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## **Chapter 26**

### **Cumulative Effects**

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## 26. CUMULATIVE EFFECTS

### 26.1 Introduction

This chapter documents the cumulative effects assessment (CEA) arising from the Proposed Development with other existing and/or approved plans and projects during the Construction and Operational Phases of the DART+ Coastal North project.

This chapter outlines the applicable legislation and guidance used in its preparation (Section 26.2), presents the methodology adopted to identify and assess plans and projects that have the potential for cumulative effects (Section 26.3), and presents the results of the assessments (Section 26.4).

### 26.2 Legislation, Policy and Guidance

#### 26.2.1 Legislation

This assessment is prepared in accordance with the requirements of Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment as amended by Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 (“the EIA Directive”).

The EIA Directive provides *inter alia*, at Annex (3)(g), that the criteria to be applied in determining whether the projects listed in Annex II should be subject to an environmental assessment include:

*‘the cumulation of the impact of other existing and/or approved projects’;*

By virtue of the 2001 Act every application for a railway order is subject to an environmental impact assessment. Section 37(3)(e) provides that an application for a railway order shall be accompanied by “a report on the likely effects on the environment (referred to subsequently . . . as an ‘environmental impact assessment report’) of the proposed railway works”. Annex IV (5) of the EIA Directive provides *inter alia* that the EIAR shall contain:

*A description of the likely significant effects of the project on the environment resulting from, inter alia:*

.....

*e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources;”*

In addition, Annex IV.5 provides that:

*“The description of the likely significant effects on the factors specified in Article 3(1) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the project. This description should take into account the environmental protection objectives established at Union or Member State level which are relevant to the project”.*

The cumulative assessment of effects in relation to the DART+ Coastal North Project has been undertaken in accordance *inter alia* with the EIA Directive and the Transport (Railway Infrastructure) Act 2001 (“the 2001 Act”) (as amended *inter alia* by the European Union (Railway Orders) (Environmental Impact Assessment) (Amendment) Regulations 2021 (S.I. No. 743 of 2021) which give further effect to the transposition of the EIA Directive.

An Environmental Impact Assessment Report (“EIAR”) must be prepared in respect of proposed railway works and must accompany each application for a Railway Order that is made to An Bord Pleanála (“the Board”).

### 26.2.2 Policy

A review of plans, programmes and projects included in the national, regional and local planning documents listed in Table 26-4 in Section 26.4.1.1 of this Chapter was undertaken.

### 26.2.3 Guidance

This Chapter has been prepared with reference to the following guidance documents:

- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment. Department of Housing, Planning and Local Government (DoHPLG), (2018).
- Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EIAR). EPA, (2022).
- Advice Note seventeen: Cumulative effects assessment relevant to nationally significant infrastructure projects, 2019. Published by the Planning Inspectorate, an executive agency of the Ministry of Housing, Communities and Local Government of the United Kingdom, (2019).
- Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions. EC, (1999).

## 26.3 Methodology

Cumulative effects result from the addition of many minor or significant effects, including effects of other projects, to create larger, more significant effects (EPA,2022). Additional cumulative effects can be caused due to incremental changes by other past, present or reasonably foreseeable projects together with the Proposed Development.

As required by the EIA Directive, the assessment identifies the likely direct, indirect, secondary, cumulative, transboundary, short-term, medium term or long-term both positive or negative effects as a result of the identified plans or projects in cumulation with the Proposed Development. The detailed methodology for identifying and assessing the cumulative effects is detailed in the sections below. The significance of effects follows Table 3.4 Descriptions of effects defined by the EPA in the 2022 Guidelines (replicated in Table 1-2 of Chapter 1 of this EIAR). The CEA is a co-ordinated approach which has been led by the EIA co-ordination team.

This cumulative assessment considered cumulative effects that are:

1. Likely;
2. Significant; and
3. Relating to a future event which is reasonably foreseeable.

### 26.3.1 Study Area

There is no established study area for the CEA however the assessment takes into consideration the previously defined study areas defined by the specialist assessments in each of their respective chapters of this EIAR. These are informed by the appropriate guidance documents together with professional judgement associated with the potential for cumulative environmental effects to occur based on the location, nature, and characteristics of the cumulative effects of projects and plans with the Proposed Development.

Table 26-1 identifies the cumulative assessment study areas defined for each environmental factor which is based on project specific characteristics and the potential for cumulative effects to occur.

**Table 26-1 Cumulative Assessment Study Areas by Environmental Factor**

Environmental Factor	Distance from Proposed Development boundary
Traffic and Transportation	500m and informed by traffic modelling
Population	500m and community effects
Biodiversity	2km (15km for EIA, SHDs, SIDs & LRDs)
Land and Soils	100m wide corridor along most of the existing railway lands
Water	500m and all downstream watercourses
Hydrogeology	250m corridor along most of the existing railway lands
Air Quality	350m construction dust and 200m of impacted road links
Climate	N/A (Projects of National Importance - as changes to carbon emissions are assessed against national targets)
Noise and Vibration	300m for noise and 50m for vibration.
Landscape and Visual	500m for 'large scale development' i.e., industrial / commercial, infrastructural, and residential over 100 units.  Where required, specific developments outside of these distances are also considered where for reason of scale of development and specific landscape / visual relationship, potential for significant impact exists.
Material Assets: Agricultural and Non-Agricultural	50m from the Proposed Development boundary.
Material Assets (Utilities)	50m from the Proposed Development boundary.

Environmental Factor	Distance from Proposed Development boundary
Resource and Waste	N/A Waste assessment is informed by regional data on waste. Study area of Eastern-Midlands Waste Region (EMWR) is applied to waste assessment.
Architectural	50m from the Proposed Development boundary.
Archaeological and Cultural Heritage	50m from the Proposed Development boundary.
Human Health	The greatest extent of other environmental factors, which is 500m in this instance.
EMC and Stray Current	100m from the Proposed Development boundary.

The DART+ Coastal North transport assessment in Chapter 6 (Traffic and Transportation) of this EIAR incorporates the NTA's ERM demand modelling associated with the DART+ Programme and for all projects contained in the Transport Strategy for the Greater Dublin Area. As such, the MetroLink and BusConnects schemes are included as part of the transport model and associated operational assessment of vehicular emissions (including air and noise) and are therefore inherently cumulative assessments. The EIAR already includes these within the defined assessment parameters contained in the respective chapters in this EIAR. Therefore, no additional cumulative assessment of these aspects is required for those projects. These assumptions are clearly stated in the technical chapters and in this CEA assessment matrix. This approach has been kept under review throughout the CEA in the event that any new existing or approved projects are identified which are not included in the models and have the potential to exceed the growth data model (and not included in the modelled forecasts). This approach is consistent with UK guidance Advice Note 17 (MHCLG, 2019).

### 26.3.2 Cumulative Effects Assessment

As per the EIA Directive, the CEA must assess the potential for *the cumulation of effects with other existing and/or approved projects*. However, to ensure a robust assessment of the potential cumulative effects on other relevant projects which may not yet have their statutory approvals, a tiered approach has been adopted, as outlined in Table 26-2 below.

**Table 26-2 Tiered Approach to Identifying and Assessing Potential Cumulative Effects**

Tier	Description	Level of Detail
Tier 1	Existing or approved projects (Staged approach) Plans or programmes to include relevant land use, planning and transport plans/strategies relevant to the project	Decreasing level of detail likely to be available. 
Tier 2	'Other' identified projects including NTA projects that are in the public domain/at preliminary design i.e., not active/granted but have the potential for cumulative effects with the project	

The methodology for this tiered approach is described in the sections below.

### 26.3.3 Tier 1 – Methodology for Assessment

Tier 1 includes the assessment of existing and/ or approved plans/programmes or projects.

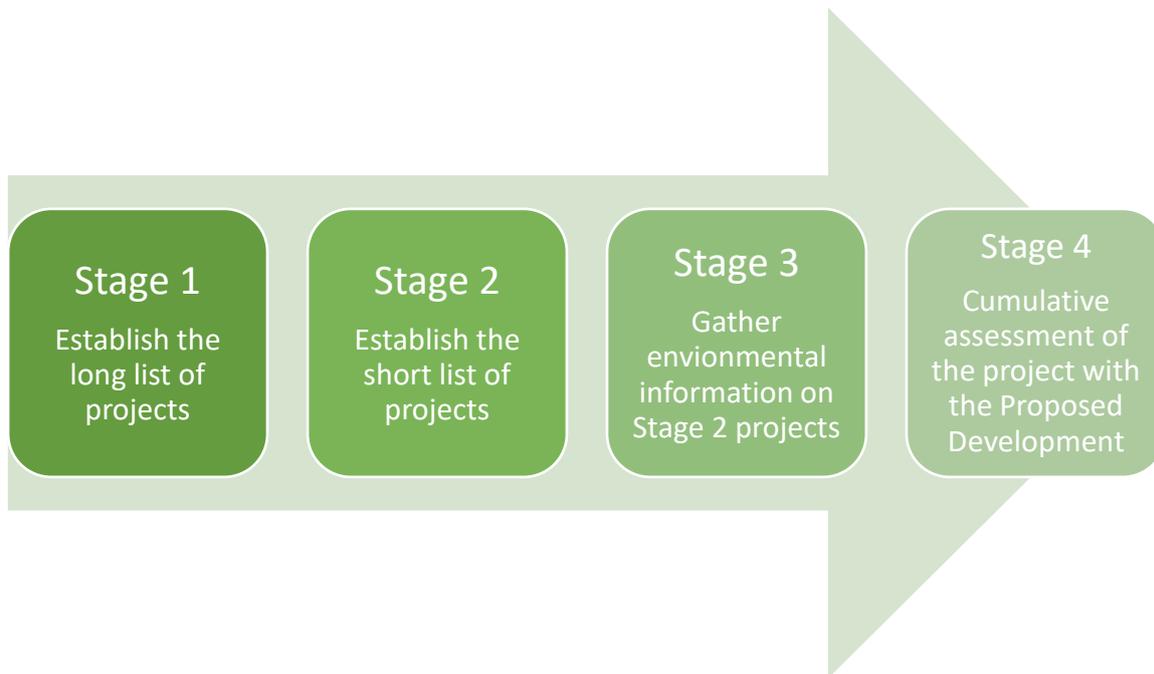
### 26.3.3.1 Identification of Plans and Programmes

A list of relevant national, regional, and local plans and programmes identified as having the potential to have a cumulative effect with the Proposed Development was collated. The Plans and Programmes for inclusion in the CEA align with the Planning Report which accompanies the Railway Order application. The assessment of plans and programmes is detailed in Section 26.4.1.1 of this chapter.

### 26.3.3.2 Identification of Existing and / or Approved Projects

To identify and assess the likely significant cumulative effects with existing and/or approved projects, a four-stage approach was adopted which is informed by Advice Note 17: Cumulative effects assessment relevant to nationally significant infrastructure projects, published in 2019 by the Planning Inspectorate, an executive agency of the Ministry of Housing, Communities and Local Government of the United Kingdom (MHCLG, 2019) hereafter referred to as 'Advice Note 17'.

The four stage approach is summarised in Image 26-1 and is discussed in detail below.



**Image 26-1 Staged approach for Tier 1 cumulative assessment**

**Stage 1 – Establish the long list of Projects** - The first step of undertaking CEA is to identify those projects or activities with which the Proposed Development may interact to produce a cumulative impact. These interactions may arise during the construction or operational phases. The study area for each of the EIAR topics (Chapters 6 – 24) was first defined by each topic specialist as in Table 26-1. The study area for the majority of the topics extends from approximately 50m to 2km from the development boundary of the Proposed Development.

A list of relevant projects occurring within 2km of the development boundary of the Proposed Development was collated, which includes a total of approximately 8,000 individual projects.

In considering Biodiversity effects, the study area was extended to 15km for some key large scale development types, including all Strategic Housing Developments (SHD), Strategic Infrastructure Developments (SID), Large-scale Residential Developments (LRD), and any application that was subject to an Environmental Impact Assessment (EIA). The Climate assessment also considered projects of national importance, as changes to carbon emissions are assessed against national targets. Regional data was used to inform the Resource and Waste Management assessment, with the study area for the Eastern-Midlands Waste Region (EMWR) being applied.

A desk study was conducted to source publicly available information on projects within the defined study area using internet searches of relevant websites, planning databases and other available sources to identify other projects falling within the study area, which may have the potential to give rise to cumulative effects with the Proposed Development.

The search included national planning applications, Large-scale Residential Developments (LRD) and Part 8 applications using National Planning applications datasets (DHLGHa, 2023), the EIA Portal (DHLGHb, 2023) and relevant local authority websites. Relevant applications including Strategic Infrastructure Developments (SID) and Strategic Housing Developments (SHD) were obtained from a search of An Bord Pleanála's website (ABP, 2023).

The following sources of information were used:

- An Bord Pleanála (ABP) website (<http://www.pleanala.ie/index.htm>) – for details of Strategic Infrastructure Developments (SIDs) and Strategic Housing Developments (SHDs);
- Local authorities (Dublin City Council, Fingal County Council, Meath County Council and Louth County Council) for up to date planning application and local development plan designations;
- National Planning Application Database (<https://data.gov.ie/dataset/national-planning-applications>) to download and cross-reference planning applications sent from Local Authorities;
- Projects being planned by the National Transport Authority (the NTA website, (<https://www.nationaltransport.ie/planning-and-investment/transport-investment/projects/>), provides detail) as part of other major transport projects and programmes in accordance with the Greater Dublin Area Transport Strategy 2022-2042;
- Project Ireland 2040, which combines the National Development Plan and National Planning Framework (gov.ie - Project Ireland 2040 ([www.gov.ie](http://www.gov.ie)) and its interactive map (<https://storymaps.arcgis.com/stories/7682860c80d64a62b90e8a1ca3d16364>);
- Transport Infrastructure Ireland website (<https://www.tii.ie/public-transport/projects-andimprovements/>) – to identify major transport projects and programmes;
- Discussions between the DART+ and Iarnród Éireann teams to gain an understanding of each organisation's relevant projects and programmes;
- The EIA Portal (<https://www.housing.gov.ie/planning/environmental-assessment/environmentalimpact-assessment-eia/eia-portal>) maintained by the Department of Housing, Local Government and Heritage– for applications for development consent accompanied by an EIAR;
- Uisce Éireann's website, which includes a page on its projects (<https://www.water.ie/projects/>).

Planning applications of various scales were included in the dataset, limited to a five-year period preceding the date of issue of this report, with the majority corresponding to small scale applications such as domestic residential modifications. A five-year time frame is deemed the most appropriate period for planning searches as permissions granted more than five years ago would generally be constructed, partially constructed, or are under construction when the planning sites are viewed.

Following the establishment of a long list of planning applications, incomplete, withdrawn, and refused applications were identified and excluded, together with very minor applications such as house extensions, construction or demolition of conservatories, driveway modifications, outbuildings construction and retention applications. The decision on whether to exclude a planning application was based upon the likelihood of such minor nature developments to have a noticeable cumulative effect over and above the effects of the Proposed Development in isolation. The exercise to identify relevant planning applications was carried out in June 2023 and subsequently updated at the end of September 2023.

Projects that did not fall within the study area were not considered. Approximate distances to the Proposed Development were provided for each project, to better understand any spatial overlap. Confidence in the status of the permissions was also noted, as there may have been uncertainty as to whether a development had been constructed, or where construction may have been delayed beyond the timeframes/ durations noted in the planning permission/ project EIA.

The long list of Tier 1 projects considered for the Stage 1 and Stage 2 assessments are included in Volume 4, Appendix A26.1.

**Stage 2 – Establish the Short List of Projects** - In order to ensure the CEA is proportionate the long list of projects identified in the Stage 1 search was sifted and/or screened to create a short list. The criteria used to screen in and/or out projects for assessment are described below.

In order for a cumulative effect to arise from two or more projects, a temporal overlap of impacts arising from each must be established. Some impacts are active only during certain phases of development e.g., such as piling noise during the Construction Phase. It was assumed, on a reasonable worst case basis, that there is potential for a temporal overlap in the Construction Phase activities for the Proposed Development with all Tier 1 projects listed in Appendix A26.1 as the details provided through relevant planning documents (e.g., Scoping Reports, EIARs etc.) may be subject to change. The criteria looked at:

- **Temporal scope:** involves the consideration of the location of the construction, operation and decommissioning of the Proposed Development with existing and/or approved projects to establish if there is an overlap and any potential cumulative effect to arise.
- **Scale and nature:** involves the consideration of the nature and scale of the existing and/or approved projects with the proposed DART+ Coastal North that may cause a cumulative effect with each of the environmental factors.
- **Other factors:** involves the consideration of any other factors, such as the conceptual or physical effect-receptor pathway, or the nature and / or capacity of the receiving environment to absorb any changes as a result of potential cumulative effect of project with the Proposed Development.

The judgement as to whether a project should be shortlisted depends on whether the scale, location and/or nature could be sufficient to generate impacts which would be noticeable against typical baseline trends in the same study area as the Proposed Development.

An examination of current EIAR's of a similar nature was carried out to identify appropriate thresholds and rationale for shortlisting the projects, and to understand how the location, nature and scale of these projects have been judged to date. This included other DART+ projects and Bus Connects. Professional judgement was used to make this assessment.

In most cases, the study area for the topic has informed whether or not another project is likely to have a cumulative effect. However, in some instances the environmental topic specialists have considered that there is potential for a likely significant cumulative effect beyond the study area applied for the Proposed Development in isolation, and therefore a project could be scoped into Stages 3 and 4 for an individual topic even though it was outside of the pre-defined study area identified at Stage 1.

Projects which are likely to have a significant cumulative effect with the Proposed Development were then brought forward to Stage 3. Projects considered for Stage 3 and Stage 4 cumulative assessment are presented in Volume 4, Appendix A26.2.

**Stage 3 – Gather environmental information on Stage 2 Projects** – This was undertaken by further planning searches of the relevant documentation submitted as part of the statutory consent applications for these projects, including but not limited to information such as: EIARs/ EIS, NIS, and other planning documentation. The environmental impact assessments completed on these projects and particularly their own cumulative assessments can help inform the likely significant cumulative assessment of effects that may result when considered with the Proposed Development. The data collection stage also considers the study areas previously defined in Table 26-1 for the respective environmental factors. Whether the project is now part of the baseline i.e. already constructed is also reviewed.

**Stage 4 – Cumulative assessment** – Once sufficient information has been gathered the cumulative assessment can take place. This final stage involves each of the competent experts reviewing the short-listed projects and environmental information gathered to undertake the respective cumulative assessment.

The information assessed related to:

- The proposed design and location of projects.
- Proposed programme of construction, operation and decommissioning of projects (if known).
- Environmental assessments that set out the baseline environment at locations of projects and the respective effects arising from these projects.

An assessment matrix was developed to streamline the assessment which sets out the key details of the project such as the planning application reference, project description and location from the Proposed Development. The environmental information gathered such as the design, location, characteristics of the project and environmental assessments of the project are also considered under each environmental factor as appropriate. The cumulative assessment of effects is undertaken for both the Construction and Operational phases of each project with the DART+ Coastal North under the relevant environmental factor, as appropriate.

This is presented in Appendix A26.2 of this EIAR. The cumulative assessment identifies the likely significant cumulative direct and indirect, secondary, transboundary, short-term, medium-term, and long-term, permanent, and temporary, positive and negative effects of the project with the Proposed Development.

In accordance with Advice Note 17, where significant cumulative effects between the Proposed Development and the identified project arise in relation to one environmental factor the assessment should focus on that aspect only. The CEA is required to be proportionate to the effect being assessed and some effects will need only very brief information to indicate that they have been considered.

Where appropriate, mitigation measures have been prescribed under the respective environmental factor to avoid, prevent, reduce, or mitigate the cumulative effects on the receiving environment. Any residual effects after applying the mitigation measures are also identified.

### 26.3.4 Tier 2 – ‘Other’ Projects

‘Other’ identified projects that are in the public domain/at preliminary design (i.e., not in the planning system or granted) but have the potential for cumulative effects with the project are also assessed as part of the CEA. This includes other projects such as the other DART+ Programme projects and relevant NTA/TII projects. The project team is aware of, and familiar with, several of the other relevant NTA funded projects that are currently at public consultation and/or are in the public domain, for example. The project team is also aware of other large-scale projects (outside of those referenced above) which may interact with the Proposed Development. There is no legal requirement to assess these projects. It was deemed prudent however, to include, within the CEA, those projects that are reasonably foreseeable and are likely to have cumulative effects with the DART+ Coastal North Project.

A separate matrix for these ‘other projects’ has been created for the assessment. The assessment information depends on the stage of the project, and these projects are likely to have limited and differing levels of environmental information available that can be used to inform the likely significant effects of this CEA.

At the time of completing this EIAR, the identified ‘Tier 2’ projects will be in the process of seeking statutory approval and/ or will be at early stages of design. Therefore, there is likely to be differing levels of environmental information available to the public and it is unlikely that there will be a published EIAR available to consider as part of the CEA. The CEA is a precautionary but pragmatic approach based on the best available information where baseline data is not available or is incomplete. Therefore, publicly available information or information made available by the delivery agents of the individual projects has informed the respective Tier 2 assessments.

The Tier 2 projects include the following:

- DART+ West;
- DART+ South West;
- DART+ Coastal South;
- Metrolink;
- Luas Finglas;
- North Irish Sea Array Offshore Wind Farm (NISA);

- Dundalk Active Travel Project;
- ESB electricity supply connections (from proposed substations to the ESB network);
- DART Station Enhancement Project;
- Multimodal Interchange Project;
- DART Platform Accessibility Project; and
- Iarnród Éireann Carparks Programme

### 26.3.5 Consultation

The CEA of the plans and projects was informed by local authority consultation for the list of planning applications over the last, nearly six (to April 2024) years. Consultation was also requested from local authorities to inform the ‘other’ projects list that are not yet in the planning process but may have a cumulative effect with this project.

To inform this cumulative assessment of effects close consultation with the ‘other’ NTA funded projects has informed the assessments contained in this EIAR and has informed the assessments regarding likely construction effects (programmes) and operational effects.

Close collaboration and consultation with the design team, EIA specialists and technical specialists has informed the cumulative assessment as part of this EIAR.

Direct interface between DART+ Coastal North Project and other NTA funded major infrastructure developments could occur during the Construction Phase. Interface liaison will be assessed on a case-by-case basis through the NTA and included in the Construction Contract in order to guarantee coordination between projects, unobstructed access locations and the appropriate management of additional construction traffic mitigation measures associated with cumulative impacts.

For other (non-NTA funded) projects an assessment has been carried out considering the known mitigation measures included as part of the DART+ Coastal North project in this EIAR.

All known Tier 2 projects are listed in Section 26.5.2.

### 26.3.6 Difficulties Encountered / Limitations

It should be noted that a planning applications monitor has been established to track live planning applications within a specified study area. This is a live register and represents a point in time. The planning application monitor has been and will continue to be updated throughout the planning of the project.

There is a significant volume of data required to be gathered and assessed in relation to identification of relevant planning applications for the CEA, and as such a cut-off date for the gathering and assessment of plans and projects is required in order to finalise and submit the Railway Order application. This cut-off date was April 2024 and any likely significant projects approved after this date are not assessed as part of the CEA.

The CEA of the Proposed Development with each of the ‘other developments’ is to a level of detail commensurate with the information that was available at the time of assessment. Where information regarding proposed ‘other’ projects was limited, these gaps were acknowledged within the assessment and the associated uncertainty in these cases is documented.

There were no other difficulties identified during this assessment.

## 26.4 Description of Potential Impacts

### 26.4.1 Tier 1 – Cumulative Assessment

#### 26.4.1.1 Tier 1 – Potential Cumulative Effects of Plans and Programmes

A range of policy documents that may have a cumulative effect with the proposed DART+ Coastal North project has been reviewed and these are shown in Table 26-3 below.

**Table 26-3 Plans and Programmes considered for the cumulative assessment.**

EU Level Policy
EU White Paper on Transport: Roadmap to a single European Transport Area - Towards a competitive and resource efficient transport system
European Union (EU) Green Deal 2019
The Trans-European Transport Network (TEN-T)
Sustainable and Smart Mobility Strategy
National Policy
Project Ireland 2040: National Planning Framework
National Development Plan 2021-2030
National Sustainable Mobility Policy
National Investment Framework for Transport Planning in Ireland 2021
Department of Transport: Statement of Strategy 2023-2025
Climate Action and Low Carbon Development (Amendment) Act 2021
Climate Action Plan 2024
The White Paper, Ireland's Transition to a Low Carbon Energy Future 2015-2030
Regional Policy
Eastern and Midland Regional Spatial and Economic Strategy (RSES) 2019-2031
Greater Dublin Area Transport Strategy 2022-2042
Integrated Implementation Plan 2019-2024

Local Rail Policy
Dublin City Development Plan 2022-2028
Fingal County Development Plan 2023-2029
Baldoyle-Stapolin Local Area Plan 2013 (recently expired)
Portmarnock South Local Area Plan 2013 (recently expired)
Donabate Local Area Plan 2016 (extended to March 2026)
Meath County Development Plan 2021-2027
Louth County Development Plan 2021-2027

The Tier 1 cumulative assessment of relevant plans and programmes with the Proposed Development is presented in Table 26-4 below.

**Table 26-4 Tier 1 Cumulative Assessment of Plans and Programmes**

Name	Description	Cumulative Impact with the Proposed Development
<b>EU Level Policy</b>		
<p>EU White Paper on Transport: Roadmap to a single European Transport Area - Towards a competitive and resource efficient transport system</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 CO2 emissions and comparable reduction in oil dependency. Goals to which the DART+ Programme is aligned:</p> <p>Goal 1: Halve the use of 'conventionally fuelled' cars in urban transport by 2030; phase them out in cities by 2050; achieve essentially CO2 free city logistics in major urban centres by 2030.</p> <p>Goal 4: By 2050, complete a European high-speed rail network. Triple the length of the existing highspeed 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.</p>	<p>The proposed DART+ Coastal North project supports the goals of the EU White Paper to improve resource efficiency of the transport system by electrifying the Malahide to Drogheda rail lines. The proposed DART+ Coastal North project will also enable the increase in frequency and capacity of rail services which will increase competitiveness of the rail network as a mode of travel within urban, and inter-urban areas.</p> <p>Positive, direct, and indirect, significant and long-term cumulative effects are predicted to arise from the combination of this plan and the Proposed Development.</p>

Name	Description	Cumulative Impact with the Proposed Development
European Green Deal	<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.</p>	<p>The proposed DART+ Coastal North project supports the European Green Deal by reducing GHG emissions from the transport sector by electrifying the Malahide to Drogheda rail line. The DART+ Coastal North project also supports the objectives of the European Green Deal in relation to frequency and capacity of rail services by enabling an increase in both the frequency and capacity of rail services.</p> <p>Positive, direct and indirect, significant and long-term cumulative effects are predicted to arise from the combination of this plan and the Proposed Development.</p>

Name	Description	Cumulative Impact with the Proposed Development
	<p>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>The Trans-European Transport Network (TEN-T)</p>	<p>The Trans-European Transport Network (TEN-T) policy supports the development of a Europe-wide network of railway lines, roads, inland waterways, maritime shipping routes, ports, airports and railroad terminals. The overall objective of TEN-T is to “close gaps, remove bottlenecks and technical barriers, as well as to strengthen social, economic and territorial cohesion in the EU”.</p> <p>The TEN-T policy seeks to achieve the following:</p> <ul style="list-style-type: none"> <li>• Improved use of infrastructure;</li> <li>• Reduced environmental impact of transport;</li> <li>• Enhanced energy efficiency; and</li> <li>• Increased safety.</li> </ul> <p>The ‘Core Network’ of the TEN-T policy includes the most important connections and links between key transport nodes, with nine corridors identified to streamline and facilitate the coordinated development of the Core Network by 2030.</p>	<p>The proposed DART+ Coastal North project is consistent with the objectives of the Trans-European Transport Network. The proposed DART+ Coastal North project will create a rail mode transport which is more energy efficient. It will enable an increase in the capacity and frequency of rail services which will increase competitiveness of the rail network as a mode of travel within urban, and inter-urban areas.</p> <p>Positive, direct and indirect, significant and long-term cumulative effects are predicted to arise from the combination of this plan and the Proposed Development.</p>

Name	Description	Cumulative Impact with the Proposed Development
Sustainable and Smart Mobility Strategy	<p>The Sustainable and Smart Mobility Strategy (European Commission 2020) sets out a number of goals as to how people will move within and between cities in the future. It has identified 82 initiatives which have been categorised into 10 'flagships'.</p> <p>The flagship relevant to the DART+ Coastal North project is '<i>Flagship 3 – Making interurban and urban mobility more sustainable and healthy - for instance by doubling high-speed rail traffic and developing extra cycling infrastructure over the next 10 years.</i>'</p>	<p>The DART+ Coastal North project complies with this strategy as it ensures sustainable alignment in urban areas for planned growth with investment in infrastructure and the provision of employment, together with supporting amenities and services.</p> <p>Positive, direct and indirect, significant and long-term cumulative effects are predicted to arise from the combination of this plan and the Proposed Development.</p>
<b>National Policy</b>		
Project Ireland 2040: National Planning Framework	<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 enable sustainable mobility choices for citizens.</p>	<p>The implementation of the DART+ Programme (which includes the DART+ Coastal North project) is supported by the NPF. The Proposed Development is consistent with NSO 1 Compact Growth and NSO 4 Sustainable Mobility of the NPF by supporting future developments along the rail line through the provision of more frequent, and higher capacity rail services to the existing and future populations in these areas. The Proposed Development will also reduce transport related emissions through the electrification of the rail fleet, which is consistent with NSO 8, Transition to a Low Carbon and Climate Resilient Society.</p> <p>Positive, direct, and indirect, significant and long-term cumulative effects are predicted to arise from the combination of this plan and the Proposed Development.</p>



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2040



Name	Description	Cumulative Impact with the Proposed Development
	<p>The Proposed Development will support the implementation of several NSOs and NPOs identified in the NPF and the NDP respectively. 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, Compact Growth and NSO 8, Transition to a Low Carbon and Climate Resilient Society. 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>	

Name	Description	Cumulative Impact with the Proposed Development
National Development Plan 2021-2030	<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. 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). 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>The proposed DART+ Coastal North Project is supported by the NDP. The project will deliver the electrification of the Malahide to Drogheda section of the railway line as part of the DART+ Programme which has been identified as a cornerstone investment for rail transport by the NDP.</p> <p>Positive, direct, and indirect, significant and long-term cumulative effects are predicted to arise from the combination of this plan and the Proposed Development.</p>

Name	Description	Cumulative Impact with the Proposed Development
National Sustainable Mobility Policy	<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 Ireland’s 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. The 3 principles are as follows:</p> <ul style="list-style-type: none"> <li>• Safe and green Mobility.</li> <li>• People Focused Mobility.</li> <li>• Better Integrated Mobility.</li> </ul> <p>The DART+ Programme is highlighted within the NSMP as being an important element for supporting Safe and Green Mobility. A key focus is the expansion of electrification and additional electric and battery-electric fleet for services to Drogheda.</p>	<p>The DART+ Coastal North project is in compliance with the NSMP and supports the goals through expansion of the electrified rail network to Drogheda. The DART+ Coastal North project will decarbonise public transport, promote the use of and expand the availability of sustainable mobility.</p> <p>Positive, direct and indirect, significant and long-term cumulative effects are predicted to arise from the combination of this plan and the Proposed Development.</p>

Name	Description	Cumulative Impact with the Proposed Development
<p>National Investment Framework for Transport Planning in Ireland 2021</p>	<p>The National Investment Framework for Transport in Ireland (NIFTI) is the Department of Transport’s high-level strategic framework to support the consideration and prioritisation of future investment in land transport. It represents the Department of Transport’s contribution to Project Ireland 2040, Government’s long-term, overarching strategy to make Ireland a better country for all and to build a more sustainable future. NIFTI has been developed to ensure sectoral investment is aligned with the National Planning Framework (NPF) and supports the delivery of the ten National Strategic Outcomes (NSOs).</p> <p>The NIFTI states:</p> <p><i>“The right transport investment helps to deliver high-quality travel and supports positive outcomes for society, the environment and the economy. However, these outcomes do not happen by chance. It is important to have in place a framework to guide transport investment and deliver the infrastructure and services we need. That is the purpose of NIFTI.</i></p> <p><i>New transport investments will have to demonstrate their alignment with NIFTI. By extension, this will ensure that investment is aligned with the NPF and its National Strategic Outcomes, resulting in a consistent approach to investment across Government, with transport supporting our growth and development goals. In this way, NIFTI will ensure that transport enables the NPF.”</i></p> <p>The NIFTI notes that the NDP identifies DART+ as one of the infrastructure projects required in the next decade.</p>	<p>The DART + Coastal North project will comply with the Investment Priorities, assist in decarbonising the transport system, help protect the environment, and improve mobility in a sustainable manner. Finally, it will improve regional connectivity between Dublin, Meath and Louth counties.</p> <p>Positive, direct and indirect, significant and long-term cumulative effects are predicted to arise from the combination of this plan and the Proposed Development.</p>

Name	Description	Cumulative Impact with the Proposed Development
	<p>In order to address the challenges identified in the supporting analysis, NIFTI establishes four Investment Priorities: Decarbonisation, Protection and Renewal, Mobility of People and Goods in Urban Areas, and Enhanced Regional and Rural Connectivity. Future transport projects must align with these priorities to be considered for funding. Moreover, as the National Strategic Outcomes are embedded in NIFTI, future investment made in accordance with the priorities will support the delivery of the National Planning Framework over the coming decades.</p>	

Name	Description	Cumulative Impact with the Proposed Development
<p>Department of Transport: Statement of Strategy 2023-2025</p>	<p>This Statement of Strategy is the Department of Transport's primary strategic plan and sets out key priorities for the period 2023- 2025. The high-level goals of the Department are:</p> <ul style="list-style-type: none"> <li>• Connectivity</li> <li>• Sustainability: Economy, Environment and Society</li> <li>• Safety, Security and Accessibility</li> <li>• Effective Regulation</li> <li>• Stakeholder Engagement</li> <li>• Organisational Excellence and Innovation</li> </ul> <p>The Statement of Strategy specifically identifies the DART+ Coastal North project as a key strategic project for delivering “Strategic Goal 2: Sustainability: Economy, Environment and Society”:</p> <p><i>“Ensuring that our transport system is integrated, resilient and decarbonised in a manner that is environmentally, economically and socially sustainable:</i></p> <p><i>We will... Accelerate modal shift to public transport, improving the transport choices available to people</i></p> <p><i>By... Continued progression of BusConnects, DART+ and MetroLink programmes”</i></p>	<p>The DART + Coastal North complies with all the stated objectives. Positive, direct and indirect, significant and long-term cumulative effects are predicted to arise from the combination of this plan and the Proposed Development.</p>

Name	Description	Cumulative Impact with the Proposed Development
Climate Action and Low Carbon Development (Amendment) Act 2021	<p>The Climate Action and Low Carbon Development (Amendment) Act 2021 sets out the central objectives relating to emission reductions. It legally binds Ireland to have net-zero emissions no later than 2050 and to a 51% reduction in emissions by the end of the decade (2030), against a base of 2018 emissions. The Act sets out the following:</p> <p><i>‘The first two carbon budgets proposed by the Advisory Council shall provide for a reduction in greenhouse gas emissions such that the total amount of annual greenhouse gas emissions in the year ending on 31 December 2030 is 51 per cent less than the annual greenhouse gas emissions reported for the year ending on 31 December 2018, as set out in the national greenhouse gas emissions inventory prepared by the Agency.’</i></p>	<p>The DART+ Coastal North project would deliver infrastructure which will support a shift towards sustainable transport options that will in turn support the targets set out in the Climate Action and Low Carbon Development (Amendment) Act 2021.</p> <p>Positive, direct and indirect, significant and long-term cumulative effects are predicted to arise from the combination of this plan and the Proposed Development.</p>
Climate Action Plan 2024	<p>Climate Action Plan 2024 is the third annual update to Ireland’s Climate Action Plan 2019. The plan implements the carbon budgets and sectoral emissions ceilings and sets a roadmap for taking decisive action to halve emissions by 2030 and to reach net zero no later than 2050, as committed to in the Programme for Government. The Plan sets out a detailed sectoral roadmap designed to deliver a 51% reduction in greenhouse gas (GHG) emissions by 2030.</p>	<p>The DART+ Coastal North project will comply with, and contribute towards, the targets identified in the Climate Action Plan. It will help reduce GHG emissions by the provision of a more efficient public transport route, thereby encouraging a modal shift towards public transportation.</p>

Name	Description	Cumulative Impact with the Proposed Development
	<p>The plan sets out Action TR/24/12 (TF), which is directly relevant to this project:</p> <p><i>“Advance DART+ Programme”</i></p> <p>An action identified to reduce emission in the transport sector is:</p> <p><i>“Support and promote a modal shift towards healthy active and sustainable mobility in the design and delivery of LDA developments. Plan to reduce travel by private car and design to optimise connectivity and access to sustainable and active travel. Promote mobility management planning and e- mobility as well as options for car sharing/clubs.”</i></p> <p>To meet the required level of emissions reduction, by 2030 the Plan sets out a number of actions, several of which are relevant to enabling increase sustainable transport behaviours:</p> <p><i>“Prioritise and accelerate delivery of NTA Connecting Ireland and new town services, via demand responsive transport pilot initiatives, conventional and non-conventional modes of public transport services”</i></p> <p><i>“Continue investment in passenger and freight rail, informed by outcomes of All Ireland Strategic Rail Review”</i></p> <p><i>“Review financial incentives to further the transition of vehicle fleets, considering actions to support and deliver a just and equitable EV transition”</i></p>	<p>It will become part of the electrified rail network in Ireland.</p> <p>The DART+ Coastal North project is part of the DART+ Programme which is identified as a specific action in the plan.</p> <p>Positive, direct and indirect, significant and long-term cumulative effects are predicted to arise from the combination of this plan and the Proposed Development.</p>

Name	Description	Cumulative Impact with the Proposed Development
<p>The White Paper, Ireland's Transition to a Low Carbon Energy Future 2015-2030</p>	<p>The White Paper; Ireland's Transition to a Low Carbon Energy Future 2015-2030 is a statement of Government policy in the energy sector. It sets out an energy policy framework up to 2030 and outlines a transition to a low carbon energy system for Ireland by 2050. The White Paper comprises of an energy policy update and provides the framework to guide national policy. The Paper considers European and International climate change objectives and agreements. The actions that support the Proposed Development are, inter alia:</p> <p><i>"To support energy efficient and renewable transport, we will: ...</i></p> <p>...support transport modal shift through better alignment of land use and transport planning and a continuation of smarter travel programmes administered by the Department of Transport, Tourism and Sport....</p> <p>...support the introduction of a suite of initiatives to improve the energy efficiency of the rail network...</p> <p>...support further rail electrification..."</p>	<p>The DART+ Coastal North project will support and facilitate the shift to support energy efficient and renewable transport through encouraging modal shift towards lower energy intensive public transport, to support Ireland's climate ambitions and increase resilience to future climate change.</p> <p>Positive, direct and indirect, significant and long-term cumulative effects are predicted to arise from the combination of this plan and the Proposed Development.</p>

Name	Description	Cumulative Impact with the Proposed Development
<b>Regional Policy</b>		
<p>Eastern and Midland Regional Spatial and Economic Strategy (RSES) 2019-2031</p>	<p>The principal statutory purpose of the RSES is to support the implementation of Project Ireland 2040 and the economic policies and objectives of the Government by providing a long-term strategic planning and economic framework for the development of the Region.</p> <p>The RSES sets out sixteen Regional Strategic Outcomes, three of which are relevant to the DART + Coastal North project:</p> <p><i>“Sustainable Settlement Patterns</i> <i>Better manage the sustainable and compact growth of Dublin as a city of international scale and develop Athlone, Dundalk, Drogheda and a number of key complementary growth settlements of sufficient scale to be drivers of regional growth. (NSO 1, 7, 10)</i></p> <p><i>“Compact Growth and Urban Regeneration</i> <i>Promote the regeneration of our cities, towns and villages by making better use of under-used land and buildings within the existing built-up urban footprint and to drive the delivery of quality housing and employment choice for the Region’s citizens. (NSO 1)”</i></p> <p><i>“Integrated Transport and Land Use</i> <i>Promote best use of Transport Infrastructure, existing and planned, and promote sustainable and active modes of travel to ensure the proper integration of transportation and land use planning. (NSO 2, 6, 8,9)”</i></p>	<p>The DART+ Coastal North project will assist in the development of urban settlements along the Northern Line rail network, and also Drogheda as a destination in which to live and work.</p> <p>The project will encourage the development of underutilised zoned lands along the Northern Line rail network via provision of a more efficient public transport route.</p> <p>The project will also assist in achieving a more balanced approach to the integration of transportation and development, both in terms of employment and residential locations. It will make locations along the Northern Line rail network more favourable for both employers and residents.</p> <p>Positive, direct and indirect, significant and long-term cumulative effects are predicted to arise from the combination of this plan and the Proposed Development.</p>

Name	Description	Cumulative Impact with the Proposed Development
<p>Eastern and Midland Regional Spatial and Economic Strategy (RSES) 2019-2031 (Continued)</p>	<p>The ‘DART Expansion’ – the previous name for the DART+ Programme - is heavily referenced and supported in the document, including in relation to the development of the Dublin Metropolitan Area, and Drogheda.</p> <p>Regional Policy Objective 5.2 states:</p> <p><i>“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>Regional Policy Objective 8.8: supports delivery of the rail projects set out in Table 8.2, subject to the outcome of appropriate environmental assessment and the planning process.</p> <p>One of the projects set out in Table 8.2 is:</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>	

Name	Description	Cumulative Impact with the Proposed Development
<p>Transport Strategy for the Greater Dublin Area 2022-2042</p>	<p>The Transport Strategy for the Greater Dublin Area 2022-2042, developed by the National Transport Authority (NTA) in 2021 was published in January 2023 and replaces the previous framework, titled the Transport Strategy for the Greater Dublin Area 2016- 2035, which was approved by the Minister for Transport, Tourism and Sport in 2016. The Strategy addresses the transportation requirements to support the continued co-ordinated development within the counties of Dublin, Meath, Kildare and Wicklow. Major projects provided for in the Strategy include:</p> <ul style="list-style-type: none"> <li>• Luas Cross City.</li> <li>• The reopening of the Phoenix Park Tunnel Rail Line.</li> <li>• The on-going roll out of cycle tracks and greenways.</li> <li>• Metrolink;</li> <li>• DART+ Programme.</li> <li>• Investment in bus priority and bus service improvements – BusConnects Dublin.</li> <li>• M7 Naas to Newbridge widening, Osberstown Interchange and Sallins Bypass.</li> </ul>	<p>The DART+ Coastal North project is in accordance with all objectives of the Transport Strategy for the Greater Dublin Area and will support the achievement of various measures including those identified.</p> <p>Positive, direct and indirect, significant and long-term cumulative effects are predicted to arise from the combination of this plan and the Proposed Development</p>

Name	Description	Cumulative Impact with the Proposed Development
	<p>With regards to the DART+ Programme, the Strategy includes the following measures:</p> <p><i>“Measure RAIL1 – DART+ 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><i>Measure RAIL – Regional and Intercity Services The NTA will continue to work with Irish Rail to improve regional and intercity services which will benefit connectivity within and to the GDA.</i></p> <p><i>Measure RAIL7 – Station Upgrades 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>	

Name	Description	Cumulative Impact with the Proposed Development
<p>Integrated Implementation Plan 2019-2024</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 (both now updated). 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...</p> <p><i>“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”.</i></p>	<p>The investment programme and overall funding provision of the Implementation Plan align with and support the DART+ Coastal North project, particularly in implementing the DART+ Programme, and improving safety and reliability.</p> <p>Positive, direct, and indirect, significant and long-term cumulative effects are predicted to arise from the combination of this plan and the Proposed Development</p>
	<p>The objectives for 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> <li>•</li> </ul>	

Name	Description	Cumulative Impact with the Proposed Development
<b>Local Rail Policy</b>		
<p>Dublin City Development Plan 2022-2028</p>	<p>The Dublin City Development Plan 2022-2028 sets out how the city will develop to meet the needs of all residents, workers and visitors. The policies and objectives:</p> <ul style="list-style-type: none"> <li>• guide growth and development,</li> <li>• provide a strategy to achieve proper planning, and</li> <li>• show how sustainable development will be achieved, meeting our needs now without compromise to future generations needs.</li> </ul> <p>The main policies and objectives relevant to the DART+ Programme are as follows:</p> <p><i>Policy QHSN11: 15-Minute City To promote the realisation of the 15-minute city which provides for liveable, sustainable urban neighbourhoods and villages throughout the city that deliver healthy placemaking, high quality housing and well designed, intergenerational and accessible, safe and inclusive public spaces served by local services, amenities, sports facilities and sustainable modes of public and accessible transport where feasible.</i></p> <p><i>Policy QHSN12: Neighbourhood Development To encourage neighbourhood development which protects and enhances the quality of our built environment and supports public health and community wellbeing. Promote developments which:</i></p> <p><i>encourage sustainable and low carbon transport modes through the promotion of alternative modes and ‘walkable communities’ whereby a range of facilities and services will be accessible within short walking or cycling distance;</i></p>	<p>The DART+ Coastal North project, including the rail enhancements at Clongriffin Railway Station, complement the aims and objectives of the Clongriffin-Belmayne SDRA enabling the development of a sustainable, mixed use urban quarter adjoining a high-quality public transport node.</p> <p>There are no objectives or designated areas within the SDRA that would be impacted by the DART+ Coastal North project. It is therefore considered that there will be positive cumulative impacts as a result of the Proposed Development.</p> <p>Positive, direct and indirect, significant and long-term cumulative effects are predicted to arise from the combination of this plan and the Proposed Development</p>

Name	Description	Cumulative Impact with the Proposed Development
Dublin City Development Plan 2022-2028 continued	<p><i>Policy SMT1: Modal Shift and Compact Growth To continue to promote modal shift from private car use towards increased use of more sustainable forms of transport such as active mobility and public transport, and to work with the National Transport Authority (NTA), Transport Infrastructure Ireland (TII) and other transport agencies in progressing an integrated set of transport objectives to achieve compact growth.</i></p> <p><i>Objective SMTO1: Transition to More Sustainable Travel Modes 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>	
Dublin City Development Plan 2022-2028 continued	<p><i>Policy SMT13: Urban Villages and the 15-Minute City To support the role of the urban villages in contributing to the 15-minute city through improvement of connectivity in particular for active travel and facilitating the delivery of public transport infrastructure and services, and public realm enhancement.</i></p> <p><i>Policy SMT14: City Centre Road Space 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>	

Name	Description	Cumulative Impact with the Proposed Development
Dublin City Development Plan 2022-2028 continued	<p><i>Policy SMT22: Key Sustainable Transport Projects To support the expeditious delivery of key sustainable transport projects 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 and to support the integration of existing public transport infrastructure with other transport modes. In particular the following projects subject to environmental requirements and appropriate planning consents being obtained:</i></p> <ul style="list-style-type: none"> <li>• DART+</li> <li>• Metrolink from Charlemont to Swords</li> <li>• BusConnects Core Bus Corridor projects</li> <li>• Delivery of Luas to Finglas</li> <li>• Progress and delivery of Luas to Poolbeg and Lucan</li> </ul> <p><i>Policy SMT23: The Rail Network and Freight Transport (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 and support the needs of freight transport in accordance with the NTA's Transport Strategy for the Greater Dublin Area 2022 – 2042 and enhance the capacity on existing rail lines and services to provide improved facilities promoting the principles of sustainable transport to cater for the movement of freight by rail. (iii) To support the outcomes of the Iarnród Éireann/Irish Rail Freight 2040 Strategy.</i></p>	

Name	Description	Cumulative Impact with the Proposed Development
	<p>The DART+ Coastal North project does not contravene any of the zoning objectives within the plan. Careful design has been considered in relation to the more sensitive zoning objectives such as High Amenity lands.</p> <p>Any works associated with the DART + North Coastal project that may affect protected structures have been carefully assessed.</p> <p>The DART+ Coastal North project either adjoins or over sails amenity conservation areas, however, works associated with the project are unlikely to affect these designations.</p> <p>The recently adopted Dublin City Development Plan designates Clongriffin-Belmayne as a Strategic Development and Regeneration Area (SDRA) to provide a strategic spatial and urban design framework, so that the objectives of the City Development Plan can guide future development; and to ensure that that the phasing and implementation strategy envisaged in the LAP can be delivered as part of the future build-out of the lands, after the expiry of the LAP.</p> <p>Clongriffin Railway Station is recognised as a key development node with additional height and densities permitted in proximity to the station.</p>	
<p>Fingal County Development Plan 2023-2029</p>	<p>The Fingal Development Plan 2023-2029 sets out the spatial framework to guide future development within the County with a focus on the places people live, work, visit and do business, and how people interact and move between these places while protecting the environment. The Plan is underpinned by a strategic vision intended to guide the sustainable future growth of Fingal. At the core of the vision is healthy placemaking, building</p>	<p>The DART+ Coastal North project, complements the aims and objectives of the plan enabling the development of a sustainable, high-quality public transport.</p> <p>There are no objectives or designated areas within the plan that would be impacted by the DART+ Coastal North project. It is therefore considered that there will be positive cumulative impacts as a result of the Proposed Development.</p>

Name	Description	Cumulative Impact with the Proposed Development
<p>Fingal County Development Plan 2023-2029 continued</p>	<p>cohesive and sustainable communities, where cultural, natural and built environment is protected.</p> <p>The Strategic Vision for the plan contains a number of strategic objectives, the following of which are relevant:</p> <p><i>“9. Reduce car dependency and promote and facilitate sustainable modes of transport. Prioritise walking, cycling and public transport, while supporting an efficient and effective transport system.</i></p> <p><i>10. Protect, enhance and ensure the sustainable use of Fingal’s key infrastructure, including water supplies and wastewater treatment facilities, energy supply including renewables, broadband and transportation.”</i></p> <p>The following policies and objectives relating to connectivity and movement are specifically relevant:</p> <p><i>“Policy CMP18 – Public Transport.</i></p> <p><i>Support the provision of a high-quality public transportation system that is accessible to all to serve the needs of the County and to enable a significant shift from car-based travel to public transport.</i></p> <p><i>Objective CMO23 – Enabling Public Transport Projects.</i></p> <p><i>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></p>	<p>Positive, direct and indirect, significant and long-term cumulative effects are predicted to arise from the combination of this plan and the Proposed Development</p>

Name	Description	Cumulative Impact with the Proposed Development
<p>Fingal County Development Plan 2023-2029 continued</p>	<p><i>Objective CMO24 – NTA Strategy.</i></p> <p><i>Support NTA and other stakeholders in implementing the NTA Strategy including MetroLink, BusConnects, DART +, LUAS and the GDA Cycle Network.”</i></p> <p>On reflecting upon the impacts of Brexit and Covid-19, the following employment and economic opportunities are identified:</p> <p><i>“Infrastructure provision will be a key factor for the economic development of the County and the prospective MetroLink, BusConnects and DART+ projects will bring significant economic benefits to Fingal. Transport and infrastructure interventions are expected to facilitate the modal shift in alignment with the policy hierarchy and national, regional and local objectives such that they encourage sustainable ways of improving Fingal’s integration, connectivity and the movement of workers.”</i></p> <p>Strategic employment aims also highlight the following:</p> <p><i>“North Fringe – Baldoyle-Stapolin – The DART Expansion Programme will support ongoing large-scale urban expansion of the North Fringe lands. Employment generators in these areas include mixed-use districts with retail and service provision.”</i></p> <p>The DART+ Coastal North project does not contravene any of these zoning objectives. Careful design has been considered in relation to the more sensitive zoning objectives such as High Amenity lands and Greenbelt areas.</p> <p>There are a significant number of protected structures on or adjoining the railway and stations. These are detailed in Chapter 21 (Architectural</p>	

Name	Description	Cumulative Impact with the Proposed Development
	<p>Heritage) in Volume 2 of this EIAR. Any works associated with the DART+ Coastal North project that may affect protected structures have been carefully assessed.</p> <p><u>Site Specific Objectives</u></p> <p>There are a number of Indicative Cycle/Pedestrian Routes adjoining the existing railway line including:</p> <p>Howth Junction north to Grange Road.</p> <p>Sutton Station east to Howth Station.</p> <p>Malahide Estuary north across Malahide Railway Viaduct.</p> <p>From Donabate north across the Rogerstown Viaduct.</p> <p>Baldoyle to Portmarnock Greenway.</p> <p><u>Local Objectives</u></p> <p>2: <i>Promote and facilitate a pedestrian over-bridge as part of an attractive walkway along Tanner's Water Lane to the proposed coastal path linking to the town centre.</i></p> <p>34: <i>Completion of the Broadmeadow Way between Malahide and Donabate to be prioritised during the lifetime of this Development Plan.</i></p> <p>51: <i>Provide for a walkway and cycleway across the rail line to Malahide Community School.</i></p> <p>88: <i>Promote the improvement of access to Howth Junction Rail Station.</i></p> <p>The design of the DART+ Coastal North project has taken these objectives into account.</p>	

Name	Description	Cumulative Impact with the Proposed Development
<p>Baldoyle-Stapolin Local Area Plan 2013 (recently expired)</p>	<p>Baldoyle-Stapolin LAP was adopted in 2013 and extended to May 2023. Although the LAP has recently expired, with lands now being guided by the Fingal Development Plan 2023-2029, work done to date on the DART+ Coastal North project has been aligned with the objectives set out in the LAP.</p> <p>The LAP lands are located on the southern boundary of Fingal County Council where they meet the administrative area of Dublin City Council along the Dublin – Belfast railway. To the west of the railway lies the developing mixed-use area of Clongriffin within Dublin City Council’s wider North Fringe Area encompassing Northern Cross / Clare Hall / Belmayne to Clongriffin. This, along with Baldoyle-Stapolin, is one of Dublin’s larger new development areas and, when completed, is envisaged to have up to 10,000 new homes as well as new retail and commercial areas.</p> <p>It is envisaged that Baldoyle-Stapolin will develop as a sustainable community comprised of new homes, community, leisure and educational facilities based around an identifiable and accessible new village centre which will form the heart of the area. With integrated amenities and excellent public transport, this will be a fledgling neighbourhood with a varied social mix and will embody the principles of sustainability, sustainable communities and inclusiveness.</p>	<p>The DART+ Coastal North project will help realise the vision and objectives of the Plan. It will provide a better service to the area, thereby encouraging the full development of the village and greater usage of the DART, leading to a more sustainable community.</p> <p>Positive, direct and indirect, significant and long-term cumulative effects are predicted to arise from the combination of this plan and the Proposed Development</p>

Name	Description	Cumulative Impact with the Proposed Development
<p>Portmarnock South Local Area Plan 2013 (recently expired)</p>	<p>The Portmarnock South Local Area Plan 2013 was adopted by the Council in July 2013 and was extended up to July 2023. As with Baldoyle-Stapolin LAP, the Portmarnock South LAP has recently expired, and the lands are now guided by the Fingal Development Plan 2023-2029. Similarly, work done to date on the DART+ Coastal North project has been aligned with the vision and objectives set out in the LAP.</p> <p>The Portmarnock South LAP comprises a land area of circa 86 hectares of which 40.36 hectares are zoned as residential. The majority of the remainder of the lands are zoned off for open space and amenities. The lands are directly to the south-east of Portmarnock DART station. The vision for Portmarnock South is to develop a high-quality urban environment with a unique sense of place, maximising and respecting the opportunities presented by the area's natural assets and coastal location adjoining Baldoyle Bay and recognising its high level of accessibility to Portmarnock DART Station.</p>	<p>The DART+ Coastal North project will continue to contribute to the sustainable development of these lands.</p> <p>Positive, direct and indirect, significant and long-term cumulative effects are predicted to arise from the combination of this plan and the Proposed Development</p>

Name	Description	Cumulative Impact with the Proposed Development
<p>Donabate Local Area Plan 2016 (extended to March 2026)</p>	<p>The Donabate LAP 2013 was adopted by the Council in March 2016 and was extended up to July 2026. The LAP comprises approx. 138 hectares (340 acres) of land in four separate parcels. The LAP seeks to establish a framework for the planned, co-ordinated and sustainable development of these lands supported by an overriding Vision Statement and supported by four Strategic Aims. The adopted Vision Statement seeks, inter alia, to:</p> <p><i>“Provide for the structured development of the identified new residential areas of Donabate such that they integrate into the established village and support the continued growth of a vibrant and attractive town for existing and future residents. New development will be accompanied by the required community, educational, transport, drainage and recreational infrastructure to ensure the protection and enhancement of local amenities and the continued growth of local services in Donabate”.</i></p>	<p>There are no policies, objectives or designated areas related to the natural or built environment that would be impacted by the DART+ Coastal North project.</p> <p>The DART+ Coastal North project is directly supported by the LAP and will provide electrification of the Northern Line from Malahide to Balbriggan to allow an extension of DART services to Balbriggan.</p> <p>Positive, direct and indirect, significant and long-term cumulative effects are predicted to arise from the combination of this plan and the Proposed Development.</p>

Name	Description	Cumulative Impact with the Proposed Development
<p>Donabate Local Area Plan 2016 (extended to March 2026) (continued)</p>	<p>The LAP notes that the NTA has requested that Irish Rail progress the planning for the extension of the DART rail service along the northern rail line, to include Donabate.</p> <p>Objective 3.2 is relevant in this regard.</p> <p><i>“Support the NTA’s proposed electrification of the Northern Line from Malahide to Balbriggan to allow an extension of DART services to Balbriggan.”</i></p> <p>The majority of the lands zoned in the LAP are within 1000m of Donabate railway station. The DART+ Coastal North project will help to facilitate the development of these lands in a sustainable manner.</p> <p>A DART+ Coastal North project compound and substation are proposed on site located within the southwest portion of the LAP. This land is designated within the LAP as being not suitable for residential development due to potential flooding. A Flood Risk Assessment has been carried out for this purpose and found the site not to be a flood risk.</p>	

Name	Description	Cumulative Impact with the Proposed Development
Meath County Development Plan 2021-2027	<p>The Meath County Development Plan 2021-2027 was adopted on 22nd September 2021 and came into effect on 3rd November 2021.</p> <p>It is a strategic aim of the Development Plan to create attractive efficient compact settlements which reduce the need to travel and improve the quality of life for inhabitants.</p> <p>The following policies and objectives in the Development Plan of specific relevance to the DART+ Coastal North project include:</p> <p><i>“MOV POL 1: To support and facilitate the integration of land use with transportation infrastructure, through the development of sustainable compact settlements which are well served by public transport, in line with the guiding principles outlined in RPO 8.1 of the EMRA RSES 2019-2031</i></p> <p><i>MOV POL 3: To promote sustainable land use planning measures which facilitate transportation efficiency, economic returns on transport investment, minimisation of environmental impacts and a general shift towards the greater use of public transportation throughout the County.</i></p>	<p>The DART+ Coastal North project complies with the strategic vision and the specific policies of the Development Plan.</p> <p>Positive, direct and indirect, significant and long-term cumulative effects are predicted to arise from the combination of this plan and the Proposed Development</p>
Meath County Development Plan 2021-2027 (continued)	<p>The DART+ Coastal North project does not contravene any of the zoning objectives within the development plan.</p> <p>There are a number of protected structures on or adjoining the railway and stations as detailed in Chapter 21 (Architectural Heritage) in Volume 2 of this EIAR. Any works associated with the DART+ Coastal North project that may affect protected structures have been carefully assessed.</p>	
Louth County Development Plan 2021-2027	<p>The Louth County Development Plan 2021-2027 was adopted on 30<sup>th</sup> September 2021. The Plan came into effect on 11<sup>th</sup> November 2021.</p>	<p>The DART+ Coastal North project supports the overall vision in the Plan, particularly in relation to the development of Drogheda as a</p>

Name	Description	Cumulative Impact with the Proposed Development
Louth County Development Plan 2021-2027 continued	<p>A key priority of the plan is to promote the continued sustainable and compact growth of the town as a regional driver of city scale with a target population of 50,000 by 2031.</p> <p>This will be supported by objectives to regenerate the town centre, promote compact growth in the town's hinterlands and enhance the role of Drogheda as a self-sustaining strategic employment centre on the Dublin-Belfast Economic Corridor.</p> <p>The Plan states the following in relation to Drogheda:</p> <p><i>“The goal of achieving compact growth will require improved accessibility, sustainable mobility and the requisite infrastructure to enable Drogheda to grow as a Regional Growth Centre (RGC). The town will benefit from the extension of the DART service and improvements will be required to MacBride station relating to accessibility.”</i></p> <p>The plan recognises that the “DART Expansion Programme” is an important growth enabler for Drogheda as it would improve the connectivity to Dublin due to the increased frequency of services, making the town more accessible and attractive for economic investment and employment generating development.</p> <p>The following policies and objectives in the plan are relevant:</p> <p><i>“SS13: To support investment in public and sustainable transport infrastructure and services in Drogheda including the progression of the DART Expansion Programme which includes the electrification of the rail line and the extension of DART services to Drogheda.</i></p>	<p>Regional Growth Centre and will improve the connectivity of Drogheda to Dublin due to the increased frequency of services.</p> <p>Positive, direct and indirect, significant and long-term cumulative effects are predicted to arise from the combination of this plan and the Proposed Development</p>

Name	Description	Cumulative Impact with the Proposed Development
	<p><i>MOV 2: To facilitate the integration of land use with sustainable transportation infrastructure in accordance with the requirements of RPO 8.1 in the RSES by supporting the creation of a critical mass of population and employment related development that would maximise investment in public transport infrastructure and create compact, sustainable settlements.</i></p> <p><i>MOV 12: To support the DART Expansion Programme including new infrastructure and the electrification of existing lines along the northern rail line to Drogheda.”</i></p> <p>The DART+ Coastal North project does not contravene any of the zoning objectives within the development plan.</p> <p>While there are a number of protected structures in or adjoining the Drogheda railway station section 38(2) of the 2001 Act disapplies Part IV of the Planning and Development Act, 2000. Any works associated with the DART+ Coastal North project that may affect structures protected under the PDA 2000 have nevertheless been carefully assessed (this is further discussed in Chapter 21 (Architectural Heritage)).</p>	

### **26.4.1.2 Tier 1 – Potential Cumulative Effects of Projects**

Due to the large number of planning applications that potentially interact with the Proposed Development, the cumulative assessment of Tier 1 projects with the Proposed Development is presented in Appendix A26.2 within Volume 4 of this EIA. Appendix A26.2 presents projects within the functional areas of Dublin City Council, Fingal County Council, Meath County Council and Louth County Council respectively and it covers projects listed in the EIA Portal, ABP applications, Foreshore Licence applications, EPA Licence applications and MyPlan applications. The below text summarises the potential impacts described in Appendix A26.2, however the summaries should be read in conjunction with Appendix A26.2 in Volume 4 of this EIA.

#### **26.4.1.2.1 Traffic and Transportation**

Construction Phase – where applicable<sup>1</sup> the cumulative effects assessment noted that if Construction Phases overlap between the Proposed Development and Tier 1 projects there is potential for impacts on traffic and transport due to road diversions and additional construction vehicles on the road network.

Operational Phase – during the Operational Phase the Proposed Development will result in positive cumulative effects throughout, with an improvement on the connection and accessibility to public transport services.

#### **26.4.1.2.2 Biodiversity**

Construction Phase – where applicable the cumulative effects assessment noted that if the Construction Phases of the Proposed Development overlap with other Tier 1 projects, it could give rise to a number of in-combination effects such as:

- On downstream habitats from a possible accidental pollution event, with negative effects on water quality and consequently potential effects on aquatic and wetland habitats.
- Disturbance of fauna such as bats, otters or wintering birds could represent a potential in-combination impact, resulting in habitat loss, and
- Spread of invasive species or disturbance impacts.

Operational Phase – Disturbance during the Operational Phase could occur, particularly on protected fauna, from in-combination impacts such as surface water runoff pollution or species disturbance due to increased human activity.

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<sup>1</sup> 'Where applicable' denotes where a project has been scoped in for a Stage 4 Assessment which is presented in Appendix A26.2 in Volume 4 of this EIA. Not all environmental factors progress to Stage 4 as per methodology explained in Section 26.3. Due to the number of projects assessed the assessment results are reported in full in Appendix A26.2.

#### 26.4.1.2.3 Population

Construction Phase – where applicable the cumulative effects assessment noted that cumulative effects on population could arise from construction traffic, with a possible increase in traffic congestion and noise effects if the construction periods overlap between the Proposed Development and Tier 1 projects. Cumulative effects on residential/public amenities could arise in specific locations should works be simultaneous with DART+ Coastal North.

Operational Phase – As well as the net positive impacts for passengers, including an improved range of journey options, the project will provide for a small, but distinct transfer from vehicle journeys, especially for commuters, with a particular benefit for future journeys. Any reduction in the number of vehicle journeys in the future will have a positive impact in mitigating congestion in Dublin compared with a do-nothing scenario. It could also reduce traffic on many local roads in the study area which do not have the capacity to carry high volumes of traffic and where excessive volumes and driving above the speed limit present a significant hazard to cyclists and pedestrians, as well as a collision risk for motorists. Particular benefits would apply from modest reductions in traffic, relative to the do-nothing scenario, on secondary roads such as the R126 between the M1 and Donabate, the R127 between Lusk and Skerries, and the R150 between the M1 and Laytown.

In addition, benefits can be expected from reduced severance to community facilities in towns such as Malahide, Donabate, Laytown and Balbriggan, while allowing for some local access to stations. This benefit will again be realised more in terms of future journeys relative to the Do-Nothing Scenario, noting also that that new development will be expected to conform more closely to a compact growth model centred on public transport nodes supported by new public transport and active travel to facilitate station access. Improved accessibility will permit, in some cases, new built development and new local opportunities for economic growth as well as having a dividend for quality of life if combined with traffic management measures and encouragement of active travel modes.

#### 26.4.1.2.4 Land and Soils

Construction Phase – where applicable the cumulative effects assessment noted that there is potential for cumulative effects during the Construction Phase in terms of topsoil and subsoil loss assuming construction overlap between projects, with no significant interaction between roads and drainage infrastructure works.

Operational Phase – No significant cumulative effects were detected during the Operational Phase upon the land and soil environment.

#### 26.4.1.2.5 Water

Construction Phase – where applicable the cumulative effects assessment noted that there is potential for cumulative effects during the Construction Phase due to increased erosion and sedimentation, with an increase of the silt load in surface water runoff and increased traffic and operations.

Operational Phase – No significant cumulative effects were detected during the Operational Phase upon the water environment.

#### 26.4.1.2.6 Air Quality

Construction Phase – where applicable the cumulative effects assessment noted if construction takes place concurrently between the Proposed Development and selected projects, it could potentially result in temporary adverse effects upon nearby sensitive receptors.

Operational Phase – the Operational Phase is predicted to have a neutral and long-term impact on air quality, no significant effects are likely to arise.

#### 26.4.1.2.7 Climate

Construction Phase – where applicable the cumulative effects assessment noted the potential for temporary adverse effects on Climate if Construction Phase works take place concurrently.

Operational Phase – the Operational Phase is predicted to have a neutral and long-term impact on climate, no significant adverse cumulative effects are likely to arise.

#### 26.4.1.2.8 Noise and Vibration

Construction Phase – where applicable the cumulative effects assessment noted that overlap in the Construction Phase with other Tier 1 projects could result in temporary adverse effects upon nearby sensitive receptors.

Operational Phase – There is potential for cumulative effects during the Operational Phase, due to a potential increase in road traffic and rail noise associated with Proposed Development.

#### 26.4.1.2.9 Landscape and Visual

Construction Phase – where applicable the cumulative effects assessment noted that there is potential for temporary in-combination townscape/visual effects that could occur if the Construction Phase between the Proposed Development and Tier 1 projects coincide or are successive. These effects would be imperceptible if there is no overlap.

Operational Phase – There is potential for cumulative effects during the Operational Phase if there is a cumulative increase in the intensity of built form in the landscape/townscape setting. However, this is in keeping with the urban context of ongoing development and no significant cumulative effects are expected.

#### 26.4.1.2.10 Material Assets: Resource and Waste

Construction Phase – where applicable the cumulative effects assessment noted the potential for negative cumulative effects on resource and waste facilities and waste industry trends in Ireland if there is an overlap between projects, due to an increase in demand on waste recovery and/or disposal sites, including waste material from excavation and construction.

Operational Phase – No significant cumulative effects are likely to occur in respect of resource and waste management from the Operational Phase.

#### 26.4.1.2.11 *Material Assets: Agricultural Properties*

Construction Phase – where applicable the cumulative effects assessment noted the potential for negative cumulative effects to any affected agricultural land parcels, in which a number of planned housing developments, in combination with the Proposed Development, will give rise to cumulative effects. A significant adverse effect will arise from land takes that exceed the baseline trends as set out in Chapter 16 of this EIAR and where these criteria are cross referenced with the land parcel sensitivity.

Operational Phase – A significant adverse effect will rise from land take over 50%, with land take that represents 50% at one specific location giving rise to Moderate Adverse cumulative effects.

#### 26.4.1.2.12 *Material Assets – Utilities*

Construction Phase – where applicable the cumulative effects assessment noted the potential for cumulative effects on Material Assets – Utilities during the Construction Phase if there is an overlap in works associated with the Proposed Development and Tier 1 projects.

Operational Phase – During the Operational Phase there is no potential for residual cumulative effects.

#### 26.4.1.2.13 *Human Health*

Construction Phase – where applicable the cumulative effects assessment noted that there is potential for cumulative effects during the Construction Phase resulting in temporary adverse effects upon nearby sensitive receptors if the construction works take place concurrently.

Operational Phase – The Operational Phase of the Proposed Development is predicted to have a positive long-term impact on human health; therefore, no significant adverse cumulative effects are likely to arise.

### **26.4.2 Tier 2 – Cumulative Assessment**

The Tier 2 cumulative assessment presented in Table 26-5 below provides a cumulative assessment of the proposed DART+ Coastal North Project with the other DART+ projects included in the DART+ Programme. Table 26-6 provides the cumulative assessment of future National Transport Authority (NTA) / Transport Infrastructure Ireland (TII) projects and other large-scale projects of national importance, which the applicant is aware are in development.

26.4.2.1 Tier 2 – Other DART+ Projects

Table 26-5 Tier 2 Cumulative Assessment of DART+ Coastal North with Other DART+ Programme Projects

Project Details	Project Description	Cumulative Impact with the Proposed Development
<p><b>Project Name:</b> DART+ West</p> <p><b>Applicant:</b> CIÉ</p> <p><b>Planning Application Reference:</b> None</p> <p><b>Location:</b> City Centre to west of Maynooth and to M3 Parkway Station</p> <p><b>Planning Status:</b> Requested statutory approval for its design, with submission of Railway Order application to An Board Pleanála in July 2022.</p> <p>Further information (FI) was submitted to ABP contained in a document entitled 'Update to Natura Impact Statement' in October 2023. Submissions were open on the FI until 30 November 2023.</p>	<p>The DART+ West is seeking to significantly increase the Rail capacity on the Maynooth and M3 Motorway lines. This will be achieved by train electrification, high-capacity DART trains and an increase on the train frequency.</p> <p>The key infrastructural works include:</p> <ul style="list-style-type: none"> <li>• Electrification and re-signalling of the Maynooth and M3 Parkway lines (approx. 40km in length).</li> <li>• Capacity enhancements at Connolly Station.</li> <li>• Provision of new Spencer Dock Station, which will better serve the North Docklands area and improve interchange with the Luas.</li> <li>• Closure of level crossings and provision of replacements bridges where required.</li> <li>• New DART depot facility in order to improve maintenance levels and parking of trains.</li> <li>• Remodelling of existing bridges to facilitate clearances for the overhead electrification equipment.</li> </ul> <p>Installation of necessary substations, electrical buildings, and other civil and ancillary works to accommodate the project.</p>	<p>At the time of writing, the DART+ West project has sought statutory approval for the proposed scheme, with the submission of a Railway Order application to An Bord Pleanála in July 2022. An Oral Hearing has been held and a decision on the Railway Order is awaited. The DART+ West project is required to assess environmental impacts in accordance with the EIA Directive including the assessment of cumulative effects with DART+ Coastal North which formed part of its Railway Order application.</p> <p>The DART+ Coastal West project has allowed the train movements associated with the DART+ Programme including those from the DART+ Coastal North project that would use the line and depot in the future. These figures form the basis of the main assessment in the DART+ Coastal North EIAR.</p> <p>The development boundary of the proposed DART+ Coastal North Project starts west of the East Wall Road Bridge. Based on the current design information from the DART+ West project, it proposes termination east of the East Wall Road Bridge. No electrification works are proposed at this location as the rail line is already electrified, so there is no overlap of works between both projects.</p> <p>CIÉ is developing both projects and will continue to work to avoid, reduce and mitigate potential negative, and maximise positive cumulative effects on the environment. However, based on current design information and the location and nature of the two projects, there is potential for cumulative effects on rail passenger and freight operations if the construction works on the rail network occur concurrently and/or sequentially. Long-term positive cumulative effects are likely during the Operational Phase as both projects will support the development and improvement of sustainable transport.</p> <p>There will be a cumulative loss of linear habitat associated with the projects which will impact on biodiversity resource. There will also be cumulative loss of heritage features associated with both projects. The recording of structures that are to be demolished / modified, while not preserving the structure, can ensure knowledge of their existence and character is preserved for the future.</p> <p>Long-term positive cumulative effects are likely during the Operational Phase as both projects will support the development and improvement of sustainable transport.</p>

Project Details	Project Description	Cumulative Impact with the Proposed Development
<p><b>Project Name:</b> DART+ South West</p> <p><b>Applicant:</b> CIÉ</p> <p><b>Planning Application ref:</b> None</p> <p><b>Location:</b> Hazelhatch &amp; Celbridge Station to Heuston Station and onward to Glasnevin Junction via the Phoenix Park Tunnel Branch Line.</p> <p><b>Planning Status:</b> Requested statutory approval of its design, with the submission of a Railway Order application to An Board Pleanála in March 2023.</p>	<p>DART+ South West (SW) is seeking to significantly increase rail capacity on the Cork Mainline circa 20km from Hazelhatch &amp; Celbridge Station to Heuston Station, and to Glasnevin via the Phoenix Park Tunnel Branch Line. This will be achieved by implementing an electrified railway network with high-capacity DART trains, increasing the frequency of trains and providing a new station at Heuston West.</p> <p>The key infrastructural works includes:</p> <ul style="list-style-type: none"> <li>• Completion of four tracking from Park West &amp; Cherry Orchard Station to Heuston Station, extending the works completed on the route in 2009.</li> <li>• Electrification and re-signalling of the line from Hazelhatch &amp; Celbridge Station to Heuston Station and from Heuston Station to Glasnevin, via the Phoenix Park Tunnel Branch Line, where it will link with the proposed DART+ West.</li> <li>• Improvements/reconstructions of bridges to facilitate movement of electrified train services.</li> <li>• Removal of rail constraints along the Phoenix Park Tunnel Branch Line.</li> <li>• Delivery of a new Heuston West Station.</li> </ul>	<p>At the time of writing, the DART+ South West project has requested statutory approval for the proposed scheme, with the submission of a Railway Order application to An Bord Pleanála in March 2023.</p> <p>There is no spatial overlap of the DART+ Coastal North Project with the DART+ South West Project.</p> <p>CIÉ is developing both projects and will continue to work to avoid, reduce and mitigate potential negative, and maximise positive cumulative effects on the environment.</p> <p>Long-term positive cumulative effects are likely during the Operational Phase as both projects will support the development and improvement of sustainable transport.</p> <p>The DART+ South West project is required to assess environmental impacts in accordance with the EIA Directive including the assessment of cumulative effects with DART+ Coastal North which was undertaken as part of that EIAR.</p>
<p><b>Project Name:</b> DART+ Coastal South</p> <p><b>Applicant:</b> CIÉ</p> <p><b>Planning Application Reference:</b> None</p> <p><b>Location:</b> City Centre to Greystones</p> <p><b>Planning Status:</b> At preplanning/ options development stage.</p>	<p>The DART+ Coastal South (CS) project will extend from Dublin City Centre to Greystones and will deliver capacity improvements and enhanced train services in line with the DART+ Programme. The project includes assessing level crossings along the route, potential turnback facilities and stabling, and increases to the line capacity.</p> <p>The DART+ Coastal South is currently at an early stage in the project timeline with the development of options currently being undertaken. Limited project details are available.</p>	<p>At the time of writing, there is limited information available on this project in the public domain. The DART+ Coastal South project is currently at an early stage in the project timeline with the development of options currently being undertaken.</p> <p>It is likely that DART+ Coastal South Project will commence south of the River Liffey, however specific project details are currently unknown.</p> <p>There is no spatial overlap of the DART+ Coastal North Project with the DART+ Coastal South Project.</p> <p>CIÉ is developing both projects and will continue to work to avoid, reduce and mitigate potential negative, and maximise positive cumulative effects on the environment.</p> <p>However, based on current information and the nature of the two projects, there is potential for cumulative effects on rail operations if the construction works on the rail network occur concurrently and/or sequentially. Long-term positive cumulative effects are likely during the Operational Phase as both projects will support the development and improvement of sustainable transport.</p> <p>The DART+ Coastal South project is required to assess environmental impacts in accordance with the EIA Directive including the assessment of cumulative effects with DART+ Coastal North which will be undertaken as part of that EIAR.</p>

26.4.2.2 Tier 2 – Other Projects

Table 26-6 Tier 2 Cumulative Assessment of DART+ Coastal North with Other projects

Project Details	Project Description	Cumulative Impact with the Proposed Development
<p><b>Project Name:</b> Metrolink  <b>Applicant:</b> NTA/TII  <b>Application Reference:</b> 314724  <b>Planning Status:</b> Lodged with ABP in September 2022. An oral hearing was held in February / March 2024. The application is being considered by ABP and no decision has yet been made.</p>	<p>MetroLink is a transformative piece of new public transport infrastructure, the first of its kind in Ireland. It will comprise a high-capacity, high-frequency, modern and efficient metro railway, with 16 new stations running from Swords to Charlemont. The alignment will link Dublin Airport, Iarnród Éireann, DART, Dublin Bus and Luas services and create a fully integrated public transport network for the Greater Dublin Area (GDA). The proposed Project will be approximately 18.8km in length.</p> <p>As well as linking major transport hubs, MetroLink will connect key destinations including Ballymun, the Mater Hospital, the Rotunda Hospital, Dublin City University (DCU) and Trinity College Dublin (TCD). Much of the 18.8km route will run underground, an exciting innovation for Irish public transport.</p> <p>It includes a 9.4km section of single bore tunnel running beneath Dublin city centre from Northwood Station to Charlemont Station and a 2.3km section of single bore tunnel running beneath Dublin Airport. Tunnel sections include intervention access facilities for emergency services at Dublin Airport, Albert College Park and just south of Charlemont Station. Tunnel portal structures will be provided at Northwood, Dardistown and Dublin Airport. North of Dublin Airport the alignment will emerge from tunnel and will run at surface level, in cut and cover and on elevated structures to Estuary Station. A new 99m long bridge will be constructed over the M50 Motorway and a 261m long multi-span Viaduct over the Broadmeadow and Ward Rivers.</p> <p>There will be a total of 16 stations, including 11 underground stations at Dublin Airport, Northwood, Ballymun, Collins Avenue, Griffith Park, Glasnevin, Mater, O'Connell Street, Tara, St. Stephen's Green and Charlemont; 4 retained cut stations at Seatown, Swords Central, Fosterstown and Dardistown and 1 at grade station at Estuary. A multi-storey 3000 space park and ride close to the M1 Motorway will be provided at Estuary Station, a maintenance depot is located near Dardistown Station which will house all the facilities required for the maintenance and operation of the MetroLink and its rolling stock and the Operational Control Centre.</p> <p>The works will also include railway signalling, command and control and communications systems; provision of electrical substations; establishment of temporary construction compounds; establishment of temporary traffic management and road diversions; new and realigned access routes and road junction improvements; diversion of existing utilities; provision of new drainage infrastructure; provision of environmental mitigation measures; and other infrastructural modifications to facilitate the overall project.</p> <p>Construction of the proposed Project is expected to take place over approximately nine years, with an intended construction commencement date in 2025 and an opening year of 2035. 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>At the time of writing, the Metrolink Project had submitted its Railway Order Application to An Bord Pleanála (end of September 2022). An oral hearing was held in February and March 2024. The Metrolink Project was required to assess impacts in accordance with the EIA Directive including the assessment of cumulative effects with other major transport projects such as the Dart+ projects as part of its Railway Order Application.</p> <p>There is no spatial overlap of the DART+ Coastal North Project with the MetroLink Project.</p> <p>Long-term positive cumulative effects are likely during the Operational Phase as both projects will support the development and improvement of sustainable transport. There will be integration and connectivity between other transport hubs, such as Dublin Airport, Iarnród Éireann and DART. The MetroLink will also be electrified and will contribute to reduce Ireland's transport carbon emissions.</p>

Project Details	Project Description	Cumulative Impact with the Proposed Development
<p><b>Project Name:</b> Luas Finglas</p> <p><b>Applicant:</b> NTA/TII</p> <p><b>Application Reference:</b> None</p> <p><b>Planning Status:</b> Preferred Route identified</p>	<p>Luas Finglas is the next extension of the Luas Green Line. It 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.</p> <p>The proposed route is 3.9km in length and will include four new stops: St Helena's, Finglas Village, St Margaret's and Charlestown. A 350-vehicle park and ride facility will be provided near the St Margaret's Road stop, close to the M50.</p> <p>The route will provide interchange opportunities with bus networks at all the new stops and with mainline rail services at Broombridge.</p> <p>Most of the route will be built using grass track, an attractive and sustainable innovation for urban transport in Ireland.</p>	<p>At the time of writing, there is limited information in relation to Luas Finglas. A report on the consultation undertaken regarding the Preferred Route has been published and submissions are being studied together with the development of the final design that will form the application for a Railway Order. It is anticipated that Luas Finglas would have the potential for increased connectivity and commuter flows with the Dart+ Coastal North Project, promoting the use of sustainable transport modes.</p> <p>There is no spatial overlap of the DART+ Coastal North Project with the current Luas Finglas Project.</p> <p>The NTA are developing both projects and will continue to work to avoid, reduce and mitigate potential negative, and maximise positive cumulative effects on the environment.</p> <p>The proposed DART+ Coastal North Project will reduce carbon emissions and similarly, light rail will achieve low carbon emissions, which will assist in meeting Ireland's commitments for decarbonisation.</p>
<p><b>Project Name:</b> NISA</p> <p><b>Applicant:</b> Statkraft Ireland</p> <p><b>Application Reference:</b> FS007031</p> <p><b>Planning Status:</b> Design Review Stage, currently working to submitting planning application in 2024.</p>	<p>The North Irish Sea Array, also known as NISA, is an offshore wind energy project being proposed off the coast of counties Dublin, Meath and Louth, bringing with it and opportunity to significantly contribute to the development of clean, renewable energy future.</p> <p>Current working design layout to include between approximately 35 and 46 turbines, displacing approximately half a million tonnes of CO<sup>2</sup> per annum, with a capacity to power around 500,000 homes and create high quality jobs.</p>	<p>At the time of writing, North Irish Sea Array Offshore Wind Farm (NISA) was at the pre-application stage, with the team working to develop the project with the view to submitting a planning application in 2024. Surveys have been carried out along with consultation and technical appraisals, which will be considered and might influence how the project develops. NISA would have the capacity to produce renewable energy for Ireland's electricity grid, together with improvements to public services and communities.</p> <p>While much of the infrastructure for NISA will be located offshore, there will be onshore infrastructure, including substations and an onshore cable to connect the power generated by the offshore turbines, to the national grid. It is likely, given the location of the project, that the onshore infrastructure may be in the vicinity of the DART+ Coastal North project and the onshore cables may cross the railway line between Dublin and Drogheda. The NISA project will be subject to an EIA and NIS similar to DART+ Coastal North. Appropriate mitigation measures will be included in the NISA EIAR and Appropriate Assessment documentation to minimise potential impacts to the environment.</p> <p>During the Construction Phase the mitigation measures within Appendix A5.1 (CEMP) for DART+ Coastal North will be implemented by the contractor to minimise effects. These measures will ensure that there are no significant cumulative effects with the NISA project. The CEMP contains a Construction Traffic Management Plan (CTMP) which includes a measure for interface with other projects. This specifies that liaison will take place on a case-by-case basis, as will be set out in the Construction Contract, to ensure that there is coordination between projects, that construction access locations remain unobstructed by the Proposed Development works, that temporary traffic management measures are implemented in a planned and coordinated manner and that any additional construction traffic mitigation measures required to deal with cumulative impacts are managed appropriately. Significant negative cumulative effects are therefore not predicted between the proposed DART+ Coastal North Project and the NISA project.</p> <p>The proposed DART+ Coastal North Project will reduce carbon emissions and similarly, an offshore wind project will achieve low carbon emissions, which will assist in meeting Ireland's commitments to decarbonisation.</p>

Project Details	Project Description	Cumulative Impact with the Proposed Development
<p><b>Project Name:</b> Dundalk Active Travel Project</p> <p><b>Applicant:</b> Louth County Council</p> <p><b>Application Reference:</b> N/A</p> <p><b>Planning Status:</b> Lodgement planned Q2 2024</p>	<p>The project envisages the creation of appropriate segregated cycle lanes, pedestrian and cyclist crossing points at existing junctions with further crossing points at recognised desire lines, which will encourage more active travel and create an essential, safe commuter corridor for pedestrians and cyclists.</p> <p>This will allow pedestrians and cyclists to “hop on, hop off” and access areas along the length of the town. These new facilities will also complement the existing cycle lanes constructed predominantly within the town centre along with the R215 scheme under LH-21-0010 and the R132 schemes under LH-22-0001 &amp; LH-22-0005 Active Travel Programs.</p> <p>Works proposed include:</p> <ul style="list-style-type: none"> <li>• The provision of segregated cycle lanes on the Inner Relief Road over a length of c.4km;</li> <li>• The review and upgrades of major junctions along this route to better facilitate pedestrian/cyclist facilities;</li> <li>• Provision of further pedestrian and cycling crossings at identified desire lines along the route;</li> <li>• Linkages to DKIT Campus on the West of the R132 to better facilitate access to DKIT Sports Campus on the Eastern side of the R132; and</li> <li>• The provision of all other ancillary works associated with these cycle lanes along the length of the scheme.</li> </ul>	<p>At the time of writing, there is limited information in relation to the Dundalk Active Travel Project. A non-statutory second phase of public consultations on the preliminary design has been concluded. It is anticipated that the project would provide greater connectivity with more sustainable transport, while reducing carbon footprints.</p> <p>The proposed Dart+ Coastal North Project will reduce carbon emissions and in combination with this project, will assist in meeting Ireland’s commitments to decarbonisation.</p>
<p><b>Project Name:</b> ESB Electricity Supply Connections</p> <p><b>Applicant:</b> ESB</p> <p><b>Location:</b> Along extents of proposed DART+ Coastal North project within functional areas of Dublin, Fingal, Meath and Louth.</p> <p><b>Application Reference:</b> N/A</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 is progressing to design (and seek consent for) electricity supply connections to accommodate the electrification of the proposed DART+ Coastal North project and as part of its wider planning for grid reinforcement works for the GDA.</p> <p>The works associated with the DART+ Coastal North project will progress in parallel and will be completed in advance of the completion of the Proposed Development construction to ensure that the project will have the necessary electricity supply for testing and operation. Close consultation between the DART+ Coastal project team and ESB 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><b>Connections to DART+ Coastal North substations</b></p> <p>There are eight 38 kV substations proposed as part of the DART+ Coastal North project which will require electricity supply through new electricity connections at the following locations:</p> <ul style="list-style-type: none"> <li>• Donabate,</li> <li>• Rush and Lusk,</li> <li>• South Skerries,</li> <li>• North Skerries,</li> <li>• Balbriggan,</li> <li>• Gormanston,</li> <li>• Bettystown and</li> <li>• Drogheda.</li> </ul> <p>These are proposed to be supplied with electrical connections, from the existing ESB/Eirgrid network and also new Eirgrid bulk supply and ESBN substations which are currently in planning to support the network upgrade.</p> <p>Desk studies completed by ESB have identified concept routes for the proposed 38kV cable connections which will be located along the existing road network and where necessary, on overhead lines across private land.</p>	<p>Any ESB connections will be subject, where required to EIA/AA processes as part of any consent process. These assessments will consider the potential for significant effects, as well as any necessary mitigation measures required to address these effects. The potential for cumulative effects with the DART+ Coastal North project is considered below under key headings:</p> <p><b>Traffic and Transport</b></p> <p><i>Construction Phase</i></p> <p><b>Potential Impact</b> – There is potential for cumulative negative effects on vehicular traffic if the construction works occur concurrently and/or sequentially with regards to the ESB connections, in particular in relation to any required road closures. Construction traffic management plans will be implemented as part of both projects to reduce likely significant impacts including cumulative effects. Based on the information available and the nature and likely duration of the works the potential cumulative effects are not likely to be significant.</p> <p><b>Mitigation</b> -The DART+ Coastal North project team will continue to collaborate constructively with ESB networks and any agents during the construction stages to avoid, reduce and mitigate potential negative cumulative impacts as part of the construction stage planning. The Construction Environmental Management Plan (CEMP) which details Construction Traffic Management measures have been developed in respect of the DART+ Coastal North Project and will be updated post planning and throughout construction.</p> <p><i>Operational Phase</i></p> <p><b>Potential Impact</b> – There are no likely significant cumulative traffic and transport operational phase impacts.</p> <p><b>Mitigation</b> – N/A</p>

Project Details	Project Description	Cumulative Impact with the Proposed Development
	<p><b>Nature of the works:</b> The works will involve laying underground cables (UGC) 38kV electricity connection in the existing roads. 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. Similarly overhead lines (OHL) poles will be erected, and cable stringing completed on private lands depending on the finally selected route from the ESB network connection location to the IE traction substation. Access arrangements will be coordinated with the local authority and with land owners.</p> <p>These will be typically daytime works that are transient in nature and temporary as they move along the road network and along the selected route.</p> <p><b>Summary of Proposed Works:</b></p> <p>Works requirements: Partial road closure required, daytime works. Likely construction temporary works. The works are typically transient in nature and temporary as they move along the road network.</p>	
<p><b>Project Name:</b> ESB Electricity Supply Connections – continued</p>	<p>Description as above</p>	<p><b>Population</b></p> <p><i>Construction Phase</i></p> <p><b>Potential Impact</b> - Should the construction stages overlap and/ or develop concurrently, there is potential for cumulative effects on communities resulting in disturbance, nuisance, short term diversions/severance. There are also likely to be positive cumulative effects due to employment opportunities and increase in local economy to support the workforce.</p> <p><i>Operational Phase</i></p> <p><b>Potential Impact</b> - There are no significant likely cumulative population operational phase impacts.</p> <p><b>Mitigation</b> - N/A</p>

Project Details	Project Description	Cumulative Impact with the Proposed Development
<p><b>Project Name:</b> ESB Electricity Supply Connections – continued</p>	<p>Description as above</p>	<p><b><u>Biodiversity</u></b></p> <p><i>Construction Phase</i></p> <p><b>Potential Impact</b> - Should the construction stages overlap and/ or develop concurrently, there is potential for cumulative effects on biodiversity resulting from the displacement of local fauna associated with construction activities of both projects.</p> <p>Mitigation and monitoring measures proposed as part of the DART+ Coastal North project will be implemented to address all likely significant impacts. Based on the information available, the potential cumulative effects are not likely to be significant.</p> <p><b>Mitigation</b> – Mitigation and monitoring measures proposed as part of the DART+ Coastal North project will be implemented to address potential significant impacts. Based on the information available, the potential cumulative effects are not likely.</p> <p><i>Operational Phase</i></p> <p><b>Potential Impact</b> - There are no significant likely cumulative Biodiversity operational phase impacts.</p> <p><b>Mitigation</b> - N/A</p> <hr/> <p><b><u>Land and Soils</u></b></p> <p><i>Construction Phase</i></p> <p><b>Potential Impact</b> – Should the construction stages overlap and/ or develop concurrently, there is potential for cumulative effects on land and soils resulting from the resource requirement of both projects, however the potential impacts are not likely to be significant.</p> <p><b>Mitigation</b> – Mitigation and monitoring measures proposed as part of the DART+ Coastal North project will be implemented to address potential significant impacts. The DART+ Coastal North project team will continue to collaborate constructively with ESB networks and any agents during the construction stages to avoid, reduce and mitigate potential negative cumulative impacts as part of the construction stage planning.</p> <p>The Construction Environmental Management Plan (CEMP) which details management of Construction &amp; Demolition Waste, excavation, stockpiling and movement of soils measures have been developed in respect of the DART+ Coastal North Project and will be updated post planning and throughout construction.</p> <p>Based on the information available, the potential cumulative effects are not likely to be significant.</p> <p><i>Operational Phase</i></p> <p><b>Potential Impact</b> – There are no significant likely cumulative Land and Soils operational phase impacts.</p> <p><b>Mitigation</b> – N/A</p>

Project Details	Project Description	Cumulative Impact with the Proposed Development
<p><b>Project Name:</b> ESB Electricity Supply Connections – continued</p>	<p>Description as above</p>	<p><u>Hydrology</u></p> <p><i>Construction Phase</i></p> <p><b>Potential Impact</b> – The construction works for both projects will be carried out in the vicinity of waterbodies, however, works within waterbodies has been excluded from the DART+ Coastal North project and will be very unlikely for any ESB electricity supply connections.</p> <p>Should the construction stages overlap and/ or develop concurrently, there is potential for cumulative effects in the event of accidental pollution during the construction phases of these developments.</p> <p><b>Mitigation</b> – Mitigation and monitoring measures proposed as part of the DART+ Coastal North project will be implemented to address potential significant impacts. Based on the information available, the potential cumulative effects are not likely to be significant.</p> <p><i>Operational Phase</i></p> <p><b>Potential Impact</b> - There are no significant likely cumulative Hydrology operational phase impacts.</p> <p><b>Mitigation</b> - N/A</p> <hr/> <p><u>Hydrogeology</u></p> <p><i>Construction Phase</i></p> <p><b>Potential Impact</b> – Given the relatively shallow depths of likely ESB electricity supply connections (underground or overhead line), significant effects on hydrogeology are unlikely. To that end, significant cumulative effects are unlikely.</p> <p><b>Mitigation</b> – Mitigation and monitoring measures proposed as part of the DART+ Coastal North project will be implemented to address potential significant impacts. Based on the information available, the potential cumulative effects are not likely to be significant.</p> <p><i>Operational Phase</i></p> <p><b>Potential Impact</b> - There are no significant likely cumulative Hydrogeology operational phase impacts.</p> <p><b>Mitigation</b> - N/A</p>

Project Details	Project Description	Cumulative Impact with the Proposed Development
<p><b>Project Name:</b> ESB Electricity Supply Connections – continued</p>	<p>Description as above</p>	<p><b>Air Quality</b></p> <p><i>Construction Phase</i></p> <p><b>Potential Impact</b> – Should the construction stages overlap and/ or develop concurrently, there is potential for cumulative effects on air quality resulting from the generation of construction dust associated with construction activities of both projects. Additional congestion or private vehicle redistribution resulting in higher emissions may occur should projects occur concurrently.</p> <p><b>Mitigation</b> – Mitigation and monitoring measures proposed as part of the DART+ Coastal North project will be implemented to address potential significant impacts.</p> <p>The DART+ Coastal North project team will continue to collaborate constructively with ESB networks and any agents during the construction stages to avoid, reduce and mitigate potential negative cumulative impacts as part of the construction stage planning.</p> <p>The Construction Environmental Management Plan (CEMP) which details dust management measures have been developed in respect of the DART+ Coastal North Project and will be updated post planning and throughout construction.</p> <p>Based on the information available, the potential cumulative effects are not likely to be significant.</p> <p><i>Operational Phase</i></p> <p><b>Potential Impact</b> - There are no significant likely cumulative Air Quality operational phase impacts.</p> <p><b>Mitigation</b> - N/A</p> <hr/> <p><b>Climate</b></p> <p><i>Construction Phase</i></p> <p><b>Potential Impact</b> – Should the construction stages overlap and/ or develop concurrently, there is potential for cumulative effects on climate resulting from the movement of construction vehicles associated with construction activities of both projects.</p> <p><b>Mitigation</b> – Mitigation and monitoring measures proposed as part of the DART+ Coastal North project will be implemented to address potential significant impacts.</p> <p>Based on the information available, the potential cumulative effects are not likely to be significant.</p> <p><i>Operational Phase</i></p> <p><b>Potential Impact</b> - There are no significant likely cumulative Climate operational phase impacts.</p> <p><b>Mitigation</b> - N/A</p>

Project Details	Project Description	Cumulative Impact with the Proposed Development
<p><b>Project Name:</b> ESB Electricity Supply Connections – continued</p>	<p>Description as above</p>	<p><b><u>Noise and Vibration</u></b></p> <p><i>Construction Phase</i></p> <p><b>Potential Impact</b> – Should the construction stages overlap and/ or develop concurrently, there is potential for cumulative effects on Noise and Vibration resulting from the generation of construction dust associated with construction activities of both projects.</p> <p><b>Mitigation</b> – Mitigation and monitoring measures proposed as part of the DART+ Coastal North project will be implemented to address significant impacts. All subsequent projects are required to assess impacts in accordance with the EIA Directive including cumulative effects which will be undertaken at the respective planning stage.</p> <p>The DART+ Coastal North project team will continue to collaborate constructively with ESB networks and any agents during the construction stages to avoid, reduce and mitigate potential negative cumulative impacts as part of the construction stage planning.</p> <p>The Construction Environmental Management Plan (CEMP) which details noise management measures have been developed in respect of the DART+ Coastal North Project and will be updated post planning and throughout construction.</p> <p>Based on the information available, the potential cumulative effects are not likely to be significant.</p> <p><i>Operational Phase</i></p> <p><b>Potential Impact</b> - There are no significant likely cumulative population operational phase impacts.</p> <p><b>Mitigation</b> - N/A</p> <hr/> <p><b><u>Landscape and Visual</u></b></p> <p><i>Construction Phase</i></p> <p><b>Potential Impact</b> – Should the construction stages overlap and/ or develop concurrently, there is potential for cumulative effects on climate resulting from the movement of construction vehicles associated with construction activities of both projects.</p> <p><b>Mitigation</b> – Mitigation and monitoring measures proposed as part of the DART+ Coastal North project will be implemented to address potential significant impacts.</p> <p>Based on the information available, the potential cumulative effects are not likely to be significant.</p> <p><i>Operational Phase</i></p> <p><b>Potential Impact</b> - There are no significant likely cumulative Landscape and Visual operational phase impacts.</p> <p><b>Mitigation</b> - N/A</p>

Project Details	Project Description	Cumulative Impact with the Proposed Development
		<p><u>Agricultural / Non-Agricultural - land take</u></p> <p><i>Construction Phase</i></p> <p><b>Mitigation</b> – Mitigation and monitoring measures proposed as part of the DART+ Coastal North project will be implemented to address potential significant impacts.</p> <p>Based on the information available, the potential cumulative effects are not likely to be significant.</p> <p><i>Operational Phase</i></p> <p><b>Potential Impact</b> - There are no significant likely cumulative Agricultural / Non-Agricultural operational phase impacts.</p> <p><b>Mitigation</b> - N/A</p> <hr/> <p><u>Material Assets: Utilities, resources and waste resources - land take</u></p> <p><i>Construction Phase</i></p> <p><b>Mitigation</b> – Mitigation and monitoring measures proposed as part of the DART+ Coastal North project will be implemented to address significant impacts. Based on the information available, the potential cumulative effects are not likely to be significant on other material assets.</p> <p><i>Operational Phase</i></p> <p><b>Potential Impact</b> - There are no significant likely cumulative Agricultural / Non-Agricultural operational phase impacts.</p> <p><b>Mitigation</b> - N/A</p> <hr/> <p><u>Electromagnetic Compatibility and Stray Current</u></p> <p><i>Construction Phase</i></p> <p><b>Potential Impact</b> - There are no significant likely cumulative Electromagnetic Compatibility and Stray Current operational phase impacts.</p> <p><b>Mitigation</b> - N/A</p> <p><i>Operational Phase</i></p> <p><b>Potential Impact</b> - There are no significant likely cumulative Electromagnetic Compatibility and Stray Current operational phase impacts.</p> <p><b>Mitigation</b> - N/A</p>
<p><b>Project Name:</b> DART Station Enhancement Project</p> <p><b>Applicant:</b> CIÉ</p> <p><b>Application Reference:</b> N/A</p> <p><b>Planning Status:</b> At preplanning/ options development stage.</p>	<p>This project is currently under early development and is appointing consultant services to review the future requirements at DART stations. The objective of the project initially is to produce a study that will recommend how DART stations (current and proposed network) should be enhanced into the future to provide an improved customer experience, whilst also considering the increasing passenger demand capacity challenges that will be introduced in the future. It will outline the most effective method to enhance DART stations into the future considering the provision of increased services under the DART+ programme and all other ongoing projects/programmes with an aim of making DART stations more attractive to the customer. The early elements of this project (focusing mainly on capacity issues associated with future passenger numbers) will be progressed in 2024, and subject to funding will be progressed thereafter.</p>	<p>At the time of writing, there is limited information in relation to the DART Station Enhancement Project. It is anticipated that the project would provide an improved passenger experience and greater functionality and connectivity to promote more sustainable transport, and thereby reducing carbon footprints. If the construction programmes overlap there is potential for cumulative effects for Traffic and Transport, however The proposed DART+ Coastal North Project will reduce carbon emissions and in combination with this project, will assist in meeting Ireland's commitments to decarbonisation.</p>

Project Details	Project Description	Cumulative Impact with the Proposed Development
<p><b>Project Name:</b> Multimodal Interchange Project</p> <p><b>Applicant:</b> CIÉ</p> <p><b>Application Reference:</b> N/A</p> <p><b>Planning Status:</b> At preplanning/ options development stage.</p>	<p>The Multimodal Interchange Project will assess all stations throughout the network with a view of implementing its strategy at stations where there is need for modifications that will have an impact on multimodal travel and station access.</p> <p>This project aims improve the integration and accessibility of the public transport network for stations and communities across the network, through the provision of multimodal interchanges. This project will assess a variety of multimodal options at stations including but not limited to the provision of secure bicycle parking and shared mobility services. The Strategy relating to this project was completed in 2023 and is currently with the NTA for review and approval. Subject to approval and funding the project will move to the next phase and eventual delivery of the solutions identified.</p>	<p>At the time of writing, there is limited information in relation to the Multimodal Interchange Project. It is anticipated that the project would provide an improved passenger experience and greater functionality and connectivity to promote more sustainable transport, and thereby reducing carbon footprints.</p> <p>The proposed DART+ Coastal North Project will reduce carbon emissions and in combination with this project, will assist in meeting Ireland's commitments to decarbonisation.</p>
<p><b>Project Name:</b> DART Platform Accessibility Project</p> <p><b>Applicant:</b> CIÉ</p> <p><b>Application Reference:</b> N/A</p> <p><b>Planning Status:</b> At preplanning/ options development stage.</p>	<p>The purpose of this project is to identify and deliver the necessary infrastructure interventions at station platforms on the existing and proposed DART network, to regularise the vertical stepping distance between the door thresholds of new trains and the platform edges, to secure compliance with the Persons with Reduced Mobility (PRM) Technical Specification for Interoperability (TSI) "level access" definition. Work to date has identified a number of priority stations and it's planned to progress these through to implementation throughout 2024 and 2025, to align with the new fleet coming into operation in November 2025.</p>	<p>At the time of writing, there is limited information in relation to the DART Platform Accessibility Project. It is anticipated that the project would provide an improved passenger experience and greater functionality and connectivity to promote more sustainable transport, and thereby reducing carbon footprints.</p> <p>The proposed DART+ Coastal North Project will reduce carbon emissions and in combination with this project, will assist in meeting Ireland's commitments to decarbonisation.</p>
<p><b>Project Name:</b> Iarnród Éireann Carparks Programme</p> <p><b>Applicant:</b> CIÉ</p> <p><b>Application Reference:</b> N/A</p> <p><b>Planning Status:</b> At preplanning/ options development stage.</p>	<p>This project is currently under early development. The overall objective of this project is to develop a National Car Parks Programme that supports Iarnród Éireann's target of achieving 75 million passenger journeys by 2025 and aligns with the long term investment and growth strategies across the network including DART+. The project will seek to increase the parking facilities at a number of stations nationwide.</p> <p>Potential carparks which are currently being considered that overlap with the DART+ Coastal North project for development are at Portmarnock Station and Skerries Station however development is at an early stage.</p>	<p>At the time of writing, there is limited information in relation to the Iarnród Éireann National Carparks Programme. It is anticipated that the project would provide an improved passenger experience and greater functionality and connectivity to promote more sustainable transport, and thereby reducing carbon footprints.</p> <p>The proposed DART+ Coastal North Project will reduce carbon emissions and in combination with this project, will assist in meeting Ireland's commitments to decarbonisation.</p>

## 26.5 Mitigation and Monitoring Measures

### 26.5.1 Tier 1 Projects

The proposed mitigation and monitoring measures are presented for the Tier 1 projects in the assessment within Table 1-1 to Table 1-15 in Appendix A26.2 in Volume 4 of this EIAR. Mitigation measures are also included, where appropriate, in Appendix A5.1 (CEMP) in Volume 4 of this EIAR. The mitigation and monitoring measures are developed to avoid, prevent, reduce or if possible, offset any identified significant cumulative effects.

Mitigation measures are proposed for each topic, which should be implemented in full and remain effective throughout the lifetime of the Proposed Development in order to reduce or avoid any possible residual effects arising in respect of cumulative effects with other Tier 1 projects.

### 26.5.2 Tier 2 Projects

With respect to the CEA of the Tier 2 ‘other’ projects, and proposed mitigation measures it must be noted that these are in draft format and are identified as recommendations rather than mitigation at this stage. This is in recognition of the ongoing design development of these Tier 2 ‘other’ projects which are in the process of seeking statutory approval and/ or will be at early stages of design. The proposed “recommendations” will need to be agreed in collaboration with the other relevant delivery agents and/ or contractors, if and when these ‘other’ projects proceed to planning stage, construction and operation, as appropriate.

To manage the potential cumulative impacts associated with the proposed DART+ Coastal North and the Tier 2 NTA ‘other’ projects, a communication channel will be developed and maintained between CIÉ and the NTA to reduce the likely significant cumulative effects on the local populations and communities including the traffic environment during the construction stages.

Cognisance will be made to the construction programmes of the proposed DART+ Coastal North and the Tier 2 ‘other’ projects by CIÉ and the NTA to limit, where feasible, concurrent or overlapping construction works from occurring in the same area and to reduce cumulative impacts on communities and the local economy from construction works.

## 26.6 Residual Effects

Residual effects are documented in Table 1-1 to Table 1-15 of Appendix A26.2 for the Tier 1 projects. No significant residual effects were noted for any Tier 2 projects.

Below summarises any potential significant residual effects noted in Appendix A26.2 for Tier 1 projects per environmental factor.

### 26.6.1 Construction Phase

#### Traffic and Transport

No significant residual cumulative impacts are anticipated during the Construction Phase.

## Population

No significant residual cumulative impacts are anticipated during the Construction Phase.

## Biodiversity

No significant residual cumulative impacts are anticipated during the Construction Phase.

## Land and Soils

No significant residual cumulative impacts are anticipated during the Construction Phase.

## Water

No significant residual cumulative impacts are anticipated during the Construction Phase.

## Hydrogeology

No significant residual cumulative impacts are anticipated during the Construction Phase.

## Air Quality

No significant residual cumulative impacts are anticipated during the Construction Phase.

## Climate

No significant residual cumulative impacts are anticipated during the Construction Phase.

## Noise and Vibration

No significant residual cumulative impacts are anticipated during the Construction Phase.

## Landscape and Visual

There is the potential for moderate / significant temporary residual cumulative impacts during the Construction Phase if the Construction Phase of the Proposed Development overlaps with construction works for the below applications. Effects would be imperceptible if this is not the case:

- Application 305316;
- Application ABP-313268-22;
- Application 308116;
- Application 301908;
- Application LRD0010/S3;
- Application LRD0016/S3;
- Application LRD0015/S3;
- Application 19643;
- Application 18610;
- Application 311095;
- Application 211333; and
- Application 22629.

## Material Assets: Agricultural Properties

In relation to the affected agricultural land parcels there are five land parcels where there is a residual cumulative effect from a planned housing development perspective as noted below:

- Application ABP-313268-22: Significant adverse residual effects;
- Application 313210: Significant adverse residual effect on land parcel on west side of railway line and moderate adverse residual effect on land parcel on east side of railway line;
- Application 18610: Significant adverse residual effects;
- Application 19643: Significant adverse residual effects;
- Application LB181385: Significant adverse residual effects; and
- Application 2460133: Significant Adverse residual effects.

## Material Assets: Non-Agricultural Properties

No significant residual cumulative impacts anticipated during the Construction Phase.

## Material Assets: Waste and Resources

No significant residual cumulative impacts anticipated during the Construction Phase.

## Material Assets: Utilities

No significant residual cumulative impacts anticipated during the Construction Phase.

## Archaeology and Cultural Heritage

No significant residual cumulative impacts anticipated during the Construction Phase.

## Architectural Heritage

No significant residual cumulative impacts anticipated during the Construction Phase.

## 26.6.2 Operational Phase

### Traffic and Transport

Overall, there are positive, significant, and long-term residual cumulative effects for traffic and transport from the Proposed Development in cumulation with other projects.

### Population

- There are positive residual cumulative effects during the Operational Phase in relation to the proposed BusConnects Clongriffin to City Centre Scheme and works on the planned Broadmeadow Way greenway linking Malahide Demesne to Newbridge Demesne which will involve a pedestrian and cycle bridge being attached to the existing rail viaduct.
- Application 306102: The additional DART services proposed in combination with the prospective Shuttle service will provide for improved public transport accessibility to Howth station.

- Application SHD/009/19: The additional DART services proposed in combination with the prospective Shuttle service will provide for improved public transport accessibility to Howth station.
- Application 310413: The additional DART services proposed in combination with the prospective Shuttle service will provide for improved public transport accessibility to Howth station.
- Application 313182 (BusConnects Clongriffin): Positive residual cumulative impact provided by opportunity for interchange between public transport modes.

## **Biodiversity**

No significant residual cumulative impacts are anticipated during the Operational Phase.

## **Water**

No significant residual cumulative impacts are anticipated during the Operational Phase.

## **Air Quality**

No significant residual cumulative impacts are anticipated during the Operational Phase.

## **Climate**

No significant residual cumulative impacts are anticipated during the Operational Phase.

## **Noise and Vibration**

No significant residual cumulative impacts are anticipated during the Operational Phase.

## **Landscape and Visual**

No significant residual cumulative impacts are anticipated during the Operational Phase.

## **Material Assets: Agricultural Properties**

In relation to the affected agricultural land parcels there are five land parcels where there is a residual cumulative effect from a planned housing development perspective as noted below:

- Application ABP-313268-22: Significant adverse residual effects;
- Application 313210: Significant adverse residual effect on land parcel on west side of railway line and moderate adverse residual effect on land parcel on east side of railway line;
- Application 18610: Significant adverse residual effects;
- Application 19643: Significant adverse residual effects; and
- Application LB181385: Significant adverse residual effects; and
- Application 2460133: Significant Adverse residual effects.

The regional cumulative residual effect on agriculture is appraised by assessing trends in agricultural productivity in Counties Dublin, Meath and Louth and new road and rail developments within the County. The human population of Counties Dublin, Meath and Louth has increased by 15% from 2011 to 2022 (Table 1 of 2011 census and preliminary results of 2022 Census, CSO). The human population continues to rise and this has increased the land-take of agricultural land for housing and industry and increased demand for new road and rail projects. The land-take for road and rail developments has risen due to recently constructed road and rail developments. Despite these developments, and the requirement for agricultural land to meet the rising population, the trend in livestock numbers in Counties Dublin, Meath and Louth is 15% upward from 2010 to 2020. This upward trend combined with improved yields of crops due to genetic improvements indicates that housing, road and rail developments are not having a significant effect on agricultural output from Counties Dublin, Meath and Louth. The Proposed Development in combination with planned developments such as those noted above would require approximately 50ha which is an insignificant area compared to the total <1% area of the agricultural area of land in Counties Dublin, Meath and Louth (1% of approximately 290292,000ha = 2,900ha). When considered along with upward agricultural productivity trends the cumulative effect on agriculture within this region is not significant.

#### **Material Assets: Non- Agricultural Properties**

No significant residual cumulative impacts are anticipated during the Operational Phase.

#### **Material Assets: Waste and Resources**

No significant residual cumulative impacts are anticipated during the Operational Phase.

#### **Material Assets: Utilities**

No significant residual cumulative impacts are anticipated during the Operational Phase.

#### **Archaeology and Cultural Heritage**

No significant residual cumulative impacts are anticipated during the Operational Phase.

#### **Architectural Heritage**

No significant residual cumulative impacts are anticipated during the Operational Phase.

## 26.7 References

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