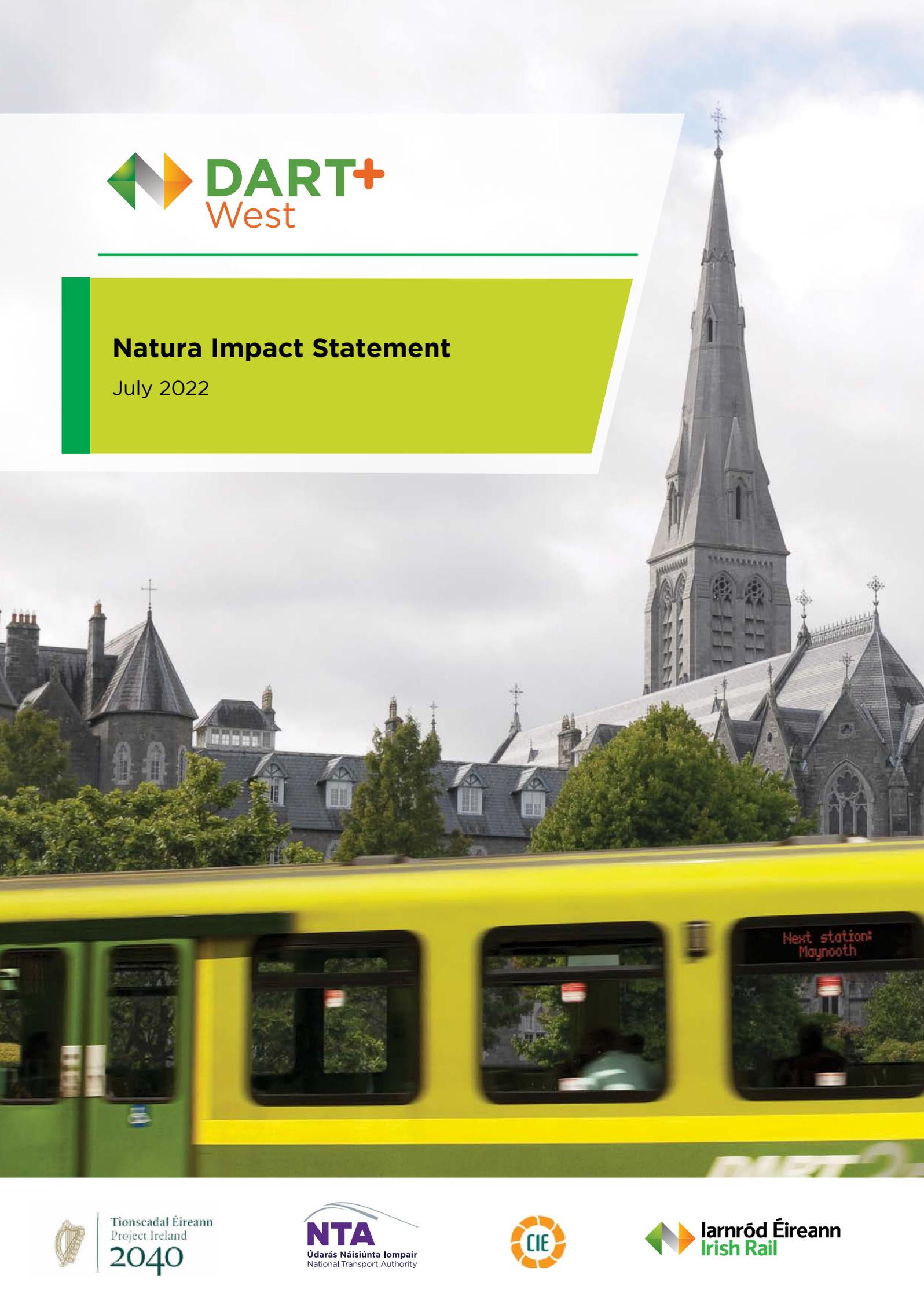




## Natura Impact Statement

July 2022



Tionscadal Éireann  
Project Ireland  
2040



## Table of contents

1.	Introduction .....	3
1.1	Background.....	3
1.2	Legislative Context.....	4
1.3	Methodology .....	6
1.4	Ecological Assessment .....	6
1.4.1	Desk Studies.....	7
1.4.2	Consultations .....	8
1.4.3	Field Surveys .....	10
2.	Description of the Proposed Development.....	11
2.1	Overview.....	11
2.2	Receiving Natural Environment .....	13
2.3	Likely Effects on the Natural Environment .....	13
3.	Identification of Adverse Effects .....	15
3.1	Establishing the Likely Zone of Impact.....	15
3.2	Site Descriptions .....	17
3.2.1	Rye Water Valley/ Carton SAC.....	17
3.2.2	South Dublin Bay and River Tolka Estuary SPA .....	18
3.2.3	North Bull Island SPA.....	19
3.2.4	North Dublin Bay SAC.....	21
3.2.5	Malahide Estuary SAC .....	23
3.2.6	Malahide Estuary SPA .....	24
3.3	Evaluation against Conservation Objectives .....	25
3.4	Summary of Potential Adverse Effects.....	35
4.	Assessment of Adverse Effects.....	36
4.1	Attributes and Targets.....	36
4.2	Rye Water Valley/ Carton SAC.....	36
4.2.1	Petrifying Springs with tufa formation ( <i>Cratoneurion</i> ) .....	36
4.2.2	Narrow-mouthed Whorl Snail ( <i>Vertigo angustior</i> ) .....	38
4.2.3	Desmoulin's Whorl Snail ( <i>Vertigo moulinsiana</i> ).....	39
4.3	South Dublin Bay and River Tolka Estuary SPA .....	41
4.3.1	Light-bellied Brent Goose .....	41
4.4	North Bull Island SPA.....	43
4.4.1	Light-bellied Brent Goose .....	43
5.	Mitigation .....	44
5.1	Principles and Approach .....	44
5.2	Mitigation Measures .....	44
5.2.1	Rye Water Valley/ Carton SAC.....	44
5.2.2	South Dublin Bay and River Tolka Estuary SPA; North Bull Island SPA .....	46
5.3	Implementation .....	47
5.4	Residual Effects .....	48
5.4.1	Petrifying Springs with tufa formation ( <i>Cratoneurion</i> ) .....	48
5.4.2	Narrow-mouthed Whorl Snail ( <i>Vertigo angustior</i> ) .....	48

5.4.3	Desmoulin's Whorl Snail ( <i>Vertigo moulinsiana</i> ) .....	48
5.4.4	Light-bellied Brent Goose .....	48
6.	In-combination Effects .....	50
6.1	Introduction .....	50
6.2	Methodology .....	50
6.3	Outcome .....	50
7.	Summary .....	101
8.	Conclusion .....	102
9.	References .....	103

<b>APPENDIX A</b>	<b>Description of the Proposed Development</b>
<b>APPENDIX B</b>	<b>Construction Strategy</b>
<b>APPENDIX C</b>	<b>Construction Environmental Management Plan</b>
<b>APPENDIX D</b>	<b>Schematics</b>
<b>APPENDIX E</b>	<b>European Sites within the likely Zone of Impact</b>
<b>APPENDIX F</b>	<b>Light-bellied Brent Geese Feeding Areas</b>
<b>APPENDIX G</b>	<b>Mitigation Measures</b>

# 1. INTRODUCTION

## 1.1 Background

Córas Iompair Éireann, hereafter referred to as CIÉ or ‘the Applicant’ (and including all references to Irish Rail or Iarnród Éireann) is applying to An Bord Pleanála (“the Board”) for a Railway Order (“RO”) for the DART+ West project (hereafter also referred to as “the proposed development”) under the Transport (Railway Infrastructure) Act 2001 (as amended and substituted) (“the 2001 Act”) and the European Union (Railway Orders) (Environmental Impact Assessment) (Amendment) Regulations 2021 (S.I. No. 743/2021) and in accordance with EU law.

IDOM and ROD have been commissioned by CIÉ to prepare the RO application including this NIS for the proposed development in accordance with relevant EU and national legislation, associated guidelines and standards.

The requirements arising out of Article 6(3) of Council Directive 92/43/EEC of 21 August 1992 on the conservation of natural habitats and of wild fauna and flora (“the Habitats Directive”) in relation to appropriate assessment are transposed into Irish law by Part XAB, Appropriate Assessment (sections 177R to 177AE of the Planning and Development Act 2000 (as amended)) and by the European Communities (Birds and Natural Habitats) Regulations 2011 as amended<sup>1</sup> (S.I. No.477 of 2011) (the Habitats Regulations), including Part 5 thereof). In accordance with Article 6(3) of the Habitats Directive and Part XAB of the Planning and Development Act, 2000 (as amended), an Appropriate Assessment (AA) Screening Report was prepared to assess whether or not the proposed development, either individually or in combination with other plans or projects, was likely to have a significant effect on one or more sites of Community importance for nature conservation (“European sites”).

The AA Screening Report, which was prepared by IDOM and ROD on behalf of CIÉ concluded, in view of best scientific knowledge and the Conservation Objectives of the sites concerned, that, in the absence of appropriate mitigation, the proposed development had the potential to significantly affect four European Sites, namely the Rye Water/ Carton SAC, the South Dublin Bay & River Tolka Estuary SPA, the North Bull Island SPA and the North Dublin Bay SAC. On the basis of that conclusion, CIÉ, in its capacity as the Competent Authority at the screening stage, determined that AA was required in order to assess the implications of the proposed development for those sites.

In accordance with Article 6(3) of the Habitats Directive and section 177V of the Planning and Development Act 2000 (as amended), it is the Competent Authority – in this case An Bord Pleanála – which carries out the appropriate assessment (AA) which includes inter alia (i) an examination (ii) an analysis (iii) an evaluation (iv) the making of findings (v) the making of conclusions and (vi) the making of a final determination.<sup>2</sup>

In order to assist An Bord Pleanála in carrying out its AA, CIÉ is required to submit a Natura Impact Statement (NIS) in respect of the proposed development.

This document comprises the NIS in respect of the proposed development and has been prepared by IDOM and ROD on behalf of CIÉ. It contains an examination, analysis and evaluation of the likely impacts from the proposed development, both individually and in combination with other plans and projects, in view of best scientific knowledge and the Conservation Objectives of the European sites concerned. It also prescribes appropriate mitigation to ensure that the proposed development will not adversely affect the integrity of those sites. Finally, it provides complete, precise and definitive findings which are capable of removing all reasonable scientific doubt as to the absence of adverse effects on the integrity of the European sites concerned and sets out detailed reasons which explains the basis for such findings.

<sup>1</sup> Including inter alia S.I. 290 of 2013; SI 499 of 2013; SI 355 of 2015; the Planning, Heritage and Broadcasting (Amendment) Act 2021, Chapter 4; SI 293 of 2021.

<sup>2</sup> *Waddenzee* (Case C-127/02) [2004] ECR I-7405; *Commission v Spain* (Case C-404/09) [2011] E.C.R. I-11853; *Sweetman* (Case C-258/11).

The NIS was prepared by Kate Moore and Patrick O'Shea. Kate is an Ecologist with over five years' experience in ecological consultancy. She holds a BSc (Hons) degree in Environmental Biology from University College Dublin. The NIS was reviewed by Patrick O'Shea MCIEEM. Patrick is an Ecologist with nine years' experience in ecological consultancy and research. Patrick has a BA (Hons) in Natural Sciences from Trinity College Dublin and an MSc in Ecological Management and Conservation Biology from Queen's University Belfast.

JBA Consulting were commissioned to carry out water chemistry analysis and freshwater invertebrate sampling at a number of locations upstream and downstream of the works at the depot and the two new bridges over the Lyreen River and Ballycaghan Stream. These surveys were led by William Mulville ACIEEM who has over three years' experience in ecological consultancy and one years' experience in research on the DETECT project, run by the Environmental Protection Agency (EPA) and University College Cork (UCC). William has a BSc (Hons) in Zoology from UCC and an MSc in Biodiversity and Conservation from Trinity College Dublin. Chemical analysis of water samples was carried out by the WaterLab, Celbridge. The lab is ISO 17025 accredited, which is the international standard that specifies the general requirements for the competence of laboratories to carry out tests.

## 1.2 Legislative Context

Council Directive 92/43/EEC of the 21<sup>st</sup> May 1992 on the conservation of natural habitats of wild fauna and flora ("the Habitats Directive") and Directive 2009/147/EC of the European Parliament and of the Council of the 30<sup>th</sup> November 2009 on the conservation of wild birds ("the Birds Directive") list habitats and species which are important for conservation and in need of protection. This protection is afforded in part through the designation of sites which support significant examples of habitats or populations of species ("European sites"). Sites designated for birds are termed "Special Protection Areas" (SPAs) and sites designated for natural habitat types or other species are termed "Special Areas of Conservation" (SACs). The complete network of European sites is referred to as "Natura 2000".

In order to ensure the protection of European sites in the context of land use planning and development, Article 6(3) of the Habitats Directive provides for the assessment of the implications of plans and projects for European sites, as follows:

*"Any plan or project not directly connected with or necessary to the management of the site [or sites] 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 [...], 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 [...]."*

The requirements arising out of Article 6(3) are transposed into Irish law by Part XAB, Appropriate Assessment (including section 177V of the Planning and Development Act 2000 (as amended)) (and in other circumstances by Part 5 of the Habitats Regulations).

The determination of whether or not a plan or project meets the two thresholds for requiring AA is referred to as "Stage 1" or "AA Screening". The first threshold is reached if the plan or project is not directly connected with or necessary to the management of one or more European sites. In its ruling in *Waddenzee*<sup>3</sup>, the Court of Justice of the European Union (CJEU) interpreted the second threshold as being reached where "*it cannot be excluded, on the basis of objective information, that [the plan or project] will have a significant effect on that site*". Thus, in applying the Precautionary Principle, the CJEU interpreted the word "likely" to mean that, as long as it cannot be demonstrated that an effect will not occur, that effect is considered "likely". A likely

<sup>3</sup> Landelijke Vereniging tot Behoud van de Waddenzee, Nederlandse vereniging tot Bescherming van Vogels v. Staatssecretaris van Landbouw, Natuurbeheer en Visserij (Waddenzee) [2004] C-127/02 ECR I-7405.

effect is considered to be “significant” only if it interrupts or causes a delay in achieving the Conservation Objectives of the site concerned.<sup>4</sup>

Prior to approval of a plan or project which is the subject of AA (also referred to as “Stage 2”), it is necessary to “ascertain” that the plan or project will not “adversely affect the integrity of the site”. In its guidance document (EC, 2018), the European Commission stated that “the integrity of a site involves its constitutive characteristics and ecological functions” and that “the decision as to whether it is adversely affected should focus on and be limited to the habitats and species for which the site has been designated and the site’s conservation objectives”. Regarding the word “ascertain”, the CJEU, also in *Waddenzee*, interpreted this as meaning “where no reasonable scientific doubt remains as to the absence of such effects”. Therefore, the legal test at Stage 2 is satisfied (and the plan or project may be authorised) when it can be demonstrated beyond reasonable scientific doubt that the plan or project will not interrupt or cause delays in the achievement of the Conservation Objectives of the site or sites concerned. AA is informed by a “Natura Impact Report” (NIR) in the case of plans or a “Natura Impact Statement” (NIS) in the case of projects.

The CJEU has made a relevant judgment on what information should be contained within documents supporting AA<sup>5</sup> (in the NIR or NIS):

*“[The AA] cannot have lacunae and must contain complete, 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.”*

The High Court and Supreme Court<sup>6</sup> have also provided clarity on how competent authorities should undertake AA<sup>7</sup> and has stated that the following four matters require to be addressed:

- First, an appropriate assessment must identify, in the light of the best scientific knowledge in the field, all aspects of the development project which can, by itself or in combination with other plans or projects, affect (a) European site(s) in the light of its conservation objectives.
- Second, there must be complete, precise and definitive findings and conclusions regarding the previously identified potential effects on any relevant European site(s) this and may not have lacunae or gaps. The requirement for precise and definitive findings and conclusions requires analysis, evaluation and decisions. Further, the reference to findings and conclusions in a scientific context requires both findings following analysis and conclusions following an evaluation each in the light of the best scientific knowledge in the field.
- Third, on the basis of those findings and conclusions, the Competent Authority (here An Bord Pleanála) must be able to determine that no scientific doubt remains as to the absence of the identified potential effects.
- Fourth, where the aforesaid three requirements are satisfied, An Bord Pleanála (“the Board”) may determine that the proposed development will not adversely affect the integrity of any relevant European site. Accordingly, an appropriate assessment may only include a determination that the proposed development will not adversely affect the integrity of any relevant European site where upon the basis of complete, precise and definitive findings and conclusions made the Board decides that no reasonable scientific doubt remains as to the absence of the identified potential effects.

<sup>4</sup> Conservation Objectives are referred to, but not defined, in the Habitats Directive. In Ireland, Conservation Objectives are set for Qualifying Interests (the birds, habitats or other species for which a given European site is selected) and represent the overall target that must be met for that Qualifying Interest to reach or maintain favourable conservation condition in that site and contribute to its favourable conservation status nationally.

<sup>5</sup> *Sweetman v. An Bord Pleanála* [2013] Case C-258/11.

<sup>6</sup> See *Kelly (Eoin) v An Bord Pleanála* [2014] I.E.H.C. 400 where the High Court (Finlay Geoghegan J.) held that section 177V(1) of the Planning and Development Act 2000 (as amended) must be construed so as to give effect to Article 6(3) of the Habitats Directive, and hence, an appropriate assessment carried out under section 177V(1) of the 2000 Act must meet the requirements of Article 6(3) of the Habitats Directive as interpreted by jurisprudence of the CJEU case law; *Connelly v An Bord Pleanála* [2018] 2 I.L.R.M 453; [2018] I.E.S.C. 31.

<sup>7</sup> *Kelly v. An Bord Pleanála* [2014] IEHC 422.

### 1.3 Methodology

On the basis of the objective information provided in the AA Screening Report (ROD-IDOM, 2022) and in view of the Conservation Objectives of the relevant European sites, CIÉ, as the competent authority at that stage, determined that the proposed development, either individually or in combination with other plans and projects, was likely to have a significant effect on three European sites, namely Rye Water/ Carton SAC, the South Dublin Bay & River Tolka Estuary SPA and the North Bull Island SPA.

In accordance with the requirements for AA, this NIS was prepared, and which presents the assessment of potential adverse effects of the proposed development on the integrity of the European sites identified at Stage 1. This assessment is undertaken in six steps, as follows:

1. Step 1 involves gathering all of the information and data that will be necessary for a full and proper assessment. These include, but are not limited to, the details of all phases of the plan or project, environmental data pertaining to the area in which the plan or project is located, e.g. rare or protected habitats and species or invasive species present or likely to be present, and the details of the European sites within the likely zone of impact.
2. Step 2 involves examination of the information gathered in the first step and detailed scientific analysis of the effects of the plan or project on the ecological structure and function of the receiving environment, focussing on European sites.
3. Step 3 evaluates the effects analysed in Step 2 against the Conservation Objectives of the relevant European site or sites, thereby determining whether or not they constitute adverse effects on site integrity.
4. Having established that the plan or project will adversely affect the integrity of one or more European sites, Step 4 involves the development of appropriate mitigation, including, where appropriate, monitoring and enforcement measures, to eliminate or minimise those effects such that they no longer constitute adverse effects on the integrity of the site(s) concerned, as well as consideration of the significance of any residual (post-mitigation) effects.
5. Step 5 involved the assessment of the significance of any residual effects arising from the proposed development in combination with other plans or projects.
6. Step 6 involves the final determination of whether or not the plan or project will adversely affect the integrity of one or more European sites. Notwithstanding the final recommendation made in the NIS, the responsibility for completing this step lies solely with the competent authority.

The following guidance documents informed the assessment methodology:

- EC (2021) Assessment of plans and projects in relation to Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Environment Directorate-General of the European Commission.
- EC (2018) Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. European Commission, Brussels.
- DEHLG (2010) Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government, Dublin.
- NPWS (2010) Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular Letter NPWS 1/10 & PSSP 2/10. Department of the Environment, Heritage and Local Government, Dublin.
- OPR (2021) Appropriate Assessment Screening for Development Management. Office of the Planning Regulator, Dublin.

### 1.4 Ecological Assessment

In order to fully inform this NIS, it was necessary to establish the baseline ecological conditions in the receiving environment, particularly with regard to European sites. This was achieved by undertaking desktop studies, carrying out field surveys and engaging in consultations with the relevant consultees, including the

National Parks & Wildlife Service (NPWS) and Inland Fisheries Ireland (IFI). The process of establishing this baseline is outlined in the subsequent subsections.

#### 1.4.1 Desk Studies

During the preparation of the NIS, the statutory consultee, the NPWS, provided data on designations of sites, habitats and species (including birds) of conservation interest. This included reports pursuant to Article 17 of the Habitats Directive (NPWS, 2019a-c) and the Site Synopses, Natura 2000 Standard Data Forms and Conservation Objectives (including supporting documents) for the relevant European sites. The desk studies involved thorough reviews of existing information relating to ecology in the vicinity of the proposed development. A number of web-based geographic information systems (GISs) were used to obtain information relating to the natural environment surrounding the proposed development. These included the NPWS Designations Viewer (NPWS, 2021), which provided information on the locations of protected sites, the National Biodiversity Data Centre's Biodiversity Maps (NBDC, 2021), which provided recent and historic records of rare and protected species in the area, and Ordnance Survey Ireland's GeoHive, which provided additional information on the wider environment.

Other resources used during the desk study included the following:

- Altemar Marine & Environmental Consultancy (2020) *Ecological Impact Assessment for a proposed development at the Old School House Site, Porterstown Road, Clonsilla, Dublin 15*. Report prepared for OSH Ventures Limited.
- Bat Eco Services (2019) *Bat Assessment*. Report prepared for DBFL Consulting Engineers, Dublin, Ireland.
- Bat Eco Services (2018) *Bridge Surveys, Royal Canal, County Dublin*. Report prepared for Natura Environmental Consultants.
- BEC Consultants (2013) *Ecological Study of the Royal Canal between Talbot Bridge and Maynooth Train Station*. Report prepared for Waterways Ireland.
- Biosphere Environmental Services (2007) *Dunboyne M3 Commuter Rail Environmental Impact Assessment: Terrestrial Ecology*. Report prepared for PM Group.
- Bat Conservation Ireland (2021) *All Ireland Daubenton's Survey data*. Received via email.
- Delaney, E., O'Hora, K., O'Donoghue, P. (2012) *Habitat Survey and Mapping of Maynooth: Habitat Survey Report*. Report prepared for the Kildare County Council, Atkins, Dublin.
- Dromey, M., Johnston, B, Nairn, R. (1990) *Ecological Survey of the Royal Canal, Final Report*. Report prepared for the Office of Public Works.
- Ecoserve Ecological Consultancy Services (2011) *An Ecological Survey of the Grand and Royal Canals in Dublin*. Report prepared for Waterways Ireland.
- Environmental Impact Services (2011a) *Natura Impact Statement for FAB 24C Conversion*. Report prepared for Intel Ireland.
- Environmental Impact Services (2011b) *Environmental Impact Statement for proposed Intel FAB 24C Project, Collinstown Industrial Park, Leixlip, Co. Kildare*. Report prepared for Intel Ireland.
- Fingal County Council (2020) *Kellystown Local Area Plan*. Fingal County Council.
- Flynn, Furney Environmental Consultants (2009) *Royal Canal: Dublin Otter Habitat Survey*. Report prepared for Waterways Ireland.
- Iarnród Éireann (2007) *Environmental Impact Statement Volume 3: Dunboyne (M3) Commuter Rail*. Report prepared for Iarnród Éireann.
- Iarnród Éireann (2013) *Guidance on the Identification and Control of Japanese Knotweed*. CCE-TEB-2013-3. Version 2.0.
- Iarnród Éireann (2021) *Vegetation Clearance Requirements for Electrified Lines*. I-ETR-4006. Version 1.0.
- Intel Ireland (2017) *The Remarkable Rye River Publication*. Information Booklet.
- JBA Consulting (2016) *Office of Public Works Arterial Drainage Maintenance Works – Ryewater Arterial Drainage Scheme*. Report prepared for the Office of Public Works.

- Keely, B. (2020) *Cross Guns Former Mill Site Bat Assessment to Inform Proposed Development of the Site for Housing*. Report prepared for Bindford Ltd.
- Keeley, B. (2015) *The Mammal Fauna of the Royal Canal*. Report prepared for Waterways Ireland and Fingal County Council Parks Division.
- Macklin, R., Brazier, B. and Sleeman, P. (2019) *Dublin City otter survey*. Report prepared by Triturus Environmental Ltd for Dublin City Council as an action of the Dublin City Biodiversity Action Plan 2015-2020.
- McCarthy Keville O'Sullivan (2018) *Ecological Assessment: Survey of the Royal Canal from Spencer Dock to Blanchardstown, Co. Dublin*. Report prepared for Waterways Ireland.
- McCarty Keville, O'Sullivan (2015) *Ecological Impact Assessment of the Greater Dublin Area Cycle Network Plan on Royal Canal pNHA from Dublin City Spencer Dock to Maynooth*. Report prepared for National Transport Authority, Dublin City Council.
- Moorkens, E. (2016) *Molluscan Survey of potential Vertigo habitats along the Royal Canal from Blanchardstown to the Dublin/Kildare Border*. Report prepared for Fingal County Council.
- Murphy, M. (2020) *Correspondence re: Draft Local Area Plan for Kellystown, Dublin 15 2020-2026. Planning Ref: FP2020/052 Kellystown*. Development Applications Unit, Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media.
- Natura Environmental Consultants (2018a) *Royal Canal Urban Greenway Biodiversity Assessment*. Report prepared for Fingal County Council.
- Natura Environmental Consultants (2018b) *12<sup>th</sup> Lock to Kildare County Boundary Waterbird Survey*. Report prepared for Fingal County Council.
- Natura Environmental Consultants (2018c) *Royal Canal Urban Greenway Biodiversity Assessment*. Report prepared for Fingal County Council.
- NM Ecology (2019) *Pre-Construction Bat Survey: Royal Canal Premium Cycle Route; Phase II, North Strand, Dublin 3*. Report prepared for Jons Civil Engineering Ltd.
- Ordinance Survey Ireland (2015) *Leixlip Habitats, 1:50,000 scale*. Habitat Map prepared for Kildare County Council.
- ROD (2018) *Royal Canal Premium Cycle Route – Phase II Sheriff Street Upper to North Strand Road, Biodiversity Study and Environmental Report*. Report prepared for National Transport Authority, Dublin City Council.
- ROD (2021) *Royal Canal Premium Cycle Route – Phase IV Phibsborough to Ashtown, Ecological Impact Assessment*. Report prepared for National Transport Authority, Dublin City Council.
- Scott Cawley (2016) *Natura Impact Statement for St. Pauls College, Raheny*. Report prepared for Crekav Trading GP Ltd.
- Scott Cawley (2014) *Kilcock Habitat Survey and Green Infrastructure Mapping*. Report prepared for Kildare County Council and The Heritage Council.
- Whitehall Environmental (2020) *Ecological Impact Assessment (EcoIA) of a Proposed Housing Development (SHD) at Cross Guns Bridge, Phibsborough, Dublin 7*. Report prepared for Bindford Ltd.
- Whitehall Environmental (2020) *Natura Impact Statement of a Proposed Strategic Housing Development at Cross Guns Bridge, Phibsborough, Dublin 7*. Report prepared for Bindford Ltd.

As with all desk studies, the data considered was only as good as the data supplied by the recorders and recording schemes. The recording schemes provide disclaimers in relation to the quality and quantity of the data they provide, and these were considered when examining outputs of the desk study.

### 1.4.2 Consultations

Throughout both the design and the environmental assessment processes, there were consultations both with the statutory consultees, the NPWS and IFI, and other relevant stakeholders. These included both written correspondence and meetings.

Consultation allowed for in-depth discussion of ecological sensitivities at specific locations along the proposed development and at specific stages in its construction and operation, as well as discussion of how any ecological impacts would be best mitigated.

A summary of these consultations, relevant to this NIS, is presented in Table 1-1 below. All issues raised by the consultees have been addressed as far as possible in this NIS.

**Table 1-1 Details of consultations**

Consultee	Date	Summary of Response or Meeting
<b>Prescribed Bodies</b>		
Department of Housing, Local Government and Heritage (National Parks & Wildlife Service)	12 <sup>th</sup> Jan 2021	A virtual meeting was held with two Divisional Ecologists from the Eastern Division of the NPWS. The NPWS staff made the following points: <ul style="list-style-type: none"> <li>The vegetation along the scheme might be an important ecological corridor.</li> <li>The presence of rare gastropods on the Royal Canal was noted.</li> <li>The canal overflows lead to the Rye Water Valley/Carton SAC and these connections need to be assessed.</li> </ul>
	6 <sup>th</sup> October 2021	A response to the PAC no. 2 was received from the Development Application Unit of the National Parks and Wildlife Service. The DAU made the following observations: <ul style="list-style-type: none"> <li>The route intersects the Rye Water Valley/ Carton SAC. The constituent species and habitats must be protected from both direct and indirect impacts.</li> <li>Habitat suitability for Desmoulin's Whorl Snail and Narrow-mouthed Whorl Snail, which are both qualifying interests of the Rye Water Valley/ Carton SAC, must be assessed.</li> <li>The submission lists the information that should be supplied to the competent authority for them to carry out their Appropriate Assessment of the project.</li> </ul>
	12 <sup>th</sup> April 2022	A virtual meeting was held with two Divisional Ecologists from the Eastern Division of the NPWS. In the meeting, ROD provided an update on the proposed development and provided responses to the DAU submission on PC2. No issues relevant to AA were discussed at the meeting.
Inland Fisheries Ireland (IFI)	21 <sup>st</sup> Apr 2021	A response to the scoping report was received from IFI. IFI made the following observations: <ul style="list-style-type: none"> <li>The proposed development will cross a number of important river systems</li> <li>The Royal Canal supports significant numbers of course fish, freshwater aquatic species, flora and fauna.</li> <li>Waterways Ireland should be consulted on works that could potentially impact the canal.</li> <li><i>Guidelines on protection of fisheries during construction works in and adjacent to waters</i> (2016) should be consulted when planning to undertake works in or near any streams and the maintenance of habitat integrity is essential.</li> <li>Specific details of works directly affecting watercourses or riparian habitats, including surface water discharges, must be submitted to IFI for assessment.</li> <li>IFI should be consulted on any proposal to manipulate surface water channels.</li> <li>Any new structures must be fish passable and should be clear-span.</li> <li>Pre-construction baseline biotic and abiotic data should be collected, to allow for comparison should the development go ahead.</li> </ul>
Meath County Council	19 <sup>th</sup> Apr 2021	A virtual meeting was held with Meath County Council (MCC) representatives and the Project Team. MCC made the following observation: <ul style="list-style-type: none"> <li>The impact of the proposed project on birds is required to be appropriately assessed and that a proposed 50 m buffer zone may be insufficient to adequately assess impact on birds and should be expanded to ensure any bird risk is appropriately assessed.</li> </ul>
<b>Pre-application Consultation</b>		
An Bord Pleanála	24 <sup>th</sup> February 2021	Pre-application consultation (PAC) meeting No. 7 was held virtually with staff of An Bord Pleanála (ABP). The purpose of PAC No. 7 with regards to biodiversity was to outline the approach and rationale that was being taken to undertake the Appropriate Assessment. The ABP representatives made the following observations:

Consultee	Date	Summary of Response or Meeting
		<ul style="list-style-type: none"> <li>Careful consideration should be given to ensure that the language used in the EIA and AA Screening Report or NIS was in line with the EIA Directive/Habitats Directive, as appropriate.</li> <li>Issues around AA Screening are currently evolving with a number of live cases before the courts.</li> <li>The proposed development crosses the Rye Water Valley/ Carton SAC, and surveys should be undertaken to identify the locations of Qualifying Interests relative to the proposed development.</li> <li>The rationale for the likely zone of impact should be scientifically justified.</li> <li>Surveys should not be limited to the railway line and stations, as it is necessary to understand the potential effects of the proposed development within an appropriate zone of impact.</li> <li>All pathways to European sites should be considered and a tailored rationale for each European site should be used.</li> </ul>
	31 <sup>st</sup> March 2021	<p>Pre-application consultation (PAC) meeting No. 8 was held virtually with staff of An Bord Pleanála. The purpose of PAC No. 8 with regards to biodiversity was to discuss the outcomes of discussion which had taken place in PAC No. 7. The ABP representatives made the following observation:</p> <ul style="list-style-type: none"> <li>The 550m element of the Zone of Influence accounted for waterbirds, however the Board queried how this was relevant to habitats, and in particular Qualifying Interests of European sites.</li> </ul>
	8 <sup>th</sup> March 2022	<p>Pre-application consultation (PAC) meeting No. 9 was held virtually with staff of An Bord Pleanála. The purpose of PAC No. 9 with regards to biodiversity was to discuss the outcomes of discussion which had taken place at PAC No. 8. ROD presented the rationale for the likely zone of impact regarding groundwater dependent habitats.</p>

### 1.4.3 Field Surveys

Field surveys were undertaken in 2020, 2021 and 2022. The purpose of the surveys was to establish the likely proximity of the qualifying interests of European sites to the proposed works.

## 2. DESCRIPTION OF THE PROPOSED DEVELOPMENT

### 2.1 Overview

The DART+ West project is seeking to significantly increase rail capacity on the Maynooth & M3 Parkway lines. This will be achieved by removing historical constraints, re-signalling the line and changing from diesel powered trains to electrified, high-capacity DART trains and increasing the frequency of trains from 7 to 12 trains per hour. The project will involve the electrification of approximately 40km of permanent way (railway line) from the Dublin City centre to west of Maynooth and to M3 Parkway Station and all associated supporting infrastructure. The electrification of the rail line is located predominantly within the existing railway corridor within Irish Rail/ CIÉ owned lands however some works will involve the acquisition of private lands to facilitate the project.

The principal project components are as follows:

- Signalling, Electrification and Telecommunication (SET) works.
- Construction of overhead line equipment (OHLE) along the railway.
- Structural alterations to existing bridge structures and construction of new bridge structures.
- Linear railway permanent way works.
- Six level crossing closures and construction of replacement bridge infrastructure, as required.
- Station alterations at Connolly Station.
- Construction of a new station at Spencer Dock.
- Construction of 12 substations and supporting technical buildings along the line.
- Provision of temporary construction and permanent maintenance compounds.
- Off-line track realignment in the vicinity of Rail overbridge 23 (OBG23/Jackson's Bridge) and associated roadworks.
- Construction of a depot (west of Maynooth), access infrastructure including a new overbridge, roadworks and flood compensation storages areas and all ancillary works.
- Main Storage and Distribution Centre.

A full description of the proposed development, the construction strategy, the Preliminary Construction Environmental Management Plan and the proposed development drawings are provided in Appendices A, B, C, D respectively. This is in line with Section 42A the Transport (Railway Infrastructure) Act 2001 (as amended), which provides for a 'coordinated assessment'. Figure 2-1 provides a schematic layout of the proposed DART+ West and its interactions with the proposed MetroLink project at Glasnevin and the proposed DART+ South West project.

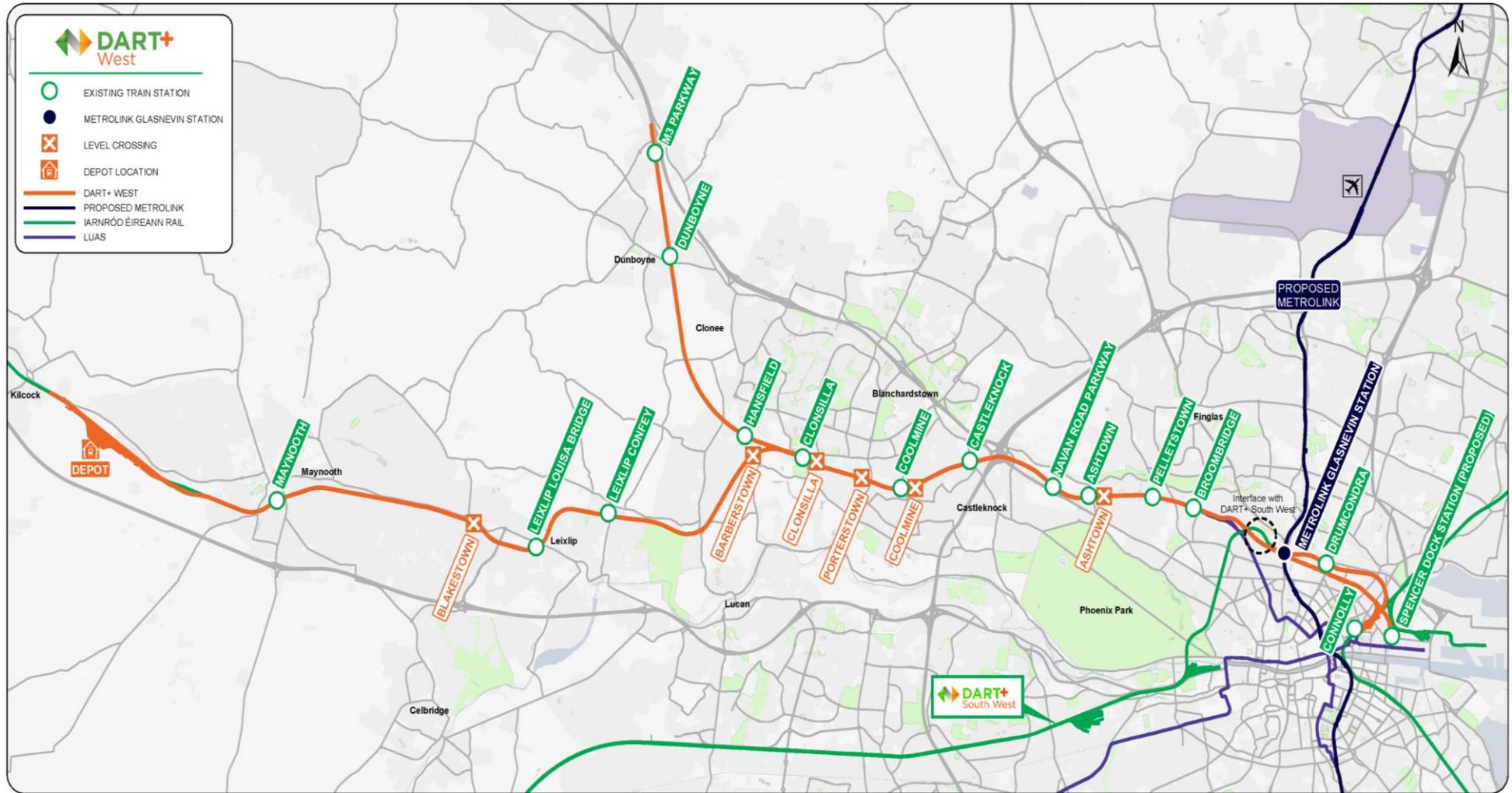


Figure 2-1 Schematic of DART+ West project

## 2.2 Receiving Natural Environment

The receiving environment is dominated by the existing railway corridor which passes through both urban and rural areas. The railway is generally lined with managed and unmanaged verges, scrub, and hedgerows or treelines outside the urban areas, runs parallel to the Royal Canal between Spencer Dock and the depot. The railway corridor has areas of seminatural habitat in an otherwise relatively managed landscape in Dublin City. Further west, outside Dublin City, the landscape becomes more open, and the main land use is agricultural. The proposed development passes a number of stately homes and golf courses in this area.

The proposed development will cross the Royal Canal, the Rye Water, the River Tolka and a tributary of the River Liffey in Westmanstown, as well as a number of small streams, ditches and drains. The proposed development is located within the bounds of the Royal Canal pNHA and is parallel to the canal between Dublin and the depot. The canal is connected to surrounding watercourses via overflows. The habitats within the immediate vicinity of the proposed development include canal (FW3), buildings and artificial surfaces (BL3), amenity grassland (GA2), flowerbeds and borders (BC4), stonewalls and other stonework (BL1), hedgerow (WL1), treelines (WL2), improved agricultural grassland (GA1) and arable crops (BC1). The Royal Canal flows in an easterly direction where it eventually discharges into the River Liffey at North Wall quay, which in turn flows into Dublin Bay. Dublin Bay is a UNESCO Biosphere Reserve and contains several other sites designated for nature conservation.

## 2.3 Likely Effects on the Natural Environment

A number of elements of the proposed development are considered likely to give rise to environmental and ecological impacts. Significant potential risks to the natural environment arising from the proposed development are as follows:

- The construction of the proposed development will result in habitat loss. The effect of these impacts will be a reduction in overall habitat area within the footprint of the proposed development. The proposed development will require the removal of some vegetation to facilitate the construction of the various elements of the proposed development. The new Spencer Dock Station and the interventions to increase capacity at Connolly Station are in Dublin City centre and will occupy existing built ground. These stations are in urban areas, and the loss of built ground is not considered ecologically significant. The depot will result in the loss of 32.6 hectares of mainly mixed agricultural land including approximately 800 m of hedgerows and 1000 m of mature treelines. A 1.5km section of the Ballycaghan Stream will also be diverted. New vehicular overbridges are proposed at Barberstown and at the depot. These will result in the loss of approximately four hectares and two hectares respectively, of agricultural land including hedgerows and treelines. An underbridge is proposed at Ashtown which will result in the loss of one hectare of agricultural and built land and approximately 400m of treelines/ hedgerows. To facilitate the construction of the underbridge and aqueduct, approximately 50 m of canal will be dewatered. The construction of new pedestrian/ cycle bridges at Ashtown, Coolmine, Porterstown and Clonsilla will lead to loss of scrub and treelines along the Royal Canal. Temporary and permanent compounds are located along the existing railway line and will result in habitat loss, mainly agricultural land.
- Habitat loss and the construction of new fencing along the existing railway line will result in habitat fragmentation. Fencing may prevent otter, badger and other mammals crossing the railway line.
- During the operational phase, train frequency is expected to double from current levels, from six trains per hour to 12 at peak times. Noise, vibration, lighting, and visual disturbance during the operation of the proposed development, and to a much lesser extent during the construction phase, could lead to habitat fragmentation.
- The proposed development will require the removal of vegetation to facilitate the construction of the various elements of the proposed development. For safety and operational reasons, trees, shrubs and climbers are not permitted within 4m of the running rail or within 1.5m from the catenary poles, depending on which is greater. In this area all trees and shrubs will be removed, although

herbaceous plants will be permitted to grow on the verges and embankments outside the cess. Vegetation clearance will be required to accommodate fencing.

- Disturbance will occur during construction and operation of the proposed development as a result of noise, lighting and vibration and will affect species both within and outside the construction footprint. Disturbance will be most significant at the depot, the new bridges and stations. The operation of the proposed development will involve a doubling in frequency of trains. Increases in noise, vibration, lighting, and visual disturbance will lead to the disturbance of fauna including birds and bats.
- Direct mortality is possible as a result of site clearance, tree felling and vegetation removal. Birds are particularly vulnerable during the nesting season (March- August inclusive) when works could lead to the loss of nests. Otter and Badger are present along the railway line and could build shelters within the footprint between the time of the surveys to inform the EIAR and the construction phase. The increase in rail traffic as a result of the proposed development will increase the likelihood of collisions with wildlife. The presence of new structures spanning the Royal Canal and the OHLE poses a risk of collision to certain groups of birds, particularly Geese, Swans and Cormorants.
- Water quality impacts arising from both the construction and the operation of the proposed development have the potential to directly and indirectly affect a wide range of habitats and species. Accidental pollution events could result in sediment and pollutants entering the River Liffey which discharges into Dublin Bay. Works in and adjacent to the Royal Canal could result in a deterioration in water quality within the canal and watercourses into which the canal overflows. The potential effects of water quality impacts include habitat degradation and changes to population and community structure.
- There is not considered to be any potential for impacts on biodiversity as a result of electromagnetic radiation. EirGrid commissioned a study into the effects of high voltage overhead transmission lines birds (RPS, 2016). The study reported no evidence that electromagnetic radiation affects birds. In terms of other impacts such as navigation for example. The Earth's DC magnetic field is approximately 48  $\mu\text{T}$  in Ireland. Wildlife using the Earth's magnetic field for navigation purposes wouldn't lose their way as a result of the DC current, as the DC field levels fall away very quickly with the distance from the OHLE. Effects on navigation may be felt within c. 10 m of the OHLE, but this would result in momentary deviation, with the magnetic north still being the dominant component.

### 3. IDENTIFICATION OF ADVERSE EFFECTS

#### 3.1 Establishing the Likely Zone of Impact

Section 3.2.3 of *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities* (DEHLG, 2010) outlines the procedure for selecting the European sites to be considered in AA. It states that European sites potentially affected should be identified and listed, bearing in mind the potential for direct, indirect, and cumulative effects. It also states that the specific approach in each case is likely to differ depending on the scale and likely effects of the plan or project. However, it advises that the following sites should generally be included:

- All European sites within or immediately adjacent to the plan or project area.
- All European sites within the likely zone of impact of the plan or project.
- In accordance with the Precautionary Principle, all European sites for which there is doubt as to whether or not they might be significantly affected.

The “likely zone of impact” of a plan or project is the geographic extent over which significant ecological effects are likely to occur. In the case of plans, this zone should extend to a distance of 15km in all directions from the boundary of the plan area. In the case of projects, however, the guidance recognises that the likely zone of impact must be established on a case-by-case basis, with reference to the following key variables:

- The nature, size, and location of the project.
- The sensitivities of the ecological receptors.
- The potential for cumulative effects.

For example, in the case of a project that could affect a watercourse, it may be necessary to include the entire upstream and/or downstream catchment in order to capture all European sites with water-dependent features of interest.

Having regard to the aforementioned key variables, the likely zone of impact of the proposed development was defined as:

- The entire area within 550 m of the proposed development boundary.
- All watercourses within 550 m of the proposed development boundary including a 10m buffer, downstream as far as and including the Liffey Estuary Lower Transitional Waterbody, the Tolka Estuary Transitional Waterbody and the Broadmeadow Water Transitional Waterbody.

The buffer was defined as 550m around the proposed development which is the precautionary flushing distance for waterbirds informed by the sensitivity of different species, the potential for visual and noise disturbance, and the ambient disturbance levels (Cutts et al., 2009; Cutts et al., 2013). The use of amenity grassland by Light-bellied Brent Geese has been considered, and the 550m buffer includes all areas of amenity grassland in the vicinity of the proposed development. Any potential Light-Bellied Brent Goose feeding areas outside this buffer are screened by buildings, walls and natural boundaries which will act as effective barriers to noise and visual disturbance.

The watercourses within 550m of the proposed development boundary, and downstream as far as their transitional waterbodies<sup>8</sup>, is the extent to which hydrological impacts could potentially occur downstream of the proposed development. The proposed development lies within the River Liffey, River Tolka catchments which flow into Dublin Bay, and the Broadmeadow River catchment which flows into Malahide Estuary.

---

<sup>8</sup> As defined in Directive 2000/60/EC of 23 October 2000 establishing a framework for Community action in the field of water policy (the Water Framework Directive), transitional waters are as bodies of surface water in the vicinity of river mouths which are partly saline in character as a result of their proximity to coastal waters but which are substantially influenced by freshwater flows.

In relation to impacts on groundwater and groundwater dependent species and habitats, *Guidelines on Procedures for Assessment and Treatment of Geology and Hydrogeology for National Road Schemes* (TII, 2008) recommends that for National roads, the study area should be 250m either side of the centreline and notes that professional judgement must be applied in assessing whether the study area needs to be extended. The Hydrogeological Assessment undertaken to inform this NIS concluded that the proposed development would result in imperceptible to slight impacts on the groundwater system immediately surrounding the depot. These effects will be attenuated with distance from the depot. In effect, any effects on groundwater flows further away will be less than slight to imperceptible. All areas where track lowering is proposed, for the purposes of assessing effects on the Rye Water Valley/ Carton SAC, concluded that the impact of the track lowering at the location of the works is imperceptible. Therefore, the buffer of 550m exceeds the limit for potential adverse effects on European sites with groundwater dependent Qualifying Interests.

A geographical representation of the likely zone of impact was generated in ArcGIS 10.4 using the proposed development boundary, publicly available basemaps (OpenStreetMap) and Environmental Protection Agency (EPA) shapefiles. This was used in combination with NPWS shapefiles to identify the boundaries of European sites.

Six European sites occur within or immediately adjacent to the likely zone of impact of the proposed development. These sites are the Rye Water/ Carton SAC, the South Dublin Bay & River Tolka Estuary SPA, the North Bull Island SPA, the North Dublin Bay SAC, the Malahide Estuary SAC and the Malahide Estuary SPA. The South Dublin Bay SAC occurs adjacent to the likely zone of impact. The South Dublin Bay SAC is not considered to be connected to the proposed development as the Great South Wall forms an effective barrier against any potential effects on the integrity of this site.

Table 3-1 below lists all of the European sites which are connected to the proposed development and describes how those sites are connected to the proposed development. There are no connections between the proposed development and any European sites other than those listed in Table 3-1. Detailed descriptions of those sites are given in Section 3.2. The European sites within the likely zone of impact are illustrated in Appendix E.

**Table 3-1 European sites located within and adjacent to the likely zone of impact.**

European site [site code]	Are there potential pathways for impacts from the proposed development to this site? Explain.
<b>Rye Water Valley/ Carton SAC [001398]</b>	<b>Yes.</b> At its closest point, the existing railway line is within this European Site for a distance of 400 m, at the Rye Water crossing (Louisa Bridge), east of Leixlip. The railway line is immediately adjacent to this European site for a further 230 m west of Louisa Bridge train station. The railway line also passes close to this European site at the Carton Estate over a length of 200 m. However, at this location, it is separated by the Royal Canal, vegetation and the R148. Two new watercourse crossings, a stream diversion and the construction of a flood compensatory storage area are proposed 3.5km upstream of this site. The proposed development is hydrologically connected to the site though canal overflows, including the canal overflow east of Louisa Bridge, which flows into the Rye Water.
<b>South Dublin Bay and River Tolka Estuary SPA [004024]</b>	<b>Yes.</b> The shortest absolute distances from the proposed development to this site are 750 m east to the Tolka Estuary and 2.2 km south-east to Sandymount Strand. The shortest distance from the proposed development to the site via a hydrological connection is 3.7 km east (through the Royal Canal and the River Liffey) to Dublin Port which is within the likely zone of impact. There is a potential pathway through the existing surface water drainage network between the proposed development and this site through the River Tolka, which has a hydrological distance of 1.1 km. Therefore, the effective distance to the site is 1.1 km.
<b>North Bull Island SPA [004006]</b>	<b>Yes.</b> The shortest absolute distance from the proposed development to this site is 3.5 km north-east. The shortest distance from the proposed development to the site via a hydrological connection is 6.2 km east (through the Royal Canal and the River Liffey and across the River Tolka Estuary) to the Bull Wall, which is within the likely zone of impact. There is a potential pathway through the existing surface water drainage network between the proposed development and this site through the River Tolka and River Tolka Estuary, which has a hydrological distance of 4.3 km. Therefore, the effective distance to the site is 4.3 km.

European site [site code]	Are there potential pathways for impacts from the proposed development to this site? Explain.
<b>North Dublin Bay SAC</b> <b>[000206]</b>	<b>Yes.</b> The shortest absolute distance from the proposed development to this site is 3.5 km north-east. This distance is over land. The shortest distance from the proposed development to the site via a hydrological connection is 6.2 km north-east (down the Royal Canal and the River Liffey and across the River Tolka Estuary), which is within the likely zone of impact. There is a potential pathway through the existing surface water drainage network between the proposed development and this site through the River Tolka and River Tolka Estuary, which has a hydrological distance of 4.3 km. Therefore, the effective distance to the site is 4.3 km.
<b>Malahide Estuary SAC</b> <b>[000205]</b>	<b>Yes.</b> The shortest absolute distance from the proposed development to this site is 7 km east. This distance is over land. The shortest distance from the proposed development to the site via a hydrological connection is approximately 10.5 km east (down the Rowelstown Stream and Broadmeadow River), which is within the likely zone of impact. Therefore, the effective distance to the site is 10.5 km.
<b>Malahide Estuary SPA</b> <b>[004025]</b>	<b>Yes.</b> The shortest absolute distance from the proposed development to this site is 7 km east. This distance is over land. The shortest distance from the proposed development to the site via a hydrological connection is approximately 10.5 km east (down the Rowelstown Stream and Broadmeadow River), which is within the likely zone of impact. Therefore, the effective distance to the site is 10.5 km.
<b>South Dublin Bay SAC</b> <b>[000210]</b>	<b>No.</b> This European site is located adjacent to the likely zone of impact, on the opposite side of the Great South Wall. The shortest absolute distance from the proposed development to this site is 2.3 km south-east. This distance is over land. The shortest distance from the proposed development to the site via a hydrological connection is 7.2 km south-east, down the Royal Canal and the River Liffey and across the open water of Dublin Bay, beyond the Great South Wall, to an area which is outside the likely zone of impact. Therefore, the effective distance to this European site is 7.2 km. The Great South Wall forms a barrier between the likely zone of impact and the SAC. The Qualifying Interests of the SAC are all habitats, and therefore there are no pathways for effects exist between the proposed development and this European site.

## 3.2 Site Descriptions

### 3.2.1 Rye Water Valley/Carton SAC

The description of the Rye Water Valley/Carton SAC is based on the Site Synopsis (NPWS, 2013a), Conservation Objectives (NPWS, 2021a) and Natura 2000 Standard Data Form (NPWS, 2019a) for the site.

#### Site Overview

Rye Water Valley/Carton SAC is located between Leixlip and Maynooth, in Counties Meath and Kildare, and extends along the Rye Water, a tributary of the River Liffey. The Rye Water in Carton Estate is dammed at intervals, creating a series of lakes. The woods on Carton Estate are mostly old demesne woods with both deciduous and coniferous species. Hairy St. John's-wort (*Hypericum hirsutum*), a species legally protected under the Flora (Protection) Order, 2015, occurs in Carton Estate and there is an old record from the estate for the similarly protected Hairy Violet (*Viola hirta*). However, this latter species has not been recorded from the site in recent years. Another species listed in the Red Data Book, Green Figwort (*Scrophularia umbrosa*), occurs on the site in several locations by the Rye Water. The woods at Carton Demesne are the site of a rare Myxomycete fungus, *Diderma deplanatum*.

The marsh, mineral spring and seepage area found at Louisa Bridge supports a good diversity of plant species. Mineral spring found at the site is of a type considered to be rare in Europe and is a habitat listed on Annex I of the E.U. Habitats Directive. The Red Data Book species Blue Fleabane (*Erigeron acer*) is found growing on a wall at Louisa Bridge. Within the woods, Blackcap, Woodcock and Long-eared Owl have been recorded. Little Grebe, Coot, Moorhen, Tufted Duck, Teal and Kingfisher, the latter a species listed on Annex I of the E.U. Birds Directive, occur on and about the lake. The Rye Water is also a spawning ground for Trout and Salmon, and the rare, White-clawed Crayfish (*Austropotamobius pallipes*) has been recorded at Leixlip. The latter two species are listed on Annex II of the E.U. Habitats Directive.

The rare Narrow-mouthed Whorl Snail and Desmoulin's Whorl Snail occur in marsh vegetation near Louisa Bridge. Both are rare in Ireland and in Europe and are listed on Annex II of the E.U. Habitats Directive. The scarce dragonfly, *Orthetrum coerulescens*, has also been recorded at Louisa Bridge. The conservation importance of the site lies in the presence of several rare and threatened plant and animal species, and the presence of petrifying springs, a habitat type listed on Annex I of the E.U. Habitats Directive. The woods found on Carton Estate and their birdlife are of additional interest.

### Qualifying Interests of the Site

- [7220] Petrifying Springs
- [1014] Narrow-mouthed Whorl Snail (*Vertigo angustior*)
- [1016] Desmoulin's Whorl Snail (*Vertigo moulinsiana*)

### Sensitivities of the Site and its Qualifying Interests

The greatest pressures/threats to the integrity of the Rye Water Valley/Carton SAC come from continuous urbanization, modification of structures of inland watercourses and forestry.

## 3.2.2 South Dublin Bay and River Tolka Estuary SPA

The description of the South Dublin Bay and River Tolka Estuary SPA provided here is based on the Site Synopsis (NPWS, 2015a), Conservation Objectives (NPWS, 2015b) and Natura 2000 Standard Data Form (NPWS, 2021b) for the site, as well as the Conservation Objectives Supporting Document (NPWS, 2014b).

### Site Overview

This site comprises a substantial part of Dublin Bay. It includes the intertidal area between the River Liffey and Dún Laoghaire and the estuary of the River Tolka to the north of the River Liffey, as well as Booterstown Marsh. A portion of the shallow marine waters of the bay is also included.

The site is of ornithological importance as it supports an internationally important population of Light-bellied Brent Goose and nationally important populations of a further nine wintering species. Furthermore, the site supports a nationally important colony of breeding Common Tern and is an internationally important passage/staging site for three tern species. Notably, four of the species that regularly occur at this site are listed on Annex I of the Birds Directive, namely Bar-tailed Godwit, Common Tern, Arctic Tern and Roseate Tern. Parts of the site are also designated as the Ramsar Convention site "Sandymount Strand/Tolka Estuary".

### Qualifying Interests of the Site

- [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] Wetlands

Being an integral part of the internationally important Dublin Bay complex, the site is important for wintering waterfowl – all counts for wintering waterbirds are five-year mean peaks for the period 1995/96 to 1999/2000. Although birds regularly commute between the south bay and the north bay, recent studies have shown that certain populations which occur in the south bay spend most of their time there.

An internationally important population of Light-bellied Brent Goose (368) occurs regularly and newly arrived birds in the autumn feed on the Eelgrass bed at the Merrion Gates. At the time of designation, the site supported nationally important numbers of a further nine species: Oystercatcher (1,145), Ringed Plover (161), Grey Plover (45), Knot (548), Sanderling (321), Dunlin (1,923), Bar-tailed Godwit (766), Redshank (260) and Black-headed Gull (3,040). Other species occurring in smaller numbers include Great Crested Grebe (21), Curlew (127) and Turnstone (52). Little Egret, a species which has recently colonised Ireland, also occurs at this site.

South Dublin Bay is a significant site for wintering gulls, with a nationally important population of Black-headed Gull, but also Common Gull (330) and Herring Gull (348). Mediterranean Gull is also recorded from here, occurring through much of the year, but especially in late winter/spring and again in late summer into winter.

Both Common Tern and Arctic Tern breed in Dublin Docks, on a man-made mooring structure known as the ESB Dolphin – this is included within the site. Small numbers of Common Tern and Arctic Tern were recorded nesting on this dolphin in the 1980s. A survey in 1995 recorded nationally important numbers of Common Tern nesting here (52 pairs). The breeding population of Common Tern at this site has increased, with 216 pairs recorded in 2000. This increase was largely due to the ongoing management of the site for breeding terns. More recent data highlights this site as one of the most important Common Tern sites in the country with over 400 pairs recorded here in 2007.

South Dublin Bay is an important staging/passage site for a number of tern species in the autumn (mostly late July to September). The origin of many of the birds is likely to be the Dublin breeding sites (Rockabill and the Dublin Docks) though numbers suggest that the site is also used by birds from other sites, perhaps outside the state. This site is selected for designation for its autumn tern populations: Roseate Tern (2,000 in 1999), Common Tern (5,000 in 1999) and Arctic Tern (20,000 in 1996).

### **Sensitivities of the Site and its Qualifying Interests**

As this site is mostly comprised of coastal wetlands and is located directly adjacent to a major city and port, expansion of the city and port poses the greatest threat to its integrity. Reclamation of land from the sea, estuary or marsh represents a direct loss of key Qualifying Interests of the site. Roads, urbanisation, human habitation, industrial and commercial activities and discharges present pressures on the site in terms of disturbance and pollution.

Watersports, walkers, horse riding and non-motorised vehicles also cause persistent disturbance to the birds within the site. Angling, particularly bait collection, causes both disturbance to birds and reduces food availability. The site is also subject to some natural eutrophication pressures.

### **3.2.3 North Bull Island SPA**

The description of the North Bull Island SPA provided here is based on the Site Synopsis (NPWS, 2014a), Conservation Objectives (NPWS, 2015c) and Natura 2000 Standard Data Form (NPWS, 2020a) for the site, as well as the Conservation Objectives Supporting Document (NPWS, 2014c).

## Site Overview

This site covers all of the inner part of north Dublin Bay, with the seaward boundary extending from the Bull Wall lighthouse across to Drumleck Point at Howth Head. The North Bull Island sand spit is a relatively recent depositional feature, formed as a result of improvements to Dublin Port during the 18<sup>th</sup> and 19<sup>th</sup> Centuries. It is c. 5 km long and 1 km wide and runs parallel to the coast between Clontarf and Sutton. Part of the interior of the island has been converted to golf courses.

The North Bull Island SPA is an excellent example of an estuarine complex and is one of the top sites in Ireland for wintering waterfowl. It is of international importance on account of both the total number of waterfowl and the individual populations of Light-bellied Brent Goose, Black-tailed Godwit and Bar-tailed Godwit that use it. Also of significance is the regular presence of several species that are listed on Annex I of the Birds Directive, notably Golden Plover and Bar-tailed Godwit, but also Ruff and Short-eared Owl. North Bull Island is a Ramsar Convention site, and part of the North Bull Island SPA is a Statutory Nature Reserve and a Wildfowl Sanctuary.

## Qualifying Interests of the Site

- [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

Saltmarsh extends along the length of the landward side of the island and provides the main roost site for wintering birds in Dublin Bay. The island shelters two intertidal lagoons which are divided by a solid causeway. These lagoons provide the main feeding grounds for the wintering waterfowl. The sediments of the lagoons are mainly sands with a small and varying mixture of silt and clay. Green algal mats (*Ulva* spp.) are a feature of the flats during summer. These sediments have a rich macro-invertebrate fauna, with high densities of Lugworm (*Arenicola marina*) and Ragworm (*Hediste diversicolor*).

This site is of international importance for waterfowl on the basis that it regularly supports in excess of 20,000 waterfowl. The site supports internationally important populations of three species, Light-bellied Brent Goose (1,548), Black-tailed Godwit (367) and Bar-tailed Godwit (1,529) - all figures are mean peaks for the five winters between 1995/96 and 1999/2000. The site is one of the most important in the country for

Light-bellied Brent Goose. A further 14 species have populations of national importance: Shelduck (1,259), Teal (953), Pintail (233), Shoveler (141), Oystercatcher (1,784), Grey Plover (517), Golden Plover (2,033), Knot (2,837), Sanderling (141), Dunlin (4,146), Curlew (937), Redshank (1,431), Turnstone (157) and Black-headed Gull (2,196). The populations of Pintail and Knot are of particular note as they comprise 14% and 10% respectively of the all-Ireland population totals. Other species that occur regularly in winter include Grey Heron, Little Egret, Cormorant, Wigeon, Goldeneye, Red-breasted Merganser, Ringed Plover and Greenshank. Gulls are a feature of the site during winter and, along with the nationally important population of Black-headed Gull (2,196), other species that occur include Common Gull (332) and Herring Gull (331). While some of the birds also frequent South Dublin Bay and the River Tolka Estuary for feeding and/or roosting purposes, the majority remain within the site for much of the winter. The wintering bird populations have been monitored more or less continuously since the late 1960s and the site is now surveyed each winter as part of the larger Dublin Bay complex.

The North Bull Island SPA is a regular site for passage waders, especially Ruff, Curlew Sandpiper and Spotted Redshank. These are mostly observed in single figures in autumn but occasionally in spring or winter. The site formerly had an important colony of Little Tern but breeding has not occurred in recent years. Several pairs of Ringed Plover breed, along with Shelduck in some years. Breeding passerines include Skylark, Meadow Pipit, Stonechat and Reed Bunting. The island is a regular wintering site for Short-eared Owl, with up to five present in some winters.

### Sensitivities of the Site and its Qualifying Interests

The greatest pressures/threats to the integrity of the North Bull SPA come from the bridge/viaduct located within the site (and the potential for other structures to be built within the site) and from walking, horse riding and non-motorised vehicles within the site. Bait digging/collection, nautical sports and the golf course (all inside the site) and roads, motorways, shipping lanes, continuous urbanisation and industrial or commercial areas (all outside the site) also represent significant pressures/threats to the integrity of this site. Other patterns of habitation within the site represent a lower-level pressure/threat.

#### 3.2.4 North Dublin Bay SAC

The description of the North Dublin Bay SAC provided here is based on the Site Synopsis (NPWS, 2013b), Conservation Objectives (NPWS, 2013c) and Natura 2000 Standard Data Form (NPWS, 2020b) for the site, as well as the Conservation Objectives Supporting Documents (NPWS, 2013g).

#### Qualifying Interests of the Site

- [1140] Tidal 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*)
- [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
- [1395] Petalwort (*Petalophyllum ralfsii*)

#### Site Overview

This site covers the inner part of north Dublin Bay, the seaward boundary extending from the Bull Wall lighthouse across to the Martello Tower at Howth Head. The North Bull Island is the focal point of this site.

North Bull Island is a sandy spit which formed after the building of the South Wall and Bull Wall in the 18th and 19th centuries. It now extends for about 5km in length and is up to 1km wide in places. A well-developed and dynamic dune system stretches along the seaward side of the island. Various types of dunes occur, from fixed dune grassland to pioneer communities on foredunes.

About 1km from the tip of the island, a large dune slack with a rich flora occurs, usually referred to as the 'Alder Marsh' because of the presence of Alder trees (*Alnus glutinosa*). The water table is very near the surface and is only slightly brackish.

Saltmarsh extends along the length of the landward side of the island. The edge of the marsh is marked by an eroding edge which varies from 20cm to 60cm high. The marsh can be zoned into different levels according to the vegetation types present. Towards the tip of the island, the saltmarsh grades naturally into fixed dune vegetation.

The habitat 'annual vegetation of drift lines' is found in places, along the length of Dollymount Strand, with species such as Sea Rocket (*Cakile maritima*), Oraches (*Atriplex* spp.) and Prickly Saltwort (*Salsola kali*).

The island shelters two intertidal lagoons which are divided by a solid causeway. The sediments of the lagoons are mainly sands with a small and varying mixture of silt and clay. The north lagoon has an area known as the "Salicornia flat", which is dominated by *Salicornia dolichostachya*, a pioneer glasswort species, and covers about 25 ha. The sediments on the seaward side of North Bull Island are mostly sands. The site extends below the low spring tide mark to include an area of the sublittoral zone.

Three rare plant species which are legally protected under the Flora (Protection) Order, 2015 have been recorded on the North Bull Island. These are Lesser Centaury (*Centaureum pulchellum*), Red Hemp-nettle (*Galeopsis angustifolia*) and Meadow Saxifrage (*Saxifraga granulata*). Two further species listed as threatened in the Red Data Book, Wild Clary/Sage (*Salvia verbenaca*) and Spring Vetch (*Vicia lathyroides*), have also been recorded. A rare liverwort, *Petalophyllum ralfsii*, was first recorded from the North Bull Island in 1874 and has recently been confirmed as still present. This species is of high conservation value as it is listed on Annex II of the E.U. Habitats Directive. The North Bull is the only known extant site for the species in Ireland away from the western seaboard.

North Dublin Bay is of international importance for waterfowl. Some of these species frequent South Dublin Bay and the River Tolka Estuary for feeding and/or roosting purposes (mostly Light-bellied Brent Goose, Oystercatcher, Ringed Plover, Sanderling and Dunlin). The tip of the North Bull Island is a traditional nesting site for Little Tern. A high total of 88 pairs nested in 1987. However, nesting attempts have not been successful since the early 1990s. A well-known population of Irish Hare is resident on the island.

The invertebrates of the North Bull Island have been studied and the island has been shown to contain at least seven species of regional or national importance in Ireland.

The main land uses of this site are amenity activities and nature conservation. The North Bull Island is the main recreational beach in Co. Dublin and is used throughout the year. Much of the land surface of the island is taken up by two golf courses. Two separate Statutory Nature Reserves cover much of the island east of the Bull Wall and the surrounding intertidal flats. The site is used regularly for educational purposes. North Bull Island has been designated a Special Protection Area under the E.U. Birds Directive and it is also a statutory Wildfowl Sanctuary, a Ramsar Convention site, a Biogenetic Reserve, a Biosphere Reserve and a Special Area Amenity Order site.

This site is an excellent example of a coastal site with all the main habitats represented. The site holds good examples of nine habitats that are listed on Annex I of the E.U. Habitats Directive; one of these is listed with priority status. Several of the wintering bird species have populations of international importance, while some of the invertebrates are of national importance. The site contains a number of rare and scarce plants including some which are legally protected. Its proximity to the capital city makes North Dublin Bay an excellent site for educational studies and research.

## Sensitivities of the Site and its Qualifying Interests

As this site is located directly adjacent to a major city and port, expansion of the city and port poses the greatest threat to its integrity. Reclamation of land from the sea, estuary or marsh represents a direct loss of key QIs of the site. Roads, urbanisation, human habitation, industrial and commercial activities and accumulation of organic material present pressures on the site in terms of disturbance and pollution. Walkers, horse riding and non-motorised vehicles also cause persistent disturbance to the birds within the site.

### 3.2.5 Malahide Estuary SAC

The description of the Malahide Estuary SAC provided here is based on the Site Synopsis (NPWS, 2017a), Conservation Objectives (NPWS, 2013d) and Natura 2000 Standard Data Form (NPWS, 2020c) for the site, as well as the Conservation Objectives Supporting Documents (NPWS, 2013h).

#### Qualifying Interests of the Site

- [1140] Tidal 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)

#### Site Overview

Malahide Estuary is situated immediately north of Malahide and east of Swords in Co. Dublin. It is the estuary of the River Broadmeadow. The site is divided by a railway viaduct which was built in the 1800s.

The outer part of the estuary is mostly cut off from the sea by a large sand spit, known as 'the island'. The outer estuary drains almost completely at low tide, exposing sand and mud flats. There is a large bed of Eelgrass (Dwarf Eelgrass, *Zostera noltii*, and Narrow-leaved Eelgrass, *Z. angustifolia*) in the north section of the outer estuary, along with Beaked Tasselweed (*Ruppia maritima*) and extensive mats of green algae (*Enteromorpha* spp., *Ulva lactuca*). Common Cord-grass (*Spartina anglica*) is also widespread in this sheltered part of the estuary.

The dune spit has a well-developed outer dune ridge dominated by Marram Grass (*Ammophila arenaria*). The dry areas of the stabilised dunes have a dense covering of Burnet Rose (*Rosa pimpinellifolia*), Red Fescue (*Festuca rubra*) and species such as Yellow-wort (*Blackstonia Perfoliata*), Autumn Gentian (*Gentianella amarella*), Hound's tongue (*Cynoglossum officinale*), Carline Thistle (*Carlina vulgaris*) and Pyramidal Orchid (*Anacamptis pyramidalis*). Much of the interior of the spit is taken up by a golf course. The inner stony shore has frequent Sea-holly (*Eryngium maritimum*). Well-developed saltmarshes occur at the tip of the spit. Atlantic salt meadow is the principal type and is characterised by species such as Sea-purslane (*Halimolobos portulacoides*), Sea Aster (*Aster tripolium*), Thrift (*Armeria maritima*), Sea Arrowgrass (*Triglochin maritima*) and Common Saltmarsh-grass (*Puccinellia maritima*). Elsewhere in the outer estuary, a small area of Mediterranean salt meadow occurs which is characterised by the presence of Sea Rush (*Juncus maritimus*). Below the salt marshes there are good examples of pioneering glasswort (*Salicornia* spp.) swards and other annual species, typified by *S. dolichostachya* and Annual Sea-blite (*Suaeda maritima*).

The inner estuary does not drain at low tide apart from the extreme inner part. Here, patches of saltmarsh and salt meadows occur, with Sea Aster, Sea Plantain (*Plantago maritima*) and Sea Club-rush (*Scirpus maritimus*). Beaked Tasselweed occurs in one of the channels. The inner part of the estuary is heavily used

for water sports. A section of the outer estuary has recently been infilled for a marina and housing development.

### Sensitivities of the Site and its Qualifying Interests

The greatest pressures/threats to the integrity of the Malahide Estuary SAC are from the bridge/ viaduct, reclamation of land from sea/ estuary/ marsh, nautical sports, walking, horse-riding, non-motorised vehicles and motorised vehicles.

#### 3.2.6 Malahide Estuary SPA

The description of the Malahide Estuary SPA is based on the Site Synopsis (NPWS, 2013e), Conservation Objectives (NPWS, 2013f) and Natura 2000 Standard Data Form (NPWS, 2021c) for the site, as well as the Conservation Objectives Supporting Document (NPWS, 2013h).

#### Qualifying Interests of the Site

- [A005] Great Crested Grebe (*Podiceps cristatus*)
- [A046] Light-bellied Brent Goose (*Branta bernicla hrota*)
- [A048] Shelduck (*Tadorna tadorna*)
- [A054] Pintail (*Anas acuta*)
- [A067] Goldeneye (*Bucephala clangula*)
- [A069] Red-breasted Merganser (*Mergus serrator*)
- [A130] Oystercatcher (*Haematopus ostralegus*)
- [A140] Golden Plover (*Pluvialis apricaria*)
- [A141] Grey Plover (*Pluvialis squatarola*)
- [A143] Knot (*Calidris canutus*)
- [A149] Dunlin (*Calidris alpina*)
- [A156] Black-tailed Godwit (*Limosa limosa*)
- [A157] Bar-tailed Godwit (*Limosa lapponica*)
- [A162] Redshank (*Tringa totanus*)
- [A999] Wetlands

#### Site Overview

Malahide Estuary is situated in north Co. Dublin, between the towns of Malahide and Swords. The site encompasses the estuary, saltmarsh habitats and shallow subtidal areas at the mouth of the estuary. A railway viaduct, built in the 1800s, crosses the site and has led to the inner estuary becoming lagoonal in character and only partly tidal. Much of the outer part of the estuary is well-sheltered from the sea by a large sand spit, known as “The Island”. This spit is now mostly converted to golf-course. The outer part empties almost completely at low tide and there are extensive intertidal flats exposed. Substantial stands of eelgrass (both *Zostera noltii* and *Z. angustifolia*) occur in the sheltered part of the outer estuary, along with Tasselweed (*Ruppia maritima*). Green algae, mostly *Ulva* spp., are frequent on the sheltered flats.

This site is of high importance for wintering waterfowl and supports a particularly good diversity of species. It has internationally important populations of Light-bellied Brent Goose (1,104 individuals or 5% of the all-Ireland total) and Black-tailed Godwit (409 individuals or 2.9% of the all-Ireland total) – figures given here and below are mean peaks for the five winters 1995/96-1999/2000. Furthermore, the site supports nationally important populations of an additional 12 species: Great Crested Grebe (63), Shelduck (439), Pintail (58),

Goldeneye (215), Red-breasted Merganser (99), Oystercatcher (1,360), Golden Plover (1,843), Grey Plover (201), Knot (915), Dunlin (1,594), Bar-tailed Godwit (156) and Redshank (581). The high numbers of diving ducks reflect the lagoon-type nature of the inner estuary, and this is one of the few sites in eastern Ireland where substantial numbers of Goldeneye can be found.

A range of other species occurs, including Mute Swan (37), Pochard (36), Ringed Plover (86), Lapwing (1,542), Curlew (548), Greenshank (38) and Turnstone (112). The estuary also attracts other migrant wader species such as Ruff, Curlew Sandpiper, Spotted Redshank and Little Stint. These occur mainly in autumn, though occasionally in spring and winter. Breeding birds of the site include Ringed Plover, Shelduck and Mallard. Up to the 1950s there was a major tern colony at the southern end of Malahide Island. Grey Herons breed nearby and feed regularly within the site.

Malahide Estuary SPA is a fine example of an estuarine system, providing both feeding and roosting areas for a range of wintering waterfowl. The lagoonal nature of the inner estuary is of particular value as it increases the diversity of birds which occur. The site is of high conservation importance, with internationally important populations of Light-bellied Brent Goose and Black-tailed Godwit, and nationally important populations of a further 12 species. Two of the species which occur regularly (Golden Plover and Bar-tailed Godwit) are listed on Annex I of the E.U. Birds Directive.

### **Sensitivities of the Site and its Qualifying Interests**

The greatest pressures/threats to the integrity of the Malahide Estuary SPA are from urbanised areas and human habitation, reclamation of land from sea/ estuary/ marsh, paths/ tracks/ cycle tracks and nautical sports.

### **3.3 Evaluation against Conservation Objectives**

Table 3-2, Table 3-3, Table 3-4, Table 3-5, Table 3-6 and Table 3-7 below detail the evaluation of the likely effects of the proposed development in view of the Conservation Objectives of the sites identified in Section 3.1 and described in Section 3.2. As explained in Sections 1.2 and 1.3, AA Screening is carried out in view of the Conservation Objectives of the relevant European sites, which are in turn defined by detailed Attributes and corresponding Targets. Therefore, the evaluation of whether or not a likely effect is significant (in view of the Conservation Objective in question) is made with regard to these Attributes and Targets. Site-specific Conservation Objectives for the Rye Water Valley/ Carton SAC have not to date been developed. However, generic Conservation Objectives apply. For the purposes of the screening, Conservation Objectives for the Qualifying Interests present in the Rye Water Valley/ Carton SAC have been applied from respective Qualifying Interests in similar conditions in other SACs, (as recommended by the NPWS).

**Table 3-2 Evaluation of the likely effects of the proposed development in view of the Conservation Objectives of the Rye Water Valley/Carlton SAC [001398] \* = a “priority habitat” in danger of disappearing from the EU.**

Qualifying Interest	Conservation Objective as per NPWS (2021a)	Does the proposed development provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Adverse Effect?
<b>Petrifying springs with tufa formation (Cratoneurion)* [7220]</b>	<i>To maintain the conservation condition of Petrifying springs with tufa formation (Cratoneurion) in the Rye Water Valley/ Carlton SAC, as per the River Barrow and River Nore SAC [002162] (NPWS, 2011).</i>	<p>The proposed development includes two new watercourse crossings, a new bridge over the canal with approach roads, a stream diversion, and the construction of a flood compensatory storage area 3.5 km upstream of the SAC. These works have the potential to alter the hydrological regime within the SAC that could lead to adverse effects on this Qualifying Interest.</p> <p>The proposed development crosses this SAC at Louisa Bridge and passes close to the SAC in two other locations, however, considering that the railway line is entirely built land and that the works are limited to the construction of catenary poles, there is no pathway for adverse effects in these areas in view of the Conservation Objective, as defined by the Attributes and Targets.</p>	Yes
<b>Narrow-mouthed Whorl Snail (Vertigo angustior) [1014]</b>	<i>To maintain the favourable conservation condition of Narrow-mouthed Whorl Snail in the Rye Water Valley/ Carlton SAC, as per the Slieve Tooley/Tormore Island/Loughros Beg Bay SAC [000190] (NPWS, 2015d)</i>	<p>In Ireland, this Qualifying Interest occurs in fen, marsh, dune grassland, salt marsh and flood plain habitat. The proposed development includes two new watercourse crossings, a new bridge over the canal with approach roads, a stream diversion, and the construction of a flood compensatory storage area 3.5 km upstream of the SAC boundary. These works have the potential to alter the hydrological regime within the SAC that could lead to a reduction in Habitat Quality, Habitat Extent and Optimal Soil Wetness, ultimately leading to a reduction in the Distribution and Occurrence of this Qualifying Interest. Therefore, adverse effects cannot be excluded.</p> <p>The proposed development crosses this SAC at Louisa Bridge and passes close to the SAC in two other locations, however, considering that the railway line is entirely built land and that the works are limited to the construction of catenary poles, there is no pathway for adverse effects in these areas in view of the Conservation Objective for this Qualifying Interest, as defined by the Attributes and Targets.</p>	Yes
<b>Desmoulin’s Whorl Snail (Vertigo moulinsiana) [1016]</b>	<i>To maintain the favourable conservation condition of Desmoulin’s Whorl Snail in the Rye Water Valley/ Carlton SAC, as per the River Barrow and River Nore SAC [002162] (NPWS, 2011).</i>	<p>In Ireland, this Qualifying Interest occurs in fen, marsh, dune grassland, salt marsh and flood plain. The proposed development includes two new watercourse crossings, a new bridge over the canal with approach roads a stream diversion, and the construction of a flood compensatory storage area 3.5 km upstream of the SAC boundary. These works have the potential alter the hydrological regime within the SAC that could lead to a reduction in Habitat Quality, Habitat Extent and Optimal Soil Wetness, ultimately leading to a reduction in the Distribution and Occurrence of this Qualifying Interest. Therefore, likely adverse effects cannot be excluded.</p> <p>The proposed development crosses this SAC at Louisa Bridge and passes close to the SAC in two other areas, however, considering that the railway line is entirely built land and that the works are limited to the construction of catenary poles, there is no pathway for adverse effects in these areas, in view of the Conservation Objective for this Qualifying Interest, as defined by the Attributes and Targets.</p>	Yes

**Table 3-3 Evaluation of the likely effects of the proposed development in view of the Conservation Objectives of the South Dublin Bay and River Tolka Estuary SPA [004024]**

Qualifying Interest	Conservation Objective as per NPWS (2015b)	Does the proposed development provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Adverse Effect
<b>Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]</b>	<i>"To maintain the favourable conservation condition of Light-bellied Brent Goose in South Dublin Bay and River Tolka Estuary SPA"</i>	Light-bellied Brent Geese feed on grasslands in Dublin City when their main food source in Dublin Bay, eelgrass, becomes exhausted. Areas close to the proposed development which have been identified as Brent Geese feeding sites include Ashington Park, Marin Savage Park and St. Vincent's Primary School. Light-bellied Brent Geese are vulnerable to collision with OHLE. Therefore, adverse effects cannot be excluded.	Yes
<b>Oystercatcher (<i>Haematopus ostralegus</i>) [A130]</b>	<i>"To maintain the favourable conservation condition of Oystercatcher in South Dublin Bay and River Tolka Estuary SPA"</i>	The closest suitable habitat for these species is 750m from the proposed development in the River Tolka Estuary. The hydrological distance between the proposed development and the Tolka Estuary is 1.1km, through the existing surface water drainage system and the River Tolka.  The location, nature and scale of the proposed development are such that any water quality impacts will be very localized and will dissipate in a very short time, before reaching the SPA. Therefore, the proposed development does not have the potential to adversely affect these Qualifying Interests, in view of their Conservation Objectives.	No
<b>Ringed Plover (<i>Charadrius hiaticula</i>) [A137]</b>	<i>"To maintain the favourable conservation condition of Ringed Plover in South Dublin Bay and River Tolka Estuary SPA"</i>		No
<b>Grey Plover (<i>Pluvialis squatarola</i>) [A141]</b>	Grey Plover is proposed for removal from the list of Qualifying Interests for South Dublin Bay and River Tolka Estuary SPA. As a result, a site-specific conservation objective has not been set for this species.		No
<b>Knot (<i>Calidris canutus</i>) [A143]</b>	<i>"To maintain the favourable conservation condition of Knot in South Dublin Bay and River Tolka Estuary SPA"</i>		No
<b>Sanderling (<i>Calidris alba</i>) [A144]</b>	<i>"To maintain the favourable conservation condition of Sanderling in South Dublin Bay and River Tolka Estuary SPA"</i>		No
<b>Dunlin (<i>Calidris alpina alpina</i>) [A149]</b>	<i>"To maintain the favourable conservation condition of Dunlin in South Dublin Bay and River Tolka Estuary SPA"</i>		No
<b>Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</b>	<i>"To maintain the favourable conservation condition of Bar-tailed Godwit in South Dublin Bay and River Tolka Estuary SPA"</i>		No
<b>Redshank (<i>Tringa totanus</i>) [A162]</b>	<i>"To maintain the favourable conservation condition of Redshank in South Dublin Bay and River Tolka Estuary SPA"</i>		No
<b>Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]</b>	<i>"To maintain the favourable conservation condition of Black-headed Gull in South Dublin Bay and River Tolka Estuary SPA"</i>		No

Qualifying Interest	Conservation Objective as per NPWS (2015c)	Does the proposed development provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Adverse Effect
<b>Roseate Tern (<i>Sterna dougallii</i>) [A192]</b>	<i>“To maintain the favourable conservation condition of Roseate Tern in South Dublin Bay and River Tolka Estuary SPA”</i>	The closest known breeding site for these Qualifying Interests is at the Electricity Supply Board dolphin on the River Liffey between Poolbeg power station and the Pigeon House (c.3 km east of the proposed development). Roosting is known to occur between Martello towers at Sandymount and Williamstown (c. 3.2km southeast).  The locations of breeding and roosting sites are of sufficient distance from the proposed development to ensure that the proposed development does not provide for any effect on the passage population, number of nests, productivity rate, distribution of roosting and breeding sites, prey biomass available, barriers to connectivity or disturbance of Roseate Tern, Common Tern or Arctic Tern within the site. Therefore, the proposed development does not have the potential to adversely affect these Qualifying Interests, in view of their Conservation Objectives.	No
<b>Common Tern (<i>Sterna hirundo</i>) [A193]</b>	<i>“To maintain the favourable conservation condition of Common Tern in South Dublin Bay and River Tolka Estuary SPA”</i>		No
<b>Arctic Tern (<i>Sterna paradisaea</i>) [A194]</b>	<i>“To maintain the favourable conservation condition of Arctic Tern in South Dublin Bay and River Tolka Estuary SPA”</i>		No
<b>Wetlands [A999]</b>	<i>“To maintain the favourable conservation condition of the wetland habitat in South Dublin Bay and River Tolka Estuary SPA as a resource for the regularly occurring migratory waterbirds that utilise it”</i>	The Conservation Objective for Wetlands is defined by a single Attribute, namely “Habitat area”, the Target for which is <i>“The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 2,192 hectares, other than that occurring from natural patterns of variation”</i> . As the proposed development will not lead any reduction in the permanent area of this habitat within the site, it has no potential to delay or interrupt the achievement of this Conservation Objective.	No

**Table 3-4 Evaluation of the likely effects of the proposed development in view of the Conservation Objectives of the North Bull Island SPA [004006]**

Qualifying Interest	Conservation Objective as per NPWS (2015c)	Does the proposed development provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Adverse Effect
<b>Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]</b>	<i>"To maintain the favourable conservation condition of Light-bellied Brent Goose in North Bull Island SPA"</i>	Light-bellied Brent Geese feed on grasslands in Dublin City when their main food source in Dublin Bay, eelgrass, becomes exhausted. Areas close to the proposed development which have been identified as Brent Geese feeding sites include Ashington Park, Marin Savage Park and St. Vincent's Primary School. Light-bellied Brent Geese are vulnerable to collision with OHLE. Therefore, adverse effects cannot be excluded.	Yes
<b>Shelduck (<i>Tadorna tadorna</i>) [A048]</b>	<i>"To maintain the favourable conservation condition of Shelduck in North Bull Island SPA"</i>	The closest suitable habitat for these species is 750m from the proposed development in the River Tolka Estuary. The hydrological distance between the proposed development and the Tolka Estuary is 4.3km, through the existing surface water drainage system and the River Tolka.  The location, nature and scale of the proposed development are such that any water quality impacts will be very localized and will dissipate in a very short time, before reaching the SPA. Therefore, the proposed development does not have the potential to adversely affect these Qualifying Interests, in view of their Conservation Objectives.	No
<b>Teal (<i>Anas crecca</i>) [A052]</b>	<i>"To maintain the favourable conservation condition of Teal in North Bull Island SPA"</i>		No
<b>Pintail (<i>Anas acuta</i>) [A054]</b>	<i>"To maintain the favourable conservation condition of Pintail in North Bull Island SPA"</i>		No
<b>Shoveler (<i>Anas clypeata</i>) [A056]</b>	<i>"To maintain the favourable conservation condition of Shoveler in North Bull Island SPA"</i>		No
<b>Oystercatcher (<i>Haematopus ostralegus</i>) [A130]</b>	<i>"To maintain the favourable conservation condition of Oystercatcher in North Bull Island SPA"</i>		No
<b>Golden Plover (<i>Pluvialis apricaria</i>) [A140]</b>	<i>"To maintain the favourable conservation condition of Grey Plover in North Bull Island SPA"</i>		No
<b>Grey Plover (<i>Pluvialis squatarola</i>) [A141]</b>	<i>"To maintain the favourable conservation condition of Grey Plover in North Bull Island SPA"</i>		No
<b>Knot (<i>Calidris canutus</i>) [A143]</b>	<i>"To maintain the favourable conservation condition of Knot in North Bull Island SPA"</i>		No
<b>Sanderling (<i>Calidris alba</i>) [A144]</b>	<i>"To maintain the favourable conservation condition of Sanderling in North Bull Island SPA"</i>		No
<b>Dunlin (<i>Calidris alpina alpina</i>) [A149]</b>	<i>"To maintain the favourable conservation condition of Dunlin in North Bull Island SPA"</i>		No
<b>Black-tailed Godwit (<i>Limosa limosa</i>) [A156]</b>	<i>"To maintain the favourable conservation condition of Black-tailed Godwit in North Bull Island SPA"</i>		No
<b>Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</b>	<i>"To maintain the favourable conservation condition of Bar-tailed Godwit in North Bull Island SPA"</i>		No

Qualifying Interest	Conservation Objective as per NPWS (2015d)	Does the proposed development provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Adverse Effect
<b>Curlew (<i>Numenius arquata</i>)</b> [A160]	<i>"To maintain the favourable conservation condition of Curlew in North Bull Island SPA"</i>		No
<b>Redshank (<i>Tringa totanus</i>)</b> [A162]	<i>"To maintain the favourable conservation condition of Redshank in North Bull Island SPA"</i>		No
<b>Turnstone (<i>Arenaria interpres</i>)</b> [A169]	<i>"To maintain the favourable conservation condition of Turnstone in North Bull Island SPA"</i>		No
<b>Black-headed Gull (<i>Chroicocephalus ridibundus</i>)</b> [A179]	<i>"To maintain the favourable conservation condition of Black-headed Gull in North Bull Island SPA"</i>		No
<b>Wetlands [A999]</b>	<i>"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"</i>		The Conservation Objective for Wetlands is defined by a single Attribute, namely "Habitat area", the Target for which is <i>"The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 1,713 hectares, other than that occurring from natural patterns of variation"</i> . As the proposed development will not lead to any reduction in the permanent area of this habitat within the site, it has no potential to delay or interrupt the achievement of this Conservation Objective.

**Table 3-5 Evaluation of the likely effects of the proposed development in view of the Conservation Objectives of the North Dublin Bay SAC [000206]**

Qualifying Interest	Conservation Objective as per NPWS (2013c)	Do the proposed development provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Adverse Effect
<b>Mudflats and sandflats not covered by seawater at low tide [1140]</b>	<i>"To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in North Dublin Bay SAC"</i>	<p>There is a potential pathway through the existing surface water drainage network between the proposed development and these Qualifying Interests through the River Tolka and River Tolka Estuary, which has a hydrological distance of 4.3 km. The location, nature and scale of the proposed development are such that any water quality impacts resulting from the construction or operation of the proposed development would be very localized and would dissipate in a very short time, before reaching the SAC. Therefore, the proposed development does not have the potential to adversely affect these Qualifying Interests, in view of their Conservation Objectives.</p>	No
<b>Annual vegetation of drift lines [1210]</b>	<i>"To restore the favourable conservation condition of Annual vegetation of drift lines in North Dublin Bay SAC"</i>		No
<b>Salicornia and other annuals colonising mud and sand [1310]</b>	<i>"To restore the favourable conservation condition of Salicornia and other annuals colonizing mud and sand in North Dublin Bay SAC"</i>		No
<b>Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330]</b>	<i>"To maintain the favourable conservation condition of Atlantic Salt meadows (<i>Glauco-Puccinellietalia maritima</i>) in North Dublin Bay SAC"</i>		No
<b>Mediterranean salt meadows (<i>Juncetalia maritima</i>) [1410]</b>	<i>"To maintain the favourable conservation condition of Mediterranean salt meadows (<i>Juncetalia maritima</i>) in North Dublin Bay SAC"</i>		No
<b>Embryonic shifting dunes [2110]</b>	<i>"To restore the favourable conservation condition of Embryonic shifting dunes in North Dublin Bay SAC"</i>	<p>There is a potential pathway through the existing surface water drainage network between the proposed development and these Qualifying Interests through the River Tolka and River Tolka Estuary, which has a hydrological distance of 4.3 km. As these habitats are located above the mean high-water mark, any water quality impacts which may arise from the proposed development are extremely unlikely to affect these habitats. Therefore, the proposed development does not have the potential to adversely affect these Qualifying Interests, in view of their Conservation Objectives.</p>	No
<b>Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120]</b>	<i>"To restore the favourable conservation condition of Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes') in North Dublin Bay SAC"</i>		No
<b>Fixed coastal dunes with herbaceous vegetation (grey dune) [2130]</b>	<i>"To restore the favourable conservation condition of fixed coastal dunes with herbaceous vegetation ('grey dunes') in North Dublin Bay SAC"</i>		No
<b>Humid dune slacks [2190]</b>	<i>"To restore the favourable conservation condition of Humid dune slacks in North Dublin Bay SAC"</i>		No
<b>Petalwort <i>Petalophyllum ralfsii</i> [1395]</b>	<i>"To maintain the favourable conservation condition of Petalwort in North Dublin Bay SAC"</i>	<p>The nearest occurrence of Petalwort is &gt;7km northeast of the proposed development on Bull Island (Campbell et al., 2019). Petalwort is a terrestrial species and thus has no hydrological connection to the proposed development. Therefore, the proposed development does not have the potential to adversely affect this Qualifying Interest, in view of its Conservation Objective.</p>	No

**Table 3-6 Evaluation of the likely effects of the proposed development in view of the Conservation Objectives of the Malahide Estuary SAC [000205]**

Qualifying Interest	Conservation Objective as per NPWS (2013d)	Do the proposed development provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Adverse Effect
<b>Mudflats and sandflats not covered by seawater at low tide [1140]</b>	<i>"To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in Malahide Estuary SAC"</i>	<p>These Qualifying Interests occur at a minimum of 10.5 km east of the proposed development.</p> <p>The location, nature and scale of the proposed development are such that any water quality impacts resulting from the construction or operation of the proposed development would be very localised and would dissipate in a very short time, before reaching the SAC. Therefore, the proposed development does not have the potential to adversely affect these Qualifying Interests, in view of their Conservation Objectives.</p>	No
<b>Salicornia and other annuals colonising mud and sand [1310]</b>	<i>"To maintain the favourable conservation condition of Salicornia and other annuals colonizing mud and sand in Malahide Estuary SAC"</i>		No
<b>Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330]</b>	<i>"To restore the favourable conservation condition of Atlantic Salt meadows (<i>Glauco-Puccinellietalia maritima</i>) in Malahide Estuary SAC"</i>		No
<b>Mediterranean salt meadows (<i>Juncetalia maritima</i>) [1410]</b>	<i>"To maintain the favourable conservation condition of Mediterranean salt meadows (<i>Juncetalia maritima</i>) in Malahide Estuary SAC"</i>		No
<b>Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120]</b>	<i>"To restore the favourable conservation condition of Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes') in Malahide Estuary SAC"</i>		No
<b>Fixed coastal dunes with herbaceous vegetation (grey dune) [2130]</b>	<i>"To restore the favourable conservation condition of fixed coastal dunes with herbaceous vegetation ('grey dunes') in Malahide Estuary SAC"</i>		No

**Table 3-7 Evaluation of the likely effects of the proposed development in view of the Conservation Objectives of the Malahide Estuary SPA [004025]**

Qualifying Interest	Conservation Objective as per NPWS (2013f)	Does the proposed development provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Adverse Effect
<b>Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]</b>	<i>"To maintain the favourable conservation condition of Light-bellied Brent Goose in North Bull Island SPA"</i>	The areas close to the proposed development which have been identified as Brent Geese feeding sites include Ashington Park, Marin Savage Park and St. Vincent's Primary School. Light-bellied Brent Geese are vulnerable to collision with OHLE. The Malahide Estuary SPA is within the likely zone of impact of the Main Storage and Distribution Centre (MSDC), but not the railway line or ancillary infrastructure. The MSDC is entirely within an existing industrial yard and the haulage routes are on the existing roads that link the MSDC to the proposed development. There are numerous areas containing suitable feeding habitat for Brent Geese between the SPA and the railway line and therefore, the proposed development does not have the potential to adversely affect Light-bellied Brent Geese, in view of its Conservation Objective.	No
<b>Great Crested Grebe (<i>Podiceps cristatus</i>) [A005]</b>	<i>"To maintain the favourable conservation condition of Great Crested Grebe in the North Bull Island SPA"</i>	These Qualifying Interests occur at least 10.5 km east of the proposed development. The location, nature and scale of the proposed development are such that any water quality impacts resulting from the construction or operation of the proposed development would be very localized and would dissipate in a very short time, before reaching the SPA. Therefore, the proposed development does not have the potential to adversely affect these Qualifying Interests, in view of their Conservation Objectives.	No
<b>Shelduck (<i>Tadorna tadorna</i>) [A048]</b>	<i>"To maintain the favourable conservation condition of Shelduck in the North Bull Island SPA"</i>		No
<b>Pintail (<i>Anas acuta</i>) [A054]</b>	<i>"To maintain the favourable conservation condition of Pintail in the North Bull Island SPA"</i>		No
<b>Goldeneye (<i>Bucephala clangula</i>) [A067]</b>	<i>"To maintain the favourable conservation condition of Goldeneye in the North Bull Island SPA"</i>		No
<b>Red-breasted Merganser (<i>Mergus serrator</i>) [A069]</b>	<i>"To maintain the favourable conservation condition of Red-breasted Merganser in the North Bull Island SPA"</i>		No
<b>Oystercatcher (<i>Haematopus ostralegus</i>) [A130]</b>	<i>"To maintain the favourable conservation condition of Oystercatcher in the North Bull Island SPA"</i>		No
<b>Golden Plover (<i>Pluvialis apricaria</i>) [A140]</b>	<i>"To maintain the favourable conservation condition of Grey Plover in the North Bull Island SPA"</i>		No
<b>Grey Plover (<i>Pluvialis squatarola</i>) [A141]</b>	<i>"To maintain the favourable conservation condition of Grey Plover in the North Bull Island SPA"</i>		No
<b>Knot (<i>Calidris canutus</i>) [A143]</b>	<i>"To maintain the favourable conservation condition of Knot in the North Bull Island SPA"</i>		No
<b>Dunlin (<i>Calidris alpina alpina</i>) [A149]</b>	<i>"To maintain the favourable conservation condition of Dunlin in the North Bull Island SPA"</i>		No

Qualifying Interest	Conservation Objective as per NPWS (2013f)	Does the proposed development provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Adverse Effect
Qualifying Interest	Conservation Objective as per NPWS (2013f)	Does the proposed development provide for any potential delay or interruption in the achievement of this Conservation Objective, as defined by its Attributes and Targets?	Adverse Effect
<b>Black-tailed Godwit (<i>Limosa limosa</i>) [A156]</b>	<i>"To maintain the favourable conservation condition of Black-tailed Godwit in the North Bull Island SPA"</i>		No
<b>Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</b>	<i>"To maintain the favourable conservation condition of Bar-tailed Godwit in the North Bull Island SPA"</i>		No
<b>Redshank (<i>Tringa totanus</i>) [A162]</b>	<i>"To maintain the favourable conservation condition of Redshank in the North Bull Island SPA"</i>		No
<b>Wetlands [A999]</b>	<i>"To maintain the favourable conservation condition of the wetland habitat in the North Bull Island SPA as a resource for the regularly occurring migratory waterbirds that utilise it"</i>	The Conservation Objective for Wetlands is defined by a single Attribute, namely "Habitat area", the Target for which is "The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 765 hectares, other than that occurring from natural patterns of variation". As the proposed development will not lead to any reduction in the permanent area of this habitat within the site, it has no potential to delay or interrupt the achievement of this Conservation Objective.	No

### 3.4 Summary of Potential Adverse Effects

In Section 3.1, it was established that six European sites, namely the Rye Water Valley/Carton SAC, the South Dublin Bay and the River Tolka Estuary SPA, the North Bull Island SPA, the North Dublin Bay SAC, the Malahide Estuary SAC and the Malahide Estuary SPA occur within the likely zone of impact. Table 3-2, Table 3-3 and Table 3-4 above established that, in the absence of appropriate mitigation, the proposed development is likely to have adverse effects on three of the Qualifying Interests of those sites, in view of their Conservation Objectives. A summary of the Qualifying Interests likely to be affected in each site is given in Table 3-8 below.

**Table 3-8 Summary of the European sites likely to be affected by the proposed development and the Qualifying Interests likely to be affected in each site.**

European site	Qualifying Interest
Rye Water Valley/Carton SAC	Petrifying springs with tufa formation ( <i>Cratoneurion</i> ) Narrow-mouthed Whorl Snail ( <i>Vertigo angustior</i> ) Desmoulin's Whorl Snail ( <i>Vertigo moulinsiana</i> )
South Dublin Bay and River Tolka Estuary SPA	Light-bellied Brent Goose ( <i>Branta bernicla hrota</i> )
North Bull Island SPA	Light-bellied Brent Goose ( <i>Branta bernicla hrota</i> )

## 4. ASSESSMENT OF ADVERSE EFFECTS

### 4.1 Attributes and Targets

In Section 3.0 of this NIS, potential adverse effects of the proposed development on the integrity of the Rye Water Valley/Carnton SAC, the South Dublin Bay and the River Tolka Estuary SPA and the North Bull Island SPA were identified. In accordance with EC (2021), the identification of these effects was focussed on and limited to the Conservation Objectives of the sites concerned.

Section 4.0 provides a detailed analysis and evaluation of the adverse effects identified in Section 3.0 (as summarised in Section 3.4). In order to fully assess the implications of the proposed development for the European sites concerned, each of the potential adverse effects is evaluated with reference to the Attributes and Targets which define the Conservation Objectives of those sites.

### 4.2 Rye Water Valley/Carnton SAC

#### 4.2.1 Petrifying Springs with tufa formation (*Cratoneurion*)

Petrifying Springs with tufa formation (*Cratoneurion*) (hereafter referred to as 'Petrifying Springs') are lime-rich water sources that deposit tufa, a porous calcareous rock. They rely on permanent irrigation, usually from upwelling groundwater sources or seepage sources. They constitute a highly specialised habitat with a distinctive flora, typically dominated by bryophytes and often containing rare species. Their small extent and their vulnerability are recognised by their designation as a priority habitat in Annex I of the European Union Habitats Directive (92/43/EEC) (Lynn and Kelly, 2013; 2016).

A site-specific Conservation Objective for Petrifying Springs in the Rye Water Valley/ Carnton SAC has not to date been developed. For the purposes of this assessment, a Conservation Objective for the Petrifying Springs in the Rye Water Valley/ Carnton SAC has been applied from the River Barrow and River Nore SAC. The Conservation Objective for Petrifying Springs in the Rye Water Valley/Carnton SAC as per the River Barrow and River Nore SAC is shown in Table 3-2 above. The Attributes of this Conservation Objective as per the River Barrow and River Nore SAC are summarised as follows:

- Habitat Area.
- Habitat Distribution.
- Hydrological Regime: Height of Water Table; Water Flow.
- Water Quality.
- Vegetation Composition: Typical Species.

#### Habitat Area

The Target for Habitat Area for the habitat, as per the River Barrow and River Nore SAC, is *Area stable or increasing, subject to natural processes*. The full extent of Petrifying Springs in the Rye Water Valley/Carnton SAC is not currently known. Calcareous springs corresponding to the priority Annex I habitat Petrifying Springs are found in the Rye Water Valley, at the location where it is crossed by the railway line at Louisa Bridge. Since the railway line is entirely built land and the proposed development in this area is limited to the construction of catenary poles, there will be no direct reduction in the area of Petrifying Springs as a result of the proposed development. The Habitat Area of Petrifying Springs within the SAC could however be indirectly adversely affected through changes in hydrological regime and water quality arising from the proposed development as outlined below. There is a risk that invasive alien species could be spread during the construction of the proposed development. If this were to occur it could lead to a reduction in Habitat Area. There is no potential for the proposed development to adversely affect this habitat through changes in groundwater supply or quality.

### Construction phase

Construction and operational activities adjacent to and upstream of surface waters can negatively impact on water quality in a variety of ways.

Surface water run-off from construction activities can contain high levels of suspended sediments, nutrients, and other pollutants. Such run-off, if not attenuated and treated prior to discharge, has the potential to cause significant ecological impacts including eutrophication. Large amounts of fine sediment deposition can smother benthic habitats, leading to changes in biological composition.

During construction, concrete, grout or other pollutants may spill directly into the local environment or be washed into watercourses in construction site run-off. These materials are highly alkaline and, consequently, can drastically alter the pH of the receiving water body. This can lead to profound ecological impacts and can affect the condition of habitats by causing damage to pH-sensitive species.

Vehicles, plant and equipment which will be used during construction rely on hydrocarbons such as diesel, petrol and lubricating oils. Leaks from poorly maintained vehicles, plant, equipment, or storage tanks risk the input of hydrocarbons into the environment. In the absence of appropriate mitigation, hydrocarbons from the construction site may be washed into surface waters in construction site run-off. This has the potential to cause negative ecological impacts on freshwater habitats. Hydrocarbons can have direct toxic effects, including reducing the ability of organisms to absorb water and nutrients. Hydrocarbons can also alter the nutrient balance and microbiota in soil and water, which can benefit some species while detrimentally affecting others. Such changes have the potential to alter the ecological community structures and ecological integrity of habitats.

Inadequate treatment of wastewater from on-site toilets and washing facilities also provides for potential water quality impacts which could lead to ecological effects. Faecal contamination can alter the nutrient balance in soils and water, causing significant changes in microbial communities and reductions in oxygen levels. This can have significant effects on the biological composition of receiving habitats.

In-stream works are proposed upstream of the SAC to facilitate the construction of the depot and the realignment of the railway line at Jackson's Bridge.

### Operational phase.

The wider use of electric trains during the operation of the proposed development will reduce the potential for pollution, however diesel trains will remain on the line to serve destinations west of the depot. Electric trains will use oils and oil-based lubricants, so some risk of pollution will remain.

## **Habitat Distribution**

The Target for the Habitat Distribution for the habitat is *no decline*. There is no proposed development within the SAC and the railway line is entirely built land. The works in proximity to the SAC are limited to the construction of catenary poles, there will be no direct or indirect change in the distribution of Petrifying Springs as a result of the proposed development. The Habitat Distribution of Petrifying Springs within the SAC could however be indirectly affected through changes in hydrological regime and water quality arising from the proposed development as outlined above.

## **Hydrological Regime: Height of Water Table; Water Flow**

The Target for Hydrological Regime for the habitat is to *maintain appropriate hydrological regimes*. Given the hydrological connectivity between the proposed development and areas supporting examples of this habitat type, there is potential for adverse effects on the Hydrological Regime through hydraulic changes associated with two new watercourse crossings, the diversion of the Ballycaghan Stream, and the construction of the depot and flood compensatory storage areas 3.5 km upstream of the SAC boundary.

## Water Quality

The Target for Water Quality for the habitat is as to *maintain oligotrophic and calcareous conditions*. The proposed development is considered to pose a risk of pollution to watercourses connected to the SAC. Pollution has the potential to alter the nutrient and pH levels in water and therefore adversely affect the Conservation Objective for Petrifying Springs by preventing or interrupting the maintenance of oligotrophic and calcareous conditions. Potential adverse effects of the construction and operation of the proposed development on Water Quality, insofar as they are discussed above in relation to Habitat Area.

## Vegetation Composition: Typical Species

The Target for Vegetation Composition for the habitat is to *maintain typical species*. Bryophytes *Cratoneuron commutatum* and *Eucladium verticillatum* are diagnostic of Petrifying Springs. The Vegetation Composition of Petrifying Springs within the SAC could be affected through changes in the hydrological regime and water quality arising from the proposed development as outlined above.

## Conclusion

In the absence of appropriate mitigation, the construction of the proposed development has the potential to adversely affect the Conservation Objective for 'Petrifying Springs' in the Rye Water Valley/ Carton SAC (as per the River Barrow and River Nore SAC) through changes in the hydrological regime, water quality and through the spread of invasive species which may in turn affect the Habitat Area, Habitat Distribution, Hydrological Regime, Water Quality and Vegetation Composition for this Qualifying Interest. Therefore, mitigation is required to avoid these potential adverse effects. The proposed development does not provide for any other adverse effects on this Conservation Objective during either the construction phase or the operational phase.

### 4.2.2 Narrow-mouthed Whorl Snail (*Vertigo angustior*)

In Ireland, Narrow-mouthed Whorl Snail is present in dune grassland, fen, marsh, salt marsh and flood plain habitats (Moorkens. & Killeen, 2011). According to the Site Synopsis for the Rye Water Valley/ Carton SAC, Narrow-mouthed Whorl Snail occurs in marsh vegetation near Louisa Bridge.

A site-specific Conservation Objective for Narrow-mouthed Whorl Snail in the Rye Water Valley/ Carton SAC has not to date been developed. For the purposes of this assessment, a Conservation Objective for the Narrow-mouthed Whorl Snail in the Rye Water Valley/ Carton SAC has been applied from the Slieve Tooley/Tormore Island/Loughros Beg Bay SAC. The Conservation Objective for Narrow-mouthed Whorl Snail in the Rye Water Valley/Carton SAC as per the Slieve Tooley/Tormore Island/Loughros Beg Bay SAC is shown in Table 3-2 above. The Attributes of this Conservation Objective as per the Slieve Tooley/Tormore Island/Loughros Beg Bay SAC are summarised as follows:

- Distribution (Occupied Sites).
- Occurrence in Suitable Habitat.
- Habitat Quality.
- Optimal Soil Wetness.
- Habitat Extent

### Distribution (Occupied Sites)

The Target for Distribution for the species is *no decline*. The proposed development may lead to impacts on water quality within habitats containing this Qualifying Interest. Given the hydrological connectivity between the proposed development and sites occupied by Narrow-mouthed Whorl Snail there is potential for the proposed development to cause a decline in sites occupied by this species through impacts on water quality and hydrological regime. There is also potential for invasive alien species to be spread during the construction of the proposed development which could reduce the number of occupied sites. The effects of

water quality impacts and invasive alien species associated with the proposed development are assessed in Section 4.2.1.

### **Occurrence in Suitable Habitat**

The Target for Occurrence in Suitable Habitat for the species is *A minimum of 25% positive samples in areas of habitat that are at least sub-optimal*. Given the hydrological connectivity between the canal and habitats occupied by Narrow-mouthed Whorl Snail there is potential for the proposed development to cause a reduction in the quality of habitats occupied by this species through impacts on water quality and the hydrological regime. There is also potential for invasive alien species to be spread during the construction of the proposed development which could make these sites unsuitable for this species. The effects of water quality impacts and invasive alien species associated with the proposed development are assessed in Section 4.2.1.

### **Habitat Quality**

The Target for Habitat Quality for the species is *90m of the established monitoring transect assessed as optimal wetness or at least 60% of sampling stops assessed as optimal wetness*. Given the hydrological connectivity between the canal and habitats occupied by Narrow-mouthed Whorl Snail there is potential for the proposed development to cause a reduction in the quality of habitats occupied by this species in the wider area through impacts on water quality, the hydrological regime and through the introduction of invasive species.

### **Optimal Soil Wetness**

The Target for Optimal Soil Wetness for the species is *90m of the established monitoring transect assessed as at least suboptimal or at least 60% of samples within suitable habitat polygon at least sub-optimal*. Given the hydrological connectivity between the canal and habitats occupied by Narrow-mouthed Whorl Snail, there is potential for the proposed development to alter the optimal soil wetness for the species in suitable habitat through impacts on water quality, the hydrological regime and through the introduction of invasive species.

### **Habitat Extent**

The Target for Habitat Extent for the species is *Area of suitable habitat stable or increasing subject to natural processes and at least 7.1ha*. Given the hydrological connectivity between the canal and habitats occupied by Narrow-mouthed Whorl Snail there is potential for the proposed development to cause a reduction in the area of suitable habitat for this species through impacts on water quality, the hydrological regime and through the introduction of invasive species.

### **Conclusion**

In the absence of appropriate mitigation, the construction of the proposed development has the potential to adversely affect the Conservation Objective for Narrow-mouthed Whorl Snail in the Rye Water Valley/ Carton SAC (as per the Slieve Tooley/Tormore Island/Loughros Beg Bay SAC) through impacts on water quality, the hydrological regime and through the introduction of invasive alien species, which may in turn affect the Distribution, Occurrence in Suitable Habitat, Optimal Soil Wetness and Habitat Extent for this Qualifying Interest. Therefore, mitigation is required to avoid these adverse effects. The proposed development does not provide for any other adverse effects on this Conservation Objective during either the construction phase or the operational phase.

#### **4.2.3 Desmoulin's Whorl Snail (*Vertigo moulinsiana*)**

In wetland habitats, Desmoulin's Whorl Snail depend on emergent vegetation typically associated with marsh and fen habitat, which allows them to escape to higher ground during period of flood. As well as suitable vegetation structure, the snail requires a stable hydrogeology, where the water-table is at, or slightly above,

the ground surface for much of the year and any seasonal flooding is of very low amplitude (Tattersfield & McInnes, 2003). According to the Site Synopsis for the Rye Water Valley/ Carton SAC, Desmoulin's Whorl Snail occurs in marsh vegetation near Louisa Bridge.

A site-specific Conservation Objective for Desmoulin's Whorl Snail in the Rye Water Valley/ Carton SAC has not to date been developed. For the purposes of this assessment, a Conservation Objective for the Desmoulin's Whorl Snail in the Rye Water Valley/ Carton SAC has been applied from the River Barrow and River Nore SAC. The Conservation Objective for Desmoulin's Whorl Snail in the Rye Water Valley/Carton SAC as per the River Barrow and River Nore SAC is shown in Table 3-2 above. The Attributes of this Conservation Objective as per the River Barrow and River Nore SAC are summarised as follows:

- Distribution (Occupied Sites).
- Population Size (Adults) and Density.
- Area Of Occupancy.
- Habitat Quality (Vegetation and Soil Moisture Levels).

### **Distribution (Occupied Sites)**

The Target for Distribution for the species is to *no decline*. The proposed development may lead to impacts on water quality within the canal and watercourses within habitats containing this Qualifying Interest. Given the hydrological connectivity between the proposed development and sites occupied by Desmoulin's Whorl Snail there is potential for the proposed development to cause a decline in sites occupied by this species through impacts on water quality and the hydrological regime. There is also potential for invasive alien species to be spread during the construction of the proposed development which could make these sites unsuitable for this species. The effects of water quality impacts and invasive alien species associated with the proposed development are assessed in Section 4.2.1.

### **Population Size (Adults) and Density**

The Target for Population Size (Adults) for the species is *at least 5 adults snails in at least 50% of samples*. The site-specific Target for Population Density for the species is *Adult snails present in at least 60% of samples per site*. Given the hydrological connectivity between the canal and habitats occupied by Desmoulin's Whorl Snail there is potential for the proposed development to alter the Population Size and density of this species through impacts on water quality, the hydrological regime and through the introduction of invasive species.

### **Area of Occupancy**

The Target for Area of Occupancy for the species is to *Minimum of 1ha of suitable habitat per site*. Given the hydrological connectivity between the canal and habitats occupied by Desmoulin's Whorl Snail there is potential for the proposed development to cause a reduction to cause a reduction in the area of suitable habitat in sites occupied by the species through impacts on water quality, the hydrological regime and through the introduction of invasive species.

### **Habitat Quality (Vegetation and Soil Moisture Levels)**

The Target for Habitat Quality: Vegetation for the species is to *90% of samples in habitat classes I and II as defined in Moorkens & Killeen (2011)*. The Target for Habitat Quality: Soil Moisture Levels for the species is to *90% of samples in moisture class 3-4 as defined in Moorkens & Killeen (2011)*. Given the hydrological connectivity between the canal and habitats occupied by Desmoulin's Whorl Snail there is potential for the proposed development to cause a reduction in the quality of habitats occupied by this species in the wider area through impacts on water quality, the hydrological regime and through the introduction of invasive species.

## Conclusion

In the absence of appropriate mitigation, the construction of the proposed development has the potential to adversely affect the Conservation Objective for Desmoulin's Whorl Snail in the Rye Water Valley/ Carton SAC (as per the River Barrow and River Nore SAC) through impacts on water quality, the hydrological regime and through the introduction of invasive alien species which may in turn affect the Distribution, Population Size, Population Density, Area of Occupancy and Habitat Quality for this Qualifying Interest. Therefore, mitigation is required to avoid these adverse effects. The proposed development does not provide for any other adverse effects on this Conservation Objective during either the construction phase or the operational phase.

## 4.3 South Dublin Bay and River Tolka Estuary SPA

### 4.3.1 Light-bellied Brent Goose

During winter the South Dublin Bay and River Tolka Estuary SPA regularly supports 1% or more of the biogeographic population of Light-bellied Brent Goose. The mean peak number of this species within the SPA during the baseline period (1995/96 – 1999/00) was 525 individuals. The long-term Population Trend for Light-bellied Brent Goose is increasing numbers at Dublin Bay although numbers in recent seasons have dropped slightly, hence the short-term trend for decline. Nationally, numbers increased at an annual rate of 5.1% over the period 1994/95 to 2008/09 (NPWS, 2014a).

Light-bellied Brent Goose is a grazer and is known for its preference for foraging in intertidal areas on beds of Eelgrass (*Zostera* spp.) (Robinson et al., 2004). Where this food source is absent or becomes depleted, the birds feed upon green algae species (*Enteromorpha* and *Ulva* spp) and saltmarsh plants. Light-bellied Brent Goose is also known to undertake terrestrial grazing on recreational grasslands from mid-winter onwards (Inger et al., 2006). Recent surveys have shown that terrestrial inland feeding sites around Dublin city support an internationally important number of Light-bellied Brent Goose (Scott Cawley, 2017). Light-bellied Brent Goose primarily feeds by day and roosts by night. Bull Island is their principal roosting site and they return here at dusk, from both intertidal and inland feeding areas (Benson, 2009).

The Conservation Objective for Light-bellied Brent Goose in the South Dublin Bay and River Tolka Estuary SPA is shown in Table 3-2 above. The Attributes of this Conservation Objective are summarised as follows:

- Population Trend.
- Distribution.

### Population Trend

The site-specific Target for Population Trend for Light-bellied Brent Goose is “stable or increasing”.

Light-bellied Brent Goose feeds on amenity grasslands in Dublin City including areas of St. Vincent's Primary School, Martin Savage Park and Ashington Park. The locations of grasslands that could be utilised by Light-bellied Brent Goose within the likely zone of impact are illustrated in Appendix F.

### Habitat Loss

The proposed development will require the construction of permanent ancillary infrastructure (substation, signalling equipment building and principal supply point) and the set-up, use and decommissioning of a temporary construction compound within the playing fields of St. Vincent's School, Glasnevin. The substation is located at the southwest corner of the playing pitches next to Clareville Court. There will be no permanent loss of amenity grassland within the St. Vincent's School. There may be a temporary loss of feeding habitat for Light-bellied Brent Goose during the construction phase, if it coincides with the months that Light-bellied Brent Goose use this area. Therefore, the proposed development could potentially impact

the long-term population trend of Light-bellied Brent Goose within the SPA. The proposed development will not lead to any permanent loss of habitat used by Light-bellied Brent Goose.

#### Disturbance

The proposed development may result in disturbance to Light-bellied Brent Goose using the playing fields at St. Vincent's School, Martin Savage Park and other areas adjacent to the railway or cause this Qualifying Interest to avoid these areas entirely. Therefore, mitigation is required to avoid potential adverse effects.

#### Collision Risk

The main causes of bird collisions with man-made structures are normally considered to be invisibility, particularly at night; deception, caused by glazing in buildings; and confusion, caused by light refracted or reflected by mist (Jaroslow, 1979). Structures that do not exhibit these features are rarely implicated in scientific literature as causes of bird mortality.

The proposed development poses a potential risk of collision to Light-bellied Brent Goose. Light-bellied Brent Goose is vulnerable to collision with over wires due to the speed at which it flies, its poor eyesight and poor manoeuvrability. Similarly, there is potential for Light-bellied Brent Goose to collide with new bridges over the Royal Canal. Therefore, mitigation is required to avoid potential adverse effects.

#### **Distribution**

The site-specific Target for Distribution of Light-bellied Brent Goose is "no significant decrease in the range, timing or intensity of use of areas".

As outlined above, the proposed development has the potential to disturb or displace Light-bellied Brent Goose from using the sports pitch at St. Vincent's Primary School, Glasnevin. This could have an indirect effect on the range, timing or intensity of use of certain areas of the SPA by Light-bellied Brent Goose. Therefore, mitigation is required to avoid potential adverse effects.

#### Habitat Loss

As outlined in the preceding sections, amenity grassland within the study area provides valuable foraging habitat for Light-bellied Brent Goose. There will be temporary loss of grassland at St. Vincent's School, Glasnevin which could potentially affect the Distribution of Light-bellied Brent Goose within SPA.

#### Disturbance

The sensitivity of birds to disturbance varies by species and whether the source of the disturbance is visual, or noise based. Additionally, the current level of habituation will also determine a bird's response to disturbance. Construction activities including bored piling with vibratory or impact hammers has the potential to disturb Light-bellied Brent Goose. The noise levels from vibratory/impact hammers are generally less than 100 dBA. Put into practice, this will mean that if an impact hammer generates 100 dBA at 1.0m from the source, this sound will be 70 dBA at 34m away. The "acceptable dose" for waterbirds is 70 dBA at receptor (IECS, 2013). Regular noise above this level is likely to illicit a response, although this depends on species and the level of habituation

Light-bellied Brent Goose is a species highly sensitive to noise disturbance and they react in a variable manner to visual disturbance (Smit & Visser, 1993). There is potential for Light-bellied Brent Goose to be displaced from the feeding areas surrounding the site of the proposed development during construction arising from noise and visual disturbance. Therefore, mitigation is required to avoid these adverse effects. The operational phase of the proposed development does not provide for a significant increase in noise or vibration within the study area.

The operation of the tracking substation is located at St. Vincent's Primary School will not result in any disturbance Light-bellied Brent Goose.

## Conclusion

In the absence of appropriate mitigation, the construction of the proposed development has the potential to adversely affect the Conservation Objective for 'Light-bellied Brent Goose in the South Dublin Bay and River Tolka Estuary SPA through collisions, habitat loss and disturbance which may in turn affect the Population Trend and Distribution of this Qualifying Interest. Therefore, mitigation is required to avoid these adverse effects. The proposed development does not provide for any other adverse effects on this Conservation Objective during either the construction phase or the operational phase.

## 4.4 North Bull Island SPA

### 4.4.1 Light-bellied Brent Goose

The Conservation Objective for Light-bellied Brent Goose in the North Bull Island SPA is shown in Table 3-2 above. The Attributes of this Conservation Objective are summarised as follows:

- Population Trend.
- Distribution.

#### Population trend

During winter the North Bull Island SPA regularly supports 1% or more of the biogeographic population of Light-bellied Brent Goose. The mean peak number of this species within the SPA during the baseline period (1995/96 – 1999/00) was 1,548 individuals. The long-term Population Trend for Brent Goose is increasing numbers at Dublin Bay although numbers in recent seasons have dropped slightly, hence the short-term trend for decline. Nationally, numbers increased at an annual rate of 5.1% over the period 1994/95 to 2008/09 (NPWS, 2014a).

For the reasons outlined above in Section 4.3.1 in relation to Light-Bellied Brent Goose in South Dublin Bay and River Tolka Estuary SPA, the proposed development has the potential to adversely affect Population Trend of Light-Bellied Brent Goose in North Bull Island SPA

#### Distribution

For the reasons outlined above in Section 4.3.1 in relation to Light-bellied Brent Goose in South Dublin Bay and River Tolka Estuary SPA the proposed development has the potential to adversely affect Distribution of Light-Bellied Brent Goose in North Bull Island SPA

## Conclusion

In the absence of appropriate mitigation, the construction of the proposed development has the potential to adversely affect the Conservation Objective for Light-bellied Brent Goose in the North Bull Island SPA through collisions, habitat loss and disturbance which may in turn affect the Population Trend and Distribution of this Qualifying Interest. Therefore, mitigation is required to avoid these adverse effects. The proposed development does not provide for any other adverse effects on this Conservation Objective during either the construction phase or the operational phase.

## 5. MITIGATION

### 5.1 Principles and Approach

Section 4.0 of this NIS identified adverse effects likely to arise from the proposed development on the specific Attributes and Targets which define the Conservation Objectives for several QIs of the Rye Water Valley/Carlton SAC, the South Dublin Bay and the River Tolka Estuary SPA and the North Bull Island SPA. This section (Section 5.0) prescribes measures and a protocol to ensure their full and proper implementation aimed at mitigating these adverse effects, thereby protecting the integrity of these European sites during the construction and operation of the proposed development.

The mitigation measures prescribed in this NIS have been designed according to the principle of a mitigation hierarchy, as outlined in the European Commission's guidance document *Assessment of plans and projects significantly affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC* (EC, 2001). According to this hierarchy, the following mitigation approaches were adopted, in order of decreasing preference:

1. Avoiding impacts at their source.
2. Reducing impacts at their source.
3. Abating impacts on site.
4. Abating impacts at their receptor.

As mitigation measures are related directly to impacts and only indirectly to receptors and as, in this case, all of the affected receptors have been identified as being affected the same set of impacts, to describe mitigation measures under the headings of the relevant receptors would lead to undue repetition. Therefore, the measures prescribed in this NIS are described under the headings of the types of impacts which they are intended to mitigate.

The mitigation measures are prescribed in Section 5.2 and a protocol to ensure their full and proper implementation is prescribed in Section 5.3. The significance of any residual effects following the inclusion of mitigation measures is evaluated in Section 5.4. As per the assessment of adverse effects in Section 4.0, this evaluation is made in view of the relevant Conservation Objectives.

### 5.2 Mitigation Measures

#### 5.2.1 Rye Water Valley/ Carlton SAC

##### 5.2.1.1 Water Quality

- In order to attenuate flows and minimise sediment input into watercourses from site run-off, all surface water run-off from the construction sites and compounds shall be intercepted and conveyed to a drainage network. The guidance of sustainable drainage systems (SuDS) from CIRIA C753 shall be used.
- All works in and adjacent to watercourses will be carried out in accordance with *Guidelines for the crossing of Watercourses During Construction of National Road Schemes* (TII, 2008); and, *Guidelines on Protection of Fisheries during Construction Works in and adjacent to Waters* (IFI, 2016).

The proposed new bridges which cross the Lyreen River, and the Royal Canal and the Ballycaghan Stream are clear span which will avoid in-stream works.

- The diversion of the Ballycaghan Stream will be undertaken as follows:
  - The new channel will be completed in the dry.
  - The banks will be constructed at a 1:2 slope and will be planted with locally sourced species.
  - As the old channel is dewatered, any fish or white-clawed crayfish will be removed and placed in the stream below the works.

- Straw bales or similar will be placed downstream of the new section of the Ballycaghan Stream to minimise sediment transfer downstream.
- The new section of the Ballycaghan Stream will be fish passable and include riffles, pools and suitable benthic substrate.
- The Contractor will ensure that all hazardous waste residuals are stored within temporary bunded storage areas prior to removal by an appropriate EPA-approved waste management contractor for off-site treatment, recycling or disposal.
- The Contractor will ensure that excess topsoil and inert soil which cannot be re-used on-site, and all hazardous soil waste will be separately removed off site to an appropriately licenced facility by a licensed Contractor.
- Any stockpiled material shall be located as far from watercourses as practicable, covered and remain stockpiled for as short a time as possible.
- All equipment including PPE which comes into contact with watercourses will be clean and will be disinfected prior to arrival and before leaving site each day using Virkon Aquatic or similar. Equipment will be disinfected at least 20m from the watercourse.
- The measures prescribed with regard to sedimentation and surface water run-off will also minimise the risk of any input of cementitious material into watercourses. However, the following additional measures shall also apply:
  - All shuttering shall be securely installed and inspected for leaks prior to cement being poured, and all pouring operations shall be supervised for spills and leaks at all times.
  - In order to eliminate any remaining risk of input of cementitious material into watercourses, all pouring of concrete, sealing of joints, application of water-proofing paint or protective systems, curing agents, etc., for outfalls shall be completed in dry weather.
  - In order to prevent input of cementitious materials into watercourses from the in-stream elements of the construction, or from works over water, concrete structural elements shall be pre-cast, wherever possible.
  - In addition, at all locations where concrete or other wet materials are to be used, bunded steel decks will be used to capture any spilled concrete or other materials.
- The measures prescribed with regard to surface water run-off will also minimise the risk of any input of hydrocarbons and other chemicals into the watercourses. However, the following additional measures shall also apply:
  - Vehicles and plant shall be refuelled off-site where possible and all fuelling of machinery shall be undertaken at least 30 m from the watercourses.
  - All fuelling of vessels shall be undertaken on an impervious base in bunded areas and all fuelling equipment shall be regularly inspected and serviced.
  - Standing plant and machinery shall be placed on drip-trays.
  - All fuel, oils, chemicals, hydraulic fluids, on-site toilets, etc., shall be stored in the construction site compound, on an impervious base which shall be bunded to 110% capacity and appropriately secured.
  - All plant and construction vehicles shall be inspected daily for oil leaks and a full-service record shall be kept for all plant and machinery.
  - Spill kits shall be available on-site during construction.
  - Paints containing organotin compounds, e.g. TBT, will not be used, during the construction or operation (e.g. maintenance) of the proposed development.

#### **5.2.1.2 Changes to Hydrology**

- The depot will be constructed at a minimum of 300mm above the 0.1%AEP flood level (+ climate change). Compensatory storage will be provided to defend the depot from flooding to the 0.1%AEP level and to prevent exacerbation of flooding downstream of the proposed development. Wetlands will be incorporated into the compensatory storage areas.

#### **5.2.1.3 Introduction and Spread of Invasive Species**

- A preconstruction invasive species survey shall be carried out, taking in the entirety of the site of the proposed development. At a minimum, this survey shall aim to identify and map the occurrences of

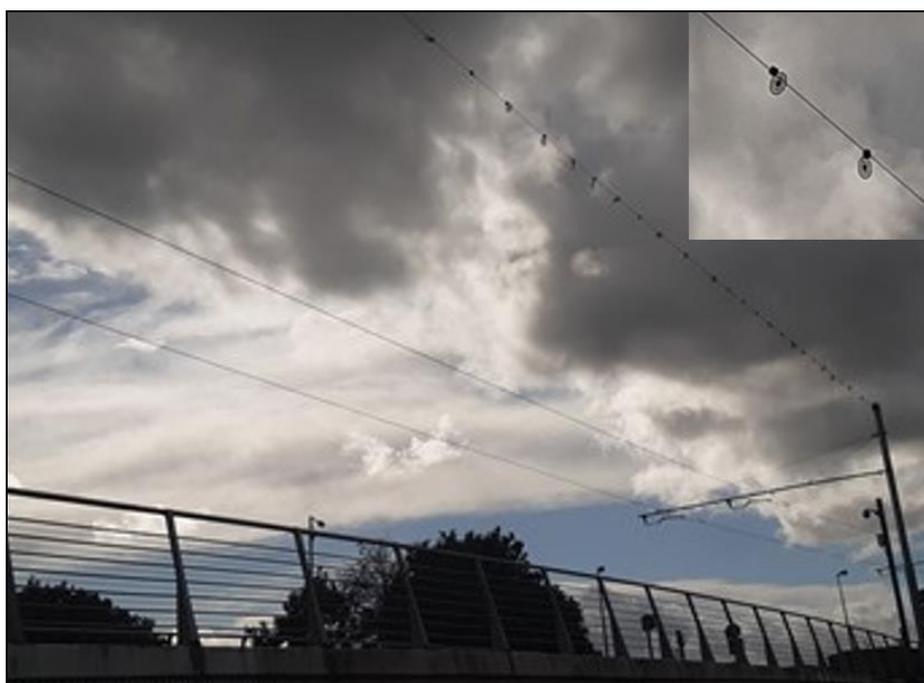
all IAPS listed on the Third Schedule of the Birds and Natural Habitats Regulations 2011 (S.I. No. 477/2011) but should also aim to identify and map other invasive species which could potentially be further dispersed as a result of the construction and operation of the proposed development.

- The Contractor will prepare an invasive species management plan, detailing how the introduction and spread of invasive species will be prevented. The invasive species management plan will be approved by CIÉ.
- Prior to the commencement of any works, areas in the site of the proposed development where invasive species occur shall be fenced and clearly marked with appropriate signage which identify the species and warn not to enter or interfere with vegetation in the fenced areas.
- The Contractor shall ensure that imported soil/substrate is free from invasive species.
- All equipment including PPE which comes into contact with watercourses will be clean and will be disinfected prior to arrival and before leaving site each day using Virkon Aquatic or similar. Equipment will be disinfected at least 20m from the watercourse.

## 5.2.2 South Dublin Bay and River Tolka Estuary SPA; North Bull Island SPA

### 5.2.2.1 Collision Risk

- The new bridges over the railway line and the Royal Canal have been designed without cables to reduce the risk of bird collision. The new bridges will be either weathered steel or bare concrete, both of which are visible to birds.
- Heightened parapets over the railway line will be of solid construction.
- To mitigate for the risk of collision with OHLE, deflectors will be installed on wires parallel to the OHLE at a number of strategic locations, including the bridges over the Royal Canal in Cabra (Ch. 50+850) and the Rye Water (76+100), and along the boundaries of St. Vincent's Primary School, Martin Savage Park and Ashington Park. Deflectors will also be installed on the diverted HV power line at Jackson's Bridge. A meta-analysis of published literature and unpublished reports to date shows that deflectors significantly reduce bird collision (Barrientos et al, 2011). An example of bird deflectors on the Anne Devlin Bridge in Dublin is shown in Figure 5-1 below. The locations of the deflectors are illustrated in Appendix G.
- Bird deflectors will also be installed at the 15 locations where overhead lines which cross the canal are being heightened or lowered, and at the high voltage cable diversion at Jackson's Bridge. The locations of the deflectors are illustrated in Appendix G.



**Figure 5-1 Bird deflector/ flight diverters on the Anne Devlin Luas Bridge, Dublin**

### 5.2.2.2 Disturbance

To mitigate for the risk of disturbance to Brent Geese at feeding sites adjacent to the railway line, there will be no daytime OHLE construction shifts adjacent to the Brent Geese feeding areas identified in Appendix F between October and April inclusive.

The construction of the ancillary infrastructure (substation, signalling equipment building and principal supply point) and the set-up, use and decommissioning of the construction compound at St. Vincent's Primary School, Glasnevin will take place between the months of May and September inclusive, to avoid disturbing wintering birds at this location.

## 5.3 Implementation

In order to give effect to the mitigation prescribed in this NIS it should be a condition of any consent granted in respect of the proposed development that all of the mitigation, including monitoring and enforcement, prescribed in this NIS be binding, during the construction phase, on the Contractor and, during operational phase, on CIÉ. Accordingly, all of the mitigation prescribed herein shall be transposed into the Contract Documents for the construction of the proposed development. Prior to any demolition, excavation, or construction, a Construction Environmental Management Plan (CEMP) will be produced by the successful contractors for each element of the proposed development. The CEMP will set out the Contractor's overall management and administration of the construction phase. A Construction Environmental Management Plan has also been prepared as part of this NIS, see Appendix C. The CEMP will be developed by the Contractor during the pre-construction phase, to ensure that the mitigation measure contained in this NIS are adhered to.

During construction, all works must comply with relevant legislation and guidelines in order to reduce and minimise environmental impacts and to protect all ecological receptors. In particular, there must be full compliance with the following:

- The Schedule of Commitments.
- The mitigation prescribed in this NIS and Chapter 8 of the EIAR.
- Any conditions which might be attached to the proposed development's planning consent.
- Any requirements of stakeholders and statutory bodies, e.g. the NPWS and IFI, including:
  - *Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters* (IFI, 2016).
- All applicable legislative requirements in relation to environmental protection.
- All relevant construction industry guidelines, including:
  - *C532 Control of water pollution from construction sites: guidance for consultants and contractors* (CIRIA, 2001).
- Any biosecurity requirements arising from the preceding points.
- The Transport Infrastructure Ireland (TII) and National Roads Authority (NRA) Environmental Assessment and Construction Guidelines, specifically:
  - *Guidelines for the Treatment of Bats during the Construction of National Road Schemes.*
  - *Guidelines for the Crossing of Watercourses during the Construction of National Road Schemes.*
  - *Guidelines for the Testing and Mitigation of the Wetland Archaeological Heritage for National Road Schemes.*
  - *Guidelines for the Protection and Preservation of Trees, Hedgerows and Scrub Prior to, During and Post-Construction of National Road Schemes.*
  - *Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes.*
  - *The Management of Invasive Alien Plant Species on National Roads – Standard.*
  - *The Management of Invasive Alien Plant Species on National Roads – Technical Guidance.*
  - *Guidelines for the Treatment of Noise and Vibration in National Road Schemes.*

- *Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes.*
- *Management of Waste from National Road Construction Projects.*
- *Guidelines for the Creation, Implementation and Maintenance of an Environmental Operating Plan.*

This list is non-exhaustive. All environmental commitments/requirements and relevant legislation and guidelines which are current at the time of construction will be followed.

## 5.4 Residual Effects

### 5.4.1 Petrifying Springs with tufa formation (*Cratoneurion*)

It is considered that the mitigation prescribed in Section 5.2 and the implementation and compliance measures prescribed in Section 5.3 will reduce all negative impacts on Petrifying Springs to imperceptible levels. Any residual effects on hydrology or water quality will not adversely affect this Qualifying Interest.

Therefore, given the full and proper implementation of the mitigation prescribed in this NIS, it can be concluded beyond all reasonable scientific doubt that construction and operation of the proposed development will not adversely affect the integrity of the Rye Water Valley/Carton SAC in view of the Conservation Objective for 'Petrifying Springs'.

### 5.4.2 Narrow-mouthed Whorl Snail (*Vertigo angustior*)

It is considered that the mitigation prescribed in Section 5.2 and the implementation and compliance measures prescribed in Section 5.3 will reduce all negative impacts on Narrow-mouthed Whorl Snail to imperceptible levels. Any residual effects on hydrology or water quality will not adversely affect this Qualifying Interest.

Therefore, given the full and proper implementation of the mitigation prescribed in this NIS, it can be concluded beyond all reasonable scientific doubt that construction and operation of the proposed development will not adversely affect the integrity of the Rye Water Valley/Carton SAC in view of the Conservation Objective for "Narrow-mouthed Whorl Snail".

### 5.4.3 Desmoulin's Whorl Snail (*Vertigo moulinsiana*)

It is considered that the mitigation prescribed in Section 5.2 and the implementation and compliance measures prescribed in Section 5.3 will reduce all negative impacts on Desmoulin's Whorl Snail to imperceptible levels. Any residual effects on hydrology or water quality will not adversely affect this Qualifying Interest.

Therefore, given the full and proper implementation of the mitigation prescribed in this NIS, it can be concluded beyond all reasonable scientific doubt that construction and operation of the proposed development will not adversely affect the integrity of the Rye Water Valley/Carton SAC in view of the Conservation Objective for "Desmoulin's Whorl Snail".

### 5.4.4 Light-bellied Brent Goose

The mitigation prescribed in Section 5.2 and the implementation and compliance measures prescribed in Section 5.3 will reduce all negative impacts on Light-bellied Brent Goose to imperceptible levels. Any residual impacts will not adversely affect Population Trend or Distribution of Light-bellied Brent Geese within the South Dublin Bay and River Tolka Estuary SPA or the North Bull Island SPA.

Therefore, given the full and proper implementation of the mitigation prescribed in this NIS, it can be concluded beyond all reasonable scientific doubt that construction and operation of the proposed development will not adversely affect the integrity of the South Dublin Bay and River Tolka Estuary SPA or the North Bull Island SPA in view of their Conservation Objectives for “Light-bellied Brent Goose”.

## 6. IN-COMBINATION EFFECTS

### 6.1 Introduction

Article 6(3) of the Habitats Directive requires that AA be carried out in respect of plans and projects that are likely to have adverse effects on European sites, “either individually or in combination with other plans or projects”. Therefore, the combined effects of the plan or project under assessment and other past, present or foreseeable future plans or projects must also be examined, analysed and evaluated.

### 6.2 Methodology

The geographical scope for the identification of plans and projects to be included in the assessment of in-combination effects included the entire area within 15 km of the proposed development. The assessment examined previous plans and projects, current plans and projects in planning and proposed future plans and projects within 15km of the proposed development from 2017 to the present. There is too much uncertainty associated with proposals beyond 5 years into the future and this NIS must be based on data that is readily available.

In assessing in-combination effects, the following were the principal sources consulted:

- DCC (2014). North Lotts and Grand Canal Dock SDZ Planning Scheme.
- DCC (2016). Dublin City Development Plan 2016 – 2022.
- DCC (2019). Poolbeg West SDZ Planning Scheme.
- NTA (2013). Great Dublin Area Cycle Network Plan.
- NTA (2016). Transport Strategy for the Greater Dublin Area 2016 – 2035.
- Dublin Port Company (2012). Dublin Port Masterplan 2012 – 2040.
- DCC Planning Application Map Viewer (2022).
- Fingal County Council Planning Application Map Viewer (2022).
- Kildare County Council Planning Application Map Viewer (2022).
- Meath County Council Planning Application Map Viewer (2022).
- An Bord Pleanála website search function (2022).
- Department of Housing, Local Government and Heritage EIA Portal (2022).

Table 6-1, Table 6-2 and Table 6-3 below detail the assessment of the implications for the relevant European sites of the following:

- The residual effects likely to arise from the proposed development (see Section 5.4 above); in combination with
- Effects likely to arise from other plans and projects identified as having potential in-combination effects.

This assessment has been undertaken in view of the Conservation Objectives of the relevant European sites.

### 6.3 Outcome

As shown in Table 6-1, Table 6-2 and Table 6-3 below, the proposed development, in combination with other plans or projects, does not have the potential to adversely affect any European site.

**Table 6-1 Assessment of adverse effects arising from the proposed development in combination with plans.**

Name of Plan or Project	Description of plan	Potential in-combination Adverse Effects
<p>EU White Paper on Transport: Roadmap to a single European Transport Area - Towards a competitive and resource efficient transport system (Distance: 0m)</p>	<p>In 2011, the European Commission adopted the White Paper Roadmap to a Single European Transport Area - Towards a competitive and resource efficient transport system in the context of the Union's 2020 growth strategy. The vision of the White Paper spans four decades, up to 2050, but also sets earlier goals for 2020 and 2030. The Commission's vision for a competitive and sustainable transport system involves transport that uses cleaner energy, better exploitation of modern infrastructure and a reduction in its negative impact on the environment.</p> <p>The White Paper defines ten goals designed to guide actions and measure progress to achieve a 60% reduction in CO<sub>2</sub> emissions and comparable reduction in oil dependency. Goals to which the DART+ Programme is aligned:</p> <ul style="list-style-type: none"> <li>1. Halve the use of 'conventionally fuelled' cars in urban transport by 2030; phase them out in cities by 2050; achieve essentially CO<sub>2</sub> free city logistics in major urban centres by 2030.</li> <li>4. By 2050, complete a European high-speed rail network. Triple the length of the existing high-speed rail network by 2030 and maintain a dense railway network in all Member States. By 2050 the majority of medium-distance passenger transport should go by rail.</li> </ul>	<p>This is a high-level strategic plan and, therefore, does not of itself provide for any real effects. Thus, it will not give rise to adverse effects in combination with the proposed development.</p>
<p>European Green Deal (Distance: 0m)</p>	<p>Climate change and environmental degradation are an existential threat to Europe and the world. To overcome these challenges, the European Green Deal will transform the EU into a modern, resource-efficient and competitive economy, ensuring:</p> <ul style="list-style-type: none"> <li>no net emissions of greenhouse gases by 2050</li> <li>economic growth decoupled from resource use</li> <li>no person and no place left behind</li> </ul> <p>The European Commission adopted a set of proposals to make the EU's climate, energy, transport, and taxation policies fit for reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels. Rail is one of the most environmentally positive choices with regards to public transport. The EU's Sustainable and Smart Mobility Strategy targets transport and mobility under 3 key objectives.</p> <ul style="list-style-type: none"> <li>Sustainable mobility</li> <li>Smart mobility</li> <li>Resilient mobility</li> </ul> <p>The mobility strategy will, while designing policies, consider the environmental impact of development. To achieve sustainable mobility, 3 key perspectives will be evident in EU policies enacted to achieve sustainable mobility. The first is the reduction of fossil fuel dependence, the second is making alternative choices available such as high-speed rail in this instance. The EU aims to double the traffic on high-speed rail by 2030 and to double the freight traffic on rail by 2050. The final consideration is that policy will be enacted so that the pricing of transport will reflect the environmental impact associated with the respective mode chosen.</p>	<p>This is a high-level strategic plan and, therefore, does not of itself provide for any real effects. Thus, it will not give rise to adverse effects in combination with the proposed development.</p>
<p>Project Ireland 2040 – National Planning Framework (Distance: 0 m)</p>	<p>The National Planning Framework (NPF) is the Government's high-level strategic plan for shaping the future growth and development of the country out to the year 2040. The NPF with the National Development Plan also set the context for each of Ireland's three regional assemblies to develop their Regional Spatial and Economic Strategies taking account of and co-ordinating local authority County and City Development Plans in a manner that will ensure national, regional and local plans align. An SEA and AA have been completed to support the plan. Planning for and delivering sustainable mobility projects is a key objective of the NPF and will help create a more integrated public transport system, enhance competitiveness, sustain economic progress and</p>	<p>This is a high-level strategic plan and, therefore, does not of itself provide for any real effects. Thus, it will not give rise to adverse</p>

Name of Plan or Project	Description of plan	Potential in-combination Adverse Effects				
	<p>enable sustainable mobility choices for citizens. The proposed development will support the implementation of several NSOs and NPOs identified in the NPF and the NDP respectively.</p> <p>NSO 4: Sustainable Mobility is identified as being central to enhancing competitiveness, sustaining economic progress and enabling mobility choices for citizens. NSO4 is supported by the delivery of the DART+ Programme whereby, the Framework aims to expand the range of public transport services available and to reduce congestion and emissions. Under NSO 4, the NPF also commits to invest in key transport projects such as the DART+ Programme, BusConnects and Metro link. The DART+ Programme will also support other NSOs identified within the Framework such as NSO 1, <i>Compact Growth</i> and NSO 8, <i>Transition to a Low Carbon and Climate Resilient Society</i>. NSO 1 identifies the need to deliver a greater proportion of residential development within existing built-up areas and the role that an integrated transport network will play in the regeneration and revitalization of urban areas while NSO 8 includes the electrification of transport fleets as a requirement to support a move away from polluting and carbon intensive propulsion systems.</p> <p>An AA and has been completed for the plan. The AA Conclusion Statement concludes:</p> <p><i>Having considered the text of the NPF, the conclusions of the NIS, the submission from the DCHG, and based on the foregoing, it can be concluded, for the purposes of Article 6(3) of the Habitats Directive that the adoption of the NPF would not adversely affect the integrity of a European site (whether individually or in combination with other plans or projects).</i></p>	<p>effects in combination with the proposed development.</p>				
<p>Project Ireland 2040 - National Development Plan 2021-2030 <b>(Distance: 0 m)</b></p>	<p>National Development Plan 2021–2030 (NDP) sets out the Government’s over-arching investment strategy and budget for the period 2021-2030. It is an ambitious plan that balances the significant demand for public investment across all sectors and regions of Ireland with a major focus on improving the delivery of infrastructure projects to ensure speed of delivery and value for money.</p> <p>The NDP identifies the DART+ Programme a cornerstone of rail investment within the lifetime of Project Ireland and represents the single biggest investment in the Irish rail network. The programme comprising a number of infrastructural projects, namely: DART+ West, DART+ South West, DART+ Coastal North to Drogheda via Balbriggan, and DART+ Coastal South. It also includes the expansion and modernisation of the rail fleet, including both battery-electric (BEMUs) and electric multiple units (EMUs).</p> <p>The NDP supports NSO 4, Sustainable Mobility and outlines the importance of investing in high quality sustainable mobility (active travel and public transport) networks if the NPF population growth targets are to be supported sustainably. It is recognised that the investment in high-quality sustainable mobility will improve citizens’ quality of life, support Ireland’s transition to a low carbon society and enhance the county’s economic competitiveness. The NDP also highlights that the improved and expanded sustainable mobility services and infrastructure can also act as an enabler of the NPF’s commitment toward compact growth of the cities, towns and villages within their existing urban footprint.</p>	<p>This is a high-level strategic plan and, therefore, does not of itself provide for any real effects. Thus, it will not give rise to adverse effects in combination with the proposed development.</p>				
<p>National Sustainable Mobility Policy (2022) <b>(Distance: 0 m)</b></p>	<p>The Department of Transport’s National Sustainable Mobility Policy (NSMP) sets out a strategic framework to 2030 for active travel and public transport to support Irelands overall requirement to achieve a 51% reduction in carbon emissions by the end of this decade, targeting at least 500,000 additional daily active travel and public transport journeys by 2030.</p> <p>The NSMP has been developed to align with and complement other international, European and national policies and frameworks, such as the UN Sustainable Development Goals, Paris Agreement, European Green Deal, EU Sustainable and Smart Mobility Strategy and National Planning Framework.</p> <p>The policy is guided by three key principles, which are underpinned by 10 high level goals as detailed in Table below.</p> <table border="1" data-bbox="568 1366 1621 1461"> <thead> <tr> <th data-bbox="568 1366 759 1417">Principles</th> <th data-bbox="759 1366 1621 1417">Goals</th> </tr> </thead> <tbody> <tr> <td data-bbox="568 1417 759 1461">Safe and Green</td> <td data-bbox="759 1417 1621 1461">1. Improve mobility safety</td> </tr> </tbody> </table>	Principles	Goals	Safe and Green	1. Improve mobility safety	<p>This is a high-level strategic plan and, therefore, does not of itself provide for any real effects. Thus, it will not give rise to adverse effects in combination with the proposed development.</p>
Principles	Goals					
Safe and Green	1. Improve mobility safety					

Name of Plan or Project	Description of plan			Potential in-combination Adverse Effects	
	Mobility		<ol style="list-style-type: none"> <li>2. Decarbonise public transport</li> <li>3. Expand availability of sustainable mobility in metropolitan areas.</li> <li>4. Expand availability of sustainable mobility in regional and rural areas.</li> <li>5. Encourage people to choose sustainable mobility over the private car</li> </ol>		
	People Focused Mobility		<ol style="list-style-type: none"> <li>6. Take a whole of journey approach to mobility, promoting inclusive access for all.</li> <li>7. Design infrastructure according to Universal Design Principles and the Hierarchy of Road Users model.</li> <li>8. Promote sustainable mobility through research and citizen engagement</li> </ol>		
	Better Integrated Mobility		<ol style="list-style-type: none"> <li>9. Better integrate land use and transport planning at all levels.</li> <li>10. Promote smart and integrated mobility through innovative technologies and development of appropriate regulation.</li> </ol>		
<p>National Investment Framework for Transport in Ireland (NIFTI) (2021) <b>(Distance: 0 m)</b></p>	<p>Following the publication of Project Ireland 2040, DTTAS commenced the Planning Land Use and Transport Outlook (PLUTO) 2040 to update the SIFLT to ensure the alignment of planning with regard to land use and transport projects across government departments and agencies. PLUTO has since been retitled as the National Investment Framework for Transport in Ireland (NIFTI). In December 2021, the Department of Transport finalised the National Investment Framework for Transport in Ireland (NIFTI). The Framework will be used by the Department for prioritising future investment in land transport network to support of the delivery of the ten National Strategic Outcomes (NSOs) of the National Planning Framework. Through the transport investment priorities identified it will contribute to Ireland's decarbonisation efforts, support vibrant and successful communities, deliver high performing transport systems, and promote a strong and balanced economy.</p> <p>As part of the future network analysis completed to support investment priorities, NIFTI identifies consistent congestion as an issue in the five major cities in the country: Dublin, Cork, Galway, Limerick, and Waterford. It supports the development of new urban infrastructure supply across the five cities including the development of BusConnects and comprehensive cycle networks, while Dublin will also see heavy rail improvements in the form of DART+ and MetroLink among other things. DART+ programme will result in a substantial investment in sustainable mobility being delivered under the National Development Plan and supports the objectives of the NPF.</p> <p>The future network analysis undertaken to inform NIFTI has demonstrates that the DART+ programme for the GDA will address existing congestion issues, cater for rising travel demand, and support sustainable public transport options across the GDA. The DART+ programme will also encourage compact growth, transport-orientated development (TOD) and supports the decarbonisation of the transport sector to include the purchasing of electric powered trains. The project also supports improvements and maximisation of existing transport infrastructure assets.</p> <p>To address the transport challenges, NIFTI establishes four investment priorities namely:</p> <ul style="list-style-type: none"> <li>• Decarbonisation</li> <li>• Protection and Renewal</li> <li>• Mobility of People and Goods in Urban Areas, and</li> <li>• Enhanced Regional and Rural Connectivity</li> </ul> <p>Projects must align with these priorities to be considered for funding. Moreover, as the NSOs are embedded in NIFTI future investment made in accordance with the priorities will support the delivery of the National Planning Framework over the coming</p>			<p>This is a high-level strategic plan and, therefore, does not of itself provide for any real effects. Thus, it will not give rise to adverse effects in combination with the proposed development.</p>	

Name of Plan or Project	Description of plan	Potential in-combination Adverse Effects
	<p>decades.</p> <p>NIFTI identifies a modal hierarchy or hierarchy of travel modes that will be encouraged when investments or other interventions are being considered. The modal hierarchy identifies the dominance of first supporting active travel, then sustainable travel modes and the last option being private vehicles. This hierarchy of investments will enable and support multiple NSOs contained in the NPF and will also support decarbonising the transport sector and delivering on the principles of compact growth. It is well documented that a significant shift is need in Ireland from low-occupancy private vehicles to active and more sustainable travel modes particularly to support our cities, towns and urban centres. NIFTI acknowledges that the private car will remain, but investment and integrated planning must support this hierarchy.</p> <p>A Strategic Environmental Assessment and an Appropriate Assessment were undertaken and have been published with this policy document.</p>	
<p>The Climate Action Plan 2021 <b>(Distance: 0 m)</b></p>	<p>The Climate Action Plan 2021 provides a detailed plan for taking action to achieve the Government commitment to reduce the overall greenhouse gas emissions by 51% by 2030 and includes the detailed actions to reach net-zero emissions by no later than 2050, (committed to in the Programme for Government and the Climate Act 2021). The commitments made makes Ireland one of the most ambitious countries in the world on climate action and will cut emissions.</p> <p>The Plan lists the actions needed to deliver on our climate targets and sets indicative ranges of emissions reductions for each sector of the economy. It will be updated annually, including in 2022, to ensure alignment with the legally binding economy-wide carbon budgets and sectoral ceilings.</p> <p>Of most relevance to the DART+ West project actions across transport targets, decarbonisation and land use integration.</p> <p>Measures to deliver targets include expanding sustainable mobility options to provide meaningful alternatives to everyday private car journeys is necessary to reduce transport emissions. We are committing to delivering an additional 500,000 daily sustainable journeys by 2030 (c. 14% increase on current levels) through the implementation of major transport projects such as:</p> <ul style="list-style-type: none"> <li>• BusConnects</li> <li>• Connecting Ireland</li> <li>• Expanding rail services and infrastructure in, and around, major urban centres i.e. DART+ Programme</li> <li>• A significant increase in our walking and cycling investments</li> </ul> <p>Specifically, Action 240: Commence delivery of DART+ Programme and continue heavy rail fleet investment.</p> <p>Decarbonisation of public sector transport emissions from transport account for about 30% of the public sector's overall GHG emissions, the second largest portion after buildings. As part of the actions the plans states will:</p> <ul style="list-style-type: none"> <li>• Transition the rail fleet towards an electric model, increasing the length of electrified rail network from 50 kilometres to 150 kilometres by 2030, including the DART+ project which will extend DART services to Drogheda in the north; Maynooth in the west; Hazelhatch in the southwest; and Greystones in the southeast</li> <li>• We will accelerate the removal of obstacles to decarbonisation of our transport fleet, proactively addressing technical and regulatory barriers.</li> </ul> <p>Energy transition: Among the most important measures of the Action Plan is to dramatically increase the proportion of renewable electricity to up to 80% by 2030. This includes an increased target of up to 5 Gigawatts of offshore wind energy. This target is needed not only to reduce fossil fuel reliance and reduce associated emissions but is also necessary to support the electrification of our transport sector including the electrification of the DART+ West.</p>	<p>This is a high-level strategic plan and, therefore, does not of itself provide for any real effects. Thus, it will not give rise to adverse effects in combination with the proposed development.</p>

Name of Plan or Project	Description of plan	Potential in-combination Adverse Effects
<p>The White Paper: Ireland's Transition to a Low Carbon Energy Future 2015-2030 (Distance: 0 m)</p>	<p>The White Paper 'Ireland's Transition to a Low Carbon Energy Future 2015-2030' provides a framework to guide policy and the actions that Government intends to take in the energy sector from now up to 2030 transforming Ireland's fossil fuel-based energy sector into a clean, low carbon system. The White Paper comprises of an energy policy update and provides the framework to guide the national policy. The Paper considers European and International climate change objectives and agreements. The actions that support the proposed project are: "Support initiatives to improve the energy efficiency of the rail network" (pg. 66) and "Support further rail electrification" (pg.67).</p>	<p>This is a high-level strategic plan and, therefore, does not of itself provide for any real effects. Thus, it will not give rise to adverse effects in combination with the proposed development.</p>
<p>2030 Rail Network Strategy Review (Distance: 0 m)</p>	<p>In 2011, Iarnród Éireann carried out a review of future development requirements of the Iarnród Éireann InterCity Network (ICN) and regional services. It sets out a broad strategic goal for the rail network to "provide safe, accessible and integrated rail services that contribute to sustainable economic and regional development in an efficient manner."</p> <p>The review states that the Dublin – Sligo corridor "carries significant traffic from the commuter areas within the Greater Dublin Area". The proposed development aims to electrify a portion of this corridor from Dublin to Maynooth.</p> <p>In terms of the distribution of passenger demand across the various routes, the Strategy review indicates that in 2011 the number and distribution of passengers using intercity and outer-suburban rail services on the Dublin to Maynooth line were the second highest after the Dublin to Drogheda route at 4,147,000 (19.3%) and 5,768, 000 accounting for 26.9% of the overall passenger demand respectively. This passenger demand on the Dublin to Maynooth line emphasise the need to increase the capacity and the frequency of rail services to Maynooth which will be facilitated by the proposed DART+ West project.</p> <p>In November 2021 an All-Island Strategic Rail Review consultation paper was launched and will focus on delivering 6 goals namely:</p> <ul style="list-style-type: none"> <li>• Contribute to decarbonisation</li> <li>• Improve all island connectivity between major cities</li> <li>• Enhance regional and rural accessibility</li> <li>• Encourage sustainable mobility</li> <li>• Foster economic activity</li> <li>• Achieve economic and financial feasibility</li> </ul> <p>The Review expands on the commitment under the New Decade, New Approach agreement to examine the feasibility of a high/higher speed rail link between Belfast, Dublin and Cork and will look at ways to improve our current rail infrastructure, including the feasibility of high/higher speeds and electrification, better connections to the North-West, and role of rail in the efficient movement of goods.</p>	<p>This is a high-level strategic plan and, therefore, does not of itself provide for any real effects. Thus, it will not give rise to adverse effects in combination with the proposed development.</p>
<p>Iarnród Éireann Strategy 2027 (Distance: 0 m)</p>	<p>ÍÉ prepared the 2017 Strategy for its national railway network. The Strategy will aid ÍÉ to deliver high-capacity sustainable public transport solutions to cater for the increase in travel resulting from the anticipated population and employment growth, and to facilitate Ireland in improving sustainable mobility options and reduce carbon emissions from the transport sector.</p> <p>The Strategy identifies the DART+ Programme as a priority investment project and highlights that the services along the DART line "have all experienced significant passenger growth over recent years with overcrowding increasingly experienced by customers on some peak services, especially on the Maynooth Line". The Strategy notes that the DART+ programme will benefit the Intercity outer GDA services by increasing the capacity along the core rail corridors in the GDA. In the case of the DART+ West Project, the</p>	<p>This is a high-level strategic plan and, therefore, does not of itself provide for any real effects. Thus, it will not give rise to adverse effects in combination</p>

Name of Plan or Project	Description of plan	Potential in-combination Adverse Effects
	Strategy states that the Dublin-Sligo Intercity service will benefit from increase in reliability and journey times for rail users and increase in services “to two-hourly all day with hourly peak services” for the Dublin to Maynooth section of the rail corridor.	with the proposed development.
Eastern and Midland Regional Spatial and Economic Strategy 2019-2031 <b>(Distance: 0 m)</b>	<p>The Eastern and Midland Regional Assembly’s (EMRA) 2019 Regional Spatial and Economic Strategy (RSES) provides regional specific policy objectives for the Midlands, Eastern and Dublin regions. The RSES addresses the implementation of Project Ireland 2040 at the regional level. It considers spatial and economic factors which relate to the future of the region and ensures that employment opportunities, services, ease of travel and the overall wellbeing of citizens is being addressed.</p> <p>The Strategy highlights the DART+ and its role in the consolidation of Dublin City and the regeneration of locations such as Dublin Docklands and Poolbeg. Along the North-West corridor, the DART+ West to Maynooth will enhance rail services on the Dublin – Sligo line. The RSES also emphasizes the role of DART+ in increasing capacity to support the ongoing development of lands adjacent to the line at Leixlip and Maynooth. Eastern and Midlands RSES supports the project through Regional Policy Objective RPO 8.8.</p> <p>The DART+ Programme is listed as one of the rail projects supported by the RSES.</p> <p><i>“DART Expansion Programme - new infrastructure and electrification of existing lines, including provision of electrified services to Drogheda or further north on the Northern Line, Celbridge-Hazelhatch or further south on the Kildare Line, Maynooth and M3 Parkway on the Maynooth/ Sligo Line, while continuing to provide DART services on the South-Eastern Line as far south as Greystones”.</i></p> <p>The Strategy highlights the importance of provision of enabling infrastructure for growth in Maynooth, identifying that the “DART+ project and proposed electrification of the rail line to Maynooth represents a significant opportunity for sequential growth in Maynooth”.</p> <p>A Strategic Environmental Assessment and an Appropriate Assessment were undertaken and published with this Strategy.</p>	This is a high-level strategic plan and, therefore, does not of itself provide for any real effects. Thus, it will not give rise to adverse effects in combination with the proposed development.
Dublin Metropolitan Area Strategic Plan (MASP) <b>(Distance: 0 m)</b>	<p>The requirement for the development of MASP for Dublin City as part of the RSES is outlined in Project Ireland 2040. The objectives of the MASP are complementary to the objectives of the RSES. The RSES requires the development of the Dublin MASP that includes the management of sustainable and compact growth of Dublin City and better use of under used lands. One of the guiding principles for the growth of the Dublin MASP is Integrated Transport and Land use which includes the following:</p> <p>The MASP contains a number of objectives for the Dublin Metropolitan Area, including Sustainable Transport Objective to include:</p> <p><i>RPO 5.2 Support the delivery of key sustainable transport projects including Metrolink, DART and LUAS expansion programmes, BusConnects and the Greater Dublin Metropolitan Cycle Network and ensure that future development maximises the efficiency and protects the strategic capacity of the metropolitan area transport network, existing and planned.</i></p> <p><i>To focus growth along existing and proposed high quality public transport corridors and nodes on the expanding public transport network and to support the delivery and integration of ‘BusConnects’, DART expansion and LUAS extension programmes, and Metro Link, while maintaining the capacity and safety of strategic transport networks.</i></p>	This is a high-level strategic plan and, therefore, does not of itself provide for any real effects. Thus, it will not give rise to adverse effects in combination with the proposed development.
Transport Strategy for the Greater Dublin Area 2016-2035 <b>(Distance: 0 m)</b>	<p>This document published by the National Transport Authority (NTA) lays out the transport strategy for the Greater Dublin Area (GDA) up to 2035. The Strategy which was adopted by Government and is now Government Policy is modally balanced and designed to cater for the future needs of the Greater Dublin Area and enable people to move efficiently around the Dublin region. It integrates short, medium and long-term plans for rail, bus, cycling, walking and roads. It sets out the transport provisions necessary to ‘contribute to the economic, social and cultural progress of the GDA by providing for the efficient, effective and sustainable movement of people and goods.’</p> <p>In developing the Strategy, the NTA have considered alternative options for the provision of transport services along the six radial</p>	This is a high-level strategic plan and, therefore, does not of itself provide for any real effects. Thus, it will not give rise to adverse effects in combination

Name of Plan or Project	Description of plan	Potential in-combination Adverse Effects
	<p>corridors into Dublin and found heavy rail to be the most appropriate solution to meet the transport needs of the high-density population centres across several of the corridors identified. Consequently, with regards to Heavy Rail Infrastructure the Strategy intends to:</p> <ul style="list-style-type: none"> <li>• <i>Implement the DART Expansion Programme, which will provide DART services as far north as Drogheda; to Hazelhatch on the Kildare Line (including a tunnel connection from the Kildare Line to link with the Northern / South-Eastern Line); to Maynooth in the west and to the M3 Parkway.</i></li> <li>• <i>Develop a new train control centre to manage the operation of the rail network.</i></li> <li>• <i>Construct additional train stations in developing areas with sufficient demand.</i></li> <li>• <i>Implement a programme of station upgrades and enhancement.</i></li> <li>• <i>Ensure an appropriate level of train fleet, of an appropriate standard, to operate on the rail network.</i></li> </ul> <p>The Strategy also outlines its objectives for Transport Services and Integration, including bus and rail services, in relation to the rail service, the Strategy proposes the following:</p> <p><i>The DART services will operate to a high frequency with adequate capacity to cater for the passenger demand. It is anticipated that DART services in the city centre section of the network will operate to a regular ten minute service frequency in the peak hours from 2016 and will transition to a five minute service frequency following the completion of the DART Expansion Programme.</i></p> <p>The GDA Transport strategy includes objectives in respect of specific modes of transport. A selection of pertinent objectives are as follows:</p> <ul style="list-style-type: none"> <li>• <i>5.7 Walking: Provide a safer, more comfortable and more convenient walking environment for those with mobility, visual and hearing impairments, and for those using buggies and prams.</i></li> <li>• <i>5.7 Walking: Revise road junction layouts, where appropriate, to provide dedicated pedestrian crossings, reduce pedestrian crossing distances, provide more direct pedestrian routes, and reduce the speed of turning traffic.</i></li> <li>• <i>5.7 Walking: Ensure that permeability and accessibility of public transport stops and stations for local communities is maintained and enhanced.</i></li> <li>• <i>5.8.2 Regional and Local Roads: Enhance orbital movement, outside of the M50 C-Ring, between the N3, the N4 and N7 national roads, by the widening of existing roads and the development of new road links.</i></li> <li>• <i>5.8.2 Regional and Local Roads: Develop appropriate road links to service development areas.</i></li> <li>• <i>5.8.2 Regional and Local Roads: Enhance pedestrian and cycle safety through the provision of safer road junctions, improved pedestrian crossing facilities and the incorporation of appropriate cycle measures including signalised crossings where necessary.</i></li> <li>• <i>5.8.3 Principals of Road Development: There will be no significant increase in road capacity for private vehicles on radial roads inside the M50 motorway.</i></li> <li>• <i>5.8.3 Principals of Road Development: That the road scheme, other than a motorway or an express road proposal, will be designed to provide safe and appropriate arrangements to facilitate walking, cycling and public transport provision.</i></li> </ul> <p>A Strategic Environmental Assessment was undertaken and published with this Strategy.</p>	<p>with the proposed development.</p>

Name of Plan or Project	Description of plan	Potential in-combination Adverse Effects
<p>Draft Transport Strategy for the Greater Dublin Area 2022-2042 (Distance: 0 m)</p>	<p>The Transport Strategy for the Greater Dublin Area 2022-2042 replaces the 2016-2035 Strategy. This strategy addresses development within the counties of Dublin, Meath, Kildare and Wicklow. Major projects that are supported in this Strategy include:</p> <ul style="list-style-type: none"> <li>• DART+ Programme</li> <li>• The reopening of the Phoenix Park Tunnel Rail Line; (now complete)</li> <li>• Metrolink</li> <li>• Luas Cross City</li> <li>• The on-going roll out of cycle tracks and greenways</li> <li>• Investment in bus priority and bus service improvements e.g., BusConnects; and</li> <li>• M7 Naas to Newbridge widening, Osberstown Interchange and Sallins Bypass. Etc</li> </ul> <p>The Strategy includes the following measures relevant to the DART+ Programme:</p> <p><b>Measure RAIL1 – DART+</b> <i>“The DART+ Programme will be implemented, providing electrified services to Drogheda in the north and Maynooth plus Celbridge in the west, in addition to an enhanced level of service to Greystones. The programme will include additional fleet, aligned with higher passenger demand, and a higher frequency of service on all lines”</i></p> <p><b>Measure RAIL7 – Station Upgrades</b> <i>“The NTA, in conjunction with Irish Rail, will upgrade, refurbish and maintain train stations across the GDA to ensure that they are of an appropriate standard and provide a good quality experience for passengers”</i></p> <p><b>Measure RAIL6 – New Rail Stations</b> <i>“The NTA, in conjunction with Irish Rail, will develop new rail stations at Cabra, Glasnevin, Heuston West, Kylemore, Woodbrook, west of Sallins, west of Louisa Bridge and west of Maynooth. Kishoge station will also open in the short term as development of the Clonburris SDZ is realised. Other stations will be considered where development patterns support such provision”</i></p> <p><b>Measure CYC8 – Bikes on Public Transport</b> <i>“The NTA will facilitate the carriage of standard bicycles on all newly acquired (during this strategy period) DART, Commuter and Intercity rail carriages operating in the Greater Dublin Area at all times”</i></p> <p>In relation to the road network, the proposed DART+ West Project will also facilitate the implementation of the following measures:</p> <p><b>Measure ROAD1 – Principles of Road Development</b></p> <p><i>“1. That there will be no significant increase in capacity for private car trips on radial roads within the Metropolitan Area, except where re-alignments or junction changes are necessary for safety reasons;</i></p> <p><i>4. That road schemes, other than a motorway or protected road, will be designed will be designed to provide safe and appropriate arrangements to facilitate walking, cycling and public transport provision, including as applicable, the delivery of walking and cycling facilities off line where this is considered to be a more attractive solution for these modes;”</i></p> <p><b>Measure ROAD9 – Regional and Local Roads Policy</b></p> <p><i>“5. Enhance pedestrian and cycle safety through the provision of safer road junctions, improved pedestrian crossing facilities and the incorporation of appropriate cycle measures including signalised crossings where necessary; and</i></p> <p><i>“6. Implement various junction improvements, realignments and local reconfigurations on the regional and local road network to address safety deficiencies and/or support integrated transport proposals catering for all road users”</i></p> <p>A Strategic Environmental Assessment and an Appropriate Assessment were undertaken and published with this Strategy.</p>	<p>This is a high-level strategic plan and, therefore, does not of itself provide for any real effects. Thus, it will not give rise to adverse effects in combination with the proposed development.</p>

Name of Plan or Project	Description of plan	Potential in-combination Adverse Effects
Integrated Implementation Plan 2019-2024 <b>(Distance: 0 m)</b>	<p>Following the approval of a transport strategy for the region by the Minister for Transport, Tourism and Sport, is required to prepare an integrated implementation plan covering a six year period. The Transport Strategy for the Greater Dublin Area 2016-2035 was approved in February 2016. The preparation of the Integrated Implementation Plan was aligned with the Government's review of capital spending which commenced in 2016 and culminated with the publication of the National Development Plan 2018-2027 in February 2018.</p> <p>The NTA's Integrated Implementation Plan (IIP) 2019-2024 supports the delivery of the Transport Strategy for the Greater Dublin Area 2016-2035 and is aligned with the objectives of the NDP. It sets out the central infrastructure investment programme and overall funding provision over the six-year period. It identifies the key investment areas with respect to bus, light rail, heavy rail and integration and sustainable transport investment.</p> <p>The IIP provides further detail on the sequencing and allocation of the €4.6bn available to the NTA across Bus, Light Rail, Metro and Heavy Rail projects up to 2024. It also notes that the "integrated rail network will provide a core, high-capacity transit system for the region and will deliver a very substantial increase in peak-hour capacity on all lines from Drogheda, Maynooth, Celbridge/Hazelhatch and Greystones".</p> <p>The objectives of rail investment in the IIP are to:</p> <ul style="list-style-type: none"> <li>• Implement key elements of the DART + programme.</li> <li>• Eliminate the current signalling restrictions in the city centre through the completion of the City Centre Re-signalling project.</li> <li>• Protect the safety and reliability of the GDA railway system through investment in upgrading of train control and monitoring systems.</li> <li>• Continue investment in a level crossing closure programme.</li> <li>• Enhance customer information systems and ticketing systems.</li> <li>• Continue the upgrading and enhancement, including accessibility, of train stations in the GDA.</li> </ul>	<p>This is a high-level strategic plan and, therefore, does not of itself provide for any real effects. Thus, it will not give rise to adverse effects in combination with the proposed development.</p>
Greater Dublin Cycle Network Plan <b>(Distance: m)</b>	<p>The NTA published the Greater Dublin Area Cycle Network Plan in 2013. The Plan consists of the Urban Network, Inter-Urban Network and Green Route Network for each of the seven Local Authority areas comprising the Greater Dublin Area (GDA). The Plan sets out a 10-year strategy to expand the urban cycle network from 500 km to 2,480 km. The overarching objective of the NCPF is that 10% of all trips in Ireland will be made by bike by 2020.</p> <p>This plan includes the development of the Royal Canal Greenway route. The Maynooth/Sligo rail line is immediately parallel to the Royal Canal extending from Dublin city centre to Maynooth. The canal towpath is paved from North Strand Road as far as Ashtown, with good quality gravel surface from there to Blanchardstown. This path is in use by cyclists as a de facto cycleway at present. A number of design studies are underway to develop a high-quality cycle track along the canal westward to Maynooth, as the Royal Canal Urban Greenway (RCUG) preferred route was presented at the Non-Statutory Public Consultation held in July 2021. The DART+ West project and the proposed greenway will complement each other in terms of connectivity and transport integration. Ongoing liaison between Fingal County Council and the RCUG design team and Iarnród Éireann has taken place in relation to the interfaces between the proposed projects.</p> <p>A Strategic Environmental Assessment and an Appropriate Assessment were undertaken and published with this plan.</p>	<p>This is a high-level strategic plan and, therefore, does not of itself provide for any real effects. Thus, it will not give rise to adverse effects in combination with the proposed development.</p>
Dublin City Development Plan 2016–2022 (under	<p>The Dublin CDP provides an integrated, coherent spatial framework to ensure Dublin City is developed in an inclusive way which improves the quality of life for its citizens, while also being a more attractive place to visit and work. The areas relevant to the DART+ West project includes the areas between the Docklands extending east towards the Ashtown level crossing.</p>	<p>This is a high-level strategic plan and, therefore, does not of</p>

Name of Plan or Project	Description of plan	Potential in-combination Adverse Effects
review) <b>(Distance: 0 m)</b>	<p>The key policies which are of specific relevance to the DART+ Programme include the follow:</p> <p><b>Policy MT4:</b> <i>To promote and facilitate the provision of Metro, all heavy elements of the DART Expansion Programme including DART Underground (rail interconnector), the electrification of existing lines, the expansion of Luas, and improvements to the bus network in order to achieve strategic transport objectives.</i></p> <p><b>Policy MT3:</b> <i>To support and facilitate the development of an integrated public transport network with efficient interchange between transport modes, serving the existing and future needs of the city in association with relevant transport providers, agencies and stakeholders.</i></p> <p><b>Policy MTO5:</b> <i>(i) To facilitate and support measures proposed by transport agencies to enhance capacity on existing public transport lines and services, to provide/improve interchange facilities and provide new infrastructure.</i></p> <p><b>Policy MT6:</b> <i>(i) To work with Iarnród Éireann, the NTA, Transport Infrastructure Ireland (TII) and other operators to progress a coordinated approach to improving the rail network, integrated with other public transport modes to ensure maximum public benefit and promoting sustainable transport and improved connectivity.</i></p> <p>A Strategic Environmental Assessment, an Appropriate Assessment, and a Strategic Flood Risk Assessment have been undertaken and published with the Plan.</p> <p>The current Dublin City Development Plan is currently under review.</p>	<p>itself provide for any real effects. Thus, it will not give rise to adverse effects in combination with the proposed development.</p>
Draft Dublin City Development Plan 2022-2028 <b>(Distance: 0 m)</b>	<p>The Draft Dublin City Development Plan 2022-2028 was prepared and published for public display on 25<sup>th</sup> November 2021. The main policies and objectives relevant to the DART+ Programme:</p> <p><b>Policy SMT20:</b> <i>To support the expeditious delivery of key sustainable transport projects including Metrolink, Bus Connects, DART+ and LUAS expansion programme so as to provide an integrated public transport network with efficient interchange between transport modes, serving the existing and future needs of the city and region.</i></p> <p><b>Policy SMT13:</b> <i>To manage city centre road-space to best address the needs of pedestrians and cyclists, public transport, shared modes and the private car, in particular, where there are intersections between DART, LUAS and Metrolink and with the existing and proposed bus network.</i></p> <p><b>SMT015:</b> <i>(ii) To promote and seek provision of additional stations as part of the DART+ projects in consultation with Iarnród Éireann/Irish Rail.</i></p> <p><b>SMT01:</b> <i>To achieve and monitor a transition to more sustainable travel modes including walking, cycling and public transport over the lifetime of the development plan, in line with the city mode share targets of 26% walking/cycling/micro mobility; 57% public transport (bus/rail/LUAS); and 17% private (car/ van/HGV/motorcycle).</i></p> <p><b>SMT21:</b> <i>(i) To work with Iarnród Éireann/Irish Rail, the NTA, TII and other operators to progress a coordinated approach to improving the rail network, integrated with other public transport modes to ensure maximum public benefit and promoting sustainable transport and improved connectivity. (ii) To facilitate the needs of freight transport in accordance with the NTA's Transport Strategy for the Greater Dublin Area 2016 – 2035 and forthcoming review.</i></p>	<p>This is a high-level strategic plan and, therefore, does not of itself provide for any real effects. Thus, it will not give rise to adverse effects in combination with the proposed development.</p>
North Lotts and Grand Canal SDZ Planning Scheme 2014 <b>(Distance: 0 m)</b>	<p><b>Proposed Spencer Dock Station</b></p> <p>A new Spencer Dock Station is proposed within the North Lotts area on a vacant lot adjacent to the Spencer Dock Luas station. This area is zoned 'SDRA6' in the Dublin CDP, approved by An Bord Pleanála to facilitate fast tracked planning and regeneration of the North Lotts area. The signalling track upgrades will follow the existing IE tracks adjacent to area zoned 'Z1: <i>To protect improve and provide for residential amenity</i>'.</p>	<p>This is a high-level strategic plan which sets out policies and objectives. Considering the nature of the plan and that any future projects</p>

Name of Plan or Project	Description of plan	Potential in-combination Adverse Effects
	<p>Key specific considerations for DART+ West contained in the North Lotts and Grand Canal SDZ Planning Scheme 2014 that have influenced the design of the proposed Spencer Dock Station include the following:</p> <ul style="list-style-type: none"> <li>• <i>“The hatched line as indicated in City Block 2A &amp; 2C shall be retained as a reservation strip for the future provision of the DART Underground Station. No permanent structures shall be built over this until the position of the DART Underground Station has been confirmed. In the interim period temporary uses and/or pavilion structures will be considered.”</i></li> <li>• <i>All planning applications within the Zone of Influence of the proposed DART Underground, as identified in Appendix 7 shall demonstrate to Iarnród Éireann how the proposal relates to the DART Underground Project. No development shall compromise the integrity of, or adversely impact on the DART Underground Line. (Refer to Appendix 7 for Reservation Strip and Zone of Influence).”</i></li> <li>• <i>The DART Underground postponement presents challenges for the rollout of the implementation, in relation to the line reservation under the Spencer Dock Economic Hub and the transport management measures which must be brought into play until such time as the DART Underground can be provided. The land reservation will be used for a variety of temporary buildings/activities, while the existing transport assets must be sweated until the DART is provided, by measures such as expedited Mobility Management Plans and more frequent trams.</i></li> </ul> <p>The proposed Spencer Dock Station supports sustainable mobility and compact Transport Oriented Development. It will provide for a modern and integrated rail station and a positive passenger experience interfacing with existing sustainable transportation, high quality public realm and future development at Spencer Dock. The site has the potential to realise Transit Oriented Development and the further intensification of the Docklands area.</p> <p>The proposed Spencer Dock Station will support the emerging population trends. The new station will also facilitate multimodal interchange between the public transport services in Dublin City, namely with the Luas and bus services which is also an objective of the North Lotts and Grand Canal Dock (SDZ) Planning Scheme.</p> <p>Furthermore, the proposed design of the Spencer Dock Station provides integration with the surrounding buildings by aligning the platform of the station to the North Lotts and Grand Canal Dock SDZ Planning Scheme gridlines. This alignment makes the layout more compatible with the structure of the existing and future buildings. Access to the proposed station is adjacent to the Spencer Dock Luas Stop thus fostering the interchange between the DART and the Luas. The access to the proposed station is located in a central urban location allowing for ease of interchange between public transport and active travel. It will also allow for a high quality arrival experience fronting the existing Spencer Dock Plaza which will act as an ‘urban hall’ for the station. Separately the Glasnevin Station also presents an important opportunity to integrate land use and transportation and will become a major public transport interchange hub in the Dublin City area.</p>	<p>stemming from the plan will be subjected to their own AA if necessary, there is no potential for adverse effects on any European site in combination with the proposed development.</p>
<p>Ashtown-Pelletstown Local Area Plan 2014 <b>(Distance: m)</b></p>	<p>Dublin City Council produced the Ashtown/Pelletstown Local Area Plan (LAP) 2014 for the lands located to the north east for which active planning applications exist. The LAP supports the proposed development through Objective MAO7:</p> <p><i>“To encourage and facilitate, in cooperation with Fingal County Council and Iarnród Eireann, the replacement of the existing manually operated rail level crossing at Ashtown Road, with a suitably designed alternative. The eventual design shall have regard to both existing and proposed developments in the immediate vicinity of the plan area and provide for high quality pedestrian and cycle facilities linking with existing and proposed pedestrian and cycle networks both within and surrounding the LAP area”.</i></p> <p>The vision of the LAP is the <i>“creation of a sustainable living and working environment with a strong urban identity, anchored by mixed-use supporting hubs and benefitting from both good permeability and quality public transport options. The area shall be characterised by a vibrant social mix, reflected in a variety of housing options and community facilities/ amenities, well integrated with the wider city via improved infrastructure and green infrastructure”.</i></p>	<p>This is a high-level strategic plan which sets out policies and objectives. Considering the nature of the plan and that any future projects stemming from the plan will be subjected to their own AA if necessary, there is no potential for</p>

Name of Plan or Project	Description of plan	Potential in-combination Adverse Effects
	<p>To achieve this vision, the LAP was developed in accordance with guiding principles which include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Support the development of a coherent spatial structure, characterised by two mixed use hubs (east and west) and predominantly residential areas in between. The Tolka Valley and Grand Canal amenities framing the northern and southern boundaries shall be interconnected via links through key open spaces, contributing to an attractive public realm.</li> <li>• To encourage employment-generating uses in vacant commercial buildings, on brownfield sites, and in identified mixed-use areas.</li> <li>• To improve connectivity throughout the area, removing existing barriers to movement and facilitating completion of a main east/west thoroughfare with associated public squares at each end and secondary north/south routes. Pedestrian and cycle routes are given specific consideration.</li> <li>• To ensure a mix of residential typologies and designs at densities appropriate to ensure the viability of public transport and other supporting community facilities within a high quality living environment.</li> </ul> <p>The LAP aims to provide over 3,500 new homes to accommodate between 6,300 to 7,200 new residents with the capacity for the development of recreational areas and community facilities also.</p> <p>The proposed development will support existing and future populations and support high density sustainable transit orientated developments in existing settlements. The development will improve the rail-road interface and congestion associated with the existing level crossing closures. The proposed footbridge at Ashtown station will maintain pedestrian and cyclist connectivity at the level crossing for all road and rail users.</p>	<p>adverse effects on any European site in combination with the proposed development.</p>
<p>Fingal County Development Plan 2017 – 2023 (Distance: 0 m)</p>	<p>The Fingal Development Plan (FDP) 2017-2023 policy remit relevant to this project extends from the Ashtown level crossing west to Leixlip.</p> <p>Improving transport within Fingal is recognised as key to the future economic, social and physical development of Fingal. The delivery of the DART+ Programme is recognised as a strategic aim of the FDP, key policies include:</p> <p><b>MT30:</b> Support Iarnród Éireann and the NTA in implementing the DART+ Programme, including the extension of the DART line to Balbriggan, the design and planning for the expansion of DART services to Maynooth and the redesign of the DART Underground.</p> <p><b>MT31:</b> Design and implement measures, having regard to potential environmental impacts, to mitigate the increased congestion on the local road network caused by more frequent closures of the existing level crossings on the Maynooth Line. Ensure that well in advance of any such measures being taken, extensive direct consultation is undertaken with local communities and residents who would be directly impacted by any such measures.</p> <p><b>MT28:</b> Facilitate, encourage and promote high quality interchange facilities at public transport nodes throughout the County</p> <p><b>Strategic Aim 15:</b> Seek the development of a high quality public transport system throughout the County and linking to adjoining counties, including the development of the indicative route for New Metro North and Light Rail Corridor, improvements to railway infrastructure including the DART Expansion Programme, Quality Bus Corridors (QBCs) and Bus Rapid Transit (BRT) systems, together with enhanced facilities for walking and cycling.</p> <p>Relevant aims of the Plan relating to transport are as follows:</p> <ul style="list-style-type: none"> <li>• Incorporating sustainable development, climate change mitigation and adaptation, social inclusion, high quality design and resilience are fundamental principles that underpin the Development Plan.</li> <li>• To promote an appropriate balance of development across the County, by developing a hierarchy of high quality, vibrant urban</li> </ul>	<p>This is a high-level strategic plan which sets out policies and objectives. Considering the nature of the plan and that any future projects stemming from the plan will be subjected to their own AA if necessary, there is no potential for adverse effects on any European site in combination with the proposed development.</p>

Name of Plan or Project	Description of plan	Potential in-combination Adverse Effects
	<p>centres and clearly delineated areas of growth, and favouring expansion in areas nearest to existing or planned public transport nodes.</p> <ul style="list-style-type: none"> <li>To promote and facilitate movement to, from, and within the County of Fingal, by integrating land use with a high quality, sustainable transport system that prioritises walking, cycling and public transport.</li> <li>To provide an appropriate level of safe road infrastructure and traffic management, in particular to support commercial and industrial activity and new development.</li> </ul> <p>To work with all relevant stakeholders to seek a reduction in greenhouse gas emissions from transport.</p>	
<p>Draft Development Plan 2023-2029</p> <p>Fingal Plan</p>	<p>The main policies and objectives relevant to the DART+ Programme are as follows:</p> <ul style="list-style-type: none"> <li><i>Objective CMO22 – Enabling Public Transport Projects: Support the delivery of key sustainable transport projects including MetroLink, BusConnects, DART+ and LUAS expansion programme so as to provide an integrated public transport network with efficient interchange between transport modes to serve needs of the County and the mid-east region in collaboration with the NTA, TII and Irish Rail and other relevant stakeholders.</i></li> <li><i>Objective CMO23: Support NTA and other stakeholders in implementing the NTA Strategy including MetroLink, BusConnects, DART +, LUAS and the GDA Cycle Network.</i></li> <li><i>Objective CMO24: Ensure that appropriate measures are put in place to mitigate the impacts of level crossing closures on the Maynooth rail line including protection measures for public transport and increased priority for cycling and walking.</i></li> </ul> <p>The draft Plan contains several deletions and changes to the existing DP local map-based objectives which are of relevance to the proposed DART+ West to include the following</p> <p>At Coolmine level crossing: <b>Objective 91</b> Ensure pedestrian and cyclist connectivity is provided across the canal and rail line at this location.</p> <p>Greater Dublin Area (GDA) Cycle Network 2013.</p> <p>At Porterstown level crossing: <b>Objective 88</b> Ensure pedestrian and cyclist connectivity is provided across the canal and rail line at this location.</p>	<p>This is a high-level strategic plan which sets out policies and objectives. Considering the nature of the plan and that any future projects stemming from the plan will be subjected to their own AA if necessary, there is no potential for adverse effects on any European site in combination with the proposed development.</p>
<p>Navan Road Parkway Local Area Plan, in preparation;</p> <p><b>(Distance: 0 m)</b></p>	<p>Ashtown level crossing is located on the boundary between the administrative areas of Dublin City Council and Fingal County Council. An area to the south west of the level crossing is designated for development under the Navan Road Parkway LAP as part of the Fingal County DP. At the time of writing the Navan Road Parkway LAP has not been developed. The LAP encompasses primarily undeveloped land bound to the north by the Royal Canal and south by Navan Road. The area stretches west of Ashtown Road and encompasses the existing Phoenix Industrial Estate, Navan Road Parkway train station, before terminating east of Ashburn Avenue. The land use designation under the Fingal County DP 2017 - 2023 is HT - High Technology to “Provide for office, research and development and high technology/high technology manufacturing type employment in a high quality built and landscaped environment”. The proposed Ashtown level crossing replacement works are located within the Navan Road Parkway LAP.</p>	<p>This is a high-level strategic plan which sets out policies and objectives. Considering the nature of the plan and that any future projects stemming from the plan will be subjected to their own AA if necessary, there is no potential for adverse effects on any European site in combination with the proposed development.</p>

Name of Plan or Project	Description of plan	Potential in-combination Adverse Effects
Kellystown Local Area Plan 2021 <b>(Distance: 0 m)</b>	<p>The Kellystown LAP was approved by Fingal County Council in January 2021 and is relevant to the Clonsilla and Porterstown level crossings. The LAP lands are bound by the Royal Canal to the north and the Dublin-Maynooth Railway Line to the south, Diswellstown Road to the east and Clonsilla Road (R121) to the west. The lands comprise approximately 56.4 ha. The LAP will provide a statutory framework for the proper planning and sustainable development of the area.</p> <p>The LAP refers to the DART+ West proposals and recognises the intention to close Clonsilla and Porterstown level crossings.</p> <p>The LAP supports the DART+ West project and investment in sustainable public transport, active travel, high quality sustainable urban developments and increased levels of pedestrian and cyclist movement within and around the area that will be supported by the project.</p> <p>The Eastern Development Area is subject to Key Objective DA 1.9 <i>“The Eastern Development Area should incorporate all new railway infrastructure resulting from amendments to the level crossing”</i>. The Western Development Area of the LAP is required under Key Objective DA 3.2 to <i>“Ensure a high level of pedestrian and cyclist connectivity through the lands to connect Clonsilla Railway station to the surrounding area”</i>. The Kellystown LAP supports the rail and road infrastructure improvements proposed at Porterstown level crossing as part of the DART+ West project through the implementation of these objectives.</p> <p>The Kellystown LAP also aims to develop a new primary and secondary school. The LAP will relocate St. Mochta’s Football Club to a new location. The new site will accommodate a full-sized soccer pitch along with new sports facilities in the form of multi-use games areas (MUGAs) which will be accessible by the new schools. The relocation of St. Mochta’s Football Club will facilitate the development of residential units within Development Area 1.</p>	<p>This is a high-level strategic plan which sets out policies and objectives. Considering the nature of the plan and that any future projects stemming from the plan will be subjected to their own AA if necessary, there is no potential for adverse effects on any European site in combination with the proposed development.</p>
Hansfield SDZ Planning Scheme 2006 <b>(Distance: 0 m)</b>	<p>The Hansfield Strategic Development Zone (SDZ) Planning Scheme comprises approximately 80.74 hectares of land in southwest Blanchardstown close to the county boundary with County Meath. The SDZ Planning Scheme was approved by An Bord Pleanála in April 2006 and a number of residential units are occupied. The site is currently active site with residential units under construction namely in Zones 1, 2, 4 &amp; 6.</p> <p>The Transport Strategy for the SDZ includes the opening of the Old Navan Line. The first phase of the proposed railway linking Navan to Dublin opened in September 2010. Over 25 trains each way per day now run between the new M3 Parkway Station, Dunboyne and Dublin City Centre. Part of the strategic infrastructure within the SDZ was to provide a new train station within the SDZ lands, and Hansfield train station was opened in 2013.</p> <p>In addition, pedestrian/cyclist connection to Clonsilla Train Station will be provided as part of the SDZ strategy.</p> <p>As already stated, the SDZ is under development. Taking into account the developed lands there is approximately 54.25 ha of the SDZ lands available for new residential development with the capacity for approximately 3,000 dwelling units.</p>	<p>This is a high-level strategic plan which sets out policies and objectives. Considering the nature of the plan and that any future projects stemming from the plan will be subjected to their own AA if necessary, there is no potential for adverse effects on any European site in combination with the proposed development.</p>
Barnhill Local Area Plan 2018. <b>(Distance: 0 m)</b>	<p>The Barnhill LAP comprises 45.64 hectares of greenfield lands. The zoned lands are located approximately 3 km southwest (as the crow flies) from Blanchardstown Town Centre. The lands are bound by the Dunboyne to Clonsilla rail Line to the south, the Royal Canal and the Dublin - Maynooth Railway Line to the west and the R149 (Clonee to Leixlip) to the east.</p> <p>The LAP Vision for Barnhill is to create a place to live that is <i>appealing, distinctive and sustainable, maximising the opportunities provided by the surrounding natural environment for biodiversity and improved amenities</i>. It is envisaged that Barnhill will develop as a sustainable community comprised of new homes, community, leisure and educational facilities based around an identifiable and accessible new local centre which will form the heart of the area.</p> <p>Fingal County Council published the Barnhill LAP in October 2018. The following key objectives have been identified within the</p>	<p>This is a high-level strategic plan which sets out policies and objectives. Considering the nature of the plan and that any future projects stemming from the plan will be subjected to their</p>

Name of Plan or Project	Description of plan	Potential in-combination Adverse Effects
	<p>Fingal County DP 2017-2023 for the LAP:</p> <p>Social Inclusion Objective SI1 <i>“Deliver between circa 950-1150 new dwellings and associated amenity and educational facilities on the LAP lands, to help meet existing and future housing needs and to create a sustainable and socially inclusive mixed-use community”</i></p> <p>High Quality Design Objective HQD3 <i>“Create a sustainable mixed-use centre for Barnhill which meets local needs by providing an appropriate range of retail, commercial, leisure and residential uses and establishes a distinctive sense of place and heart for the community”</i></p> <p><i>Movement and Transport Strategy:</i></p> <p>Objective MT1 <i>“Improve accessibility throughout the plan area, through the completion of a hierarchical road infrastructure network to serve the development, and encourage links to existing and proposed public transport nodes both within and beyond the LAP boundary”</i></p> <p>Objective MT3 <i>“Promote increased cycling and pedestrian activity within the development through a network of routes that connect to public transport routes, centres of employment, amenities, and community and retail destinations.”</i></p> <p>Objective MT4 <i>“Implement an integrated and sustainable movement and transport strategy for Barnhill which supports the effective management of sustainable travel patterns across the site with good connections to the greater Blanchardstown network.”</i></p> <p>Objective MT6 <i>“Prioritise sustainable modes of transport including walking, cycling and public transport and reduce the reliance on the use of private cars within Barnhill.”</i></p> <p>In order to provide for a coherent sustainable movement and transport strategy and to maximise development capacity within the Barnhill LAP lands, it is required to deliver the necessary extension of the Ongar-Barnhill Road with provision of a new bridge over the Dunboyne (Pace) – Clonsilla rail line and provision of a new junction with the existing road network. This will connect the Ongar Road to the existing R149.</p>	<p>own AA if necessary, there is no potential for adverse effects on any European site in combination with the proposed development.</p>
<p>Kildare County Development Plan 2017 – 2023 (Distance: 0m)</p>	<p>The Kildare County Development Plan (KCDP) sets out an overarching strategy for the proper planning and sustainable development of the functional area of County Kildare, over the period 2017-2023 and beyond. In the context of the DART+ Programme the KCDP pertains to the areas from Leixlip extending west to the proposed depot located west of Maynooth. The following policies and objectives are of specific relevance to the DART+ Programme.</p> <ul style="list-style-type: none"> <li>• <b>MT 1:</b> Promote the sustainable development of the county through the creation of an appropriately phased integrated transport network that services the needs of communities and businesses.</li> <li>• <b>PTO 7:</b> Promote and support the upgrading of the Maynooth rail line and the Kildare rail line, in accordance with the Transport Strategy for the Greater Dublin Area 2016-2035 and in co-operation with the NTA.</li> </ul> <p>Other policies and objectives which are of specific relevance to the DART+ Programme include:</p> <ul style="list-style-type: none"> <li>• <b>MT 2:</b> <i>Support sustainable modes of transport by spatially arranging activities around existing and planned high quality public transport systems</i></li> <li>• <b>MT3:</b> <i>Influence people’s travel behaviour and choices towards more sustainable options by working closely with relevant organisations in improving and accessing public transport facilities</i></li> <li>• <b>PT 1:</b> <i>Promote the sustainable development of the county by supporting and guiding national agencies including the National Transport Authority in delivering major improvements to the public transport network and to encourage public transport providers to provide an attractive and convenient alternative to the car.</i></li> </ul>	<p>This is a high-level strategic plan which sets out policies and objectives. Considering the nature of the plan and that any future projects stemming from the plan will be subjected to their own AA if necessary, there is no potential for adverse effects on any European site in combination with the proposed development.</p>

Name of Plan or Project	Description of plan	Potential in-combination Adverse Effects
	<ul style="list-style-type: none"> <li>• <b>PT 2:</b> Generate additional demand for public transport services by strengthening development around existing and planned high capacity transport routes and interchanges throughout the county.</li> <li>• <b>PTO 3:</b> Support the delivery of the NTA's Greater Dublin Area Transport Strategy (2016-2035) in Kildare.</li> <li>• <b>PTO 5:</b> Investigate, in co-operation with Irish Rail and the National Transport Authority, the provision of new railway stations in the county and the upgrading/relocation of existing stations, to rectify existing constraints in the network.</li> </ul> <p>A Strategic Environmental Assessment, an Appropriate Assessment and a Strategic Flood Risk Assessment were undertaken as part of the proposed development.</p>	
<p>Maynooth Local Area Plan 2013-2019 (Distance: 0 m)</p>	<p>The Maynooth Local Area Plan sets out the overall strategy for the proper planning and sustainable development of Maynooth in the context of the Kildare County Development Plan 2011-2017.</p> <p>The Maynooth Local Area Plan has identified traffic congestion as a major problem in the area and identifies key challenges to be addressed, such as: "Delivering strategic transport improvements particularly the upgrading of the railway line and the completion of the Maynooth Outer Orbital Road".</p>	<p>This is a high-level strategic plan which sets out policies and objectives. Considering the nature of the plan and that any future projects stemming from the plan will be subjected to their own AA if necessary, there is no potential for adverse effects on any European site in combination with the proposed development.</p>
<p>Kilcock Local Area Plan 2015-2021 (Distance: 0 m)</p>	<p>Kilcock town is bounded by the River Rye water to the north and the M4 motorway to the south. The Kilcock Local Area Plan sets out a series of objectives and policies to ensure the proper planning and sustainable development of the area.</p> <p>Key Strategy 1 KS1.2 Connecting Infrastructure "Connecting Kilcock through services infrastructure and a network of transport infrastructure will make it accessible and easy to move around, allowing the town to intensify and grow".</p> <p>Objectives related to transport contained within the plan are as follows: <b>MTO 2</b> "To maximise the use of public transport infrastructure, walking and cycling and minimise car dependence."</p> <p>Policies related to transport contained within the plan are as follows: <b>MT3</b> "To continue to promote the modal shift from private car use towards increased use of more sustainable modes of transport such as cycling, walking and public transport and to implement the initiatives contained in Government's "Smarter Travel, A Sustainable Transport Future 2009-2020" <b>MT11</b> "To co-operate with Iarnród Eireann in the upgrading of the railway line and station in Kilcock."</p>	<p>This is a high-level strategic plan which sets out policies and objectives. Considering the nature of the plan and that any future projects stemming from the plan will be subjected to their own AA if necessary, there is no potential for adverse effects on any European site in combination with the proposed development.</p>
<p>Leixlip Local Area Plan 2020-2023 (Distance: 0 m)</p>	<p>The existing Blakestown level crossing is located within the boundary of the Leixlip Local Area Plan. The LAP supports the proposed DART+ Programme through objective MT2.2 "To support and facilitate the delivery of electrification and upgrading of the Dublin – Sligo rail line from Connolly Station to Maynooth, including improvements to Cope Bridge." and recognises the requirement for the removal of level crossings and re-signalling works.</p>	<p>This is a high-level strategic plan which sets out policies and objectives. Considering</p>

Name of Plan or Project	Description of plan	Potential in-combination Adverse Effects
	<p>Section 8.2 of the LAP (Public Transport) states <i>“The DART Expansion Programme is a key project in the delivery of an integrated rail transport network for the Dublin region and includes the electrification of the Dublin-Sligo rail line from Connolly Station to Maynooth, together with the removal of level crossings and re-signalling”</i>. It recognises that the realisation of this project will improve the number and frequency of train services in addition to improving journey times.</p>	<p>the nature of the plan and that any future projects stemming from the plan will be subjected to their own AA if necessary, there is no potential for adverse effects on any European site in combination with the proposed development.</p>
<p>Meath County Development Plan 2021-2027 (Distance: 0 m)</p>	<p>The Meath County Development Plan 2021-2027 sets out an overarching strategy for the proper planning and sustainable development of the functional area of County Meath, over the period 2021-2027 and beyond.</p> <p>The relevant objectives contained in the Plan include the following:</p> <p><b>ED OBJ 10</b> <i>“In accordance with RPO 4.33 of the Regional Spatial and Economic Strategy, to support the continued development of Maynooth, co-ordinated with the delivery of strategic infrastructure including pedestrian and cycle linkages within the town and to the Royal Canal Greenway, DART expansion and road linkages forming part of the Maynooth Outer Meath County Development Plan 2021-2027 Chapter 4 Orbital Route in a manner which supports future development and population growth and builds on synergies with Maynooth University promoting a knowledge-based economy”</i></p> <p><b>MOV OBJ 4</b> <i>“To improve, in conjunction with the NTA and Irish Rail, facilities at existing stations”</i></p> <p><b>MOV OBG6</b> <i>“To facilitate and encourage the upgrading of existing railway stations, and protect, as required, lands necessary for the upgrading of existing railway lines or stations or the provision of new railway stations throughout the County”</i></p> <p>The Plan also recognises the higher-level planning and transportation policy remit (e.g., Regional Spatial and Economic Strategy 2019-2031), and references support for these policies (RPO 8.8) that relate to the delivery of this project which states: <i>“The RSES supports delivery of the rail projects set out in Table 8.2, subject to the outcome of appropriate environmental assessment and the planning process.”</i></p> <p>These projects include:</p> <ul style="list-style-type: none"> <li>• Re-appraisal of the extension of the Dunboyne/M3 Parkway line to Navan during the Mid Term Review of the GDA Transport Strategy.</li> <li>• Dart expansion Programme - new infrastructure and electrification of existing lines, including provision of electrified services to Drogheda, Maynooth and M3 Parkway on the Maynooth/Sligo Line.</li> </ul> <p>It goes on to state that the <i>“Plan supports the prioritisation of these projects and will continue to support TII in the roll out of rail improvements and upgrades throughout the County.”</i></p> <p>MCDP recognises that the NTA’s Transport Strategy for the Greater Dublin Area (GDA) provides a framework for the planning and delivery of transport infrastructure and services over the period 2016 - 2035.</p> <p>The DART+ West Project will provide an electrified, more frequent rail service, improving capacity on the M3 Parkway rail line. The Project will reduce congestion and make journeys more comfortable for passengers, and support climate action targets as well as supporting business and communities living in County Meath.</p> <p>A Strategic Environmental Assessment, an Appropriate Assessment and a Strategic Flood Risk Assessment were undertaken and</p>	<p>This is a high-level strategic plan which sets out policies and objectives. Considering the nature of the plan and that any future projects stemming from the plan will be subjected to their own AA if necessary, there is no potential for adverse effects on any European site in combination with the proposed development.</p>

Name of Plan or Project	Description of plan	Potential in-combination Adverse Effects
	published with the Plan.	
Draft Kildare County Development Plan 2023 – 2029	<p>At the time of writing, the draft Kildare County Development Plan 2023 – 2029 was prepared and published for public display on 14th of March 2022. The main policies and objectives relevant to the DART+ Programme are as follows:</p> <p><b>TM P1:</b> <i>Promote sustainable development through facilitating movement to, from, and within the County that is accessible to all and prioritises walking, cycling and public transport.</i></p> <p><b>TM P3:</b> <i>Promote the sustainable development of the county by supporting and guiding national agencies in delivering major improvements to the public transport network and to encourage a shift from car-based travel to public transport that is accessible for all, regardless of age, physical mobility, or social disadvantage.</i></p> <p><b>TM O9:</b> <i>Facilitate and secure the delivery/implementation of the public transport projects that relate to County Kildare as identified within the Integrated Implementation Plan (2019-2024), (or any superseding document), including the DART+ programme (Including DART+ West and DART+ South West), BusConnects and the light rail investments.</i></p> <p><b>TM O44:</b> <i>support the electrification of intercity routes.</i></p>	<p>This is a high-level strategic plan which sets out policies and objectives. Considering the nature of the plan and that any future projects stemming from the plan will be subjected to their own AA if necessary, there is no potential for adverse effects on any European site in combination with the proposed development.</p>
Dunboyne, Clonee & Pace Local Area Plan 2009 – 2015 <b>(Distance: 0 m)</b>	<p>The existing PACE M3 Parkway Train station is located within the development boundary of the Dunboyne Clonee Pace LAP. Relevant policies in this plan include:</p> <p><b>MOV POL 4</b> <i>To facilitate and protect the operation of the railway in conjunction with Iarnród Éireann/CIE. To protect the Pace–Navan extension of the railway corridor from inappropriate development where all planning applications lodged within the route reservation corridor or which may impact on the future railway will be referred to Iarnród Éireann/CIE for comment.</i></p> <p><b>MOV POL 6</b> <i>To facilitate the development of Park &amp; Rides as set out in the Railway Order NA0001 at Dunboyne Station &amp; Pace Interchange</i></p> <p>The proposed development will provide for sustainable growth and travel options within County Meath, specifically for the population of Dunboyne and the commuters who utilise the M3 Parkway train station and connections further along the network.</p> <p>A new Local Area Plan (LAP) will be developed for this settlement in accordance with the Meath CDP which will supersede the Dunboyne Clonee &amp; Pace LAP 2009-2015.</p>	<p>This is a high-level strategic plan which sets out policies and objectives. Considering the nature of the plan and that any future projects stemming from the plan will be subjected to their own AA if necessary, there is no potential for adverse effects on any European site in combination with the proposed development.</p>

**Table 6-2 Assessment of adverse effects arising from the proposed development in combination with projects.**

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
<p><b>Project Name:</b> ESB electricity supply connections</p> <p><b>Applicant:</b> ESB/ EirGrid</p> <p><b>Planning Application ref:</b> None</p> <p><b>Location:</b> Along extents of proposed DART+ West project within functional areas of Dublin, Fingal, Meath and Kildare.</p> <p><b>Planning Status:</b> At the time of writing the ESB Connections planning application has not been submitted and therefore there is no detailed information to inform this cumulative assessment.</p>	<p>ESB/EirGrid Networks are progressing a separate planning application for electricity supply connections to accommodate the electrification of the proposed DART+ West project. The works will progress in parallel and will be completed in advance of the completion of the DART+ West construction to ensure that the project will have the necessary electricity supply for testing and operation.</p> <p>Close consultation between the DART+ West project team and ESB/ EirGrid will ensure the required electricity is planned and available to the project. The key elements proposed as part of the planning application are outlined below.</p> <p>Connections to DART+ West substations</p> <p>There are twelve 38kV substations proposed as part of the DART+ West project which will require electricity supply through new electricity connections at the following locations:</p> <p>Spencer Dock, Glasnevin, Ashtown, Castleknock, Coolmine, Hansfield, Dunboyne, M3 Parkway, Leixlip Confey, Blakestown, Maynooth and the depot. These are proposed to be supplied with High Voltage (HV) and Low Voltage (LV) connections via underground cabling which will follow the local road network.</p> <p>Desk studies completed by ESB/ EirGrid have identified the preferred routes of the proposed 38kV underground cable connections which will be located along the existing road network.</p> <p>Nature of the works:</p> <p>The works will involve laying underground cables (UGC) 38kV electricity connection in the existing road.</p> <p>Typical construction duration for carrying out the standard trenching and ducting is between 50 to 70 linear metres of trench in a roadway per day depending on the site conditions. All road works involving cable require traffic management procedures when installing within public roads. It may be a temporary requirement for some roads to be closed along particular sections of the cable route. In the case of wider roads, one carriageway may be closed, with use of the other carriageway restricted and controlled by temporary traffic lights or a “stop and go” traffic management system. The traffic management plan and corresponding works will be carried out with the agreement of the local authority.</p> <p>These will be typically daytime works that are transient in nature and temporary as they move along the road network.</p> <p>Summary of proposed works in each location:</p> <p>Spencer Dock: The DART+ West Spencer Dock substation is proposed to be connected by ESB through 2x approx. 800 m 38 kV cable to loop into the existing East Wall Road – McDermott 38 kV circuit.</p> <p><u>Works requirements:</u> Partial road closure required, daytime works. Likely construction temporary works.</p> <p>Glasnevin: The DART+ West project Glasnevin substation is proposed to be connected by 2x approx. 180 m 38 kV cable to loop into the existing Glasnevin – Merville 38 kV cable.</p> <p><u>Works requirements:</u> Partial road closure required, daytime works. Likely construction temporary works.</p>	<p>In-combination adverse effects are not anticipated.</p>

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
	<p>Ashtown: The DART+ West project Ashtown substation is proposed to be connected by 2x approx. 3.8 km 38 kV cable; one cable to connect Ashtown substation to Castleknock substation and one cable to continue on to new ESB 110 kV station via the existing Castleknock Road bridge over the M50.  <u>Works requirements:</u> Partial road closure required, daytime works. Likely construction temporary works.</p> <p>Castleknock: The DART+ West project Castleknock substation is proposed to be connected by 2x approx. 1.6km 38 kV cable; one cable to connect Castleknock substation to Coolmine substation and one cable to continue on to new ESB 110 kV station.  <u>Works requirements:</u> Partial road closure required, daytime works. Likely construction temporary works.</p> <p>Coolmine: The DART+ West project Coolmine substation is proposed to be connected by:</p> <ul style="list-style-type: none"> <li>• 2x approx. 3 km 38 kV cable; one cable to connect to Coolmine substation to Hansfield substation and one cable to continue on to new ESB 110 kV station.</li> <li>• 2x approx. 2.8 km 38 kV cable, one to connect Coolmine substation to Hansfield substation and one cable to continue on to the new ESB 110 kV station.</li> </ul> <p>The total connection distance between the Coolmine and Hansfield substations is approx. 5.8km via the proposed route.  <u>Works requirements:</u> Partial road closure required, daytime works. Likely construction temporary works.</p> <p>Hansfield: The DART+ West project Hansfield substation is proposed to be connected by 2x approx. 4.5 km 38 kV cable; one cable to connect Hansfield substation to the new ESB 110 kV station and one to connect to Ashtown substation.  <u>Works requirements:</u> Partial road closure required, daytime works. Likely construction temporary works.</p> <p>Dunboyne: The DART+ West project Dunboyne substation is proposed to be connected by 2x approx. 4.7 km 38 kV cable; one to connect to the new ESB 110kV station and the other to continue on to the M3 Parkway substation.  <u>Works requirements:</u> Partial road closure required, daytime works. Likely construction temporary works.</p> <p>M3 Parkway: The DART+ West project M3 Parkway substation is proposed to be connected by 2x approx. 2.7 km 38 kV cable: one cable to connect Dunboyne substation to M3 Parkway substation and one to the new ESB 110 kV station.  <u>Works requirements:</u> Partial road closure required, daytime works. Likely construction temporary works.</p> <p>Leixlip Confey: The DART+ West project Leixlip Confey substation is proposed to be connected by 2x approx. 3.5 km 38 kV cable; one cable to connect the Leixlip Confey substation to the new ESB 110 kV station and the other to continue on to the Blakestown substation.  <u>Works requirements:</u> Partial road closure required, daytime works. Likely construction temporary works.</p>	

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
	<p>Blakestown: The DART+ West project Blakestown substation is proposed to be connected by:</p> <p>Option 1</p> <ul style="list-style-type: none"> <li>• 2x approx. 1.7 km 38 kV cable; one cable to continue to Blakestown substation and the other to connect Leixlip Confey substation to the existing Leixlip 38kV station.</li> <li>• 2x approx. 3.8 km 38kV cable; one cable to connect the existing Leixlip 38 kV station to Blakestown substation and the other to connect from the new ESB 110 kV station.</li> </ul> <p><u>Works requirements:</u> Partial road closure required, daytime works. Likely construction temporary works.</p> <p>Maynooth: the DART+ West project Maynooth substation is proposed to be connected by 2x approx. 1.3 km 38 kV cable that will loop into the existing Griffinrath – Kilcock 38 kV circuit.</p> <p><u>Works requirements:</u> Partial road closure required, daytime works. Likely construction temporary works.</p> <p>Depot: the DART+ West project depot substation is proposed to be connected by 2x approx. 550m 38kV cable that will loop into Kilcock – Moneycooley 38kV circuit.</p> <p><u>Works requirements:</u> Partial road closure required, daytime works. Likely construction temporary works.</p>	
<p><b>Project Name:</b> Hansfield 110kV/38kV substation</p> <p><b>Applicant:</b> ESB /EirGrid</p> <p><b>Planning Application ref:</b> None</p> <p><b>Location:</b> Townland of Walterstown, Co. Meath.</p> <p><b>Planning Status:</b> At the time of writing the ESB Connections planning application has not been submitted and therefore there is no detailed information to inform this cumulative assessment.</p>	<p>As described above, ESB/EirGrid are progressing a separate planning application for grid reinforcement in the Hansfield / Barnhill area which will in turn supply connection for the electrification of the proposed DART+ West project. The works will progress in parallel and will be completed in advance of the completion of the DART+ West construction to ensure that the project will have the necessary electricity supply for testing and operation.</p> <p>Close consultation between the DART+ West project team and ESB networks will ensure the required electricity is planned and available to the project. The key elements proposed as part of the planning application are outlined below.</p> <p>Typical construction duration for carrying out the standard trenching and ducting is between 50 to 70 linear metres of trench in a roadway per day depending on the site conditions. All road works involving cable require traffic management procedures when installing within public roads. It may be a temporary requirement for some roads to be closed along particular sections of the cable route. In the case of wider roads, one carriageway may be closed with use of the other carriageway restricted and controlled by temporary traffic lights or a “stop and go” traffic management system. The traffic management plan and corresponding works will be carried out with the agreement of the local authority. These will be typically daytime works that are transient in nature and temporary as they move along the road network.</p> <p><b>Hansfield substation + connection</b></p> <p>The new substation at Hansfield proposed as part of DART+ West project and the substations to the west will require the support of an additional 110KV ESB substation which is proposed to be connected to the Dunfirth – Kinnegad – Rinawade 110 kV transmission line. This substation will provide a supply to eight DART+ West railway stations in west Dublin, Meath, and north Kildare; Ashtown, Castlknock, Coolmine, Hansfield, Dunboyne, M3 Parkway, Leixlip Confey, and Blakestown.</p> <p>ESB Networks in consultation with EirGrid have undertaken option selection studies and identified preferred connection routing</p>	<p>In-combination adverse effects are not anticipated.</p>

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
	<p>and sites for a new 110kV ESB substation.</p> <p>The preferred option for the siting of the new ESB 110kv substation, is identified as Site E and is located in agricultural lands zoned for 'RA–Rural Area' by the Meath County Development Plan 2021-2027 to <i>“to protect and promote in a balanced way, the development of agriculture, forestry and sustainable rural-related enterprise, community facilities, biodiversity, the rural landscape, and the built and cultural heritage”</i>. Site E is located approximately 4 km to the west of the Clonsilla – M3 Parkway railway line.</p> <p>The site is located in the far corner of a large field and is surrounded on three sides with mature hedges. The Dunfirth – Kinnegad – Rinawade 110 kV transmission line passes overhead. The nearest dwelling is approximately 100 m from the site. Site access would be along the eastern boundary of the field and exit on the local road.</p> <p>The preferred connection routing consists of two 110 kV line / cable interface masts that will be installed underneath the Dunfirth – Kinnegad – Rinawade 110 kV transmission line and the circuit will be looped into the substation by underground cable. The connection routing is located in agricultural lands zoned for 'RA–Rural Area' by the Meath County Development Plan 2021-2027.</p>	
<p><b>Project Name:</b> Irish Water utility connections to the depot</p> <p><b>Applicant:</b> Irish Water</p> <p><b>Planning Application ref:</b> None</p> <p><b>Location:</b> Maws, Municipal District of Clane, Maynooth, Co. Kildare.</p> <p><b>Planning Status:</b> At the time of writing the Irish Water planning application has not been submitted and therefore there is no detailed information to inform this cumulative assessment.</p>	<p>Irish Water (IW) are progressing a separate planning application to extend their water and wastewater connections to the depot proposed as part of the DART+ West project to the west of Maynooth, Co. Kildare. The works will progress in parallel and will be completed in advance of the completion of the DART+ West construction to ensure that the project will have the necessary utility supply for the depot.</p> <p>Close consultation between the DART+ West project team and Irish Water will ensure the required utility connections are planned and available to the project.</p> <p><b>Water connection</b></p> <p>There are existing IW water utilities located on the western end of the proposed depot. A connection in a form of a watermain will be provided by IW to the proposed depot.</p> <p>Approx. 1.3km of IW local network upgrade from top of Connaught Street, west of Kilcock to the M4 will be required to upsize the existing 4” uPVC watermain to 250mmID watermain from the DART+West project to the existing 12” uPVC main. These works are proposed to be included in the Irish Water connection application.</p> <p><b>Wastewater connection</b></p> <p>An approx. 550m gravity foul pipe will be installed by IW for the proposed depot which will be mainly routed along Connaught Street, west of Kilcock.</p> <p><b>Nature of the proposed works:</b> The trenching and pipe installation works required for the water and wastewater connections are as described in Appendix B Construction Strategy to this NIS.</p>	<p>In-combination adverse effects are not anticipated.</p>
<p><b>Applicant:</b> Dublin Port Company</p>	<p>Planning permission was granted for the construction of a new 1.4km pedestrian walkway and a 2-way cycle lane along East Wall Road and Bond Road from the River Liffey to the Tolka Estuary and will comprise the following: (a) Removal of part of existing Dublin Port western boundary wall / fence; (b) Removal of the existing access to Terminal 3 on East Wall Road; (c)</p>	<p>In-combination adverse effects are</p>

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
<p><b>Local Authority:</b> Dublin County Council</p> <p><b>Planning Applicant ref:</b> DCC reg no. 3220/21 &amp; ABP ref no. ABP-312692-22</p> <p><b>Location:</b> Dublin Port, Alexandra Road, Dublin 1.</p> <p><b>Status:</b> Planning permission was granted in Jan 2022. Construction duration is not defined by the applicant.</p>	<p>Modifications to layout of Terminal 3 along eastern boundary including removal of private car parking spaces.</p> <p>The ESB substation (Record of Protected Structures No. 8771) is located within the subject site. Works are proposed within the curtilage of this protected structure.</p> <p>In addition to the replacement of permitted pedestrian and cycle facilities and associated works along East Wall Road and Bond Road to the north of Tolka Quay Road as permitted under Reg. Ref. 3084/16 to include a bridge over Promenade Road with revised design and alignment the following proposed amendments to permission granted under Reg. Ref. 3084/16.</p> <p>The proposed development and proposed amendments include all associated ancillary works, including site clearance, demolitions, earthworks, pavement construction, drainage services, diversion and installation of utility services, installation of road markings and signs.</p> <p>This application is accompanied by a Natura Impact Statement. An Environmental Impact Assessment (EIA) Screening Report has also been developed in respect of the development.</p> <p><b>Distance:</b> 0km from development boundary.</p>	<p>not anticipated.</p>
<p><b>Applicant:</b> Waterside Block 9 Developments Limited</p> <p><b>Local Authority:</b> Dublin City Council</p> <p><b>Planning Application ref:</b> DCC reg no. DSD22103/21</p> <p><b>Location:</b> Site of 0.921 ha at City Block 9, North Wall Quay and Mayor Street Upper, Dublin 1.</p> <p><b>Status:</b> Planning permission was granted in Aug 2021. At the time of writing, construction has commenced for the development. The construction duration is approx. 4 years as defined by the applicant.</p>	<p>Planning permission was granted for a ten-year permission for development relates to a proposed development within a Strategic Development Zone Planning Scheme area, located within City Block 9 as identified in the North Lotts &amp; Grand Canal Dock Planning Scheme, 2014 totalling 66,718 sq. m above and below ground on a site of 0.921 ha.</p> <p>The development will consist of the following: 1. Construction of 3 No. commercial office buildings (identified as four blocks (Blocks B1-B4)) ranging in height from 5-storeys to 9-storeys. 2. Construction of basement accommodation (22,951 sq. m), accommodating: lower ground floor level (7,119 sq. m) of office and ancillary accommodation; plant rooms (1,599 sq. m); waste storage facilities (290 sq. m); employee changing / drying / locker facilities (825 sq. m); a bike repair area (40 sq. m); a goods' storage area (298 sq. m); double loading bay; 107 No. car parking spaces; 14 No. motorcycle parking spaces; and 570 No. bicycle parking spaces, with vehicular access provided by ramp from Castleforbes Road. 3. Development of a new western pedestrian lane from Castleforbes Road linking centrally with a new pedestrian lane through the centre of the overall City Block 9 site to North Wall Quay, with a second lane also linking to North Wall Quay to the east of Block B4. 4. Public realm improvements. 5. All enabling and site development works</p> <p>A Natura Impact Statement has been prepared in relation to the proposed development.</p> <p><b>Distance:</b> c.240m east of development boundary</p>	<p>In-combination adverse effects are not anticipated.</p>
<p><b>Applicant:</b> Glenveagh Living Limited</p> <p><b>Local Authority:</b> Dublin City Council</p> <p><b>Planning application ref:</b> EIA Portal ID 2020203 &amp; DCC reg no. 3197/20</p>	<p>Planning permission was granted to Glenveagh Living Limited in 2020 for a Strategic Housing Development (EIA Portal 2020203) consisting of demolition of all structures on site, 702 no. Build to Rent residential units, commercial, retail, creche, cultural buildings and associated site works.</p> <p>An Environmental Impact Assessment Report (EIAR) has been prepared in respect of the proposed development.</p> <p>An Environmental Impact Assessment Report (EIAR) has been prepared to support the planning application. A screening for an Appropriate Assessment (AA) was carried out which concluded that the <i>“development that would not give rise to any significant effects to designated sites”</i>.</p>	<p>In-combination adverse effects are not anticipated.</p>

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
<p><b>Location:</b> Site of c. 0.5 ha which forms part of the Castleforbes Business Park, Sheriff Street Upper, Dublin 1. (D01 VX48).</p> <p><b>Status:</b> Planning permission was granted in March 2021. Construction commenced in 2021. The applicants have provided for a construction phase duration of approx. 48 months with completion expected in Q4 2025 as per the application documents.</p>	<p><b>Distance:</b> adjacent to the proposed development boundary.</p>	
<p><b>Applicant:</b> David Carson of Deloitte</p> <p><b>Local Authority:</b> Dublin City Council</p> <p><b>Planning Application ref:</b> DCC reg no. DSDZ3779/17</p> <p><b>Location:</b> Site of 1.08 ha at North Wall Quay and Mayor Street Upper. The site is bounded by North Wall Quay to the South, undeveloped lands to the East, Castleforbes Road to the West, and Mayor Street Upper to the North, Dublin 1.</p> <p><b>Status:</b> Planning permission was granted in Dec 2017. At the time of writing, site clearance works have commenced for the development which was granted a 10-year planning permission. Construction duration is not defined by the applicant.</p>	<p>Planning permission was granted to David Carson of Deloitte (DCC reg no. DSDZ3779/17) for a development of site of 1.08 ha at North Wall Quay and Mayor Street Upper, the site is bounded by North Wall Quay to the South. The development consists of a ten year permission for the construction of 2 No. residential buildings ranging in height from 6 storeys to 11 storeys, a with a total gross floor area above ground of circa 41,364.4 sqm accommodating 420 no. apartments comprising 113 no 1 bed units, 242 no. 2 bed units and 65 no. 3 bed units. The development also provides for a crèche of c 281.4 sq. metres and 4 no. cafe/restaurant/retail units with a total floor area of 763.5 sq. metres. Construction of one level of basement beneath the residential buildings, accessed from a secure ramp on Castleforbes Road, accommodating 450 bicycle parking spaces, 288 car parking spaces, plant, storage areas and other associated facilities.</p> <p>The development also includes for a new pocket park of 760 sq., accessed from a new pedestrian route from Castleforbes Road and a new north-south pedestrian route centrally located through Block 9 connecting North Wall Quay and Mayor Street Upper.</p> <p>The application includes all site landscaping works, signage, and associated and ancillary works, including site development works.</p> <p>A Flood Risk Assessment has been prepared in respect of the proposed development.</p> <p><b>Distance:</b> c.200m south of development.</p>	<p>In-combination adverse effects are not anticipated.</p>

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
<p><b>Applicant:</b> David Carson  <b>Local Authority:</b> Dublin City Council  <b>Planning Application ref:</b> DCC reg no. DSDZ3780/17  <b>Location:</b> Site of 0.91 ha at North Wall Quay and Mayor Street Upper, Dublin 1, The site is bounded by North Wall Quay to the South, undeveloped lands to the West, the new north-south road to the East, and Mayor Street Upper to the North  <b>Status:</b> Planning permission was granted in Dec. 2017. At the time of writing, site clearance works have commenced for the development which was granted a 10-year planning permission. Construction duration is not defined by the applicant.</p>	<p>Planning permission was granted to David Carson Statutory Receiver, acting for Crossman Properties Limited (in receivership) c/o Deloitte, 29 Earlsfort Terrace, Dublin, D02 AY28 for a ten year permission (DCC reg no. DSDZ3780/17) for development at a site of 0.91 ha at North Wall Quay and Mayor Street Upper Dublin 1. The site is bounded by North Wall Quay to the South, undeveloped lands to the West, the new north-south road to the East and Mayor Street Upper to the north. The overall site is located within City Block 9, as identified in the North Lotts &amp; Grand Canal Dock SDZ Planning Scheme.</p> <p>The development will consist of a ten-year permission for the construction of 4 no. commercial office buildings ranging in height from 6 storeys to 8 storeys. The total gross floor area above ground is circa 35,883 sq.m.</p> <p>Construction of one level of basement beneath the proposed commercial building accommodating 360 bicycle parking spaces, 90 car parking spaces, plant, storage areas and other associated facilities, with access from the new north-south road to the east</p> <p>The development also includes a public plaza, located onto North Wall Quay between Block D1 and D2, accessed from North Wall Quay, a new pedestrian route from the new north-south street to the East and a temporary new north-south pedestrian route centrally located through Block 9 connecting North Wall Quay and Mayor Street Upper. The planning application includes all site landscaping works, signage, and associated and ancillary works, including site development works.</p> <p>An Appropriate Assessment (AA) Screening Report, Environmental Impact Assessment (EIA) Screening Report and a Flood Risk Assessment have been prepared in respect of the proposed development.</p> <p><b>Distance:</b> c.180m south of the proposed development.</p>	<p>In-combination adverse effects are not anticipated.</p>
<p><b>Applicant:</b> KWCI GP Limited  <b>Local Authority:</b> Dublin City Council  <b>Planning Application ref:</b> DCC reg no. DSDZ3350/20 &amp; DSDZ4087/19  <b>Location:</b> Coopers Cross, City Block 3 (including 8, Castleforbes Road, Dublin 1), at Sheriff Street Upper, Castleforbes Road and Mayor Street Upper, North Lotts, Dublin 1.  <b>Status:</b> Planning permission was granted for</p>	<p>Planning permission was granted for a site (c. 1.08 Ha) at Coopers Cross, City Block 3 (including No. 8 Castleforbes Road, Dublin 1), at Sheriff Street Upper, Castleforbes Road, Dublin 1), at Sheriff Street Upper, Castleforbes Road and Mayor Street Upper, North Lotts, Dublin 1 and otherwise generally bounded by Mayor Street Upper to the south, undeveloped lands to the west, existing Northbank House and Alexandra Terrace to the north and Castleforbes Road to the east. The proposed development seeks revisions to previously permitted commercial scheme, DCC Reg. Ref. DSDZ4087/19 (the 'parent permission' - consist development of 2 no. commercial blocks over 2 no. level basement (45,328 sq.m gross floor area - inclusive of basement) as amended by DCC Reg. Ref. DSDZ2626/20) comprising: - Minor adjustments to basement layout to facilitate additional bicycle parking provision (increase from 640 to 744 no. spaces) and proportional increase of welfare facilities resulting in plant moving to roof level, minor adjustments to parking layout and the including of additional storage area and security room. This application relates to a proposed development within the North Lotts &amp; Grand Canal Dock Strategic Development Zone Planning Scheme area.</p> <p>An Appropriate Assessment (AA) Screening Report and Flood Risk Assessment have been prepared in respect of the proposed development.</p> <p><b>Distance:</b> c.150m south of development</p>	<p>In-combination adverse effects are not anticipated.</p>

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
<p>DSDZ3350/20 in Nov 2022. At the time of writing, site clearance works for this development have commenced. construction duration is not defined by the applicant.</p>		
<p><b>Applicant:</b> sub-fund KW PRS Fund 11  <b>Local Authority:</b> Dublin City Council  <b>Planning Application ref:</b> DCC reg no. DSDZ2186/20  <b>Location:</b> Site (c.1.55Ha) at City Block 3 and Northbank House, Sheriff Street Upper, New Wapping Street and Mayor Street Upper, North Lotts, Dublin 1.  <b>Status:</b> Planning permission was granted in March 2020. At the time of writing, site clearance works for this development have commenced. Construction duration is not defined by the applicant.</p>	<p>Planning permission was granted to KW PRS ICAV acting for and on behalf of its sub-fund KW PRS Fund 11 intends to apply for permission at a site (c.1.55Ha) at City Block 3 and Northbank House, Sheriff Street Upper, New Wapping Street and Mayor Street Upper, North Lotts, Dublin 1 and otherwise generally bounded by Nos. 7-10 Mayor Street Upper to the south, Nos. 1-14 New Wapping Street to the west, and existing Northbank House, Alexandra Terrace and Castleforbes Road to the east. The development will consist of: - A residentially led development accommodated in 5no. residential blocks ranging from 2 to 7 storeys, sitting partially over single level basement, and at ground floor of existing Northbank House (c.37,358.1 sq.m gross floor area excluding basement c. 5,410.5 sq.m gross floor area), to accommodate: 472no. residential units in total, comprising 463no. 'Build-to-Rent' apartments (65no. 1-bed studios, 217no. 1-beds, 179no. 2-beds, 2no. 3-beds) and 9no. 2-bed houses; residential amenities (c.805 sq.m gross floor area) in proposed Block 3B1 and basement; 1no. café/restaurant (c.111.4sq.m gross floor area). This application relates to a proposed development within the North Lotts &amp; Grand Canal Dock Strategic Development Zone Planning Scheme Area.</p> <p>An Appropriate Assessment (AA) Screening Report, an Environmental Impact Assessment (EIA) Screening Report and Flood Risk Assessment have been prepared in respect of the proposed development.</p> <p><b>Distance:</b> c.80m east of Spencer Dock Station</p>	<p>In-combination adverse effects are not anticipated.</p>
<p><b>Applicant:</b> Oxley Holdings Limited  <b>Local Authority:</b> Dublin City Council  <b>Planning Application ref:</b> EIA Portal ID 2019168, ABP reference:PL29N.305676 &amp; DCC reg. no. 2723/20 &amp; SHD0024/19  <b>Location:</b> Lands to the Rear of Connolly Station, Connolly Station car park, Sheriff</p>	<p>Planning permission was granted to Oxley Holdings Limited in 2019 for a Strategic housing Development (EIA Portal ID 2019168) consisting of demolition of 4 no. structures, construction of 741 no. Build to Rent apartments; residential support facilities and amenities (1,444sq.m); and retail, commercial and community floorspace (3,142 sq.m) and associated site works is proposed at lands to the Rear of Connolly Station, Connolly Station car park, Sheriff Street Lower, Dublin 1.</p> <p>Project includes modifications to a portion of a Protected Structure (RPS No. 130), specifically the wall fronting Oriel Street Upper to facilitate;</p> <ol style="list-style-type: none"> <li>the development of a new pedestrian entrance to the site;</li> <li>the development of a vehicular entrance to the proposed car parking area; and</li> <li>the development of a service/emergency vehicular access only ramp to serve CIE's transport needs at Connolly Station;</li> </ol> <p>An Environmental Impact Assessment Report (EIAR) has been prepared in respect of the proposed development. An Appropriate Assessment Screening Report has been prepared in respect of the proposed development. The AA Screening</p>	<p>In-combination adverse effects are not anticipated.</p>

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
<p>Street Lower, Dublin 1.</p> <p><b>Status:</b> Planning permission was granted in Feb 2020. At the time of writing construction has not commenced. Construction phase is approx. 56 months as defined by the applicant.</p>	<p>Report concluded that "<i>significant effects are not likely to arise, either alone or in combination with other plans or projects to the integrity of the Natura 2000 network</i>".</p> <p>A Site-Specific Flood Risk Assessment has also been developed in respect of the proposed development.</p> <p><b>Distance:</b> adjacent to proposed development (Connolly Station)</p>	
<p><b>Applicant:</b> Connolly Quarter Development Company Limited</p> <p><b>Local Authority:</b> Dublin City Council</p> <p><b>Planning Application ref:</b> EIA Portal ID 2021272 and DCC ref no. 3054/22</p> <p><b>Location:</b> 'Dublin Arch', on a site adjacent to Connolly Station, Sheriff Street Lower, Dublin 1, D01 V6V6.</p> <p><b>Status:</b> Subject to successful grant of planning, the construction phase will last approx. 60 months as defined by the applicant.</p>	<p>Request for a planning permission was submitted by Connolly Quarter Development Company limited for a proposed mixed-use development (EIA Portal 2021272), 'Dublin Arch', on a site (2.86 ha) adjacent to Connolly Station, Sheriff Street Lower, Dublin 1, D01 V6V6.</p> <p>The proposed development relates to work to a Protected Structure (RPS Ref. No. 130).</p> <p>The development will consist of:</p> <p>(i) The construction of 4 no. office blocks (B1, B2, B3 and B4) 12 to 16 storeys in height including landscaped areas in the form of gardens at podium level and landscaped terraces at upper levels (combined 3,365 sq.m) with a cumulative gross floor area of 52,509 sq.m comprising of: (ii) The construction of 187 no. Built-to-Rent (BTR) apartments and associated supporting tenant support facilities, services and amenities in 2 no. blocks (C and D1/D2) with a cumulative gross floor area of 19,836 sq.m; An Environmental Impact Assessment Report (EIAR) was submitted to support the application. An Appropriate Assessment Screening has been prepared in respect of the proposed development. The AA Screening concluded that there is no requirement for to proceed to Stage 2 of the Appropriate Assessment process and a Natura Impact Statement is not required.</p> <p>A Flood Risk Assessment has also been prepared in respect of the proposed development.</p> <p><b>Distance:</b> 0m from development boundary</p>	<p>In-combination adverse effects are not anticipated.</p>
<p><b>Applicant:</b> CWTC Multi Family ICAV</p> <p><b>Local Authority:</b> Dublin City Council</p> <p><b>Planning Application Ref:</b> EIA Portal ID 2021136, DCC reg ref: SHD0015/21 &amp; ABP Reference: TA29N.310860</p> <p><b>Location:</b> Holy Cross College, Clonliffe Road, Dublin 3 and Drumcondra Road Lower, Drumcondra, Dublin 9.</p>	<p>Planning permission as granted to CWTC Multi Family ICAV in 2021 (EIA Portal ID 2021136) for a Strategic Housing Development at Holy Cross College (Clonliffe Road Dublin 3, and Drumcondra Road, Dublin 9) that comprises demolition of a number of existing office/former buildings on site, including the New Wing and Library Wing Buildings (c. 6,130sq.m) and the construction of a residential development with a gross floor area of c. 119,459sq.m (excluding basement parking area) set out in 12 no. residential blocks, ranging in height from 2 to 18 storeys to accommodate 1,614 no. build to rent apartments with associated residential tenant amenity, 1 retail unit, 1 cafe and a creche.</p> <p>An Environmental Impact Assessment Report (EIAR) has been prepared in respect of the proposed development. An Appropriate Assessment (AA) Screening Report has been prepared in respect of the proposed development which concluded that a Stage 2 Appropriate Assessment is not required.</p> <p>A Flood Risk Assessment has been prepared in respect of the proposed development.</p> <p><b>Distance:</b> c.270m north</p>	<p>In-combination adverse effects are not anticipated.</p>

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
<p><b>Status:</b> Planning permission was granted in Nov 2021. Construction phase is approx. 36 months as defined by the applicant.</p>		
<p><b>Applicant:</b> Glenveagh Living Limited  <b>Local Authority:</b> Dublin County Council  <b>Planning Application ref:</b> DCC reg no. 2143/20  <b>Location:</b> Site of c.0.22 ha which forms part of the Castleforbes Business Park, Sheriff Street Upper and East Road, Dublin 1.  <b>Status:</b> Planning permission was granted in June 2020. At the time of writing, the construction for this development has not commenced. Construction duration is not defined by the applicant.</p>	<p>Planning permission was granted to Glenveagh Living Limited (DCC reg no. 2143/20) for development on a site of c.0.22 ha which forms part of the Castleforbes Business Park, Sheriff Street Upper and East Road, Dublin 1. The site is bound by Sheriff Street Upper to the south, Castleforbes Business Park to the north and east, and East Road to the west. The proposed development consists of the demolition of all existing structures on the site and the construction of a 219 bedroom hotel ranging in height from 6 to 9 storeys (maximum height of c.33.95m) with total gross floor area of c.9,241sq.m (incl. basement). The ground floor includes hotel reception/lobby/check in area, a public bar with seating area, a public restaurant area with seating area, a cafe/work zone, kitchen, staff area, storage areas, lifts and circulation areas, plant, and ancillary office areas. Floors one to eight typically contain, bedrooms, linen and clearing stores, lifts and circulation areas with a gym and wellness centre located on floor one. A proposed basement -1 level contains plant, storage, staff areas, laundry store and staff cycle parking. A service access is provided from Sheriff Street Upper to the east of the site to a dedicated service area. The development also includes for enhanced landscaping and public realm along Sheriff Street Upper and East Road including for visitor cycle parking. The proposed development also includes for the provision of screened plant at roof level; PV panels; green roofs; new ESB substation; associated site servicing (foul and surface water drainage and water supply); and all other associated site development works above and below ground.</p> <p>An Environmental Impact Assessment (EIA) Screening Report, an Appropriate Assessment (AA) Screening Report and a Flood Risk Assessment have been prepared in respect of the proposed development.</p> <p><b>Distance:</b> c.70m south of the proposed development</p>	<p>In-combination adverse effects are not anticipated.</p>
<p><b>Applicant:</b> College Square GP3 Limited  <b>Local Authority:</b> Dublin City Council  <b>Planning Application ref:</b> DCC reg no. 2583/20 &amp; ABP ref no. ABP-307854-20  <b>Location:</b> site of 0.66 ha at the former Apollo House, Tara Street, Dublin 2 (D02 N920).  <b>Status:</b> Planning permission was granted in August 2020. At the time of writing,</p>	<p>Planning permission was granted to College Square GP3 Limited (DCC reg no. 2583/20) for a development which consists of addition to and the amendment of previous permissions relating to the former College House and former Screen Cinema (DCC Reg. Ref. 3637/17 ABP Ref:PL29S.300709) and the former Apollo House (DCC Reg. Ref.: 3036/16, ABP Ref: PL29S.24907) and as amended by DCC Reg. Ref.: 2415/19 and DCC Reg. Ref.: 3668/19, ABP Ref: PL29S.305652 as follows:</p> <ol style="list-style-type: none"> <li>1.The demolition of existing structures (which includes the apartment building known as The Brokerage, vacant ground floor retail unit and bar unit basement -1)</li> <li>2.The construction of a new 8-11 storey commercial development with a building height of c.48.25m, on the site of the existing Brokerage Building on the south east corner of the site, that would integrate into the adjacent permitted College House and Apollo House office development at all levels to the north and west of the application site. This includes the enclosure of permitted setback/terrace adjacent the existing Brokerage building and extension of permitted basement -1 &amp; -2 into the area of existing basement -1 under the existing Brokerage building and the construction of a new basement -2,</li> </ol> <p>An Appropriate Assessment (AA) Screening Report and Environmental Impact Assessment (EIA) Screening Report have been prepared in respect of the proposed development.</p> <p><b>Distance:</b> c.160m south of development</p>	<p>In-combination adverse effects are not anticipated.</p>

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
<p>construction has commenced. Construction duration is approx. 40 months as defined by the applicant.</p>		
<p><b>Applicant:</b> Ruirside Development Ltd  <b>Local Authority:</b> Dublin City Council  <b>Planning Application ref:</b> DCC reg no. 2596/20 &amp; ABP ref no. ABP-308477-20  <b>Location:</b> Capel Site, Pelletstown, Ashtown, Dublin 15  <b>Status:</b> Planning permission was granted in March 2021. At the time of writing, construction phase has not commenced. Construction duration is not defined by the applicant.</p>	<p>Planning permission was granted for development at a site (c.1.66 Ha) known as the 'Capel' site, Pelletstown, Ashtown, Dublin 15. The site forms part of the wider 'Capel' site, and is bounded generally by Rathborne Avenue to the north and west, existing residential development adjoining Rathborne Drive and Royal Canal Way to the east and the remainder of the development permitted under DCC Reg. Ref. 3666/15 (ABP Ref PL29N.246373) to the south, at Pelletstown, Ashtown, Dublin 15. The development will consist of minor amendments to the development permitted under DCC Reg. Ref. 3666/15 (ABP Ref PL29N.246373) comprising changes to house types to 92 dwellings as follows: 25no. 2 storey, 3 bedroom house type units each of c. 105.3sq.m (Types HAL, HA, HALM, HAM and HAR) to replace 25no. house type C units (2 storey, 3 bedroom); 17no. 3 storey, 4 bedroom house type units of c. 150.8sq.m (Types HB and HBM) to replace 12no. house type F units (3 storey, 4 bedroom) and 5no. 2 storey, 3 bedroom house type D units; 22no. 3 storey, 4 bedroom house type units each of c. 153.2sq.m (Types HCL, HC, HCM and HCR) to replace 22no. house type E units (3 storey, 4 bedroom); 10no. 3 storey, 4 bedroom house type units of c. 167.5sq.m (Types HDL and HDR) to replace 6no. house type K units (3storey, 4 bedroom), 1no. house type B unit (2 storey, 3 bedroom) and 3no. house type A units (2 storey, 3 bedroom); 18no. 2 storey, 3 bedroom house type units each of c. 102.8sq.m (type HEL, HELM, HERM and HER) to replace 6no.house type K units (3 storey, 4 bedroom) and 12no. house type A units (2 storey, 3 bedroom). A new substation (c. 11.5sqm) is also proposed with associated drop kerb access.  <b>Distance:</b> c.10m north of DART+ West boundary</p>	<p>In-combination adverse effects are not anticipated.</p>
<p><b>Applicant:</b> Iarnród Eireann Infrastructure, CCE Department  <b>Local Authority:</b> Dublin City Council  <b>Planning Application ref:</b> DCC reg no. 2848/20  <b>Location:</b> 115, Amiens Street, Former Dart Station Hall, Connolly Station, Dublin 1.  <b>Status:</b> Planning permission was granted in Oct 2020. At the time of writing, construction has not commenced. Construction</p>	<p>Planning permission was granted to Iarnród Eireann (DCC reg no. 2848/20) for works to 115 Amiens Street, Dublin D01 NP44, a former station hall and vaults located within the curtilage of Connolly Station, a Protected Structure. The development consists of: the change of use from vacant motorcycle repair shop and emergency exit from the DART station to use as offices over two storeys; alteration of the exterior of the former station hall to include windows, a set of new entrance doors, curtain walling, external downpipes and rendered external insulation system with brick slips to base and new fascia detail.  <b>Distance:</b> Adjacent to development.</p>	<p>In-combination adverse effects are not anticipated.</p>

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
duration is not defined by the applicant.		
<p><b>Applicant:</b> Concept Fusion Ltd.</p> <p><b>Local Authority:</b> Dublin City Council</p> <p><b>Planning Application ref:</b> DCC reg no. 2979/21 &amp; ABP ref no. ABP-312029-21</p> <p><b>Location:</b> Swimming Pool lands, part of St. Vincent's CBS, Finglas Road, Glasnevin, Dublin 11, D11 PD28.</p> <p><b>Status:</b> Planning application was granted in Nov 2021. At the time of writing, construction phase has not commenced. Construction duration is not defined by the applicant.</p>	<p>Planning permission was granted to Concept Fusion Ltd (DCC reg no. 2979/21) for the development which will consist of the demolition of existing St. Vincent's Swimming Pool (derelict single storey detached building c. 757 sqm) and the construction of 6 no. dwellings, comprising 1 no. 2 storey 5 bedroom dwelling, 2 no. 2 storey 4 bedroom dwellings and 1 no. 2.5 storey 5 bedroom dwelling in a single terraced block on sites 3 – 6 inclusive and 2 no. houses in a two storey semi-detached block comprising a 4 bedroom house on site 1 and a 3 bedroom house on site 2, including all associated on and off-site development works, car parking, boundary treatment works, soft and hard landscaping on the site of c. 0.24 ha, and removal of existing c. 2m high boundary wall to create direct vehicular and pedestrian access by the extension of the existing Towerview Cottages cul de sac. The development will also include the provision of a temporary construction access road (c. 90m long) through the adjoining St. Vincent school lands with vehicular access onto the Finglas Road and the temporary removal (and future reinstatement) of existing single storey storage building c. 57m sq. required to facilitate the temporary access.</p> <p>A Natura Impact Statement (NIS) and a Site Specific Flood Risk Assessment (SSFRA) has been prepared and is included with the application.</p> <p><b>Distance:</b> c. 70m north of Glasnevin substation.</p>	In-combination adverse effects are not anticipated.
<p><b>Applicant:</b> Fitzwilliam Real Estate Developments Ltd</p> <p><b>Local Authority:</b> Dublin County Council</p> <p><b>Planning Application ref:</b> DCC reg no. 3040/22</p> <p><b>Location:</b> 97 Middle Abbey St &amp; 16/17 Prince's Street North, D1, 19/25 Prince's Street North, D1 &amp; 98-101 Middle Abbey Street, D1 &amp; 102-107 Middle Abbey Steet, D1, &amp; 2-3, 4 &amp; 4A Proby's Lane, D1 &amp; 7/7A and Liffey Street Upper, D1.</p> <p><b>Status:</b> Request for additional information was</p>	<p>A request for a planning permission was submitted by Fitzwilliam Real Estate Developments Ltd (DCC reg no. 3040/22) for development which will consist of a Build-To-Rent residential development at 97 Middle Abbey St &amp; 16/17 Prince's Street North, D1, 19/25 Prince's Street North, D1 &amp; 98-101 Middle Abbey Street, D1 &amp; 102-107 Middle Abbey Steet, D1, &amp; 2-3, 4 &amp; 4A Proby's Lane, D1 &amp; 7/7A and Liffey Street Upper, D1 consisting of the: demolition of the existing 3 No. storey Eircom structure to the rear of No. 97 Middle Abbey Street (c. 2,201 sq. m); decommissioning and demolition of the top three open-air levels of the Arnotts' Car Park (resulting in the removal of 145 No. car parking spaces, with 225 No. car parking spaces remaining); development of a 12 No. storey over basement element fronting William's Lane, a 5 No. storey element above Arnotts' Car Park, and 2 No. storey element above Arnotts Store, to provide 155 No. apartments (56 No. studio units; 85 No. 1-bed units; and 14 No. 2-bed units). The development also provides for hard and soft landscaping including the provision of: a landscaped public plaza (including bicycle parking) along the William's Lane frontage; a landscaped communal courtyard as well as a communal terrace and private terraces on the southern elevation all at Sixth Floor Level; a landscaped communal courtyard as well as private terraces at the southern elevation, communal terraces at the southern elevation and part of the western elevation, and outdoor exercise area and basketball court at the northern elevation all at Seventh Floor Level; and terraces on the eastern and western elevations of the Eleventh Floor Level. Private open space in the form of terraces are also provided on the east-facing, west-facing and south-facing elevations of the two courtyards at Sixth and Seventh Floor Levels. Juliette balconies are also proposed on the eastern, western, southern elevations as well as the east-facing, west-facing and south-facing elevations of the two courtyards. Pedestrian access to this part of the development will be provided via William's Lane.</p> <p>An Appropriate Assessment (AA) Screening Report, an Environmental Impact Assessment (EIA) Screening Report and a Flood</p>	In-combination adverse effects are not anticipated.

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
<p>submitted with respect to this planning application. Construction duration is not defined by the applicant.</p>	<p>Risk Assessment have been prepared in respect of the proposed development. <b>Distance:</b> c.500m west of proposed development</p>	
<p><b>Applicant:</b> Colin Daly, Nicola Daly and Andrew Haydon <b>Local Authority:</b> Dublin City Council <b>Planning Application ref:</b> DCC reg no. 3308/20 &amp; 3448/22 &amp; ABP ref no. ABP-309366-21 <b>Location:</b> 76, 76G &amp; 280 Bannow Road, Cabra, Dublin 7. <b>Status:</b> Planning permission was granted in July 2021. At the time of writing, construction phase has not commenced. Construction duration is not defined by the applicant.</p>	<p>Planning permission was granted to Colin Daly, Nicola Daly and Andrew Haydon (DCC reg no. 3308/20, as amended by 3448/22) for development at 76, 76G &amp; 280 Bannow Road, Cabra, Dublin 7 which will consist of the construction of a 'Build to Rent' residential development comprising of 69 no. apartments (51 no. 1 beds, 18 no. 2 beds) in 2 no. blocks, to be provided as follows: Block A – a four storey building containing a total of 20 no. apartments comprising of 3 no. 1 beds, 17 no. 2 beds with balconies to north, south and east elevations with ancillary residential amenity facilities including concierge and residential lounge at ground level; Block B – a five storey building containing a total of 49 no. apartments comprising of 48 no. 1 beds, 1 no. 2 beds with balconies to south elevations; a single level basement comprising a total of 33 no car parking spaces, 3 no. motorcycle spaces, 148 no. bicycle parking spaces (128 no. spaces at basement level and 20 no. spaces at ground floor level), ancillary plant room and refuse storage areas; along with a play/activity room, gym facility, utility room in support of the Build to Rent ancillary residential amenities and support facilities; vehicular and pedestrian access will be onto Bannow Road. An AA Screening Report has been prepared in respect of the proposed development. <b>Distance:</b> c. 40m south of the development (Broombridge)</p>	<p>In-combination adverse effects are not anticipated.</p>
<p><b>Applicant:</b> Labinies Limited <b>Local Authority:</b> Dublin County Council <b>Planning Application ref:</b> DCC reg no. SHD0001/18 &amp; ABP reference: PL29N.300666 <b>Location:</b> Former 'Matts of Cabra' public house and lands to the rear, Fassaugh Avenue, Cabra, Dublin 7. <b>Status:</b> Planning permission was granted in April 2018. At the time of writing, construction phase did not commence. Construction</p>	<p>Planning permission was granted to Labinies Limited for a strategic housing development on a site, the former 'Matts of Cabra' public house and lands to the rear, Fassaugh Avenue, Cabra, Dublin 7. The development will consist of: 1) The demolition of the former 'Matts of Cabra' public house and associated structures; 2) The construction of a mixed use development comprising student accommodation consisting of 208 no. ensuite student accommodation bedrooms - 198 no. bedspaces in 32 no. house units (ranging in size between 4 and 8 single bed ensuite rooms) in a linked four and five storey building and 10 no. single bed ensuite studio rooms in a three storey building, and associated facilities including a central access lobby, a central hub, recreation spaces, administration areas at basement and ground floor levels - and 657.65 sq.m of retail floor space in 2 no. units fronting onto Fassaugh Avenue - 368.47 sq.m on the basement, ground and first floors of the four/ five storey building and 289.18 sq.m on the basement and ground floors of the three storey building; 3) The construction of a vehicular access onto Fassaugh Avenue and the provision of a vehicle set down in front of the four/ five storey building; An Appropriate Assessment (AA) Screening Report and a Flood Risk Assessment have been prepared in respect of the proposed development. <b>Distance:</b> adjacent to the DART+ West development boundary.</p>	<p>In-combination adverse effects are not anticipated.</p>

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
duration is not defined by the applicant.		
<p><b>Applicant:</b> Bindford Limited  <b>Local Authority:</b> Dublin City Council  <b>Planning Application ref:</b> DCC reg no. SHD0004/21 &amp; ABP reference: TA29N.309345-21  <b>Location:</b> Old Bakery Site, also known as 113 Phibsborough Road, Cross Guns Bridge, Phibsborough, Dublin 7.  <b>Status:</b> Planning permission was granted in May 2021. At the time of writing, construction has not commenced. Construction duration is approx. 24 months as defined by the applicant.</p>	<p>Planning permission was granted to Bindford Limited (DCC reg no. SHD0004/21 / ABP reference: TA29N.309345-21) for a development at Old Bakery Site, also known as 113 Phibsborough Road, Cross Guns Bridge, Phibsborough, Dublin 7. The site is bounded by the Royal Canal Conservation Area to the North, the Phibsborough Road and the former mill, a protected structure (RPS Ref: 6732) to the East. The development will consist of the demolition of the existing buildings on site and the construction of a Build to Rent (BTR) residential scheme comprising 205 no. apartments within 3 no. blocks ranging in height up to 12 storeys. A new café/ retail unit area, and public plaza to the east of the site. Provision of 29 no. car parking spaces (20 no. at basement and 9 no. at surface); 272 no. residential bicycle parking spaces along with a further 72 no. visitor surface parking spaces.</p> <p>Vehicular and pedestrian connection via Phibsborough Road with two additional pedestrian accesses to be provided along the Royal Canal to the north (necessitating alterations to the existing boundary wall).</p> <p>All associated site development works and services provisions including bin storage areas, substations, plant rooms, boundary treatments and landscaping.</p> <p>A Natura Impact Statement has been prepared in respect of the proposed development. An Ecological Impact Assessment and Environmental Impact Assessment (EIA) Screening Report have also been prepared in respect of the proposed development.</p> <p><b>Distance:</b> c.20m south of development</p>	<p>In-combination adverse effects are not anticipated.</p>
<p><b>Applicant:</b> Birkey Limited  <b>Local Authority:</b> Dublin City Council  <b>Planning Application ref:</b> DCC reg no. SHD0032/21 &amp; ABP Reference: TA29N.312352  <b>Location:</b> No. 146A and Nos. 148-148A, Richmond Road, Dublin 3.  <b>Status:</b> Decision is pending with regards to this planning application. Construction duration is not defined by the applicant.</p>	<p>A request for a planning permission was submitted by Birkey Limited (DCC reg no. SHD0032/21 / ABP Reference: TA29N.312352) for a development at No. 146A and Nos. 148-148A, Richmond Road, Dublin 3. The proposed development will principally consist of the demolition of all existing structures on site (c. 2,346 sq. m) including warehouses and 2 No. dwellings; and the construction of a part 6 No. to part 10 No. storey over basement development (with roof level telecommunications infrastructure over), comprising 1 No. café/retail unit (157 sq. m) at ground floor level and 183 No. Build-to-Rent apartments (104 No. one bedroom units and 79 No. two bedroom units). The proposed development has a gross floor area of c. 16,366 sq. m over a basement of c. 2,729 sq. m. The proposed development has a gross floor space of c. 15,689 sq. m.</p> <p>The development also includes the construction of a new c. 126 No. metre long section of flood wall to the River Tolka along the site's southern boundary. The new flood wall is positioned at the top of the existing river bank and will connect to existing constructed sections of flood wall upstream and downstream of the site. The top of the wall will be set at the required flood defence level resulting in typical wall heights of c. 1.2 to 2 metres above existing ground levels. The development will also include the repair and maintenance of the existing river wall on site adjacent to the River Tolka.</p> <p>A Natura Impact Statement (NIS) has been prepared in respect of the proposed development. An Ecological Impact Assessment and an Environmental Impact Assessment (EIA) Screening Report have also been prepared in respect of the proposed development. A Flood Risk Assessment has also been prepared in respect of the development.</p> <p><b>Distance:</b> c.360m north of development boundary</p>	<p>In-combination adverse effects are not anticipated.</p>

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
<p><b>Applicant:</b> Ruirsíde Developments</p> <p><b>Local Authority:</b> Dublin City Council</p> <p><b>Planning Application ref:</b> EIA Portal ID 2020109, DCC reg no. SHD0016/20 &amp; ABP ref no. TA29N.307656</p> <p><b>Location:</b> Rathborne Avenue, Pelletstown, Ashtown, Dublin 15</p> <p><b>Status:</b> Planning permission was granted in Nov 2020. At the time of writing construction has not commenced. Construction phase is approx. 36 months as defined by the applicant.</p>	<p>Planning permission was granted for a Strategic Housing Development at Rathborne Avenue, Pelletstown, Ashtown, Dublin 15 which will consist of a mixed-use (residential and commercial) scheme, including 725no. dwellings (107no. studio units, 226no. 1-bed units, 376no. 2-bed units and 16no. 3-bed units), a licenced discount foodstore (c. 2,549 sq.m gross floor area), a café/restaurant unit (c.199 sq. m gross floor area) and a creche facility (c. 724 sq.m gross floor area), ancillary residents amenity space (c. 394 sq. m gross floor area) all accommodated in 6no. blocks ranging in height from 2 to 14 storeys (when viewed from Rathborne Avenue) (1 to 13 storeys at the Canal side) and incorporating an undercroft level beneath all blocks.</p> <p>An Environmental Impact Assessment Report (EIAR) has been prepared in respect of the proposed development. A Natura Impact Statement also accompanies this application.</p> <p>A Flood Risk Assessment has been prepared in respect of the proposed development.</p> <p><b>Distance:</b> c.20m south of the proposed development</p>	<p>In-combination adverse effects are not anticipated.</p>
<p><b>Applicant:</b> Castlethorn Construction Unlimited</p> <p><b>Local Authority:</b> Dublin City Council</p> <p><b>Planning Application ref:</b> DCC reg no. SHD0003/21 &amp; ABP Ref TA29N.309318</p> <p><b>Location:</b> Rathborne Avenue, Pelletstown, Ashtown, Dublin 15.</p> <p><b>Status:</b> Planning permission was granted in May 2021. At the time of writing, the construction for this development has not commenced. Construction duration is approx. 30 months as defined by the applicant.</p>	<p>Planning permission was granted to Castlethorn Construction Unlimited (DCC reg no. SHD0003/21 / ABP Ref TA29N.309318) for a development at Rathborne Avenue, Pelletstown, Ashtown, Dublin 15. The proposed development will consist of the demolition of the former marketing suite building and prefab building (previously used on a temporary basis as a school); and ESB Mini pillar. 169no. residential units (9no. 1-bed, 78no. 2-bed and 12no. 3-bed apartments; 5no. 2-bed and 65no. 3-bed duplexes) and internal residents' amenity spaces (c. 301.7sqm), accommodated in 2no. buildings ranging in height from 4 to 10 storeys. The development proposal will also include a childcare facility of c. 221.9 sqm. Provision of all associated and ancillary site development, landscaping and boundary treatment works.</p> <p>An Appropriate Assessment (AA) Screening Report and an Ecological Impact Assessment have been prepared in respect of the proposed development.</p> <p><b>Distance:</b> c.130m north of development boundary</p>	<p>In-combination adverse effects are not anticipated.</p>
<p><b>Applicant:</b> Bartra Property</p>	<p>Planning permission was submitted by to Bartra Property (Porterstown) Ltd for the demolition of a vacant dwelling and</p>	<p>In-combination</p>

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
<p>(Porterstown) Ltd  <b>Local Authority:</b> Fingal County Council  <b>Planning Application ref:</b> ABP case ref ABP-312190-21 &amp; FCC Planning ref no. FW21A/0171  <b>Location:</b> Site at Porterstown Road, Porterstown, Dublin 15, D15 Y95T.  <b>Status:</b> The planning application was refused by Fingal Co. Co. and is currently on Appeal with An Bord Pleanála. Construction duration is approx. 18-24 months as defined by the applicant..</p>	<p>outbuildings (207 sqm), and the construction of 99 no. apartments (46 no. one bedroom and 53 no. two bedroom apartments) in a 5 no. storey block (7,548 sq.m.) at site along Porterstown Road, Porterstown, Dublin 15.  An Appropriate Assessment (AA) Screening Report, an Ecological Impact Assessment Report and an Environmental Impact Assessment (EIA) Screening Report have been prepared in respect of the proposed development.  <b>Distance:</b> 0m north of development</p>	<p>adverse effects are not anticipated.</p>
<p><b>Applicant:</b> La Vista Ltd. &amp; E.P. Lynam Properties Ltd.  <b>Local Authority:</b> Fingal County Council  <b>Planning Application ref:</b> FCC planning ref no: FW16A/0176  ABP case no. PL06F.249188  <b>Location:</b> Lands bounded by Clonsilla Road to the south, Clonsilla Link Road to the east and the residential development of Portersgate, to the west, Clonsilla, Dublin 15.  <b>Status:</b> Planning permission was granted in Jan 2018. Construction duration is not defined by the applicant.</p>	<p>Planning permission was granted to La Vista Ltd. &amp; E.P. Lynam Properties Ltd. for or a mixed use development on lands bounded by Clonsilla Road to the south, Clonsilla Link Road to the east and the residential development of Portersgate to the west, Clonsilla, Dublin 15. The development will consist of the provision of 103 no. residential units and a local neighbourhood centre. The development comprises: (1) The construction of 67 no. two storey residential dwellings (45 no. 3 bed &amp; 22 no. 4 bed dwellings) all with 2 no. car parking spaces, (2) 2 no. three storey apartment blocks comprising 36 apartments (12 no. 1 bed and 24 no. 2 bed apartment units) with 40 no. car parking spaces, 36 bicycle spaces and bin store, (3) 1 no. two storey commercial unit comprising 1,288 sq.m of retail convenience food store including off licence and ancillary services at ground floor; offices at first floor with associated elevational signage, (4) 1 no. single storey structure comprising 1 no. café and 1 no. retail unit with associated elevational signage, (5) 82 no. car parking spaces and 2 no. motorbike spaces to serve commercial development, (6) construction of new vehicular access and pedestrian access points off the Clonsilla Link Road, upgrade works to Clonsilla Road to include footpath and cycle lane, (7) landscaping, boundary treatments and 1 no. playground, (8) 1 no. ESB substation, (9) engineering and all site development works necessary to facilitate the development.  An Appropriate Assessment (AA) Screening Report has been prepared in respect of the proposed development.  <b>Distance:</b> c.80m north of the development</p>	<p>In-combination adverse effects are not anticipated.</p>

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
<p><b>Applicant:</b> Garlandbrook Ltd.  <b>Local Authority:</b> Fingal County Council  <b>Planning Application ref:</b> EIA Portal: HD025 &amp; FCC Ref no. FW18A/0110  <b>Location:</b> Zone 7 'Railway', Hansfield Strategic Development Zone, Barberstown, Hansfield, Dublin 15.  <b>Status:</b> Planning permission was granted in May 2019. At the time of writing, the construction for this development has commenced. Construction duration is approx. 3.5 - 4 years as defined by the applicant.</p>	<p>Planning permission was granted for a Strategic Housing Development was submitted by Garlandbrook Ltd. in 2018 (Planning ref no. FW18A/0110) for a residential development consisting of 618 no. apartments, comprised of 56 no. 1 bed apartments, 513 no. 2 bed apartments and 49 no. 3 bed apartments, crèche and 3 no. retail/commercial units, all accommodated in 10 no. blocks. access to the development will be via roads permitted under Reg. Ref.s FW16A/0123 &amp; FW17A/0078 to the north/north-east and from Station Road to the west. The proposed development also includes for all associated site development works, car parking (at surface (197 no. spaces) and basement (538 no. spaces) levels), hard and soft landscaping, open spaces, public lighting, foul and surface water drainage / attenuation and water supply. The proposed development is located on lands within the boundaries of Hansfield Strategic Development Zone as defined by Statutory Instrument No. 273 of 2001.</p> <p>An Environmental Impact Assessment Report (EIAR) and an Appropriate Assessment (AA) Screening Report has been prepared in respect of the proposed development.</p> <p><b>Distance:</b> c.10m north of development</p>	<p>In-combination adverse effects are not anticipated.</p>
<p>Applicant: Garlandbrook Ltd.  <b>Local Authority:</b> Fingal County Council  <b>Planning Application ref:</b> FCC Planning ref no. FW18A/0021  <b>Location:</b> Zone 6 of Hansfield Strategic Development Zone (SDZ) North of the Royal Canal &amp; Dublin, to Dunboyne Rail Line, West of St. Josephs Hospital, South of Ongar Road, &amp; a permitted development known as Hansfield Wood, in townland of Barberstown  <b>Status:</b> Planning permission was granted in May 2018. At</p>	<p>Planning permission was granted for a Strategic Housing Development for a residential development consisting of 95 no. dwellings, on a site area of 1.475ha, being part of Zone 6 "Canal" of the Hansfield Strategic Development Zone Planning Scheme 2006. The proposed development is located on a site north of the Royal Canal and the Dublin to Dunboyne rail line, south of Ongar Road and of a permitted development, known as Hansfield Wood under Reg. Ref. FW16A/0123, and south-west of St. Joseph's Hospital.</p> <p>An Appropriate Assessment Screening Report was submitted as part of the application. The Screening Report concluded that <i>"no significant negative effects are likely to occur to the integrity of Natura 2000 sites within the zone of influence of the project. There will be no measurable negative impacts upon Annex II species. There will be a loss of feeding and commuting for bats and badgers that can be partially mitigated by planting along the southern boundary to provide a commuting corridor to create access to west and east of the site and to connect with the Royal Canal"</i>.</p> <p>A Site-Specific Flood Risk Assessment has been prepared in respect of the development.</p> <p><b>Distance:</b> c.10m north of the proposed development</p>	<p>In-combination adverse effects are not anticipated.</p>

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
<p>the time of writing, construction has commenced. Construction duration is not defined by the applicant.</p>		
<p><b>Applicant:</b> Garlandbrook Ltd.  <b>Local Authority:</b> Fingal County Council  <b>Planning Application ref:</b> FCC Planning ref no. FW20A/0059  <b>Location:</b> Zone 7 "Railway", Hansfield Strategic Development Zone Planning Scheme 2006, Barberstown, Dublin 15.  <b>Status:</b> At the time of writing, construction has commenced. Construction duration is not defined by the applicant.</p>	<p>Planning permission was granted for circa 0.55 ha, being part of Zone 7 Railway of the Hansfield Strategic Development Zone Planning Scheme 2006 in the townland of Barberstown, Hansfield, Dublin 15. The proposed development is located to the north of the Royal Canal and the Dublin to Dunboyne rail line. The proposed development consists of 83 no. dwellings in 2 no. 5 &amp; 6 storey blocks (Blocks L&amp;K) over basement level carparking. Block K is a 5 storey building consisting of 35 no. dwellings comprised of 15 no. 1 bed &amp; 20 no. 2 bed apartments. Block L is a 6 storey building consisting of 48 no. 2 bed apartments. The proposed development also includes for basement level carparking measuring circa 3,305m<sup>2</sup> consisting of 97 no. car parking spaces (including for 4 no. disabled parking spaces) bin store and plant room. Access to the proposed development will be from Station Road to the west and Park Walk Road to the north via the internal road network granted under Reg.Ref. FW18A/0110.</p> <p>Screening for Appropriate Assessment was carried out concluding that the "significant effects to the Natura 2000 network are not likely to arise, either alone or in combination with other plans or projects".</p> <p><b>Distance:</b> c. 100m north of the development</p>	<p>In-combination adverse effects are not anticipated.</p>
<p><b>Applicant:</b> Hansfield Investments Ltd.  <b>Planning Application ref:</b> FCC Planning ref no. FW18A/0197  <b>Local Authority:</b> Fingal County Council  <b>Location:</b> Lands at Hansfield, Dublin 15, being part of Zone 7 'Railway', of the Hansfield Strategic Development Zone Planning Scheme 2006., The site is bounded by Station Road, to the East, Barnwell Grove and, Barnwell Heath to the North, and M3 Parkway</p>	<p>Planning permission was granted to Hansfield Investments Ltd for 200 dwellings on a site at Hansfield, Dublin 15, being part of Zone 7 'Railway' of the Hansfield Strategic Development Zone Planning Scheme 2006. The site is bounded by Station Road to the east, Barnwell Grove and Barnwell Heath to the north and the M3 Parkway railway line to the south. The proposed development consists of the construction of 117 no. family houses comprising 101 no. two storey three-bedroom houses, 15 no. two storey four-bedroom houses and 1 no. three storey four-bedroom house and 83 no. apartments, comprising 29 no. 1 bedroom apartments and 54 no. 2 bedroom apartments. The apartments are arranged in 3 blocks ranging in height from 3 storeys plus penthouse to 4 storeys plus penthouse. The development includes the construction of a foul water pumping station, all associated site works and infrastructure including landscaped open space, internal roads, paths, public lighting, utilities, drainage and surface water attenuation. The development is wholly on lands within the boundaries of Hansfield Strategic Development Zone as defined by Statutory Instrument No. 273 of 2001.</p> <p>Screening for Appropriate Assessment (AA) was undertaken for the application concluding that "<i>significant effects to the Natura 2000 network are not likely to arise, either alone or in combination with other plans and projects</i>".</p> <p><b>Distance:</b> Adjacent to the DART+ West development boundary.</p>	<p>In-combination adverse effects are not anticipated.</p>

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
<p>Railway Inn.</p> <p><b>Status:</b> Planning permission was granted in July 2019. At the time of writing, construction has commenced. Construction duration is not Defined by the applicant.</p>		
<p><b>Applicant:</b> Breffni Assets Holdings Ltd.</p> <p><b>Local Authority:</b> Fingal County Council</p> <p><b>Planning Applicant ref:</b> FCC planning ref. F21A/0667</p> <p><b>Location:</b> Ballyhack, Kilsallaghan, Dublin, K67 R984</p> <p><b>Status:</b> Request for additional information. Construction duration is not defined by the applicant.</p>	<p>Breffni Assets Holdings Ltd. submitted a planning permission in 2021 at Ballyhack, Kilsallaghan, Dublin, K67 R984 for the construction of 1 no. new Storage Building (c. 1,643 m2 GFA) and 1 no. Store (357 m2 GFA) to facilitate the storage of plant machinery and maintenance equipment together with associated hard standing areas, hard and soft landscaping works and all associated site and engineering works necessary to facilitate the development.</p> <p><b>Distance:</b> the development site of this project overlaps with the proposed DART+ West project boundary.</p>	<p>In-combination adverse effects are not anticipated.</p>
<p><b>Applicant:</b> EngineNode Ltd</p> <p><b>Local Authority:</b> Meath County Council</p> <p><b>Planning Application ref:</b> EIA Portal 2019205 &amp; MCC ref (RA191593)</p> <p><b>Location:</b> Bracetown &amp; Gunnocks , To the North Of Clonee, Co. Meath</p> <p><b>Status:</b> 10 year Planning permission was granted in June 2020. Construction</p>	<p>Planning permission was granted for the following to be constructed in a minimum of four phases: The construction of 4 number 2 storey data storage buildings with a combined gross floor area of c. 92, 172 sq.m, associated single storey energy centre with a gross floor area of c. 8,906 sq.m with an ancillary 1 storey MV operations building with part basement with a gross floor area of c. 1,016 sq.m, EngineNode 2 storey offices with a gross floor area of 736 sq.m. The data storage campus shall comprise of the following uses: offices, canteen, computer and associated support areas, electrical component rooms, plant and associated equipment. Each Data Storage building includes for a total of 18 number 21.5 m high back-up generator exhaust flues which are incorporated on to the building facade. The energy centre shall comprise of: gas engines, ancillary plant and associate equipment. Each Data Storage building includes for a total of 18 number 21.5m high back-up generator exhaust flues which are incorporated on to the building facade. The energy centre shall comprise of: gas engines, ancillary plant and associate equipment. The energy centre includes for 4 number 40m high x 5m diameter exhaust flues and a standby diesel generator with a 22m high exhaust flue.</p> <p>An Environmental Impact Assessment Report (EIAR) has been submitted with this application. An Appropriate Assessment (AA) Screening Report has been prepared in respect of the proposed developments.</p>	<p>In-combination adverse effects are not anticipated.</p>

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
duration is approx. 5 years as identified by the applicant.	<b>Distance:</b> c.540m east of development	
<p><b>Applicant:</b> McGarrell Reilly Homes</p> <p><b>Local Authority:</b> Meath County Council</p> <p><b>Planning Application ref:</b> MCC ref no. RA161443</p> <p><b>Location:</b> Newtownmoyaghy, Kilcock, Co. Meath.</p> <p><b>Status:</b> A 10 year planning permission was granted in Oct 2017. Construction duration is not defined by the applicant.</p>	<p>Planning permission was granted to McGarrell Reilly Homes (MCC ref no. RA161443) for a development at Newtownmoyaghy townland, Kilcock comprising of 187 no. residential dwellings of 37 no. apartment units and 150 house units comprising of the following mix of unit types: 26no.1 bedroom units; 14no.2 bedroom units; 90 no. 3 bedroom units;53 no.4bedroom units &amp;4 no. 5 bedroom units. The development also includes ancillary public open space including part of a riverside linear park along the Rye Water River, a creche (652GFA sqm), 359 no. ancillary residential car parking spaces &amp; 18no. crèche car parking spaces &amp; all associated infrastructure, development &amp; works. The proposed development is facilitated by and integrates with permitted infrastructure development &amp; works within the administrative area of Meath County Council permitted by An Bord Pleanála under ABP Ref. PL17.238370(MCC Ref DA/100614) and ABP Ref 17.239375(MCC Ref. DA/100697), &amp; within the administrative area of Kildare County Council under An Bord Pleanála Ref PL09.238818 (KCC Ref 10/571) which development and works are substantially outside the boundaries of this application.</p> <p>The planning application is accompanied by an Environmental Impact Statement (EIS) and a Site-Specific Flood Risk Assessment.</p> <p>Subsequent planning application for revision of layout have been submitted to Meath Co. Co. (planning ref, no. RA200216)).</p> <p><b>Distance:</b> c.40m north of development</p>	In-combination adverse effects are not anticipated.
<p><b>Applicant:</b> McGarrell Reilly Homes</p> <p><b>Local Authority:</b> Meath County Council</p> <p><b>Planning Application ref:</b> MCC ref no. RA150205 &amp; ABP case ref: PL17.246141</p> <p><b>Location:</b> Newtownmoyaghy, Kilcock, Co. Meath.</p> <p><b>Status:</b> A 10 year Planning permission was granted in Jan 2016. Construction duration is not defined by the applicant.</p>	<p>Planning permission was granted to McGarrell Reilly Homes (ABP case ref. PL17.246141 / MCC ref no. RA150205) for a development at Newtownmoyaghy townland, Kilcock which comprises the development of 152 no. new residential dwellings, comprising of 12 x 2 bedroom; 92 x 3 bedroom; 38 x 4 bedroom and 10 x 5 bedroom dwellings together with ancillary public open space provision, including a riverside linear park along the Rye Water River and childcare facility (337 sq.m GFA). The proposed development provides for a total of 304 no. ancillary residential car parking spaces and a further 18 no. ancillary car parking spaces in connection with the creche.</p> <p>The planning application is accompanied by an Environmental Impact Statement (EIS), a Natura Impact Statement (NIS) and a Site Specific Flood Risk Assessment (SSFRA). Significant further information/revised plans submitted on this application.</p> <p>Subsequent planning applications for revision of layout have been submitted to Meath Co. Co. (planning ref, no. RA170429, RA171230, and RA181517).</p> <p><b>Distance:</b> c. 40m north of the development</p>	In-combination adverse effects are not anticipated.
<p><b>Applicant:</b> Intel Ireland Limited</p> <p><b>Local Authority:</b> Kildare County Council</p>	<p>Planning permission was granted for a development consisting of an extended and revised manufacturing facility (granted under An Bord Pleanála Ref. PL09.248582; Kildare County Council Ref. 16/1229), including reconfigured and extended support buildings, water tanks and yards to provide for additional manufacturing capacity. The development will consist of buildings, site infrastructure and ancillary works, for the manufacture of integrated circuits.</p> <p>An Environmental Impact Assessment Report (EIAR) and a Natura Impact Statement (NIS) have been prepared in respect of</p>	In-combination adverse effects are not anticipated.

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
<p><b>Planning Application ref:</b> EIA Portal ID 2019018, KCC ref no (1991) &amp; ABP case ref: PL09.304672</p> <p><b>Location:</b> Collinstown, Leixlip, Blakestown, Kellystown, Kilmacredock Lower, Collinstown Industrial Park, Leixlip, Co. Kildare.</p> <p><b>Status:</b> 10 year planning permission was granted in May 2019. Construction duration is approx. 4 years as defined by the applicant.</p>	<p>the proposed development. A Flood Risk Assessment has also been prepared in respect of the development.</p> <p><b>Distance:</b> c.90m north of development</p>	
<p><b>Applicant:</b> Intel Ireland Limited</p> <p><b>Local Authority:</b> Kildare County Council</p> <p><b>Planning Application ref:</b> EIA Portal ID 2017041, ABP Ref no. (PL09.248582) &amp; KCC ref no. 161229</p> <p><b>Location:</b> Collinstown, Leixlip, Blakestown, Kellystown, Kilmacredock Lower, Collinstown Industrial Park, Leixlip, Co. Kildare.</p> <p><b>Status:</b> 10 year planning permission was granted in May 2017. Construction duration is approx. 3 years as defined by the applicant.</p>	<p>Planning permission was granted to Intel Ireland Limited for development comprising: Revised design and configuration of previously permitted manufacturing building Planning Reg Ref 12/435 – PL09.241071, over four levels (parapet height of 31m) with a total floor area of 88,740sqm including support areas and roof mounted stacks and equipment ranging in height from 6m to 24m above parapet. Revised design and configuration of previously permitted utility support buildings, multi storey car park, chemical store and other ancillary works include new underground utilities, a two-storey elevated link structure to the east of the proposed manufacturing building. Works will also include the demolition of a redundant electricity substation sized 108sqm and 4.2m high. Works also include new internal road layouts throughout, modifications to the main central vehicular entrance together with realignment and widening to the R148 road.</p> <p>An Environmental Impact Assessment Report (EIAR) and a Natura Impact Statement (NIS) have been prepared in respect of the proposed development.</p> <p><b>Distance:</b> c. 90m north of development</p>	<p>In-combination adverse effects are not anticipated.</p>
<p><b>Applicants:</b> Avoca Homes</p> <p><b>Local Authority:</b> Kildare County Council</p> <p><b>Planning Application ref:</b></p>	<p>Request for a planning permission was submitted for a development consisting of 50 no. apartments arranged in 2 no. buildings and comprises; 14 no. one bedroom units, 32 no. two bedroom units and 4 no. three bedroom units. Eight apartment types are proposed. The proposed buildings each contain five storeys of residential accommodation over a basement level car park with 50 no. car parking spaces and 126 no. bicycle parking spaces. A bin store of 23.4 sqm is provided at the southern boundary of the site adjoining the entrance to the basement level.</p>	<p>In-combination adverse effects are not anticipated.</p>

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
<p>KCC Planning ref no. 20108 &amp; ABP case ref no. PL09.309929</p> <p><b>Location:</b> North of Louisa Park, Station Road, Leixlip, Co. Kildare.</p> <p><b>Status:</b> Planning application was refused, but an appeal was lodged in April 2021. Decisions is pending. Construction duration is not defined by the applicant.</p>	<p>This application is accompanied by a Natura Impact Statement (NIS). The NIS concluded that <i>“the proposed development will not adversely affect (either directly or indirectly) the integrity of any European site, either alone or in combination with other plans or projects”</i>.</p> <p><b>Distance:</b> 0km from development.</p>	
<p><b>Applicant:</b> Heathcote Holdings Limited</p> <p><b>Local Authority:</b> Kildare County Council</p> <p><b>Planning Application ref:</b> KCC planning ref no. 211108</p> <p><b>Location:</b> Parklands Grove, Railpark, Maynooth, Co. Kildare, W23 V5D4.</p> <p><b>Status:</b> Decision regarding the planning application is pending. Request for further information issued in Sept 2021 by the planning authority. Construction duration is not defined by the applicant.</p>	<p>Request for a planning permission was submitted to Heathcote Holdings Ltd (KCC ref no. 211 108) for the demolition of a habitable house and the construction of 40 No. houses and 36 No. apartments, 1 No. vehicular link with the approved Maynooth Eastern Ring Road and all associated and ancillary site development works.</p> <p><b>Distance:</b> c. 10m south of development</p>	<p>In-combination adverse effects are not anticipated.</p>
<p><b>Applicant:</b> Glenveagh Homes Limited</p> <p><b>Local Authority:</b> Kildare County Council</p> <p><b>Planning Application ref:</b> KCC planning ref no. 21370</p> <p><b>Location:</b> Parson Street, Maynooth, Co. Kildare.</p> <p><b>Status:</b> Planning permission</p>	<p>Planning permission was granted to Glenveagh Homes Limited (KCC ref no. 21370) at Parson Street, Maynooth for the construction of a mixed residential and commercial development with a total gross floorspace of c. 20,023 sqm and a single level basement car park of c.8,153 sqm. The mixed use development comprises c.4,497 sq.m office floorspace including refurbishment and adaptive re-use of the former Rectory building (a Protected Structure, c.688 sq.m including ancillary outhouse structures) and a 2-storey glazed atrium connection to a 3-storey over basement office building; and the provision of 183 no. apartments and ancillary /commercial development (total c.891 sq. m including concierge, gym, café, creche, tenant amenity and commercial floorspace) in 4 no. blocks ranging in height from 3 to 9 storeys over single level basement shared with the proposed office structure.</p> <p>A Natura Impact Statement (NIS) and an Ecological Impact Assessment (EclIA) have been prepared in respect of the proposed development. An Environmental Impact Assessment (EIA) Screening Report has also been prepared in respect of the</p>	<p>In-combination adverse effects are not anticipated.</p>

Name of Plan or Project	Description project	Potential in-combination Adverse Effects
<p>was granted in March 2022. Construction duration is approx. 2 years as defined by the applicant.</p>	<p>proposed development. <b>Distance:</b> c. 0m north of the development.</p>	

**Table 6-3 Assessment of adverse effects arising from the proposed development in combination with future projects.**

Project Details	Project Description	Likely in-combination effects
<p><b>Project Name:</b> BusConnects Clongriffin to City Centre Core Bus Corridor Scheme</p> <p><b>Applicant:</b> National Transport Authority</p> <p><b>Planning Applicant ref:</b> EIA Portal ID: 2022049 &amp; ABP ref no. ABP-313182-22</p> <p><b>Location:</b> Routed along the R107 Malahide Road from Mayne River Avenue Junction to the junction with Marino Mart - Fairview and also via Brian Road, Carleton Road, St Aidan's Park, Haverty Road and Marglann Marino</p> <p><b>Status:</b> Case is due to be decided by 05/10/2022</p>	<p>Request for planning permission was submitted for the Clongriffin to City Centre Core Bus Corridor Scheme. The Proposed Scheme includes an upgrade of the existing bus priority and cycle facilities associated with the Malahide Road Quality Bus Corridor (QBC), which has been in place since 1999. The scheme includes a substantial increase in the level of bus priority provided along the corridor, including the provision of additional lengths of bus lane, particularly in the outbound direction resulting in improved journey time reliability. To facilitate bus journey time reliability the existing roundabouts at Priorswood Road/ Blunden Drive and Ardlea Road/ Gracefield Road (R808) will be removed and replaced with traffic signal controlled junctions.</p> <p>This application is accompanied by a Natura Impact Statement (NIS). The NIS concluded that <i>"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."</i></p>	<p>In-combination adverse effects are not anticipated.</p>
<p><b>Project Name:</b> BusConnects Belfield/Blackrock to City Centre Core Bus Corridor Scheme</p> <p><b>Applicant:</b> National Transport Authority</p> <p><b>Planning Applicant ref:</b> EIA Portal ID: 2022083 &amp; ABP ref no. ABP-313509-22</p> <p><b>Location:</b> Routed along the N31 Temple Road from the junction with Monkstown Road, then along R118 Rock Rd/Merrion Rd/Pembroke</p>	<p>Request for planning permission was submitted for the Belfield/Blackrock to City Centre Core Bus Corridor Scheme. The Proposed Scheme has an overall length of approximately 8.3km and is comprised of two main alignments in terms of the route it follows, from Blackrock to the City Centre and along Nutley Lane. 18 The Blackrock to City Centre section will commence on the R113 at Temple Hill, approximately 80m to the north of the R827 Stradbroke Road, travel along the N31 Frascati Road, the R118 Rock Road / Merrion Road / Pembroke Road, the R816 Pembroke Road / Baggot Street Upper / Baggot Street Lower, turn onto Fitzwilliam Street Lower and terminate at the junction of Mount Street Upper / Merrion Square South / Merrion Square East. The Nutley Lane section of the Proposed Scheme will commence at the tie-in with the signalised junction on the R138 Stillorgan Road on the southern end of Nutley Lane, travel along Nutley Lane and terminate at the junction with the R118 Merrion Road. 19 The Proposed Scheme includes an upgrade of the existing bus priority and cycle facilities. The scheme includes a substantial increase in the level of bus priority provided along the corridor, including the provision of additional lengths of bus lane resulting in improved journey time reliability. Throughout the Proposed Scheme bus stops will be enhanced to improve the overall journey experience for bus passengers and cycle facilities will be substantially improved with segregated cycle tracks provided along the links and protected junctions with enhanced signalling for cyclists provided at junctions.</p> <p>This application is accompanied by a Natura Impact Statement (NIS). The NIS concluded that <i>"with the implementation of the mitigation measures proposed that the Proposed Scheme will not adversely affect (either directly or indirectly) the integrity of any European site, either alone or in combination with other plans or projects."</i></p>	<p>In-combination adverse effects are not anticipated.</p>

Project Details	Project Description	Likely in-combination effects
<p>Rd, R816 Pembroke Rd/Baggot St Upper/Baggot St Lwr and Fitzwilliam St Lwr and Nutley Lane.</p> <p><b>Status:</b> Case is due to be decided by 14/11/2022</p>		
<p><b>Project Name:</b> BusConnects Core Bus Corridor No. 16 Ringsend to City Centre</p> <p><b>Applicant:</b> TII</p> <p><b>Planning Application ref:</b> None</p> <p><b>Location:</b> North Wall Quay</p> <p><b>Planning Status:</b> At the time of writing the BusConnects planning application has not been submitted and therefore there is no detailed information to inform this cumulative assessment.</p>	<p>According to BusConnects Core Bus Corridor No. 16 Ringsend to City Centre PC3 brochure published in November 2020, The Ringsend to City Centre Core Bus Corridor (CBC) commences at Talbot Memorial Bridge. The route encompasses bus lane and cycle infrastructure on both north and south quays connecting the city centre with the Docklands and onto Ringsend and Irishtown. Priority for buses is provided along the entire length of the North Quays, from the Custom House to the 3-Arena at Tom Clarke Bridge, consisting of dedicated bus lanes in each direction. Segregated two-way cycle tracks will be provided in the campshires on both sides of the River Liffey. A cycle route will extend through Ringsend and Irishtown towards the Poolbeg Peninsula.</p> <p>The construction areas of the proposed DART+ West and BusConnects Core Bus Corridor No. 16 are in vicinity of each other at the Docklands Area. The proposed DART+ West project proposes to reconstruct Sheriff Street Bridge which would result in the closure of Sherriff Street Upper for approx. 18 months during construction. All traffic will be redirected to North Wall Quay during the closure.</p> <p>At this location, based on the current design information from the BusConnects project, this project proposes to construct continuous bus lanes in both directions on Custom House Quay and North Wall Quay between the Matt Talbot Bridge and the Tom Clarke Bridge. This will secure improved bus priority along the north quays. The historic Scherzer Bridges constrain the road width at the crossing of the canal entrance to George's Dock and the Royal Canal at Spencer Dock. These structures will be repositioned either side of the new bus and general traffic lane cross-section such that the pedestrian footway and cycle track will pass through them instead. In order to protect bus priority, right-turning restrictions are proposed at most junctions along the north quays where alternative access is available from Seville Place and Sheriff Street Upper to the north.</p> <p>The two-way cycle infrastructure on the North Wall Quay will be enhanced and will continue along the full extent of the north quays. A general landscaping arrangement is proposed along the north quays, with two lines of trees along the proposed cycleway. There are width constraints at the two small restaurant buildings at the Excise Walk junction, where a new boardwalk is proposed to overhang the river for a wider pedestrian space on the riverside.</p> <p>There are no environmental assessment documents available upon which to base an assessment of the potential in-combination effects. Therefore, this project has been excluded from further consideration herein. Should the project be progressed at some future date, it shall be subject to the proper statutory planning requirements, including EIA and AA, as appropriate.</p>	<p>In-combination adverse effects are not anticipated.</p>

Project Details	Project Description	Likely in-combination effects
<p><b>Project Name:</b> BusConnects Ballymun to City Centre Core Bus Corridor No. 3</p> <p><b>Applicant:</b> NTA</p> <p><b>Planning Application ref:</b> None.</p> <p><b>Location:</b> Glasnevin</p> <p><b>Planning Status:</b> At the time of writing the BusConnects planning application has not been submitted and therefore there is no detailed information to inform this cumulative assessment</p>	<p>According to BusConnects Ballymun to City Centre Core Bus Corridor No. 3 PC3 brochure published in November 2020, The Ballymun to City Centre Core Bus Corridor (CBC) commences on the Ballymun Road at its junction with St. Margaret's Road just south of M50 Junction 4. It is routed along Ballymun Road, St. Mobhi Road, Botanic Road, Prospect Road, Phibsborough Road, Constitution Hill and Church Street as far as Arran Quay, where it will join the existing traffic management regime on the North Quays. Priority for buses is provided along the entire route, consisting primarily of dedicated bus lanes in each direction, with alternative measures proposed at particularly constrained locations along St. Mobhi Road and Botanic Road in Glasnevin. Segregated cycle tracks will be provided along the full length of the route from the northern end to the Royal Canal just south of Hart's Corner in Phibsborough. An alternative cycle route is proposed along a part of the corridor in the southern half from Hart's Corner through Phibsborough to the Markets area of the western city centre.</p> <p>The construction areas of the proposed DART+ West and BusConnects Core Bus Corridor No. 3 overlap in Glasnevin at OBO 11 Prospect Road Bridge. The proposed DART+ West project proposes perway works within the MGWR and GSWR railway lines including OHLE installation and drainage works under OBO11 Prospect Road Bridge. Track lowering and parapet heightening works are also proposed for OBO11.</p> <p>At this location, based on the current design information from the BusConnects project, on Prospect Way, it is proposed to retain the bus lane and reduce from two general traffic lanes to a single traffic lane. This will accommodate a two-way cycle track on the northern side outside of the existing trees which will be retained. This cycle track will allow cyclists to bypass the Hart's Corner one-way traffic system, and also to link westward to the Finglas CBC. A two-way segregated cycle track will continue along the eastern side of Prospect Road to the Royal Canal where the cycle route will extend to Royal Canal Bank bypassing Phibsborough Village. This will allow cyclists to circulate around the northern and eastern sides of Hart's Corner fully segregated from traffic. The existing layout with a bus lane and two traffic lanes will be reduced to a bus lane and a single traffic lane along Prospect Road from Prospect Way to Lyndsay Road.</p> <p>There are no environmental assessment documents available upon which to base an assessment of the potential in-combination effects. Therefore, this project has been excluded from further consideration herein. Should the project be progressed at some future date, it shall be subject to the proper statutory planning requirements, including EIA and AA, as appropriate.</p>	<p>In-combination adverse effects are not anticipated.</p>
<p><b>Project Name:</b> BusConnects Swords to City Centre Core Bus Corridor No. 2</p> <p><b>Applicant:</b> NTA</p> <p><b>Planning application ref:</b></p> <p><b>Location:</b> Binn's Bridge</p> <p><b>Planning Status:</b> At the time of writing the BusConnects planning application has not been submitted and therefore there is no detailed information to inform this</p>	<p>According to BusConnects Swords to City Centre Core Bus Corridor No. 2 PC3 brochure, published in November 2020, The Swords to City Centre Core Bus Corridor (CBC) commences on the Swords Road at the Pinnock Hill junction and is routed along Swords Road, Drumcondra Road Upper &amp; Lower and Dorset Street to the junction with North Frederick Street. This CBC is then routed via North Frederick Street and Parnell Square East, where it will join the existing traffic management regime in the City Centre. Priority for buses is provided along the entire route, consisting primarily of dedicated bus lanes in both directions.</p> <p>The construction areas of the proposed DART+ West and BusConnects Core Bus Corridor No. 2 overlap at OBD223 Binn's Bridge. The proposed DART+ West project proposes track lowering and parapet heightening works for OBD223 Binn's Bridge. OHLE installations, utility diversions and drainage works will occur within the perway under the existing bridge.</p> <p>At this location, based on the current design information from the BusConnects project, works within the road carriageway over OBD223 Binn's Bridge are proposed.</p>	<p>In-combination adverse effects are not anticipated.</p>

Project Details	Project Description	Likely in-combination effects
cumulative assessment.		
<p><b>Project Name:</b> BusConnects Blanchardstown to City Centre Core Bus Corridor No.5</p> <p><b>Applicant:</b> NTA</p> <p><b>Planning Application ref:</b> None.</p> <p><b>Location:</b> R147 Navan Road/Ashtown Road</p> <p><b>Planning Status:</b> At the time of writing the BusConnects planning application has not been submitted and therefore there is no detailed information to inform this cumulative assessment.</p>	<p>According to the BusConnects Core Bus Corridor No.5 Blanchardstown to City Centre PC3 brochure published in November 2020, The Blanchardstown to City Centre Core Bus Corridor (CBC) commences on the north side of the South Blanchardstown Road junction with the N3. The CBC proceeds on the R121 Blanchardstown Road South into the Blanchardstown Shopping Centre. From a new terminus to the north-west of Blanchardstown Shopping Centre the CBC is routed onto the N3 Navan Road via the Snugborough Road junction, and follows the N3 and Navan Road as far as the junction with the Old Cabra Road. From here the CBC is routed along Old Cabra Road, Prussia Street and Manor Street to the junction with North Brunswick Street. The CBC is then routed via Blackhall Place as far as the junction with Ellis Quay and Arran Quay, where it will join the existing traffic management regime on the North Quays. Priority for buses is provided along the entire route, consisting primarily of dedicated bus lanes in both directions, with alternative measures proposed at particularly constrained locations.</p> <p>The construction areas of the proposed DART+ West and BusConnects Core Bus Corridor No. 3 overlap at Navan Road/Ashtown Road. The proposed DART+ West project proposes a new permanent OHLE compound will be constructed beside Navan Road station. The works will consist in the construction of OHLE Navan Road Permanent Maintenance Building and the associated urban development. At Ashtown, the proposed DART+ West project requires the re-routing of Ashtown Road to the west under both the railway and the Royal Canal via an underpass structure. A pedestrian and cyclist bridge is provided at Ashtown Station.</p> <p>At this location, based on the current design information from the BusConnects project, it is proposed to provide a continuous bus lane in both directions on the roundabout over the M50. It is intended to provide additional bus BusConnects Core Bus Corridors / 5. Blanchardstown &gt; City Centre 14 stops at Auburn Avenue. The cycle track along the Navan Road adjacent to Castleknock Manor has been removed and Castleknock Manor has been designated as a Quiet Street to cater for cyclists, as well as vehicular traffic. This cycle facility will tie into the proposed Greater Dublin Area Proposed Cycle Network that will run along Castleknock Manor.</p> <p>The bus lane will be directed up the on and off slip roads to provide access to the bus stops serving the Navan Road Parkway. The outbound traffic lanes will be rearranged from two general traffic lanes to one general traffic lane and one bus lane. It is proposed to modify the Navan Road roundabout at Ashtown Road to a signal controlled roundabout – keeping the existing trees on the central island. At this junction, it is proposed to terminate the two-way cycle way (west of the junction) and to transition to a segregated cycle track on each side of the carriageway (east of the junction).</p> <p>A general traffic lane and bus lane in both directions are to be provided along Navan Road, with one-way cycle tracks on both sides of the road. Proposed junction layouts include a right turn lane from Navan Road (westbound) to Kinvara Avenue. The previously proposed eastbound right turn lane into Baggot Road has been removed, although a right turn movement is allowed.</p> <p>There are no environmental assessment documents available upon which to base an assessment of the potential in-combination effects. Therefore, this project has been excluded from further consideration herein. Should the project be progressed at some future date, it shall be subject to the proper statutory planning requirements, including EIA and AA, as appropriate.</p>	<p>In-combination adverse effects are not anticipated.</p>

Project Details	Project Description	Likely in-combination effects
<p><b>Project Name:</b> Metrolink  <b>Applicant:</b> TII  <b>Planning Application ref:</b> None.  <b>Location:</b> Glasnevin  <b>Planning Status:</b> At the time of writing the Metrolink planning application has not been submitted and therefore there is no detailed information to inform this cumulative assessment.</p>	<p>According to the Metrolink preferred Route 2019 Report, the MetroLink project proposes a high-capacity, high-frequency rail line running from Swords to Charlemont, linking Dublin Airport, Irish Rail, DART, Dublin Bus and Luas services, creating fully integrated public transport in the Greater Dublin Area. As well as linking major transport hubs, MetroLink will connect key destinations including Ballymun, the Mater Hospital, the Rotunda Hospital, Dublin City University and Trinity College Dublin. Much of the 19 kilometre route will run underground, an exciting innovation for Irish public transport. The underground section of MetroLink is constructed by two separate methods. The stations are constructed using the “cut and- cover” method – excavating the site from ground level and covering it up again. The tunnels between stations are bored using Tunnel Boring Machines.</p> <p>The construction areas of the proposed DART+ West and Metrolink projects overlap at Glasnevin. The proposed DART+ West project proposes perway works within the MGWR and GSWR railway lines including OHLE installation and drainage works under OBO11 Prospect Road Bridge. Track lowering and parapet heightening works are also proposed for OBO11.</p> <p>At this location, based on the current design information from the MetroLink project, Glasnevin is a key station. This is where MetroLink will interchange with Iarnród Éireann where the north-western line from Sligo/Maynooth to Dublin, and the southwestern commuter line from Newbridge/ Hazelhatch to Grand Canal Dock converge at Whitworth Road increasing demand for both MetroLink and Iarnród Éireann services. The station location and design are changing slightly so we can avoid impacting the Court Apartment building at Dalcassian Downs. The scope of the works has increased and is impacting on property to the west of the station. We will work with the local community on issues around construction and with Iarnród Éireann on the interconnection.</p> <p>There are no environmental assessment documents available upon which to base an assessment of the potential in-combination effects. Therefore, this project has been excluded from further consideration herein. Should the project be progressed at some future date, it shall be subject to the proper statutory planning requirements, including EIA and AA, as appropriate.</p>	<p>In-combination adverse effects are not anticipated.</p>
<p><b>Project Name:</b> Metrolink  <b>Applicant:</b> TII  <b>Planning Application ref:</b> None.  <b>Location:</b> Railway Tracks West of OBO11 Prospect Road to Glasnevin Junction  <b>Planning Status:</b> At the time of writing the Metrolink planning application has not been submitted and therefore there is no detailed information to inform this cumulative assessment.</p>	<p>According to the Metrolink preferred Route 2019 Report, the MetroLink project proposes a high-capacity, high-frequency rail line running from Swords to Charlemont, linking Dublin Airport, Irish Rail, DART, Dublin Bus and Luas services, creating fully integrated public transport in the Greater Dublin Area. As well as linking major transport hubs, MetroLink will connect key destinations including Ballymun, the Mater Hospital, the Rotunda Hospital, Dublin City University and Trinity College Dublin. Much of the 19 kilometre route will run underground, an exciting innovation for Irish public transport. The underground section of MetroLink is constructed by two separate methods. The stations are constructed using the “cut and- cover” method – excavating the site from ground level and covering it up again. The tunnels between stations are bored using Tunnel Boring Machines.</p> <p>The construction areas of the proposed DART+ West and Metrolink projects overlap along a section of the perway at Glasnevin, west of OBO11 Prospect Road Bridge.</p> <p>The proposed DART+ West project proposes a number of different interventions required on the MGWR line: OHLE installation, general track lowering, structural interventions (U-concrete section in OBD221 Glasnevin Maintenance Bridge and OBD222 Cross Guns Bridge, OBG foundation reinforcement with jet grouting and UBD 233 rail fastening system alteration), Cable Management System, drainage, and some minor civil works.</p> <p>At this location, based on the current design information from the MetroLink project, track realignment works are proposed to the MGWR &amp; GSWR line west of the proposed Metrolink Glasnevin station. A new bridge is also proposed to carry the realignment MGWR line over the GSWR line.</p> <p>There are no environmental assessment documents available upon which to base an assessment of the potential in-</p>	<p>In-combination adverse effects are not anticipated.</p>

Project Details	Project Description	Likely in-combination effects
	<p>combination effects. Therefore, this project has been excluded from further consideration herein. Should the project be progressed at some future date, it shall be subject to the proper statutory planning requirements, including EIA and AA, as appropriate.</p>	
<p><b>Project Name:</b> Metrolink  <b>Applicant:</b> TII  <b>Planning application ref:</b> None  <b>Location:</b> Tara Street  <b>Planning Status:</b> At the time of writing the Metrolink planning application has not been submitted and therefore there is no detailed information to inform this cumulative assessment.</p>	<p>According to the Metrolink preferred Route 2019 Report, the MetroLink project proposes a high-capacity, high-frequency rail line running from Swords to Charlemont, linking Dublin Airport, Irish Rail, DART, Dublin Bus and Luas services, creating fully integrated public transport in the Greater Dublin Area. As well as linking major transport hubs, MetroLink will connect key destinations including Ballymun, the Mater Hospital, the Rotunda Hospital, Dublin City University and Trinity College Dublin. Much of the 19 kilometre route will run underground, an exciting innovation for Irish public transport. The underground section of MetroLink is constructed by two separate methods. The stations are constructed using the “cut and- cover” method – excavating the site from ground level and covering it up again. The tunnels between stations are bored using Tunnel Boring Machines.</p> <p>The construction areas of the proposed DART+ West and Metrolink projects are in vicinity of each, whereby the DART+ West project electrification terminates just north of the River Liffey, while Metrolink proposes the construction of Tara Street station in vicinity of the existing Tara Street train station.</p> <p>According to the Metrolink preferred Route 2019 Report, Tara is an important station as MetroLink will interconnect with DART and Iarnród Éireann services here, one of the major strategies behind the new alignment. The Emerging Preferred Route necessitated acquiring and demolishing the Colledge Gate complex and the Sport and Fitness Markievicz centre owned by Dublin City Council. While the site would be available afterwards for new development, the loss of the current apartment block and valued public amenity is a serious impact.</p> <p>There are no environmental assessment documents available upon which to base an assessment of the potential in-combination effects. Therefore, this project has been excluded from further consideration herein. Should the project be progressed at some future date, it shall be subject to the proper statutory planning requirements, including EIA and AA, as appropriate.</p>	<p>In-combination adverse effects are not anticipated.</p>
<p><b>Project Name:</b> Luas Finglas  <b>Applicant:</b> TII  <b>Planning Application ref:</b> None  <b>Location:</b> Broombridge  <b>Planning Status.</b> At the time of writing the Luas Finglas planning application has not been submitted and therefore there is no detailed information to inform this cumulative assessment.</p>	<p>According to the Luas Finglas Public Consultation Preferred Route 2021 Brochure, Luas Finglas is the next extension of the Luas Green Line and will create a new public transport connection between the communities of Charlestown, Finglas Village, Finglas west, St Helena’s, Tolka Valley and the city centre. The proposed route will include four new stops along its 3.9 kilometre length. These are at St Helena’s, Finglas Village, St Margaret’s Road and Charlestown. A 350-vehicle Park and Ride facility will be provided near the St Margaret’s Road stop, close to the M50. Most of the route will be built using grass track, an attractive and sustainable innovation for urban transport in Ireland.</p> <p>The construction areas of the proposed DART+ West and Luas Finglas projects overlap at Broomebridge. The proposed DART+ West project proposes the modification of Broome bridge which consists of the demolition of the current deck and reconstruction of a new precast arch deck. During the reconstruction of the bridge deck, the road access to the bridge will be closed. Therefore, until the construction is complete, passing traffic will be diverted. OHLE installations and utility diversions will occur within the perway under the existing bridge.</p> <p>At this location, based on the current design information from the Luas Finglas project, the preferred route commences at the existing Broombridge Luas stop and travels north crossing the Royal Canal and Maynooth rail line over a new bridge. Approximately 70% of which will be in grass track. From there, the line proceeds north to Ballyboggan Road alongside the Dublin Industrial Estate.</p> <p>There are no environmental assessment documents available upon which to base an assessment of the potential in-combination effects. Therefore, this project has been excluded from further consideration herein. Should the project be</p>	<p>In-combination adverse effects are not anticipated.</p>

Project Details	Project Description	Likely in-combination effects
	<p>progressed at some future date, it shall be subject to the proper statutory planning requirements, including EIA and AA, as appropriate.</p>	
<p><b>Project Name:</b> Royal Canal Urban Greenway  <b>Applicant:</b> TII  <b>Planning Application ref:</b> None  <b>Location:</b> eastwards from the Kildare County Boundary to the Old Navan Road (near 12th Lock)  <b>Planning Status:</b> At the time of writing the Royal Canal Urban Greenway planning application has not been submitted and therefore there is no detailed information to inform this cumulative assessment.</p>	<p>Fingal County Council in conjunction with the NTA and Waterways Ireland is proposing to develop the Royal Canal Urban Greenway, which will provide a safe, high quality, sustainable transport and recreational route serving Castleknock, Blanchardstown, Clonsilla, Coolmine and the wider Dublin 15 area.</p> <p>The Royal Canal Urban Greenway is a pedestrian and cycle route which is to be constructed along /adjacent to the Royal Canal as it heads eastwards from the Kildare County Boundary to the Old Navan Road (near 12th Lock) to connect with a previously constructed section of the Greenway. The proposed development is a joint scheme, Fingal County Council (the Client) is the scheme promoter in conjunction with the National Transport Authority (NTA) as the funding body and Waterways Ireland (WI) who are the principal property owner.</p> <p>The Royal Canal Urban Greenway will provide a shared pedestrian/cycle route on/adjacent to the Royal Canal towpath over an approximate length of 8.1km which will tie in with the completed section of the Ashtown Greenway at Talbot Bridge (Old Navan Road) in the east and the Kildare County Council greenway section at the County boundary in the west.</p> <p>The construction areas of the proposed DART+ West and Royal Canal Urban Greenway projects overlap along between the Kildare County Boundary to the east and the Old Navan Road (near 12th Lock). The proposed DART+ West includes OHLE installation, drainage and utility diversions as well as the closure and the provision of replacement road infrastructure at Porterstown and Barberstown level crossings.</p> <p>There are no environmental assessment documents available upon which to base an assessment of the potential in-combination effects. Therefore, this project has been excluded from further consideration herein. Should the project be progressed at some future date, it shall be subject to the proper statutory planning requirements, including EIA and AA, as appropriate.</p>	<p>In-combination adverse effects are not anticipated.</p>
<p><b>Project Name:</b> The Royal Canal Greenway Cycle and Pedestrian Route Phase 4  <b>Applicant:</b> Dublin City Council  <b>Planning Application ref:</b> None  <b>Location:</b> between Phibsborough in Dublin 7 and Ashtown in Dublin 15  <b>Planning Status:</b> At the time of writing the Royal Canal Greenway Cycle and Pedestrian Route Phase 4 planning</p>	<p>The Royal Canal Greenway Cycle and Pedestrian Route Phase 4 scheme commences at Cross Guns Bridge on Phibsborough Road continuing along the Royal Canal to the Village Centre at Ashtown and is approximately 4.2km in length as previously granted under planning reference number of the existing Part 8 in place: 2870/15.</p> <p>The amending Part VIII Report for this project proposes to widen the towpath by narrowing the canal at the following three locations:</p> <ul style="list-style-type: none"> <li>• West of Lock 6 for approximately 600m, narrowing by up to 2.15m</li> <li>• West of Broombridge for approximately 345m, narrowing by up to 1.4m</li> <li>• West of Lock 8 for approximately 85m, narrowing by up to 1.75m</li> </ul> <p>A Part VIII Planning Report and an Ecological Impact Assessment have been prepared for the project.</p> <p>The primary objective of the scheme is to provide a premium quality cycle and pedestrian facility with environmental enhancements to encourage and promote cycling and walking in the Dublin region</p> <p>The construction areas of the proposed DART+ West and The Royal Canal Greenway Cycle and Pedestrian Route Phase 4</p>	<p>In-combination adverse effects are not anticipated.</p>

Project Details	Project Description	Likely in-combination effects
<p>application has not been submitted and therefore there is no detailed information to inform this cumulative assessment.</p>	<p>projects overlap between Phibsborough in Dublin 7 and Ashtown in Dublin 15.</p> <p>The proposed DART+ West includes OHLE installation, drainage and utility diversions as well as the closure and the provision of replacement road infrastructure at Ashtown level crossings.</p>	
<p><b>Project Name:</b> Kellystown Road Project</p> <p><b>Applicant:</b> TII</p> <p><b>Planning Application ref:</b> None</p> <p><b>Location:</b> Kellystown Road</p> <p><b>Planning Status:</b> At the time of writing the Kellystown road project planning application has not been submitted and therefore there is no detailed information to inform this cumulative assessment.</p>	<p>According to the Kellystown Road Route Selection Report (September 2020), the Kellystown Road scheme includes the provision of an arterial link to the existing road network in the wider Blanchardstown area and walking and cycling infrastructure.</p> <p>The construction areas of the proposed DART+ West and Kellystown Road projects overlap at Porterstown level crossing and Barberstown level crossing. The proposed DART+ West includes OHLE installation, drainage and utility diversions as well as the closure and the provision of replacement road infrastructure at Porterstown and Barberstown level crossings.</p> <p>There are no environmental assessment documents available upon which to base an assessment of the potential in-combination effects. Therefore, this project has been excluded from further consideration herein. Should the project be progressed at some future date, it shall be subject to the proper statutory planning requirements, including EIA and AA, as appropriate.</p>	<p>In-combination adverse effects are not anticipated.</p>
<p><b>Project Name:</b> Dunboyne Distributor Road</p> <p><b>Applicant:</b> Meath County Council</p> <p><b>Planning Application ref:</b> None</p> <p><b>Location:</b> Dunboyne</p> <p><b>Planning Status:</b> At the time of writing the Dunboyne Eastern Distributor project planning application has not been submitted. The proposed</p>	<p>According to the Iarnród Éireann Technical Submission Report prepared in February 2022 by Meath County Council, the Dunboyne Eastern Distributor Road project consists of a new road linking the L2228 approximately 200m west of the existing Dunboyne train station in Dunboyne, Co. Meath. Cycling infrastructure will also be provided. A part of the road development, a new bridge is proposed over the existing railway line approximately 750m north of Dunboyne train station.</p> <p>The construction areas of the proposed DART+ West project and Dunboyne Distributor Road project overlap at the proposed bridge location approx. 750m north of Dunboyne Station. There is potential for construction phases of both projects to overlap given that the planning application for the Dunboyne Distributor Road project has not yet been submitted.</p> <p>The works proposed as part of the DART+ West project include perway works only at this location, consisting of OHLE installation, drainage and utility diversions.</p>	<p>In-combination adverse effects are not anticipated.</p>

Project Details	Project Description	Likely in-combination effects
<p>road is expected to progress to application for Planning Permission within Q2 of 2022. The works associated with the delivery of the road are anticipated to go through the procurement process in Q4 of 2022 with Construction of same in Q1 2023.</p>		

## 7. SUMMARY

This NIS has been prepared in accordance with the relevant provisions of the Habitats Directive, the Habitats Regulations and the Planning and Development Act, as well as the relevant case law and current guidance. In particular, this NIS has been prepared with the decisions of the High Court and the Supreme Court<sup>9</sup> decisions in mind, on how AA should be undertaken.

An overview of the proposed development is presented in Section 2.1 of this NIS, with a detailed description of the proposed development contained in Appendix A ('Description of the Proposed Development') to this NIS. This contains details of all aspects of the proposed development, which could by themselves or in combination with other plans and projects, affect one or more European sites, on view of the relevant Conservation Objectives.

Adverse effects are identified in Section 3 and an assessment of these adverse effects is contained in Section 4. The assessment of adverse effects contains complete, precise, and definitive findings and conclusions, informed by the desk study and field surveys, which were undertaken in accordance with best practice guidance. No scientific doubt remains as to the absence of adverse effects. ROD, as the authors of this NIS, recommend that the Competent Authority determine that, given the full and proper implementation of the mitigation prescribed in this NIS, the proposed development, either individually or in combination with other plans or projects, will not adversely affect the integrity of the Rye Water Valley/Cartron SAC, the South Dublin Bay and the River Tolka Estuary SPA, the North Bull Island SPA or any other European site.

---

<sup>9</sup> See *Kelly (Eoin) v An Bord Pleanála* [2014] I.E.H.C. 400 where the High Court (Finlay Geoghegan J.) held that section 177V(1) of the Planning and Development Act 2000 (as amended) must be construed so as to give effect to Article 6(3) of the Habitats Directive, and hence, an appropriate assessment carried out under section 177V(1) of the 2000 Act must meet the requirements of Article 6(3) of the Habitats Directive as interpreted by jurisprudence of the CJEU case law; *Connelly v An Bord Pleanála* [2018] 2 I.L.R.M 453; [2018] I.E.S.C. 31.

## 8. CONCLUSION

This NIS has been prepared in accordance with the relevant provisions of the Habitats Directive, the Habitats Regulations and the Planning and Development Act, as well as the relevant case law and current guidance. It has demonstrated that, in the absence of appropriate mitigation, the proposed DART+ West project, individually or in combination with other plans or projects, would adversely affect the integrity of three European sites, namely of the Rye Water Valley/Carton SAC, the South Dublin Bay and the River Tolka Estuary SPA and the North Bull Island SPA, in view of their Conservation Objectives. In light of this finding, this NIS has prescribed appropriate mitigation to eliminate or minimise such effects. Any residual effects, either individually or in combination with other plans or projects, have been assessed as not constituting adverse effects on the integrity of the European sites concerned. This assessment has been undertaken on the basis of the best scientific knowledge in the field and the Precautionary Principle. No reasonable scientific doubt remains as to the absence of such effects.

It is the considered opinion of ROD-IDOM, as the author of this NIS, that, in making its AA in respect of the proposed DART+ West project, An Bord Pleanála, as the Competent Authority in this case, may determine that, given the full and proper implementation of the mitigation prescribed in this NIS, the proposed development, either individually or in combination with other plans or projects, will not adversely affect the integrity of the Rye Water Valley/Carton SAC, the South Dublin Bay and the River Tolka Estuary SPA, the North Bull Island SPA or any other European site. Furthermore, ROD-IDOM recommend that it be a binding condition of any consent granted in respect of the proposed development that the mitigation prescribed in this NIS be fully and properly implemented.

## 9. REFERENCES

- Campbell, C., Hodd, R. & O'Neill, F. (2019). *The monitoring and assessment of *Petalophyllum ralfsii* (Petalwort) in the Republic of Ireland 2016–2018. Irish Wildlife Manuals, No. 109.* NPWS, Department of Culture, Heritage and the Gaeltacht, Ireland)
- CIRIA (2001) *C532 Control of water pollution from construction sites: guidance for consultants and contractors.* Griffin Court, 15 Long Lane, London, EC1A9PN, UK
- Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive). Official Journal of the European Communities, L206/7.
- DEHLG (2010) *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities.* Department of the Environment, Heritage and Local Government, Dublin.
- Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (the Birds Directive). Official Journal of the European Union, L20/7.
- EC (2018) *Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC.* European Commission, Brussels.
- EC (2021) *Assessment of plans and Projects in relation to Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC.* Environment Directorate-General of the European Commission.
- EC (2007) *Guidance Document on Article 6(4) of the 'Habitats Directive' 92/43/EEC. Clarification of the Concepts of Alternative Solutions, Imperative Reasons of Overriding Public Interest, Compensatory Measures, Overall Coherence.* Opinion of the European Commission.
- European Communities (Birds and Natural Habitats) Regulations, 2011. *SI No. 477/2011.*
- European Communities (Birds and Natural Habitats) (Amendment) Regulations, 2013. *SI No. 499/2013.*
- European Communities (Birds and Natural Habitats) (Amendment) Regulations, 2015. *SI No. 355/2015.*
- IFI (2016) *Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters.* Inland Fisheries Ireland, Dublin.
- Inger, R., Bearhop, S., Robinson, J.A. & Ruxton, G. (2006) Prey choice affects the trade-off balance between predation and starvation in an avian herbivore. *Animal Behaviour*, 71, 1335-1341.
- Jaroslow, B. (1979). A review of factors involved in bird-tower kills, and mitigative procedures. Pp. 469-473 in: G.A. Swanson, tech. coord. *The mitigation symposium: a national workshop on mitigation losses of fish and wildlife habitats.* U.S. Forest Service General Technical Report RM-65.
- Lyons, M.D. & Kelly, D.L. (2013) *Conservation Status Assessment for Petrifying Springs.* Unpublished report to National Parks and Wildlife Service.
- Moorkens, E.A. & Killeen, I.J. (2011) *Monitoring and Condition Assessment of Populations of *Vertigo geyeri*, *Vertigo angustior* and *Vertigo moulinsiana* in Ireland. Irish Wildlife Manuals, No. 55.* National Parks and Wildlife Service, Department of Arts, Heritage and Gaeltacht, Dublin, Ireland.
- NPWS (2010) *Circular NPW 1/10 & PSSP 2/10 Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities.* Department of the Environment, Heritage and Local Government, Dublin.

NPWS (2011) *Conservation Objectives: River Barrow and River Nore SAC 002162. Version 1.0.* National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2013a) *Site Synopsis for the Rye Water Valley/ Carton SAC [001398].* Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2013b) *Site Synopsis for the North Dublin Bay SAC [000206].* Published 06/11/2013. National Parks & Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin.

NPWS (2013c) *Conservation Objectives for the North Dublin Bay SAC [000206]. Version 1.* National Parks & Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin.

NPWS (2013d) *Conservation Objectives Supporting Document for the Malahide Estuary SAC [000205]. Version 1.* National Parks & Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin.

NPWS (2013e) *Site Synopsis for the Malahide Estuary SPA [004025] Published 23/08/2013.* National Parks & Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin

NPWS (2013f) *Conservation Objectives for the Malahide Estuary SPA [004025]. Version 1.* National Parks & Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin.

NPWS (2013g) *Conservation Objectives Supporting Document for the North Dublin Bay SAC – Marine Habitats. Version 1.* National Parks & Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin.

NPWS (2013h) *Conservation Objectives Supporting Document for the Malahide Estuary SAC [000205] – coastal habitats. Version 1.* National Parks & Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin.

NPWS (2013i) *Conservation Objectives Supporting Document for the Malahide Estuary SPA [004025]. Version 1.* National Parks & Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin.

NPWS (2014a) *Site Synopsis for the North Bull Island SPA [004006]. Published 25/03/2014.* NPWS, Department of Arts, Heritage and the Gaeltacht, Dublin

NPWS (2014b) *Conservation Objectives Supporting Document for the South Dublin Bay and River Tolka Estuary SPA [004024]. Version 1.* National Parks & Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin.

NPWS (2014c) *Supporting Document for the North Bull Island SPA.* National Parks & Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin.

NPWS (2015a) *Conservation Objectives for the South Dublin Bay and River Tolka Estuary SPA [004024]. Version 1.* National Parks & Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin.

NPWS (2015b) *Site Synopsis for the South Dublin Bay and River Tolka Estuary SPA [004024].* Published 30/05/2015. National Parks & Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin.

NPWS (2015c) *Conservation Objectives for the North Bull Island SPA [004006]. Version 1.* NPWS, Department of Arts, Heritage and the Gaeltacht, Dublin.

NPWS (2015d) *Conservation objectives for the Slieve Tooey/Tormore Island/Loughros Beg Bay SAC [000190].* Generic Version 5.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2017a) *Site Synopsis for the Malahide Estuary SAC [000205].* Published 26/05/2017. National Parks & Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin.

NPWS (2019a) *Natura 2000 Standard Data Form for the Rye Water Valley/ Carton SAC [001398]*. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs

NPWS (2020a) *Natura 2000 Standard Data Form for North Bull Island SPA [004006]*. National Parks & Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin.

NPWS (2020b) *Natura 2000 Standard Data Form for the North Dublin Bay SAC [000206]*. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2020c) *Natura 2000 Standard Data Form for the Malahide Estuary SAC [000205]*. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2020c) *Natura 2000 Standard Data Form for the Malahide Estuary SPA [004025]*. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2021a) *Conservation objectives for Rye Water Valley/Carton SAC [001398]. Generic Version 8.0*. Department of Culture, Heritage and the Gaeltacht.

NPWS (2021b) *Natura 2000 Standard Data Form for the South Dublin Bay & Tolka Estuary SPA [004024]*. Updated October 2020. National Parks & Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin.

NPWS (2021c) *Online Map Viewer* <<http://webgis.npws.ie/npwsvviewer/>> [Accessed 16/0/2021]. Department of Culture, Heritage and the Gaeltacht, Dublin.

OPR (2021) *Practice Note PN01: Appropriate Assessment Screening for Development Management*. Office of the Planning Regulator, Dublin.

People Over Wind and Peter Sweetman v. Coillte Teoranta [2018] C-323/17.

Planning and Development Act, 2000. No. 30 of 2000.

Planning and Development (Amendment) Act, 2002. No. 32 of 2002.

Planning and Development (Strategic Infrastructure) Act, 2006. No. 27 of 2006.

Planning and Development (Amendment) Act, 2010. No. 30 of 2010.

Robinson, J. A., Colhoun, K., Gudmundsson, K. A., Boertman, D., Merne, O. J., O'Briain, M., Portig, A. A., Mackey, K. & Boyd, H. (2004). *Light-bellied Brent Goose Branta bernicla hrota (East Canadian High Arctic population) in Canada, Ireland, Iceland, France, Greenland, Scotland, Wales, England, the Channel Islands and Spain. 1960/61 – 1999/2000*. Waterbird Review Series. The Wildfowl & Wetlands Trust/Joint Nature Conservation Committee. Slimbridge. UK.

Rossmore v. An Bord Pleanála [2014] IEHC 557.

Scott Cawley (2017). *Natura Impact Statement – Information for Stage 2 Appropriate Assessment. Proposed Residential Development St. Paul's College, Sybil Hill, Raheny, Dublin 5*. Scott Cawley Ltd., Dublin.

Sweetman & Others v. An Bord Pleanála [2013] C-258/11.

Tattersfield, P. & McInnes, R. (2003) *Hydrological requirements of Vertigo moulinsiana on three candidate Special Areas of Conservation in England (Gastropoda, Pulmonata: Vertiginidae)* In: Speight, M.C.D., Moorkens, E.A. & Falkner, G. (eds) Proceedings of the Workshop on Conservation Biology of European Vertigo species. *Heldia* 5: 135-150.