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

378 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.

379 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.

380 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.

381 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.

382 Table 34 and Table 35 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.

383 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.

384 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

385 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, the manner in which these could potentially impact on the European sites' qualifying interest habitats and species and 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 Island SAC, Lambay 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 or The Murrough SPA. The possibility of significant effects on any other European sites can be excluded.

386 Avoidance, design requirements and mitigation measures are set out within this NIS (and its appendices) and the effective implementation of these mitigation measures will ensure that any impacts on the conservation objectives of European sites will be avoided during the construction and operation of the Proposed Scheme such that there will be no adverse effects on any European sites."

387 It has been objectively concluded by Scott Cawley Ltd., following an examination, analysis and evaluation of the relevant information, including in particular the nature of the predicted impacts from the Proposed Scheme and the effective implementation of the mitigation measures proposed that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of any European site, either alone or in combination with other plans or projects, and there is no reasonable scientific doubt in relation to this conclusion.

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