
Appendix A3.1

PC1 Findings Report

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1. GENERAL INFORMATION

1.1 DART+ Programme Description

The DART+ Programme is a transformative programme of projects that aims to modernise and improve existing rail services in the Greater Dublin Area (GDA). It will provide a sustainable, electrified, reliable and more frequent rail service, improving capacity on rail corridors serving Dublin. The current DART network is 50km long, extending from Malahide / Howth to Greystones. The DART+ Programme will increase the length of the DART network to 150km of railway corridor through the electrification and upgrade of existing lines transforming commuter train travel in the Greater Dublin Area (GDA). The DART+ Programme also includes the purchase of a new train fleet. The DART+ Programme will deliver frequent, modern, electrified services from Dublin City Centre (Connolly & Spencer Dock) to:

- Maynooth, M3 Parkway, DART+ West;
- Hazelhatch & Celbridge, DART+ South West;
- Drogheda, DART+ Coastal North; and
- Greystones, DART+ Coastal South.

The DART+ Programme is a key transportation improvement to form a high quality and integrated public transport system. It will have benefits for the residents of the Greater Dublin Area and also those living in the other surrounding regions. It will assist in providing a sustainable transport system and a societal benefit for current and future generations. The DART+ Programme will seek to maximise use of the existing railway corridors and implement a modernisation programme to achieve the capacity increase necessary to meet current and future demands.

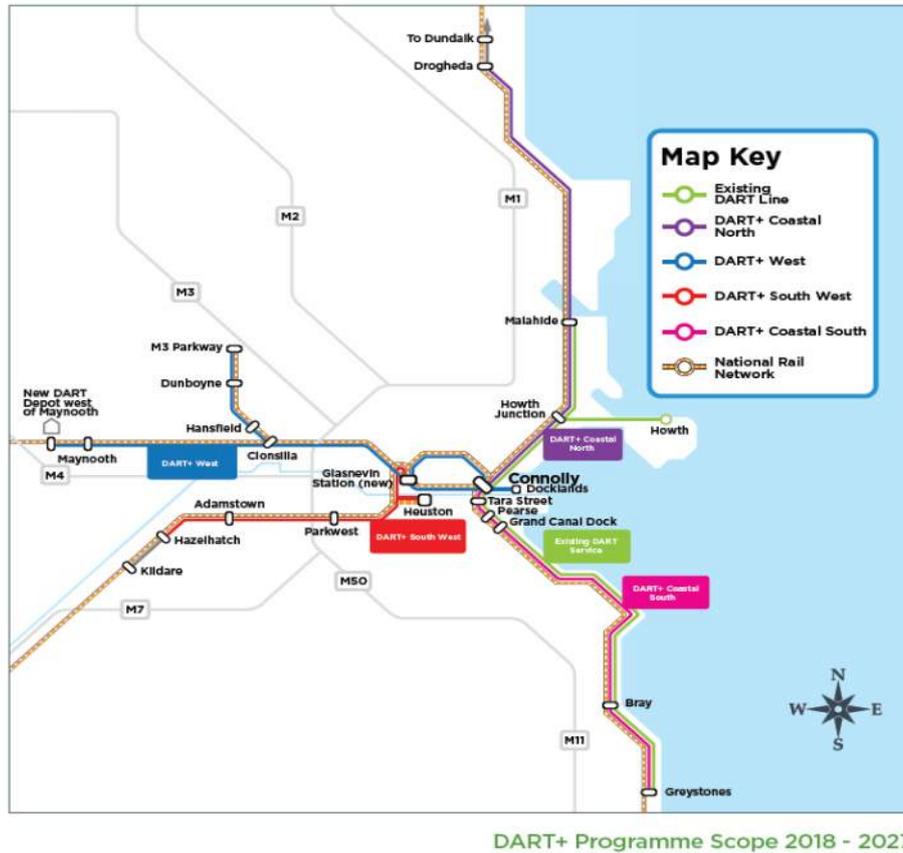


Figure 1 Schematic diagram of DART+ Programme extent

1.2 DART+ Coastal North - Project Description

The delivery of the DART+ Coastal North project will form the third infrastructural project of the DART+ Programme in addition to DART+ West and DART+ South West.

The DART+ Coastal North project, as part of the DART+ Programme, will deliver an improved and extended electrified rail network and will enable increased passenger capacity and an enhanced train service between Dublin City Centre and Drogheda, including the Howth Branch. This increased rail capacity will be achieved by implementing an extended electrified railway network with high-capacity DART trains and an increased frequency of rail services. In addition, the DART+ Coastal North project requires that some track modifications are implemented, including the provision of turnback facilities at Malahide, Clongriffin and Howth Junction & Donaghmede Stations. These modifications are essential to facilitate the increase in train services by improving operational flexibility, allowing trains to be turned back clear of continuing services and allow for a higher frequency and a more reliable service.

To achieve the peak capacity increases proposed by the DART+ Programme, the DART+ Coastal North project will seek a reconfiguration of Howth Junction and Donaghmede Station and the removal of crossing conflicts at the station which currently limit both capacity and frequency of services on the Northern and Howth Branch Lines.

The project is seeking to deliver the infrastructure at Howth Junction and Donaghmede Station that will enable the operation of both a DART shuttle service on the Howth Branch Line as required, and/or a direct through service to/from Dublin City Centre, allowing for the capacity and frequency of DART+ services on both the Northern, and Howth Branch, lines to be maximised and to help future-proof the network.

Proposed changes to the Howth Branch, as defined in the Train Service Specification TSS1C, will see both the service frequency and capacity increase, along with improvements to the reliability of timetabling. The reliability of the Howth Branch will increase as the proposed shuttle service would mean that trains operating on this branch would no longer be susceptible to delays occurring along the Northern Line. Further assessments on the four Howth Branch level crossings have indicated that, even with the proposed DART service uplift, the existing level crossings can continue to operate and provide an appropriate level of cross connectivity and accessibility to surrounding communities and thus will remain open.

Delivery of the DART+ Coastal North project will support existing communities along the railway and support future sustainable development. The project will serve all existing stations along the railway corridor between Dublin City Centre and Drogheda MacBride Station, including those located on the Howth Branch, with electric powered trains that have a lower carbon footprint than the existing diesel trains. The frequency and quality of service will provide a viable transport alternative to communities along the route and help encourage people to migrate from private car use. This will assist Ireland in reducing greenhouse gas emissions from transport and help combat climate change.

The extended electrification of the Northern Line will predominantly follow the existing railway corridor. Works outside of Iarnród Éireann lands will be required at several locations for some of the scheme elements such as:

- Bridge modifications/improvements to facilitate extended electrification;
- Construction of substations (to facilitate the provision of power to the line); and
- Use of land for temporary construction/storage compounds.

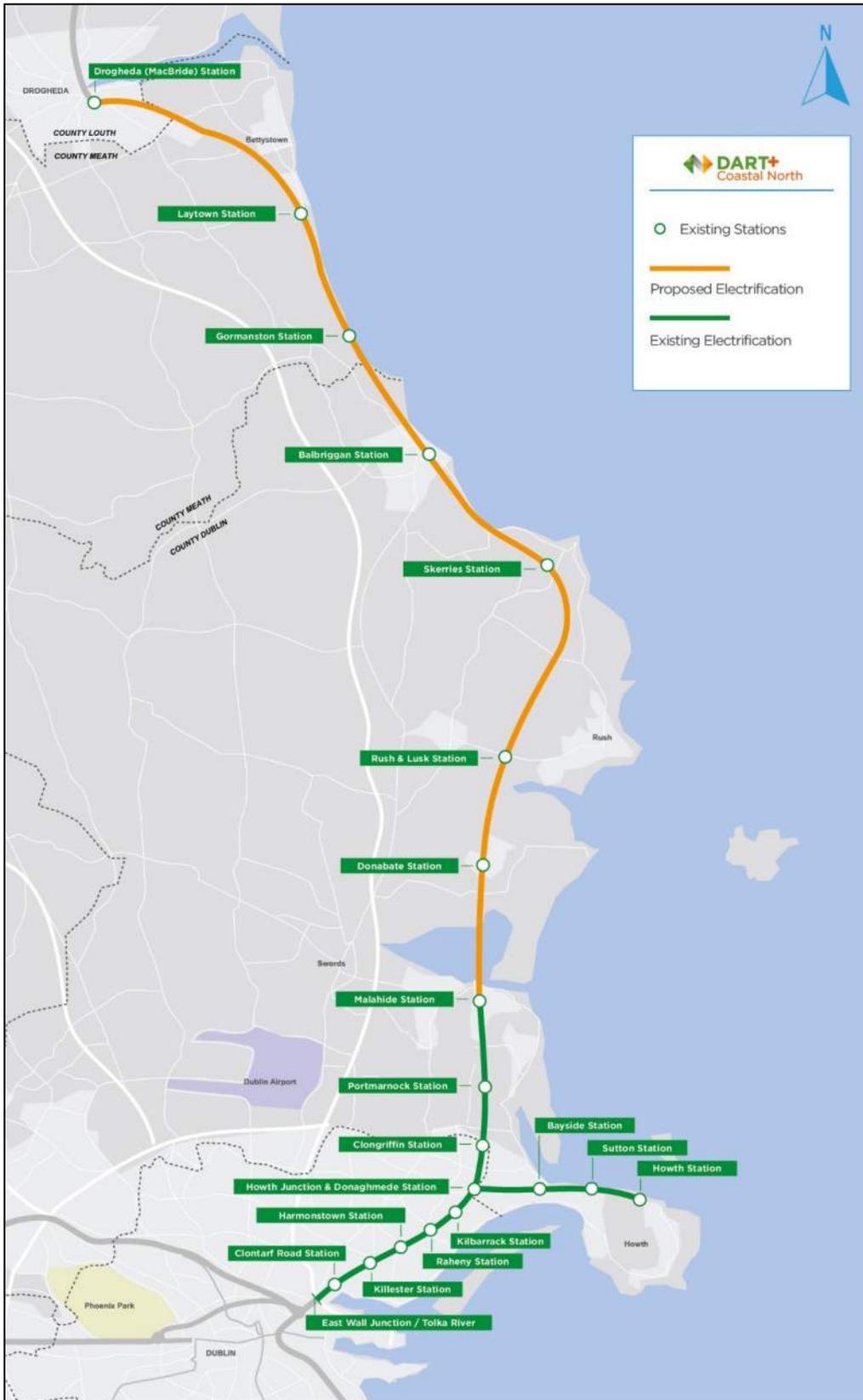


Figure 2 Map of proposed DART+ Coastal North project extents

1.3 Public Consultation

Public participation during the design process is a key element in the delivery of major infrastructure projects such as DART+ Coastal North. The purpose of these consultations is to engage the public in the scheme delivery process, inform the public of the statutory process and the likely timescales, seek the public's cooperation and understanding of the project and to capture local knowledge to inform the Environmental Impact Assessment (EIA) and Railway Order (RO) process.

Public participation is welcomed and encouraged throughout the design development process. There will be three main project consultation stages which will provide the opportunity to learn about the design development and provide feedback which may inform the development of the design. The main public participation stages as part of the project development are listed below:

- Non-Statutory Public Consultation No.1 Emerging Preferred Option (Q1 2022, completed);
- Non-Statutory Public Consultation No.2 Preferred Option (Q2 2023);
- Statutory Consultation Period as part of the Railway Order application process (Q4 2023*).

** Dates to be confirmed.*

This report details the process, and records and analyses the feedback, from the first of the non-statutory Public Consultation events, Public Consultation No.1 The Emerging Preferred Option.

1.3.1 Covid-19

Due to the COVID-19 pandemic and restrictions in place in the lead up to Public Consultation No.1, the consultation strategy focused predominantly on digital / online consultations. To comply with the public health guidelines, no physical roadshow / public hall events were scheduled.

2. PUBLIC CONSULTATION NO.1 – THE EMERGING PREFERRED OPTION

2.1 Overview of Public Consultation Process

This Public Consultation No.1 Findings Report has been prepared to summarise and assess the feedback received from Public Consultation No.1, on the Emerging Preferred Option. The consultation period commenced on 24th February 2022 and continued for a duration of 6 weeks. The Public Consultation period concluded on 08th April 2022.

As described in the Public Consultation project brochure, the consultation was an opportunity for potential users of the improved services, those likely to be affected by its development and all members of the public, to express their views on the project plans at an early stage in the design process. On projects such as DART+ Coastal North local knowledge communicated through submissions of all types, positive or negative informs the option selection process and the design development. This feedback and engagement will ultimately assist Iarnród Éireann in improving the project and ensuring the successful delivery of a project that best meets the needs of its users and the local communities. Throughout Public Consultation No.1, the project team responded to queries raised in a timely manner. The objective was to assist the public in gaining a better understanding of the project and to encourage engagement in the consultation process. The following sections describe the various channels of communication used to notify and inform the public of the Public Consultation.

2.2 DART+ Coastal North Public Consultation No.1 Launch and Media Coverage

"Iarnród Éireann Chairman Frank Allen and Chief Executive Jim Meade were joined by the Mayor of Drogheda Cllr James Byrne, Cathaoirleach of Meath County Council, Cllr Sean Drew and Mayor of Fingal, Cllr Seán Ó Rodaigh, on the 24th of February 2022 to launch the public consultation at Drogheda Station (See Figure 3).



Figure 3 Photograph from DART+ Coastal North Project Launch

Iarnród Éireann Corporate Communications and Media team provided a press release to 285 press contacts across local and national news and radio outlets.

The launch was covered widely on the launch day by national media including:

- Irish Independent;
- Irish Times;
- The Journal;
- Evening Echo;
- Breakingnews.ie;
- Northside News;
- Fingal Independent;
- Swords/Fingal Independent;
- LMFM; and
- East Coast FM.

A selection of press clippings in relation to the launch is provided in Appendix A.

2.2.1 Elected Member Briefings

On the afternoon of 24th February 2022, immediately following the Public Consultation No.1 launch event, a series of online briefing sessions were held with elected representatives from Dublin City Council (DCC), Fingal County Council (FCC), Meath County Council (MCC) and Louth County Council (LCC).

The briefings were split into 2 online briefings (DCC & FCC combined and MCC & LCC combined) held via MS Teams. A total of 69 elected representatives were invited across the 4 county and city councils. These briefings acted as a basis for the DART+ Coastal North project team to encourage the elected representatives to use their platforms to inform their constituents of the upcoming public briefings and to encourage their constituents to make a submission in relation to the proposals in Public Consultation No.1. The presentations provided during the online briefing sessions can be found in Appendix B.

2.2.2 Project Website

A project webpage (<https://www.dartplus.ie/en-ie/projects/dart-north>) was established which presented all of the project information published as part of Public Consultation No.1 including a Virtual Room for website visitors to navigate through project information, the project brochures (English and Irish), the project leaflet (English and Irish), the project feedback form, the Preliminary Options Selection Report and associated annexes and drawings. A list of Frequently Asked Questions (FAQ) was also developed prior to the launch of the Public Consultation, and these were updated on the website as necessary following the initial submissions received as part of the consultation process. The final FAQ's can be found in Appendix C of this report.

2.2.2.1 Project Webpage Analytics

The webpage analytics measure the hit rate on the Public Consultation webpage as well as the areas of the webpage where the most traffic was recorded. The determination of these analytics is fully GDPR compliant.

The analytics demonstrate that the www.dartplus.ie project webpage had a total of **40,457** separate page views during the Public Consultation with the largest audience viewing on the launch day of the 24th February 2022.

The project brochure had 91 downloads and the Preliminary Option Selection Report: Main Report had 165 downloads. The total number of Public Consultation material downloads from the project webpage is shown in Table 2-1.

Table 2-1 Website Downloads

Material	Number of Downloads
DART+ Coastal North Preliminary Options Selection Report: Drawings	318
DART+ Coastal North Preliminary Options Selection Report: Annexes	191
DART+ Coastal North Preliminary Options Selection Report: Main Report	165
DART+ Coastal North Public Consultation Project Leaflet	111
DART+ Coastal North Public Consultation Project Brochure	91

Material	Number of Downloads
Preliminary Options Selection Report: Executive Summary	62

The results from the webpage analytics, in conjunction with feedback and queries received during the Public Consultation, ensured that the webpage was continually updated and improved throughout the consultation period. The improvements implemented during the course of the consultation period include:

- FAQs updated and added to a dedicated FAQ page as necessary;
- Links to published material added to FAQ's; and
- Web-user experience improvements.

2.2.3 Virtual Exhibition Room

A virtual exhibition room was created and made available through the project website to provide information to website visitors, similar to exhibition events that would have traditionally been held in local communities, for projects of this type.

The virtual space was aimed at increasing the public knowledge of the project from the safety and comfort of their own surroundings during a time when public events were not considered appropriate due to Covid 19.

The boards presented as part of the virtual exhibition room can be found in Appendix D.

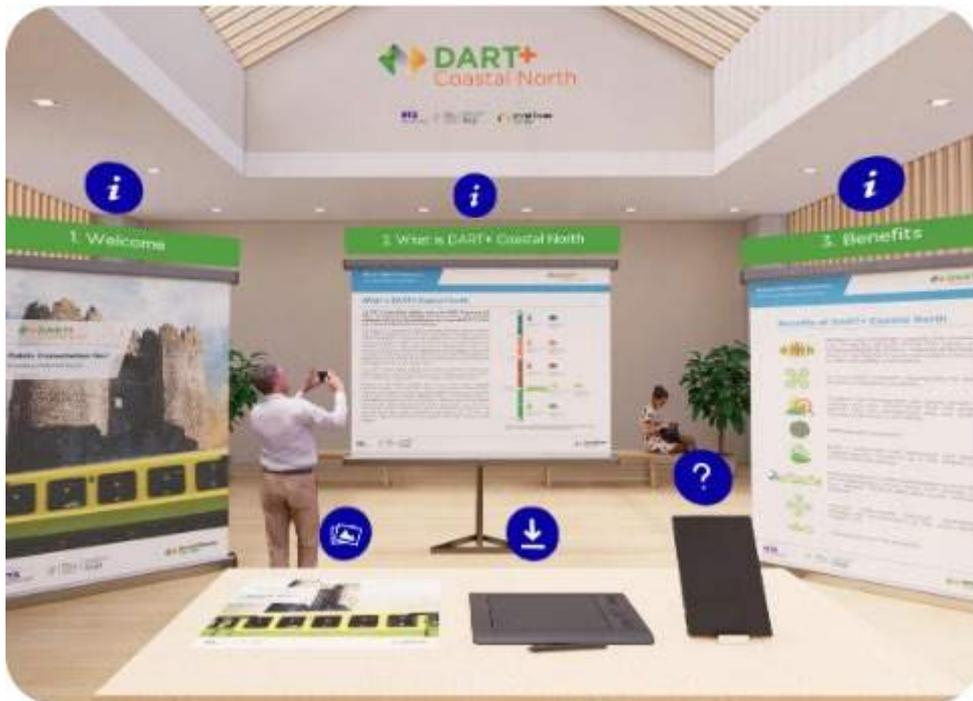


Figure 4 Virtual Exhibition Room

2.2.4 Brochures and Leaflets

A 76-page non-technical Public Consultation brochure presenting the key details of the DART+ Coastal North project, the benefits, the option selection process, the Emerging Preferred Option, maps, and drawings, was developed and published in both the Irish and English languages. The brochure was made available on the dedicated project webpage and hard copies were issued to the elected representatives following the Public Consultation No.1 launch on the 24th February 2022. The English brochure can be found in Appendix E.

An information leaflet was distributed via mail drop to c. 11,500 properties during the opening week of the consultation. The mail drops targeted areas within 100m of the railway line, and extended areas surrounding those project areas where interventions are proposed. The information leaflet, written in both the English and Irish languages, highlighted the key elements of the project and notified the local community of the commencement of the Public Consultation. A copy of the DART+ Coastal North leaflet can be found in Appendix F.

Feedback from Public Consultation No.1 has indicated that some respondents believed the leaflet distribution coverage area was not appropriate. This was particularly clear from the feedback received from residents and businesses on the Howth Peninsula, many of whom noted that they were not aware of the DART+ Coastal North project proposals.

Additional consideration has been given to the leaflet distribution areas prior to Public Consultation No.2 and the extents of leaflet distribution around points of intervention have been extended as a result. Additional consideration has also been given to in-station advertising, more extensive postering and a general increase in the level of advertising at stations. Copies of the project leaflet have also been made available at stations on the Howth Branch at the commencement of Public Consultation No.2. Press Advertising and Social Media Campaigns

A print advertising campaign was run across 3 different publications circulated in the North County Dublin coastal area to raise awareness of Public Consultation No.1. These publications included the following:

- Drogheda Independent (02nd March 2022, Page 9)
- Northside People East (02nd March 2022, Page 8)
- Fingal Independent (02nd March 2022, Page 7)

A social media campaign using both Facebook, Instagram and Twitter platforms was carried out, targeting all adults in areas within a 3km radius of DART stations including Malahide, Clongriffin, Drogheda (extending to Navan), Donaghmede (Howth Junction), Sutton, Bayside & Howth. This campaign played an integral part in raising awareness of Public Consultation No.1.

Advertising posters were also placed in various DART stations including Pearse, Connolly and Malahide Stations.

Further details of Press Advertising and Social Media Campaigns can be found in Appendix G.

2.2.5 Letters to Potentially Affected Landowners

Letters to all registered landowners (4 in total) identified as likely to be directly affected by the Emerging Preferred Option were sent via registered post notifying them in advance of the commencement of the Public Consultation No.1 and inviting them to provide feedback on the Emerging Preferred Option. Details of the communication channels to do so were provided. Additional contact was made with these registered landowners to ensure awareness of the Public Consultation No.1 commencement and to encourage engagement.

2.2.6 Direct Correspondence via Emails, Online Forms, Project Helpline

A project email address (DartCoastalNorth@irishrail.ie) and a project postal address was provided on all project material. An online feedback form was provided on the project webpage to allow the public make submissions on the project. The online feedback form asked the respondents specific questions relating to the project, to provide comments, suggestions, ideas and to detail what aspects of the project are of interest to the respondents.

A helpline was established to ensure that all calls received during the consultation period were answered, documented, passed to the dedicated Community Liaison Officer (CLO), and responded to in a timely manner.

All the above measures were promoted to ensure adherence with the public health advice in relation to Covid-19.

2.2.7 Meetings

Meetings were arranged upon request with affected landowners / interested parties. These meetings were held virtually via MS Teams and attended by the Community Liaison Officer (CLO) and members of the DART+ Coastal North Design Team.

2.2.7.1 Public Information Webinars

5 webinar meetings were held via MS Teams between IÉ and potentially affected residents, community groups, elected representatives and interested parties. Invitations and links to the webinars were issued to individuals wishing to attend upon request. Webinars were held during the early weeks of the Public Consultation to allow attendees sufficient time to digest the information presented and make submissions or raise queries as part of the consultation process.

Each of the webinar presentations was generally based on the main presentation as included in Appendix B but tailored to specific locations as necessary.

Questions raised during the webinars, both verbally or through the meeting chat function, were addressed and participants were encouraged to make a formal submission as part of the consultation process. Each webinar was allowed to continue until such time that all attendees were provided with adequate time to raise their comments, queries and/or observations.

The feedback received as part of public webinars, both verbally and in the chat functions on MS Teams has been considered along with all other feedback and submissions as part of this Public Consultation.

Following each public information webinar, each webinar attendee was issued with a pdf copy of the presentation, specific to the webinar that they attended, via email.

Table 2-2 provides a list of public webinars and presentations held as part of Public Consultation No.1:

Table 2-2 Public Consultation No.1 webinar meetings

Date	Project Area
08/03/2022	City Centre to Donaghmede
09/03/2022	Bayside to Howth Area
10/03/2022	Clongriffin to Malahide Area
14/03/2022	Donabate to Balbriggan Area
15/03/2022	Gormanston to Drogheda Area

3. CONSULTATION FEEDBACK

3.1 Assessment Methodology

All submissions received either via post, telephone communication, email or online feedback form have been logged and analysed. As part of the analysis, all issues, trends, themes, comments, and suggestions/recommendations have been logged in a project database for further consideration. Any hard copy submissions such as letters or feedback forms received by mail have been scanned, filed, and treated as per submissions received by email or through the project website.

The online feedback form posed specific questions in relation to DART+ Coastal North. These questions allowed for a wide range of feedback to be received, as well as some tailored questioning to inform the project development.

3.2 Overview of Submissions Received

A total of 2,115 submissions were received by Iarnród Éireann via the communication channels provided. Submissions received after the close of the Public Consultation period (08th of April 2022) continued to be accepted and are taken into consideration as part of an overall body of feedback on the content of Public Consultation No.1. Figure 5, below, includes submissions that were received up until the 30th of April 2022. The feedback received ranges from personal submissions from affected residents and commuters to detailed proposals from public bodies and various associations.

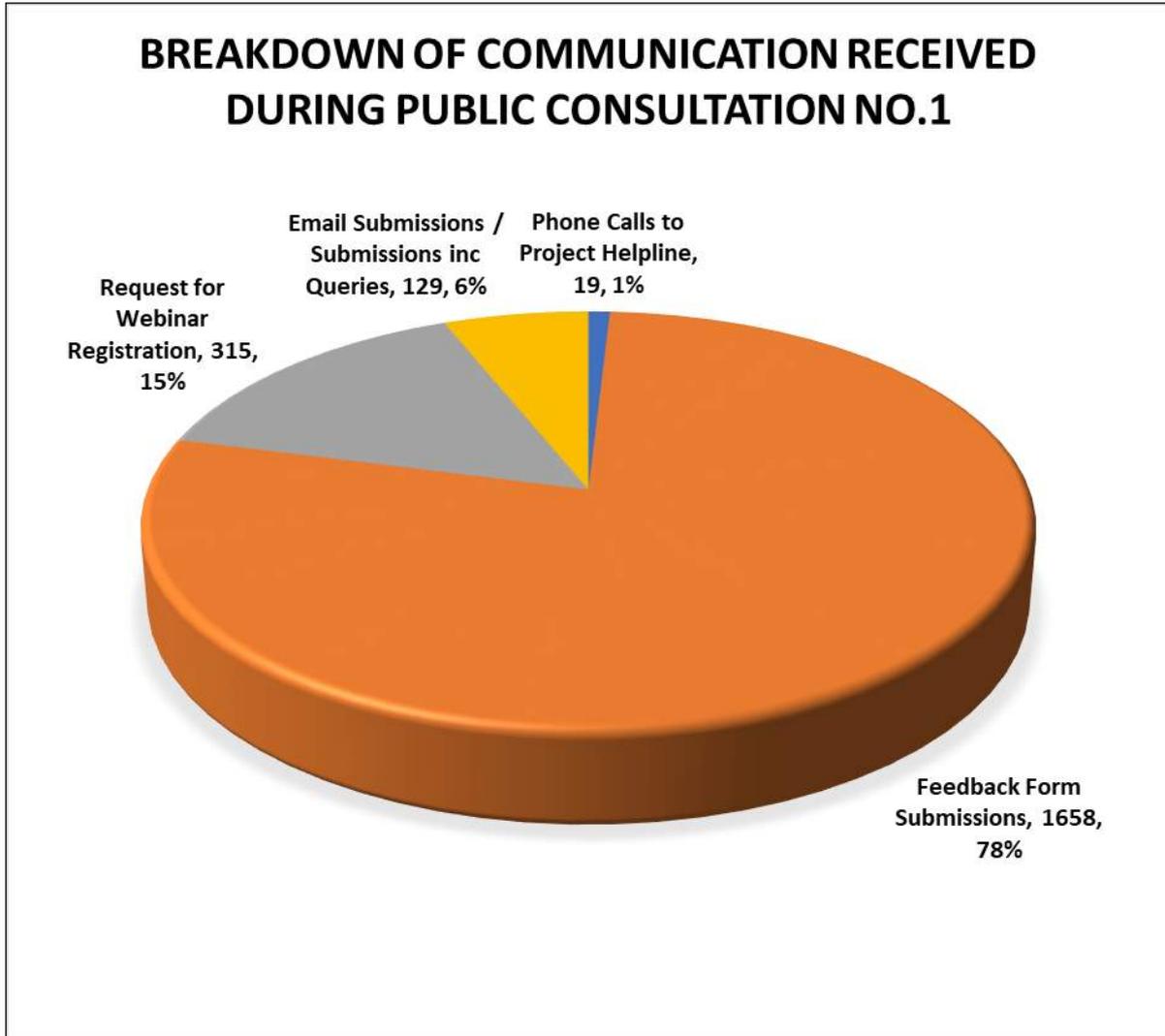


Figure 5 Breakdown of communications during Public Consultation No.1

Due to the largely digital nature of the Public Consultation, it was common for the respondents to submit queries via email seeking further information or clarity regarding the Emerging Preferred Option.

Of the 444 email submissions received, 315 related to registration for online webinars, 43 contained both comments and queries, 86 consisted of comments only. Of the 1,652 feedback forms received, 69 forms contained queries. Every effort was made during the Public Consultation period to respond to those correspondences containing queries to allow people make an informed submission.

It was requested during public webinars, by webinar participants, that all comments, suggestions, objections, and general feedback provided during the public webinars would be considered as part of the overall submission analysis. It should be noted that all comments and feedback from these public events have been assessed and considered as part of the Public Consultation process. Feedback received through webinar forums carries the same weight as feedback received through feedback forms, phone calls, emails, or letters.

3.3 General Themes Raised During Consultation Process

All of the 2,115 submissions received by Iarnród Éireann were reviewed and the themes / issues raised were categorised, summarised and analysed. During the review process a number of main themes / issues were identified and are indicated in Table 3-1.

The issues and concerns raised will be expanded on further in Section 4 of this report.

Table 3-1 General themes / issues raised during Public Consultation No.1

Themes / Issues	Comment Frequency
Howth Branch Line Infrastructure Proposals	1472
Journey Times	1165
Safety	960
Level Crossings & Traffic Impacts	621
Train Frequency, Capacity & Reliability	527
Howth Tourism & Business Impacts	448
Station Facilities – Carparking, Bicycle Parking, Park & Ride, Toilets	427
Development / Planning Implications	296
Access & Mobility Issues	287
Public Consultation Process	183
Extension of DART to Drogheda & Change to Electric Power	132
Limited Scope of Project	113
Health Concerns: Noise & Vibration, and Impact on Landowners & Residents	62
Environmental & Heritage Impacts	61

3.4 Issues Raised Outside Project Scope

While reviewing the feedback received it was clear that there were several issues raised in the submissions that are outside of the scope of this project or which were not directly related to the proposals. These are detailed below and include the following topics:

- Effects of Covid-19 on Public Engagement;
- Inclusion of additional stations at Drogheda North, Skerries, Balbriggan, Bettystown;
- Extending DART services to Navan / Dundalk South / Dublin Airport / Swords Area;
- Fares & Future Inclusion of Drogheda in LEAP Card zone;
- Provision of Toilets on New DART Fleet;
- Condition of existing stations and upgrades to existing facilities;
- Provision of 4-tracking or underground to improve rail network;
- Night-time services.

3.4.1 Effects of Covid-19 on Public Engagement

A number of submissions received indicated that they were unhappy with the decision to host Public Consultation No.1 as a predominantly virtual event. Respondents were concerned that the lack of a public forum, or in-person event, did not allow for all potentially affected members of the public to view the project material and voice their opinions.

Response

As mentioned in section 2 of this report, the decision not to hold 'in-person' events was taken on the back of government advice at the time of planning Public Consultation No.1, the general uncertainty surrounding Covid-19 at the time, and in keeping with the approach to Public Consultation taken by other DART+ projects. The public were advised of public webinars and invited to attend these events for further information on the DART+ Coastal North project.

The second round of Public Consultation, scheduled to commence on 03rd May 2023 and continue until 16th June 2023, will include some in-person events in addition to the virtual forum used for Public Consultation No.1. The virtual forum offers a valuable form of consultation and is expected to be retained as a part of any future consultations.

3.4.2 Inclusion of additional stations, or platforms, as part of DART+ Coastal North

A number of submissions called for the DART+ Coastal North Project to include for additional stations at a variety of locations along the Northern Railway Line. These locations include:

- Dundalk;
- Dundalk South;
- Drogheda North;
- Dunleer;
- Castlebellingham;
- Southgate;
- North Skerries;
- Balbriggan;
- Bettystown;
- Laytown; and
- Reopening the station at Mosney.

In addition to calls for additional stations to be included, a number of respondents suggested either extending existing platforms, or construction of new platforms at the following stations:

- Drogheda;
- Clongriffin; and
- Howth Junction & Donaghmede.

Response

The delivery of new stations is not included as part of the DART+ Coastal North project but will however be considered by Iarnród Éireann as required, under separately funded projects. The 'Preferred Option' will not preclude the future development of any potential new stations, such as that proposed at Bettystown in the East Meath Local Area Plan.

A variety of works aimed at delivering the project objectives are proposed as part of the DART+ Coastal North Project at stations including Drogheda, Malahide, Clongriffin, and Howth Junction & Donaghmede Stations. Further information on all these interventions can be found in the published material through the DART+ Coastal North project website: www.DARTplus.ie

3.4.3 Extending DART services to Navan / Dundalk South / Dublin Airport / Swords Area

A number of submissions called for the DART+ Coastal North project to include for an extension of DART services to service locations including Navan, Dundalk, Dublin Airport and/or Swords.

Response

No such extensions are included as part of the DART+ Coastal North project, however, the 'Preferred Option' will be compatible with any future extensions and/or additional links/branches that may be added to the Northern Line as part of any future Iarnród Éireann projects.

3.4.4 Fares & Future Inclusion of Drogheda in LEAP Card zone

Numerous queries related to future fares that will be applicable to the DART extension to Drogheda and to query if the potential exists for the LEAP travel zones to be extended to Drogheda as part of the DART+ Coastal North project.

Response

The potential extension of the leap card zones to include Drogheda is not included in the DART+ Coastal North project remit. The regulation of fares and fare structures is the responsibility of the NTA for all rail services and indeed all Public Service Obligation (PSO) public transport services.

3.4.5 Provision of Toilets on New DART Fleet

Concerns have been raised in relation to the lack of toilet facilities being provided on the new DART+ Fleet carriages. Respondents raised a need for toilet facilities to be provided largely due to the expected journey time from areas such as Drogheda to Dublin City Centre and some passenger requirements for such facilities to allow them to use public transport as a means of travel.

Response

The DART+ Coastal North Project, as noted previously, is responsible for the delivery of rail infrastructure to enable an increased frequency and capacity of rail services between Drogheda and Howth and Dublin City Centre.

The initial order of carriages for the new DART+ Fleet was made at the end of 2021 and does not have toilet facilities on board. The feedback received during consultation has been shared with the DART+ Fleet team and consideration will be given to onboard toilet facilities in advance of any future fleet orders.

3.4.6 Condition of existing stations and upgrades to existing facilities

Some concerns have been raised in relation to the condition of facilities at existing stations including lifts, toilets, parking, and bicycle facilities.

Response

Station facilities are continuously monitored, and improvements are proposed and made as appropriate through Iarnród Éireann's Network Enhancement Division and NTA's Park & Ride Development Office. Any works associated with existing station facilities would be progressed separately to the DART+ Coastal North Project and not as a direct component of the project.

Any concerns raised as part of this public consultation will be noted and given appropriate consideration by Iarnród Éireann. Iarnród Éireann's lift improvement programme has seen significant improvement in lift availability since 2020 and investments continue to be made in station lifts. This is the third year of a five-year programme which will see lifts replaced or upgraded in more than 50 stations.

As a direct result of feedback received as part of Public Consultation No.1, a variety of significant modification works are now proposed to Howth Junction and Donaghmede Station to both improve the passenger experience generally, and to develop the station to better serve as an interchange station into the future. The proposed works will involve modifying the entrances to provide a more accessible, user friendly and customer focused station for all rail users, as well as improving the connection to the surrounding areas of Donaghmede and Kilbarrack. Upgrades to the existing footbridge and connections to the centre platforms will also be carried out, as well as upgrades to lighting, signage, and finishes throughout.

3.4.7 Provision of 4-tracking or underground to improve rail network

Submissions have questioned the potential for the inclusion of 4-tracking, or underground rail construction, as a potential upgrade to the existing Northern Line.

Response

The provision of additional track installations, or the inclusion of any underground construction, is not currently proposed as part of the Preferred Option for DART+ Coastal North. The main objectives of the DART+ Coastal North project include delivering a higher frequency, higher capacity, reliable, electrified route to enable an increased DART service frequency between Drogheda and Dublin City Centre and it is currently considered possible to deliver these objectives without the introduction of track installations. Upgrades to telecommunication and signalling infrastructure along the Northern Line will also contribute to meeting the project objectives.

3.4.8 Night-time Services

A limited number of submissions referred to the need for extended and more frequent night-time services.

Response

Any amendments to the current timetables will be a matter for Iarnród Éireann operations and will be considered separately to the DART+ Coastal North project at the appropriate time.

3.5 Specific Feedback from the Online Forms

An online feedback form was provided which requested the following information:

- Respondent's contact details;
- Respondent's relationship to the project (property owner/occupier/other);
- Respondents support of, or opposition to, the principles of the project;
- Aspects of DART+ Coastal North of interest to respondents;
- Respondent's comments on the Emerging Preferred Option and the project in general;
- Whether respondents felt the improved services will encourage a modal shift;
- The means by which respondents had heard about the Public Consultation; and
- Whether respondents wanted to be added to a mailing list for future correspondence.

Question 4 & question 5 requested the form submitter to list aspects of interest and comments/suggestions on the Emerging Preferred Option. The responses to these questions are considered in detail as part of the key issues and/or concerns in Section 4 of this report. A summary of the responses to the remaining questions is presented below.

Questions 7 & 8 relate to the means by which people have heard about the Public Consultation and whether they wish to be contacted about the project going forwards. The responses to these questions will be used to inform the planning of future consultations and ensure that all members of the public who have expressed a continued interest in the project are informed of any upcoming events or publications relevant to DART+ Coastal North.

3.5.1 Question 1: Do you own or occupy property located within the immediate vicinity of the proposed development?

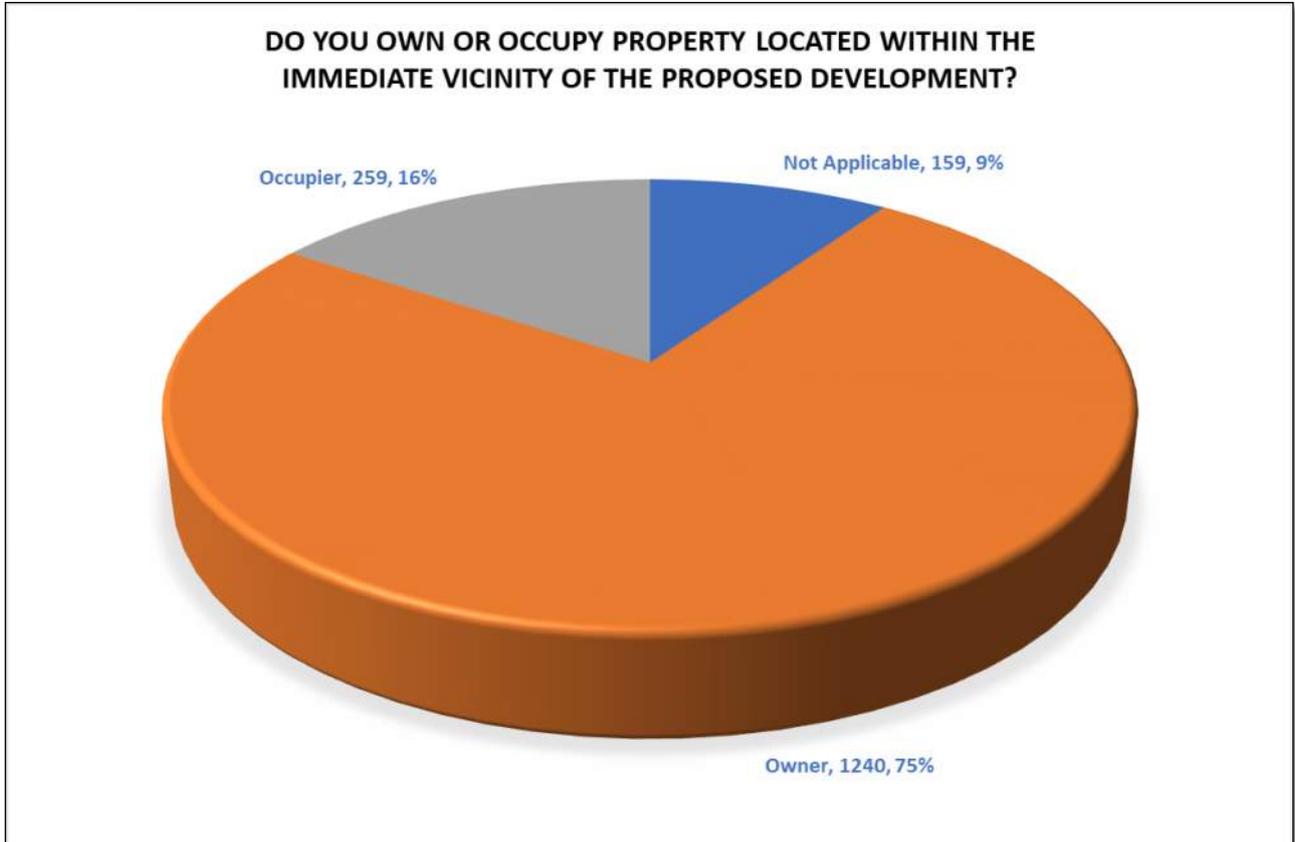


Figure 6 Response to Questionnaire, Question 1

Based on the feedback from **Question 1**, it is clear that the majority of respondents to the online feedback form are owners of properties in relatively close proximity to the proposed project works. The information gathered under this question will allow the project team to build upon and update a landowner database and ensure that contact details are current and up to date going forward.

3.5.2 Question 2: Do you support the principle of the DART+ Coastal North Project?

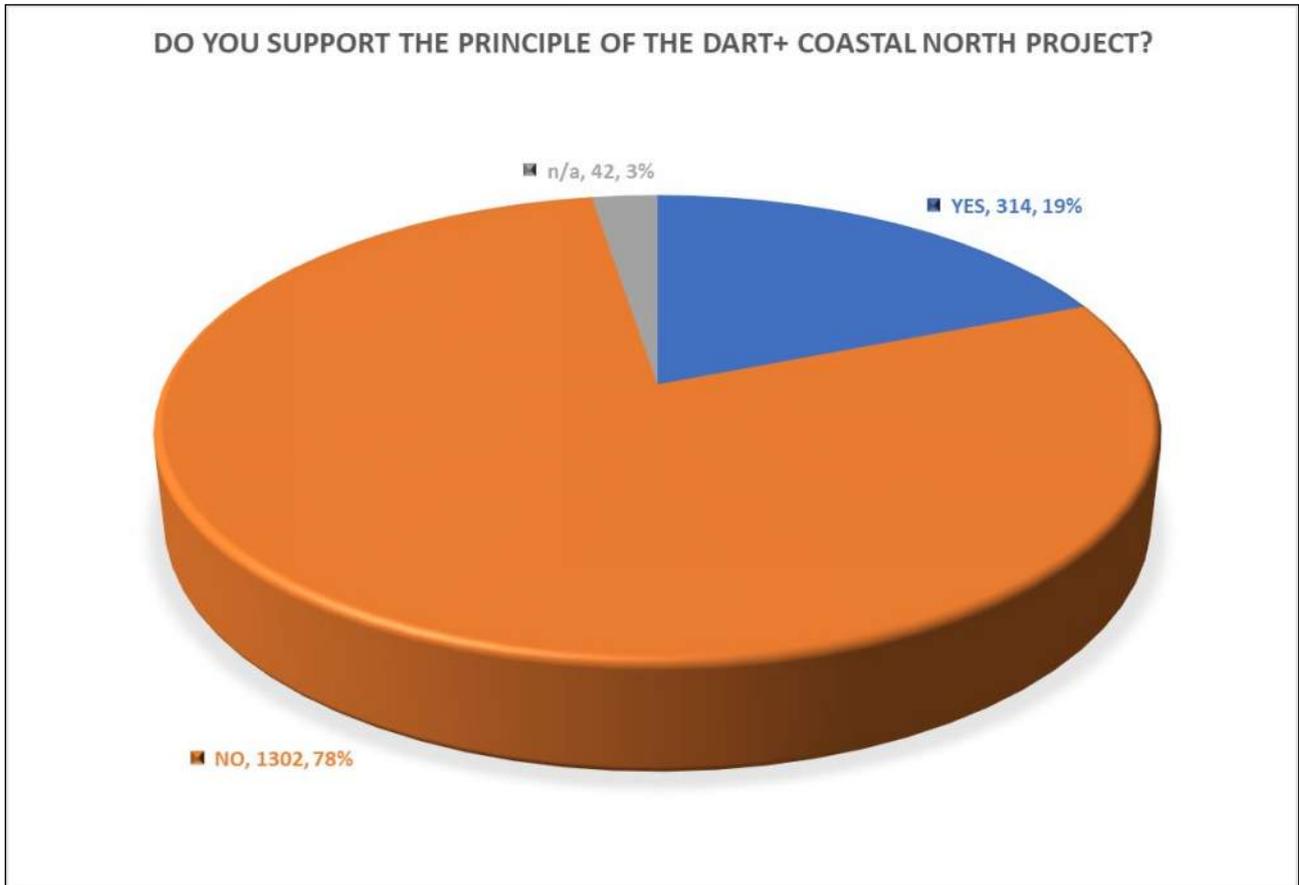


Figure 7 Response to Questionnaire, Question 2

The feedback received from **Question 2** provides a clear indication that the majority of the respondents do not support the principle of the DART+ Coastal North project. 3% of respondents did not provide a response to this question.

Many of those respondents who support the principle of the project cite reasons such as improved reliability, frequency, and capacity as reasons to support the project. The provision of extended DART services as far as Drogheda was seen as providing great benefit to those areas added to the DART catchment area. Environmental and sustainable benefits were also significant factors in people’s reasons for supporting the project with the move to more electrically powered trains from diesel power being of particular benefit.

The proposals relating to the Howth Branch were cited as being significant factors in people opposing the principle of the DART+ Coastal North project. The possible introduction of a future DART shuttle service, the need to change trains at Howth Junction & Donaghmede Station, security concerns relating to the change of trains, and level crossing closure times & frequencies were significant factors in people’s decisions to oppose the principles of the project.

3.5.3 Question 3: Please detail the geographical location of where the project is closest to you?

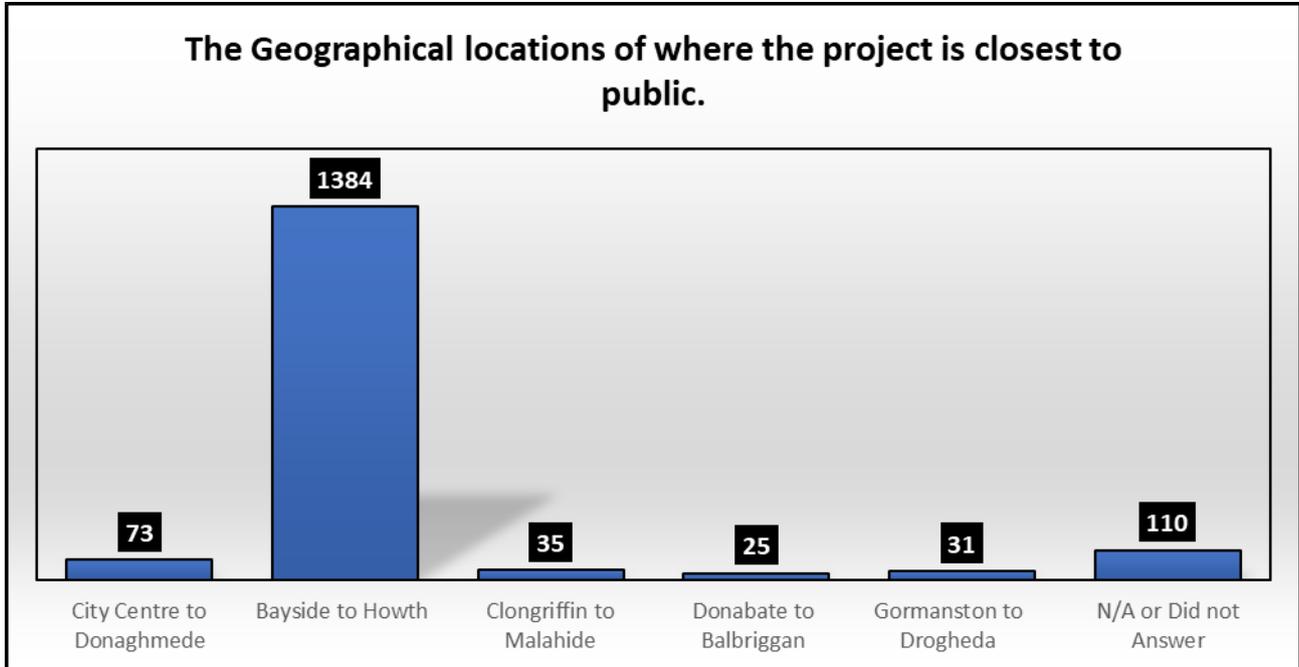


Figure 8 Response to Questionnaire, Question 3

The feedback from **Question 3** has provided a clear indication of where the DART+ Coastal North project has registered the greatest levels of interest in the project. 84% of responders indicated that they were closest to the DART+ Coastal North project in the Bayside to Howth area with the remaining 16% being split between the rest of the project localities or not providing a response to this question. 7% of respondents did not provide a response to this question.

The information received from this question will help shape future engagement and inform decisions relating to future consultations and public engagement for the DART+ Coastal North Project.

Overall, when the feedback from **Question 2 and Question 3** are considered in tandem, the level of support or opposition for the project is quite consistent with the split of localities from which feedback was received.

The information received from **Question 3** is further broken down in Figure 9. It is clear that the bulk of negative responses to this question have come from respondents from the Howth Branch Line locality. Respondents from the localities surrounding the railway line between Dublin City Centre and Drogheda are mostly positive in response to this question.

Summary of Positive & Negative Feedback by Location

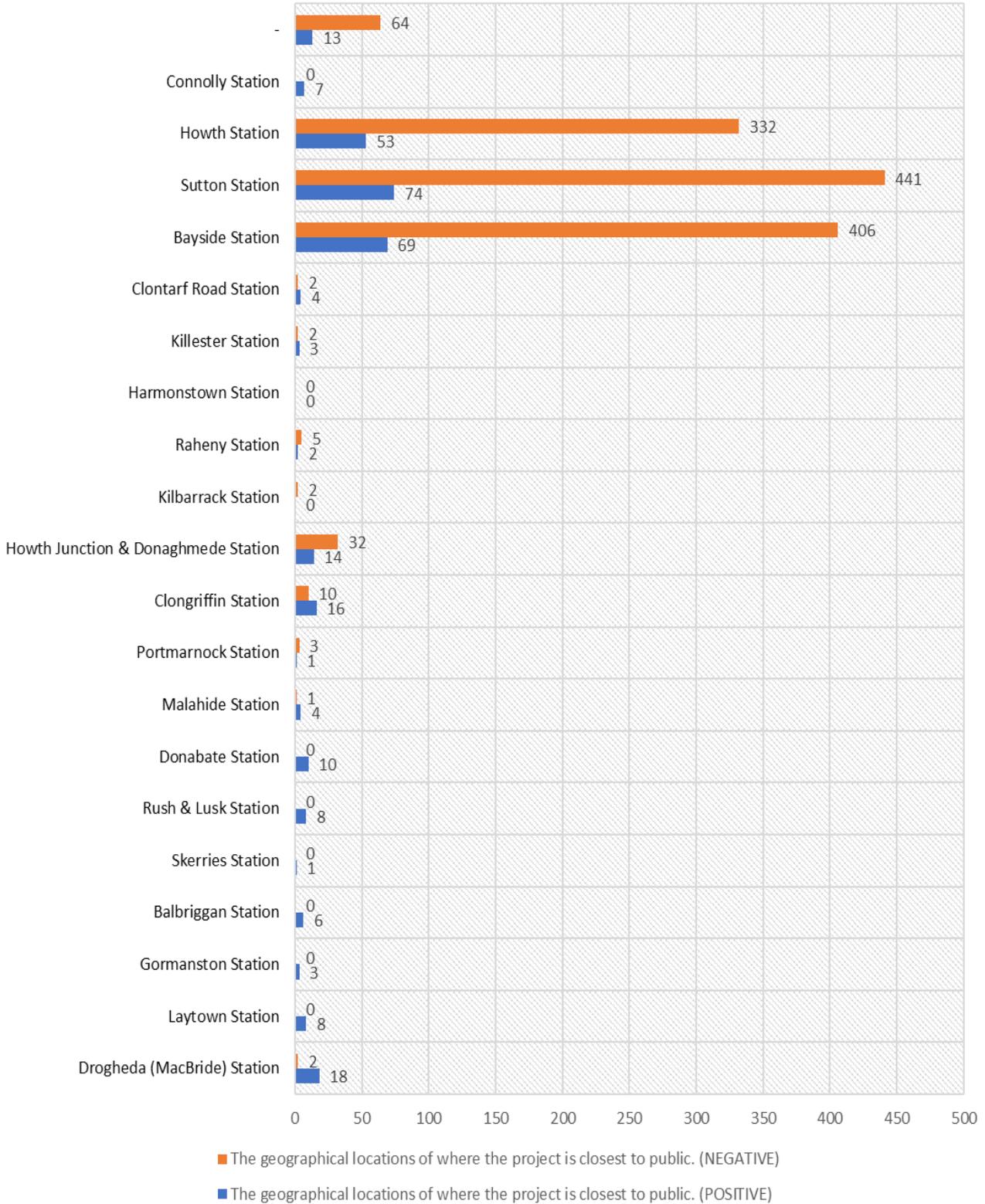


Figure 9 Response to Questionnaire, Question 3, Further Breakdown of Data

3.5.4 Question 6: Will the improved services encourage you to change from travelling by private car to public transport?

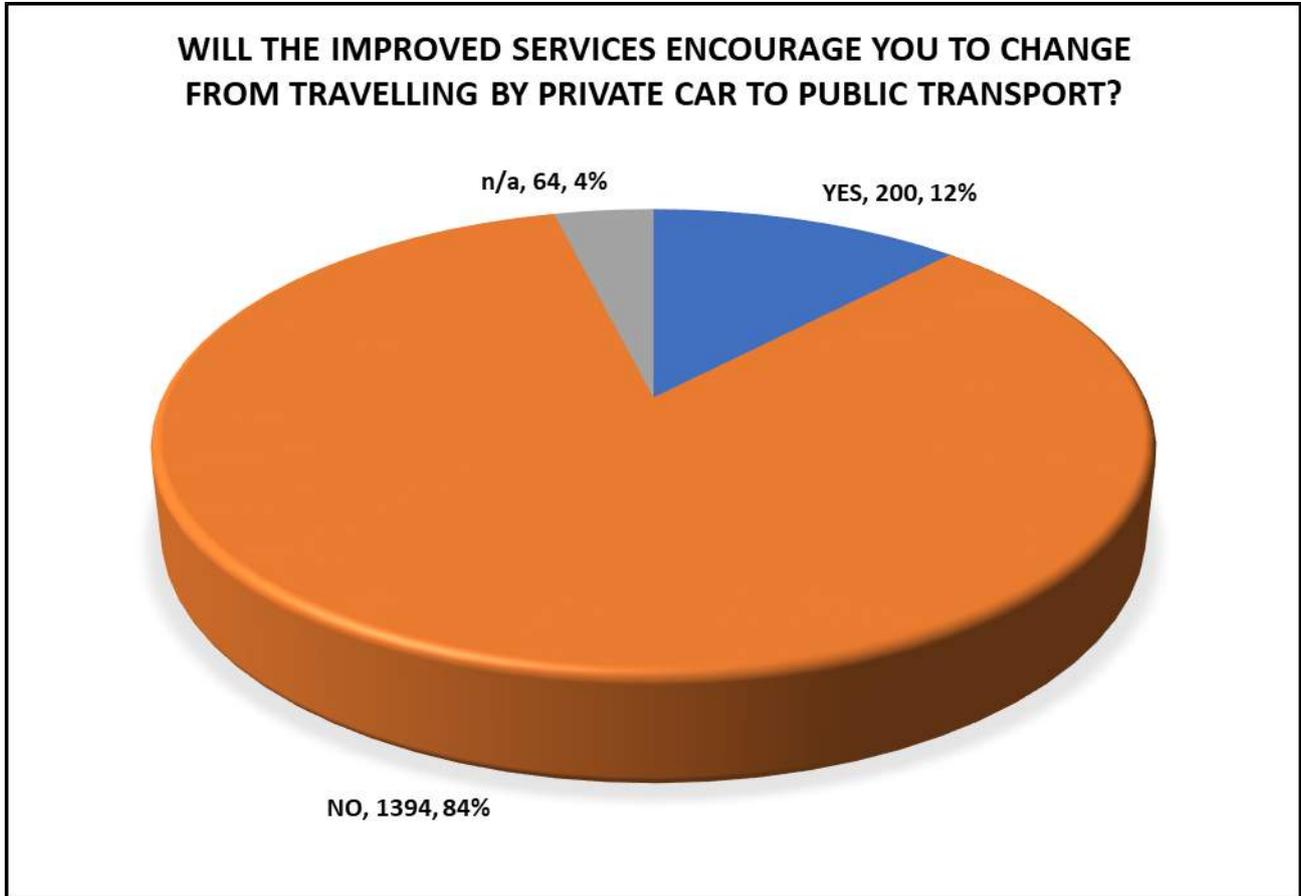


Figure 10 Response to Questionnaire, Question 6

The feedback from **Question 6** clearly indicates that the DART+ Coastal North project proposals included in the Public Consultation No.1 material would not encourage people to engage in a modal shift from private cars to public transport. In fact, there was clear indication that people were more likely to make a move back to private car use as a result of the proposal to introduce a DART shuttle service, and the loss of a direct service during peak times, on the Howth Branch. 4% of respondents did not provide a response to this question.

In order to maximise the value of this question in future consultations, feedback has suggested that an additional box be included to allow respondents to indicate that they are current public transport users who may choose to revert to alternative means of transport due to the proposals presented in Public Consultation No.1. Respondents felt it necessary to include this in their written feedback so as not to potentially skew the results of this question.

3.5.5 Question 7: How did you hear about this current round of the Public Consultation?

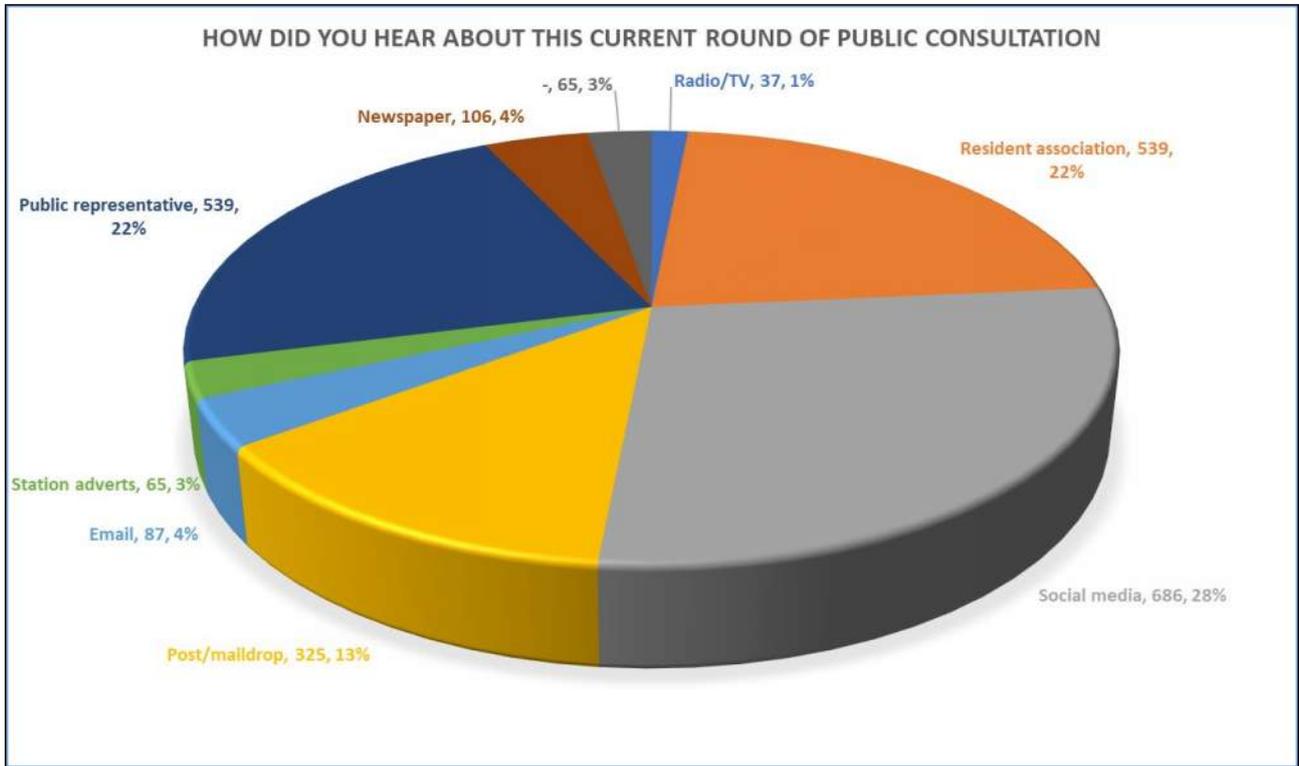


Figure 11 Response to Questionnaire, Question 7

The feedback received from **Question 7** indicates that the main means by which people were informed of Public Consultation No.1 was via social media advertising, through resident associations, through public representatives and from the postal mail drop that was carried out as the consultation launched. While every effort was made to ensure that notification of Public Consultation No.1 was circulated to all relevant persons, the means of communication will now be reassessed and where appropriate, improved upon going forwards. In order to ensure that all further consultations and communications are received by as wide a range of recipients as possible the findings from this question will be considered further. 3% of respondents did not provide a response to this question.

A clear feeling was expressed in the feedback that the extents over which the mail drop was carried out and the level of advertising displayed in the various DART stations and on DART's was inadequate. The scope to improve upon these means of communications will be assessed in advance of Public Consultation No.2 and all appropriate amendments to the means of communication will be made.

3.5.6 Question 8: Do you wish to be added to our mailing list for periodic Project updates?

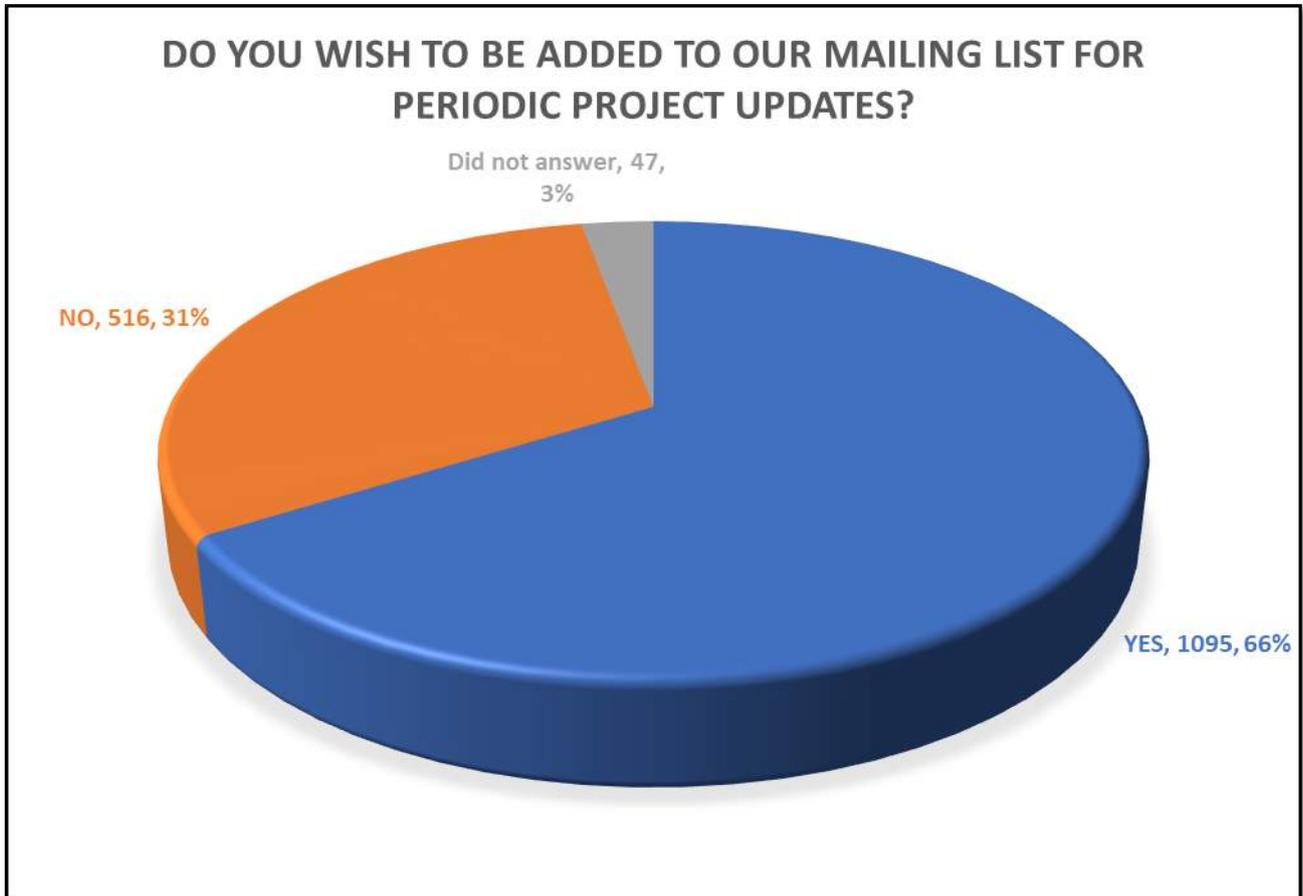


Figure 12 Response to Questionnaire, Question 8

The feedback from **Question 8** has indicated that two-thirds of respondents wish to be added to the DART+ Coastal North mailing list. Those respondents who have provided an email address and indicated that they wish to be added to the project mailing list will receive email notification of project updates and upcoming project events such as Public Consultation No.2 which will be held in Autumn of 2022. 3% of respondents did not provide a response to this question.

4. SUMMARY OF KEY ISSUES OR CONCERNS

Key Issues or Concerns Raised

While a wide variety of issues were raised in the submissions received during Public Consultation No.1, this section provides a summary of the principal issues or main concerns across the entire project.

- Howth Branch Line Infrastructure Proposals
- Journey Times
- Safety
- Level Crossings & Traffic Impacts
- Train Frequency, Capacity & Reliability
- Howth Tourism & Business Impacts
- Station Facilities – Carparking, Bicycle Parking, Park & Ride, Toilets
- Development / Planning Implications
- Access & Mobility Issues
- Public Consultation Process
- Extension of DART to Drogheda & Change to Electric Power
- Limited Scope of Project
- Noise, Health & Impact on Landowners & Residents
- Environmental & Heritage Impacts

The feedback presented in Section 4 reflects the comments and broad nature of feedback provided during the Public Consultation.

Issues outside of the scope such as future fares, extending the project to areas such as Dundalk, Navan or the Airport, or the addition of stations at Drogheda North, Bettystown, Laytown, or elsewhere are not included in this section and have been commented upon in Section 3.4.

4.1 Howth Branch Line Infrastructure Proposals

Infrastructure to enable a DART shuttle service.

It is important to note that the DART+ Coastal North project will deliver the infrastructure to enable the capacity and frequency increases being proposed as part of the DART+ Programme. These works will deliver the infrastructure to remove existing crossing conflicts at Howth Junction & Donaghmede Station which currently limit the overall capacity and frequency on both the Northern and Howth Branch Lines. The proposals would enable the operation of both a DART shuttle service on the Howth Branch Line, and/or a direct through service to/from Dublin City Centre. This will succeed in allowing for an overall increase in both frequency and capacity for passengers along the Howth Branch Line, as well as contributing to an overall increase in service delivery for passengers travelling across the DART+ Coastal area.

The operation of a DART shuttle service on the Howth Branch Line is on the assumption that all of DART+ Programme has been delivered and that there is a need to operate the Northern Line, inclusive of the Howth Branch Line, at its maximum possible level of service.

In the future, when passenger demand exceeds the current capacity and it is necessary to operate a DART shuttle service on the Howth Branch Line, passengers to/from Howth, Sutton and Bayside Stations would be required to interchange between trains at Howth Junction and Donaghmede Station. The proposed infrastructure will not prevent the operation of a direct through service and it is envisaged that direct services would continue to run during off peak times and during weekends. Final operational decisions relating to the operation of a DART shuttle service will be made at a later stage and are subject to future passenger demand on the Northern Line and Howth Branch Line.

As outlined above, should a DART shuttle service be implemented on the Howth Branch Line, commuters from Howth, Sutton and Bayside stations would be required to interchange between train services at Howth Junction & Donaghmede Station. It is acknowledged that upgrades to Howth Junction & Donaghmede Station will be necessary to enable the implementation of a DART shuttle service on the Howth Branch Line. Following feedback received during Public Consultation No.1, a variety of significant modification works are proposed to Howth Junction and Donaghmede Station to both improve the passenger experience generally, and to develop the station to better serve as an interchange station into the future. The proposed works will involve modifying the entrances to provide a more accessible, user friendly and customer focused station for all rail users, as well as improving the connection to the surrounding areas of Donaghmede and Kilbarrack. Upgrades to the existing station footbridge and connections to the centre platforms will also be carried out, as well as upgrades to lighting, signage, and finishes throughout.

It is also important to note that a DART shuttle service is not something that will come into effect immediately upon the delivery of the DART+ Coastal North project. There will be different phases of timetable development that will be gradually introduced as the project builds towards that maximum level of service. The operational detail behind each of these phases has not been worked through at this early stage in the project planning and development. Any substantial timetable change will go through a Public Consultation process of its own organised by the NTA known as the Timetable Customer Consultation Process. If a DART shuttle service ultimately forms part of a future timetable proposal, it will be flagged well in advance and the community will be asked again for their feedback and input, through that consultation process.

Topics and issues associated with the proposals to introduce infrastructure to enable a DART shuttle service are outlined below.

4.1.1 Howth Shuttle – Shuttle Bus Misrepresentation

Some respondents referred to a 'shuttle-bus' in their submissions on the Emerging Preferred Option presented in Public Consultation No.1. There was some confusion as to what is meant by the 'shuttle service' that is referred to in Public Consultation No.1 documentation as part of the Howth Branch Line infrastructural interventions forming part of the DART+ Coastal North project.

Response

Any DART+ Coastal North Public Consultation No.1 documentation referring to a 'shuttle service' or 'Shuttle' are referring to the potential operation of a DART shuttle service, or shuttle train service, on the Howth Branch Line and not a bus service as suggested by some respondents.

It is important to note again that the primary objectives of the DART+ Coastal North project include delivering a higher frequency, higher capacity, reliable, electrified railway to enable an increased DART service frequency between Drogheda and Dublin City Centre, inclusive of the Howth Branch Line. The provision of infrastructure to remove crossing conflicts at Howth Junction & Donaghmede Station and enable the operation of a DART shuttle service on the Howth Branch Line forms an important part of meeting these objectives.

4.1.2 Loss of Direct Access to Dublin City Centre

Respondents stated very clearly in submissions that there is significant opposition to, and concerns relating to, the potential loss of direct access to Dublin City Centre during peak travel periods (i.e. without the need for a change of train). Respondents also stated that the loss of the direct link to Dublin City Centre at these times will be strongly opposed by commuters from the Howth Peninsula. The proposed DART shuttle service, and loss of direct access to Dublin City Centre during peak times, is seen as a significant downgrade in service quality for those commuters on the Howth Branch Line.

Feedback on this issue was received from a variety of commuters including those travelling for work with particular time constraints such as nurses, chefs, carers, etc.

Concerns were raised for students (university, college, and school) who cannot compromise on their need to be in attendance for class times. Concerns over interchanging were expressed for the elderly, those with mobility issues, parents travelling with buggies, vulnerable persons, children, and others. Young school children who currently travel to school by DART will be compromised by the need to interchange at Howth Junction with many respondents stating that they would no longer be comfortable allowing their children to commute by DART under the new proposals.

Respondents expressed feelings that commuters from Drogheda, Portmarnock, Malahide, Clongriffin etc are being prioritised over those commuting from Howth, Sutton, and Bayside Stations.

Options to retain a direct link to Dublin City Centre during peak times were put forward by some respondents. These options included:

- An option to retain a permanent direct service from Howth based on current frequency was put forward;
- An option to operate a DART shuttle service between Howth Junction & Donaghmede Station and Drogheda while retaining the direct link to Dublin City Centre for the Howth Branch was put forward; and
- An option to develop an underground line beneath Howth Junction & Donaghmede Station to remove crossing conflicts was put forward.

Response

It was very clear from the feedback received as part of Public Consultation No.1 that there is significant opposition and concern about the reconfiguration of track infrastructure at Howth Junction & Donaghmede Station and the potential operation of a DART shuttle service during peak hours on the Howth Branch Line.

It is an established principle in railway operations to seek to minimise, and preferably remove conflicts entirely, to maximise rail capacity. To achieve the maximum potential service level proposed by the DART+ Coastal North project on both the Northern and Howth Branch Lines, it is necessary to remove the crossing conflicts at Howth Junction & Donaghmede Station.

The project is seeking to deliver the infrastructure to enable the operation of both a DART shuttle service on the Howth Branch Line as required, and/or a direct through service to/from Dublin City Centre, allowing for the capacity and frequency of DART+ services on both the Northern, and Howth Branch, lines to be maximised and to help future-proof the network.

At what point a DART shuttle service may actually be introduced is essentially an operational decision and would be considered after the project is delivered in direct response to future passenger demand. An introduction of any timetable that may include the operation of a DART shuttle service would be subject to a public consultation process of its own run by the National Transport Authority (NTA). The overall increase in service frequency and capacity provided by the DART+ Programme will result in an overall better service for many train users. It should also be noted that in the absence of any measures (such as those proposed in DART+ Coastal North), the capacity of the current network will remain the same, resulting in the increased demand from all areas along the Northern Line catchment, inclusive of the Howth Branch Line, not being met and inevitable impacts on the service as a result of existing constraints not being addressed.

Impact on Direct Services to and from Dublin City Centre

Based on current assessments, in order to maximise the capacity and frequency of services on the Northern and Howth Branch Lines, it will be necessary to remove the existing crossing conflicts between services currently experienced at Howth Junction & Donaghmede Station. The introduction of a DART shuttle service between Howth Station and Howth Junction & Donaghmede Station allows for these crossing conflicts to be removed and for the existing infrastructure to be optimised through infrastructural upgrades.

If during peak times a direct or through service from Howth Station was continued, even at its current frequency, the crossing conflicts at Howth Junction & Donaghmede Station are not fully removed and the potential maximum capacity of the Northern Line is compromised. To retain a direct service during peak times will significantly limit the number of trains that can be operated on the Northern Line as well as the number of trains on the Howth Branch Line. A through service results in two less trains running in the hour on the Northern Line for every single through service in the hour on the Howth Branch Line. In order to allow for the rail capacity to grow in line with demand and population growth, the introduction of a DART shuttle service during peak hours is seen as being the most effective way to allow for the capacity to be increased given the scale of existing constraints to alternative options.

As noted earlier, it is important to note that the DART shuttle service is not something that will come into effect immediately upon the delivery of the DART+ Coastal North project. The option to continue some direct services from Howth Station during peak times, up to the point at which the networks capacity is maximised, remains. There will be different phases of timetable development that will be gradually introduced as the project builds towards a maximum level of service. The decision to operate the DART shuttle service will be an operational decision driven by demand.

Further assessment of feedback and current options will be required prior to the selection of a preferred option for DART+ Coastal North that will be presented at Public Consultation No.2.

Operation of DART shuttle service between Howth Junction & Donaghmede Station and Drogheda Station

The option of retaining direct services between Dublin City Centre and Howth Station and operating a DART shuttle service on the Northern Line between Howth Junction & Donaghmede Station and Drogheda Station, does not allow for the DART+ Coastal North project to meet its objectives of maximising capacity and frequency of service on the Northern and Howth Branch Lines.

Development of underground infrastructure to resolve the existing crossing conflicts at Howth Junction & Donaghmede Station.

The main objectives of the DART+ Coastal North project include delivering a higher frequency, higher capacity, reliable, electrified route to enable an increased DART service frequency between Drogheda and Dublin City Centre. It is currently considered possible to deliver these objectives without the inclusion of a section of underground railway at Howth Junction & Donaghmede Station or elsewhere. The heavily constrained nature of the area surrounding Howth Junction & Donaghmede Station, and the extents of negative impacts on property and the environment associated with an underground solution in this area all contribute to the decision not to pursue an underground solution.

4.1.3 Concerns interchanging between services at Howth Junction & Donaghmede Station.

Respondents have stated opposition and raised concerns in relation to the need to interchange between Howth Branch Line services and Northern Line services at Howth Junction and Donaghmede Station.

Objections and concerns primarily relate to the following:

- Concerns with capacity of receiving DART services to accommodate Howth Branch passengers, and scheduling of DART services to minimise passenger wait times for connecting DART services;
- Concerns with lack of clarity on what is expected of commuters when interchanging between services;
- Concerns relating to station facilities and accessibility at Howth Junction & Donaghmede Station;
- Concerns for safety of vulnerable commuters, including children and the elderly amongst others, when interchanging between services;
- Concerns with elderly or vulnerable commuters being able to find a seat on connecting DART services; and
- Concerns relating to the intimidating nature of overpasses and anti-social behaviour associated with Howth Junction & Donaghmede station.

Response

Capacity of receiving DART services to accommodate Howth Branch passengers, and scheduling of DART services to minimise passenger wait times for connecting DART services.

Post project delivery, should passenger demand reach a point where a DART shuttle service is required to operate during peak times on the Howth Branch Line, it is envisaged that Howth Branch DART shuttle service passengers would have minimal wait times for connecting services at Howth Junction and Donaghmede Station. It is however too early to say exactly what wait times will be or indeed what the exact journey time from stations on the Howth Branch will be, but it is expected that journey time will remain similar to current journey times from these stations into the city centre.

The scheduling of services on the Northern Line between Dublin City Centre and Drogheda has not yet been determined and will be linked to operational decisions and the development of future timetables as discussed previously. As a result, the capacity of receiving services is not yet known. Receiving DART trains will be full length trains as part of DART+ Coastal North, which will provide an increase in capacity over what is currently operated on the Northern Line. As DART+ Coastal North builds towards maximum frequency and capacity, the scheduling of DART trains on the Northern Line will of course need to ensure that adequate capacity is available to accept passengers from the Howth Branch during peak times.

It is also important to note that revised timetabling is not something that will come into effect immediately after project delivery. There will be different phases of timetable development that will be gradually introduced as we aim towards a maximum level of service. The operational detail behind each of these phases hasn't been worked through at this stage in the project planning and development. Any substantial timetable change goes through a public consultation process of its own organised by the NTA known as the Timetable Customer Consultation Process. If a DART shuttle service was to form part of a future timetable proposal, it will be flagged well in advance and the community will be asked again for their feedback and input.

As outlined above, the timetabling process will see a gradual increase in frequency as each timetable is proposed and delivered and this will be designed based on passenger demand at that time on the Northern Line and the Howth Branch Lines.

Concerns with lack of clarity on what is expected of commuters when interchanging between services.

Post project delivery should passenger demand reach a point where a DART shuttle service is required to operate during peak times on the Howth Branch Line, it is envisaged that commuters interchanging at Howth Junction & Donaghmede Station will need to join a connecting service at an adjacent platform to that from which they alight from their initial DART service. In some cases, passengers will need to move between platforms by overbridge to meet connecting trains which may result in some minor additional journey times.

A variety of significant modification works are proposed to Howth Junction and Donaghmede Station to both improve the passenger experience generally, and to develop the station to better serve as an interchange station into the future. The proposed works will involve modifying the entrances to provide a more accessible, user friendly and customer focused station for all rail users, as well as improving the connection to the surrounding areas of Donaghmede and Kilbarrack. Upgrades to the existing footbridge and connections to the centre platforms will also be carried out, as well as upgrades to lighting, signage, and finishes throughout

Concerns relating to station facilities and accessibility at Howth Junction & Donaghmede Station.

Following receipt of feedback from Public Consultation No.1, and in direct response to concerns raised in relation to station facilities at Howth Junction & Donaghmede Station, a variety of significant modification works are proposed to both improve the passenger experience generally, and to develop the station to better serve as an interchange station into the future as detailed above.

Concerns for safety of vulnerable commuters when interchanging between services.

As a direct result of feedback received during Public Consultation No, 1 in addition to further project consideration and requirements, significant upgrades to Howth Junction & Donaghmede Station are now proposed to provide a more accessible, user friendly and customer focused station for all rail users. Full details of the proposed plans are shared in the Public Consultation No. 2 project documentation.

The new DART fleet is designed specifically with passenger accessibility in mind and features low level entrances and flooring throughout. A retractable step at every doorway is deployed automatically before the doors open to minimise the horizontal gap between the train and the platform. This will greatly improve access for persons with reduced mobility and ensure unassisted travel for the majority of rail users.

In addition, inductive hearing loops will be placed throughout the new Fleet with Passenger Information Displays in each carriage providing transformed customer information on-board.

Concerns that elderly or vulnerable commuters may be unable to find a seat on connecting DART services.

The new DART+ Fleet interior configuration is still being finalised in consultation with staff and passenger focus groups. That being said, contrary to the concerns raised, the new DART+ full length unit will offer more seating to passengers when compared with the 29000 8-car diesel carriages that currently operate between Dublin City Centre and Drogheda on the Northern Line. A new DART+ full length unit will consist of 404 seats (plus an additional number of tip-up seats which will be confirmed once the interior configuration is finalised). That is compared to 370 currently offered on the 29000 8-car unit. In direct comparison, but also considering the frequency uplift that this project will deliver, this is a significant increase in the seating available to passengers. In addition, there will be a larger number of priority seats on the DART+ Fleet, offering a minimum of 80 priority seats compared to 64 on the equivalent 29000.

Finally, one of the primary objectives of the design of the new DART+ Fleet is to provide improved accessibility for train users including;

- Larger wheelchair spaces with easy access from adjacent doors
- Uncluttered family areas to fit pushchairs and located close to doors
- A mixture of seating and standing layouts to accommodate diverse passenger needs
- Bike stowage areas
- A retractable step at each doorway to provide for unassisted access for all users
- E-bicycle and e-scooter charging spots
- Wide gangways between carriages to allow ease of movement, create a more open connected feel and a greater feeling of security
- USB charging points and Wi-Fi throughout
- 4 CCTV cameras per car to support passenger safety and security
- 4 (PIS) Passenger Information System screens per carriage for real time travel information.

4.1.4 Safety Concerns at Howth Junction & Donaghmede Station

Respondents expressed a strong concern relating to safety at Howth Junction & Donaghmede Station. There is a strong demand for improvements to be made at the station to improve safety and security and to improve the experience for commuters that use Howth Junction & Donaghmede Station.

Concerns relating to the safety of women, older commuters and children have been particularly prominent in the feedback received. The level of anti-social behaviour has been highlighted at this station and respondents have stated that they will not use the DART+ services should there be a need to interchange at Howth Junction & Donaghmede Station based on recent station experiences and the station's reputation.

A strong desire has been expressed for Irish Rail staff and security personnel to be visibly located at the station.

Respondents are asking for these security concerns to be addressed now, in advance of any potential changes associated with the DART+ Coastal North project.

Response

As a direct result of feedback received during Public Consultation No. 1 in addition to further project consideration and requirements, significant upgrades to Howth Junction & Donaghmede Station are now proposed to provide a more accessible, user friendly and customer focused station for all rail users. Full details of the proposed plans are shared in the Public Consultation No. 2 project documentation.

The proposed works will involve modifying the entrances to provide a more accessible, user friendly and customer focused station for all rail users, as well as improving the connection to the surrounding areas of Donaghmede and Kilbarrack. Upgrades to the existing footbridge and connections to the centre platforms will also be carried out, as well as upgrades to lighting, signage, and finishes throughout.

Customer experience, accessibility, safety, and security will be central to the development of Howth Junction & Donaghmede Station, and we also acknowledge the feedback we have been given to date about this station experience and its current facilities. These concerns are something the DART+ Coastal North project is taking very seriously, and the project team is looking at what solutions can be provided for in both the long and short term.

It is important to note that the majority of train users travel without incident. The network is actively monitored by a central operations team which helps create a safe travel and work environment for both Iarnród Éireann staff and customers.

There are a range of existing measures in place across the DART and Commuter network designed to help mitigate against anti-social behaviour (ASB):

- A TEXT alert system is in place on trains (51444 TRAIN) for members of the public to report incidents of ASB in real time so assistance can be dispatched as needed.
- Joint operations with Gardaí have proven effective and are planned to continue. The roll out of Garda Hubs around the network to assist on-board staff to deal with problematic passengers have provided much peace of mind to passengers and staff alike. We regularly work closely with An Garda Síochána (AGS) in targeted joint operations to address issues of anti-social behaviour on the network and the issuing of fixed penalty notices where appropriate. Moving forward we will be collocating with (AGS) in the new Operations Control Centre in at Heuston Station.
- CCTV at all stations, monitored in real time by a team at our security monitoring room at Howth Junction & Donaghmede Station. The security monitoring room actively monitors the DART and Commuter stations CCTV, and the supervisory team coordinates the security response in the Greater Dublin Area as required.
- Teams of security operatives roam the network throughout the day and into the night.
- Fare evaders are targeted by the Revenue Protection Officers (RPOs) ensuring issue of fare penalty notices.
- Iarnród Éireann now have a team specifically dedicated to targeting and addressing ASB across a wide range of issues from trespass to vandalism to graffiti etc. Part of their remit is to ensure that those who are engaged in criminal activity are prosecuted for same.

4.1.5 Alternatives to the DART shuttle service

Respondents have queried if, and what, other alternative solutions to the introduction of a DART shuttle service have been considered as part of the development of the Emerging Preferred Option?

Response

DART+ Coastal North is primarily an infrastructure project that is seeking to maximise the capacity and performance on both the Northern and Howth Branch Lines. The crossing conflicts which exist at Howth Junction & Donaghmede Station are significant constraints to this maximisation of capacity and performance. The removal of crossing conflicts follows industry best practice when considering the delivery of increased service frequency and capacity on a railway line.

The delivery of infrastructure to remove the crossing conflicts at Howth Junction & Donaghmede Station and enable the operation of both a DART shuttle service, and/or a direct through service to/from Dublin City Centre, is seen as the most appropriate solution that can be implemented to maximise the capacity and performance on both the Northern and Howth Branch Lines.

While alternative solutions involving very significant infrastructure interventions exist, these types of intervention go beyond the objectives of the project and do not deliver a value for money solution to the existing constraints.

4.1.6 Community Impact ('Bad Deal' for Howth Branch Users)

Many respondents from the Howth Branch Line area noted their feeling that the proposed DART+ Coastal North upgrades will come at the expense of Howth Branch Line users. Many expressed the feeling that DART+ Coastal North provides a 'bad deal' for Howth Branch users.

Response

It was very clear from the feedback received as part of Public Consultation No.1 that there is significant opposition and concern about the potential for the introduction of a DART shuttle service on the Howth Branch Line.

It should be noted that the proposed DART+ Coastal North project will provide the infrastructure to enable the future maximised DART service. Any changes in DART service operations, such as a potential DART shuttle service, will be dependent on operational decisions in the future, which will be led by growth in user demand on the network. Any such proposed changes will be subject to a Public Consultation process in advance of such decisions.

It should also be noted that in the absence of any measures (such as those proposed in DART+ Coastal North), the capacity of the current network will remain the same, resulting in the increased demand from all areas along the Northern and Howth Branch Lines catchments not being met and inevitable impacts on the service as a result of existing constraints not being addressed.

4.1.7 Concern that Howth Branch may be phased out or abandoned over time.

Concerns have been raised that the introduction of the DART shuttle service on the Howth Branch may be the beginning of a process to phase out, or abandon, the Howth Branch DART service over time.

Response

Patronage at the Howth Branch stations of Bayside, Sutton and Howth is strong and on par with other DART stations on the network for example Killester, Kilbarrack and Lansdowne. This patronage is also expected to grow over the coming years. Iarnród Éireann (or any other relevant government authority) have no plans to reduce, phase out or close the Howth Branch Line.

A reminder that the DART+ Coastal North project is seeking to deliver the infrastructure that will enable the operation of both a DART shuttle service on the Howth Branch Line as required, and/or a direct through service to/from Dublin City Centre, allowing for the capacity and frequency of DART+ services on both the Northern Line, and Howth Branch Line, to be maximised and to help future-proof the network.

4.2 Journey Times

Respondents stated that journey time information was lacking from the information presented as part of Public Consultation No.1.

Concerns were raised in relation to a number of aspects of journey times including:

- Lack of detailed timetables for future services;
- Effects of DART+ Coastal North on enterprises and intercity services journey times; and
- Effects of DART+ Coastal North on Howth Branch journey times.

Response

It is important to note that the proposed DART+ Coastal North project will provide the infrastructure necessary to allow an increase in frequency and capacity on the Northern Line, inclusive of the Howth Branch Line. Timetable changes to implement the frequency and capacity increases will be made over time, when the project is complete and as demand for services increases (led by development in the catchment served by the railway line, increased modal shift, etc). A range of variables will affect final journey times, and these are discussed in more detail in the following sub-sections.

4.2.1 Timetables

It is important to note that the DART+ Coastal North Project scope includes the construction of infrastructure to enable a planned increase in service, capacity, and frequency on the Northern Line, inclusive of the Howth Branch Line. The development of timetables will progress separately to the DART+ Coastal North Project under the responsibility of Iarnrod Éireann Operations Division.

Further information on journey time modelling is included in the Public Consultation No.2 documentation. The development of service timetabling is an entirely operational procedure, however, which will be carried out separately to this DART+ Coastal North Project. Future timetables will be directly determined by future passenger demand.

Any substantial timetable changes are subject to a Public Consultation process organised by the NTA known as the Timetable Customer Consultation Process. Iarnród Éireann will provide updates on changes to timetables as they are developed over the coming years.

4.2.2 Effects of DART+ Coastal North on Enterprise and Commuter services journey times

It is important to note that the DART+ Coastal North Project will deliver rail infrastructure which will enable the proposed increased frequency and capacity of rail services between Drogheda, Howth, and Dublin City Centre. The project will also deliver improved reliability of services on the Northern and Howth Lines.

Actual journey times, and timetables, for DART services originating from Drogheda have yet to be determined. These will vary depending on operational decisions on the stopping patterns of DART services in the future, of which there are many variations and options to consider.

Timetables will be developed based on some DART trains stopping at all stations between Drogheda and Dublin City Centre, and others operating on a skip stopping pattern, similar to the existing stopping pattern on Northern Commuter services. Also, there will be different phases of timetable development that will be gradually introduced as the project builds towards the maximum level of service.

The operational detail behind each of these phases will be determined through the timetable decisions at those times. Any substantial timetable change will go through a Public Consultation process of its own organised by the NTA known as the Timetable Customer Consultation Process.

The operation of commuter services, or Enterprise services, during a peak period may result in an extended journey time for these services. This does however allow Iarnród Éireann to maximise the Northern Line track capacity, through the implementation of the DART+ Coastal North project. Factors including the output from the ongoing Enterprise Fleet Replacement Project, the improved acceleration and braking provided by the new DART+ Fleet, and the stopping patterns of DART services implemented on the Northern Line will all influence and inform future journey times for all rail services.

Modelling completed to date suggests expected DART journey times between Drogheda and Dublin Connolly during peak periods would take circa 53 minutes. Again, as described previously, it is worth noting that the DART+ Coastal North project will deliver the infrastructure to enable the maximum level of service on the Northern Line and future journey times and timetables have yet to be developed and will be sensitive to a variety of influencing factors.

4.2.3 Effects of DART+ Coastal North on Howth Branch journey times

DART+ Coastal North is an infrastructure project tasked with the development of the infrastructure on the Howth Branch Line to enable the operation of both a DART shuttle service on the Howth Branch Line as required, and/or a direct through service to/from Dublin City Centre, allowing for the capacity and frequency of DART+ services on both the Northern, and Howth Branch, lines to be maximised. If a DART shuttle service was operated in the future, passengers from Howth, Sutton and Bayside Stations would be required to interchange between services at Howth Junction & Donaghmede Station on route to/from Dublin City Centre. With the overall increase in DART train service frequency delivered by the DART+ Programme, it is envisaged that passengers would encounter minimal wait times for connecting services when interchanging at this station and planned improvements at Howth Junction and Donaghmede Station will also result in an improved overall passenger experience at the station.

At this stage it is too early to say exactly what wait times would be, when interchanging at Howth Junction & Donaghmede Station, or indeed what the exact journey time from stations on the Howth Branch into Dublin City Centre will be. It is expected that sectional journey times (e.g. Bayside to Howth Stations) along the Howth Branch Line will remain similar to current journey times experienced by DART passengers, and that any adjustment to journey times from the Howth Branch into the city centre will be as a result of the interchange between services at Howth Junction & Donaghmede Station which is expected to be minimal. Changes to journey times will be somewhat offset by increased service frequency resulting in more choice for passengers and reduced wait times to commence DART journeys in the first instance.

Any future timetable that may include the operation of a DART shuttle service on the Howth Branch Line would be subject to its own public consultation process run by the National Transport Authority in advance of that service being implemented.

As outlined above, the timetabling process would see a gradual increase in frequency as each timetable is proposed and delivered and this will be designed based on passenger demand at that time on the Northern, and the Howth Branch, lines.

4.3 Safety

4.3.1 General Safety Concerns

Respondents expressed concern relating to general safety associated with travelling by DART, and through DART stations. These concerns largely revolved around anti-social behaviour associated with DART stations, a lack of staff/security presence at DART stations along the Northern and Howth Branch Lines, and poor lighting in areas surrounding DART stations. Concerns raised during Public Consultation No.1 mainly centred around the elderly, the vulnerable, women, and children. Particular focus was directed to concerns with Howth Junction & Donaghmede Station which is expanded upon in section 4.3.2.

Response

Iarnród Éireann continue to work to provide a safe rail network for all users. The majority of train users travel without incident. Iarnród Éireann actively monitor the network to help create a safe travel and work environment for both Iarnród Éireann staff and customers. Significant resources are put into security with €5.7m spent on these measures in 2021, up from €3.7m in 2016.

There are a range of existing measures in place across the DART and Commuter network designed to help mitigate against anti-social behaviour (ASB):

- A TEXT alert system is in place on trains (51444 TRAIN) for members of the public to report incidents of ASB in real time so assistance can be dispatched as needed.
- Joint operations with Gardaí have proven effective and are planned to continue. The roll out of Garda Hubs around the network to assist on-board staff to deal with problematic passengers have provided much peace of mind to passengers and staff alike. We regularly work closely with An Garda Síochána (AGS) in targeted joint operations to address issues of anti-social behaviour on the network and the issuing of fixed penalty notices where appropriate. Moving forward we will be collocating with (AGS) in the new Operations Control Centre in at Heuston Station.

- CCTV at all stations, monitored in real time by a team at our security monitoring room at Howth Junction & Donaghmede Station. The security monitoring room actively monitors the DART and Commuter stations CCTV and the supervisory team coordinates the security response in the Greater Dublin Area as required.
- Teams of security operatives roam the network throughout the day and into the night.
- Fare evaders are targeted by the Revenue Protection Officers (RPOs) ensuring issue of fare penalty notices.
- Iarnród Éireann now have a team specifically dedicated to targeting and addressing ASB across a wide range of issues from trespass to vandalism to graffiti etc. Part of their remit is to ensure that those who are engaged in criminal activity are prosecuted for same.

4.3.2 Safety Concerns at Howth Junction & Donaghmede Station

Respondents expressed a strong concern relating to safety at Howth Junction & Donaghmede Station. There is a significant demand for upgrades to be made at the station to improve safety and security and to improve the experience for commuters that use Howth Junction & Donaghmede Station.

Concerns relating to the safety of women, older commuters and children have been particularly prominent in the feedback received. The level of anti-social behaviour has been highlighted at this station and respondents have stated that they will not use the DART+ services should there be a need to interchange at Howth Junction & Donaghmede Station based on recent station experiences and the station's reputation. Past incidents of violence, drug-dealing, and general anti-social behaviour have been highlighted during the Public Consultation.

A very strong desire has been expressed for Irish Rail staff and security personnel to be located at the station. Feedback identified that it is important that these staff are in visible locations around the station, including on platforms and at access points, and that they are present during both peak travel and quieter times including evenings and weekends.

It is clear that respondents desire these security concerns to be addressed now, in advance of any potential changes associated with the DART+ Coastal North project, in order for the proposals to be considered anything other than negatively impactful.

Response

As a direct result of feedback received during Public Consultation No. 1 in addition to further project consideration and requirements, significant upgrades to Howth Junction & Donaghmede Station are now proposed to provide a more accessible, user friendly and customer focused station for all rail users. Full details of the proposed plans are shared in the Public Consultation No. 2 project documentation.

The proposed works will involve modifying the entrances to provide a more accessible, user friendly and customer focused station for all rail users, as well as improving the connection to the surrounding areas of Donaghmede and Kilbarrack. Upgrades to the existing footbridge and connections to the centre platforms will also be carried out, as well as upgrades to lighting, signage, and finishes throughout.

Customer experience, accessibility, safety, and security will be central to the development of Howth Junction & Donaghmede Station, and we also acknowledge the feedback we have been given to date about this station experience and its current facilities. These concerns are something the DART+ Coastal North project is taking very seriously, and the project team is looking at what solutions can be provided for in both the long and short term.

It is important to note that the majority of train users travel without incident. The network is actively monitored by a central operations team which helps create a safe travel and work environment for both Iarnród Éireann staff and customers.

There are a range of existing measures in place across the DART and Commuter network designed to help mitigate against anti-social behaviour (ASB):

- A TEXT alert system is in place on trains (51444 TRAIN) for members of the public to report incidents of ASB in real time so assistance can be dispatched as needed.
- Joint operations with Gardaí have proven effective and are planned to continue. The roll out of Garda Hubs around the network to assist on-board staff to deal with problematic passengers have provided much peace of mind to passengers and staff alike. We regularly work closely with An Garda Síochána (AGS) in targeted joint operations to address issues of anti-social behaviour on the network and the issuing of fixed penalty notices where appropriate. Moving forward we will be collocating with (AGS) in the new Operations Control Centre in at Heuston Station.
- CCTV at all stations, monitored in real time by a team at our security monitoring room at Howth Junction & Donaghmede Station. The security monitoring room actively monitors the DART and Commuter stations CCTV, and the supervisory team coordinates the security response in the Greater Dublin Area as required.
- Teams of security operatives patrol the network throughout the day and into the night.
- Fare evaders are targeted by the Revenue Protection Officers (RPOs) ensuring issue of fare penalty notices.
- Iarnród Éireann now have a team specifically dedicated to targeting and addressing ASB across a wide range of issues from trespass to vandalism to graffiti etc. Part of their remit is to ensure that those who are engaged in criminal activity are prosecuted for same.

4.4 Level Crossings & Traffic Implications

4.4.1 Closure Times & Frequency

Respondents have stated significant concerns that the proposed increase in the overall level crossing closure times, and increased frequencies of level crossing closures, will have a considerable impact on traffic in the areas surrounding the level crossings as well as on the Howth peninsula, and will cause delays for other forms of sustainable transport including:

- Pedestrians and Cyclists; and,
- Buses and Public Transport.

Some respondents queried if the recommendation that the level crossings could continue to operate without a significant impact on the surrounding traffic was realistic. The data used to inform the assessment was queried and some suggestions that data may have been skewed to produce a desirable result were raised.

It has been noted that the impact of idling vehicles at level crossings also has a negative effect on the health of pedestrians and cyclists who are also held up at level crossings as a result of breathing in emissions while waiting for level crossing gates to re-open.

The level crossing closure proposals were noted as having a negative impact on residents living in close proximity to level crossings and on the members and visitors of Sutton Golf Club which requires golfers who frequent the course to cross the DART tracks twice (across & back across) during each 9-hole round of golf.

Response

The proposed changes to the Howth Branch, as defined in the Train Service Specification (TSS), will facilitate an increase in both DART service frequency and capacity, along with improvements to the reliability of timetabling and service operation. Operational benefits linked to the infrastructural upgrades will allow for greater operational flexibility and optimisation of services on the Howth Branch. The current level crossing barrier opening and closing timings have been used to inform a traffic model assessing the effects on vehicles, cyclists, and pedestrians.

Detailed assessment of the four existing level crossings along the Howth Branch Line has concluded that these level crossings can continue to operate and provide an appropriate level of cross connectivity and accessibility whilst still meeting the increased DART service frequency requirement. The increased frequency of level crossing closures will result in a greater likelihood of vehicles, pedestrians and cyclists being required to queue at the crossings, however, the traffic modelling and sensitivity analysis has shown that queue lengths are likely to remain within the available queueing road space in all cases. Based on the assessments carried out to date, additional infrastructural interventions at the four level crossings are not considered necessary.

The impacts on traffic surrounding the Howth Branch level crossings have been assessed using LinSig modelling software. LinSig is an industry standard software tool which allows traffic engineers to model traffic signals and their effect on traffic capacities and queuing. This was used to investigate the impacts of the barrier closures on the surrounding road network and further details are included in Annex 3.7 Appendix B of the published material which is available through the project website <https://www.dartplus.ie/en-ie/projects/dart-north>.

The traffic data used in the level crossing assessments was based on surveys carried out in May 2022. These included classified vehicle junction turning count surveys over a 14-hour time period between 0600 and 2000 at the junctions within the study area and also at the level crossings within the study area. The data also included queue length surveys and pedestrian count surveys. The AM peak hour was determined to occur between 0800 and 0900 and the PM peak hour between 1730 and 1830 (refer to Annex A). These are the busiest periods on the road network and the impact of the proposed level crossing closures was therefore assessed for these time periods. Historical traffic data (2018/2019) was available at some of the junctions adjacent to the Kilbarrack and Sutton level crossings and a comparison of the most recent traffic data (2022) and the historic traffic data (2018/2019) has shown that traffic levels observed in the recent surveys have, to a large extent, returned to pre-Covid levels in the study area. The most recent 2022 traffic count data were therefore considered a suitable data source for the assessment.

The effects of any changes to traffic patterns will be fully assessed as part of the EIAR and it should also be noted that the EIAR accompanying the Railway Order application will include a comprehensive assessment of potential air quality and climate impacts resulting from the proposed DART+ Coastal North development.

4.4.2 Environmental Considerations related to Level Crossing Closure Times

Respondents have stated that the proposals contained in Public Consultation No.1, if implemented, will make them less likely to use public transport and more likely to use their cars which will in turn lead to an increase in emissions. Respondents have also stated that the increase in level crossing gate closure frequency will lead to an increased volume of vehicles queuing at level crossings and further negatively contribute to CO₂ emissions. Concerns have been raised in relation to the ongoing climate emergency and the need to move people away from car use and into sustainable forms of transport.

Response

One of the stated objectives of the DART+ Coastal North project is to help build a sustainable and connected city region, supporting the transition to a low carbon and climate resilient society. The investment in this infrastructure is needed to help achieve climate change targets, helping to reduce the transport sector greenhouse gas emissions and supporting the objectives of the Climate Action Plan¹. In support of current government policy, the intent is to encourage modal shift from private car to public transport going forward through the provision of a more reliable, higher capacity and more frequent DART service across the network.

It should be noted that the proposed DART+ Coastal North project will provide the infrastructure to enable a future DART shuttle service. Any changes in DART service operations, such as a potential DART shuttle service, will be dependent on operational decisions in the future, which will be led by demand on the network. Any such proposed changes will be subject to a Public Consultation process in advance of such decisions.

It should also be noted that in the absence of any measures (such as those proposed), the capacity of the network will remain the same, with the result that increased demand from all areas along the catchment will not be met and there will be increasing capacity constraints on the network, which will inevitably impact service.

In respect of the level crossings on the Howth Branch Line, and as indicated at Public Consultation No.1, assessments have shown that the Howth Level Crossings can continue to operate and provide an appropriate level of cross connectivity and accessibility whilst still meeting the increased DART service frequency requirements. Assessments carried out to date identifies that the likelihood of traffic queues at the crossings will increase as a result of the increased train frequencies.

¹ <https://www.gov.ie/en/publication/6223e-climate-action-plan-2021/>

The effects of any changes to traffic patterns will be fully assessed as part of the EIAR and it should also be noted that the EIAR accompanying the Railway Order application will include a comprehensive assessment of potential air quality and climate impacts resulting from the proposed DART+ Coastal North development.

4.4.3 Safety Considerations linked to level crossing closures

Respondents have raised concerns relating to impacts on road safety as a result of the proposed overall increase in level crossing closure times, and increased frequencies of level crossing closures. Concerns raised state that the increase in frequency of closure of level crossing gates, and the associated increased traffic disruption, increases the overall risk of Emergency Services vehicles being delayed at level crossing locations.

Respondents also made reference to potential risks posed by more vehicles speeding to beat more frequent gate closures as a result of the greater potential for vehicles to be caught and delayed by level crossing closures. The risks posed to other vehicles, cyclists and pedestrians was highlighted.

Response

Emergency Services

The proposed changes to the Howth Branch will enable an increase in both the service frequency and capacity on the line. The current level crossing barrier opening and closing timings have been used to inform a traffic model assessing the effects on vehicles, cyclists, and pedestrians. Details of the analysis and the effects of the increased frequency of DART services on level crossing closures is included in Annex 3.7 Appendix B of the published material which is available through the project website <https://www.dartplus.ie/en-ie/projects/dart-north>.

The overall increase in level crossing closure frequency associated with the increased DART+ Coastal North services will increase the likelihood of all road users being required to queue and wait at the level crossings, as detailed above. As demonstrated by the modelling in Annex 3.7 Appendix B, the wait times at some level crossings will increase and others will decrease depending on the timetable adopted in future. Any future timetable is yet to be decided and will be progressed separately to the DART+ Coastal North project at a later date. In the event of an emergency, emergency services vehicles typically bypass a general traffic queue and travel up to the level crossing ensuring a swift crossing upon the next barrier opening.

Consultation with all emergency services is ongoing and all feedback will be fully considered in the development of the final design for the DART+ Coastal North project.

Speeding Vehicles

The primary objective of the DART+ Coastal North project is to deliver the infrastructure to allow increased train frequency and capacity between Drogheda and Howth and Dublin City Centre. Based on assessment of level crossing closure times and considering the crossings will be closed for more regular and shorter time periods, it is not anticipated that the incidents of drivers taking unnecessary risks at the crossings will increase. No significant increase in poor behaviour has been shown on other areas of the network with a comparable level of service.

Iarnród Éireann undertakes regular safety awareness activity and would put a particular focus on this area should anything necessitate it in the future. Risks associated with dangerous driving will be considered as part of the overall development of the Preferred Option.

4.4.4 Potential for the inclusion of underpasses at level crossings.

Respondents queried if the inclusion of underpasses at level crossings may be an option which may help offset the potential delays that respondents expect to be subject to as a result of increased frequency of level crossing closures.

Response

The assessments completed to date conclude that the level crossings can continue to operate and provide an appropriate level of cross-rail connectivity and accessibility whilst still meeting the increased DART service frequency requirement. As a result, further interventions, such as underpasses or overbridges, at the level crossings are not considered necessary.

4.5 Train Frequency, Capacity & Reliability

Respondents noted the benefits of increased train frequency, capacity and reliability that will be provided by DART+ Coastal North. These benefits were more prominent from respondents from the northern extents of the project area.

Feedback from respondents from the Howth Branch Line area, while generally positive on this theme, included some opposition to the increase in frequency and capacity if it is to be at the expense of direct services to Dublin City Centre or if it is to have a negative impact on level crossing closure times and traffic in the surrounding areas.

4.6 Howth Tourism & Businesses

Respondents noted that Howth is one of the most visited tourist areas in the Dublin Area and is second only to the Guinness Storehouse for numbers of visitors each year. Both Tourism Ireland and Fingal County Council have plans to add new attractions to Howth to further increase tourist numbers. Significant developments such as those planned for Howth Castle will also contribute to a continued increase in tourist traffic.

Local businesses such as shops, restaurants, markets, golf, hotels, and Air B&B properties have been noted as potentially being negatively impacted by a loss of a direct service to Dublin City Centre.

Response

The seasonal peaks related to tourism have been included in considerations as part of the development of the Preferred Option. Consultation with both Tourism Ireland, Fáilte Ireland, Fingal County Council, and other relevant bodies and associations will continue through the development of the Preferred Option.

It is worth noting again that in the absence of measures being implemented as part of DART+ Coastal North to increase the DART capacity and frequency on both the Northern Line and Howth Branch Lines, the existing constraints on capacity to accommodate tourist numbers, and other Howth Branch commuters, will remain. Any future increases in capacity and frequency will be based on passenger demand at the time, inclusive of seasonal peaks.

4.7 Station Facilities (Lifts, Toilets, Parking, Cycling)

Respondents expressed concern relating to the provision of adequate parking facilities at stations (Drogheda, Clongriffin, Howth Station, Howth Junction & Donaghmede Stations) or park and ride facilities near stations (Clongriffin and Sutton Stations), largely in relation to the proposed increase of rail users resulting from DART+ Coastal North. The need for suitable bicycle access and storage facilities was raised. Concerns were expressed over the dis-repair and often inaccessible toilet and lift/elevator facilities at stations across the rail network.

Response

Under the DART+ Programme, it is not proposed to provide any additional parking facilities at stations, or park and ride services.

Iarnród Éireann's Network Enhancement Division and the NTA's Park & Ride Development Office are responsible for developing projects that deliver enhanced parking at stations, for both cars and bicycles. These projects progress separately to DART+ Programme and DART+ Coastal North and, subject to the future demand for these facilities, there is potential that they may be developed at certain stations on the Northern and Howth Branch Lines in the future based on passenger demand.

The maintenance of, and accessibility to, both toilet and lift facilities at stations is managed by Iarnród Éireann's accessibility group and the management and maintenance of these facilities is an ongoing process that is operated separately to the DART+ Programme.

4.8 Land-Use Planning, Development, and Population Growth

4.8.1 General

The nature of respondent's feedback relevant to land-use planning considerations, future housing developments and future population growth was extremely varied. Feedback typically varied based on the locality relevant to each respondent.

Respondents providing commentary on current and future developments in areas located between Dublin City Centre and Drogheda MacBride Station, such as those in the Clongriffin and Malahide areas, were generally supportive of the DART+ Coastal North Project. The proposed capacity increases and service frequency enhancements that will provide rail transport options to those areas zoned for development and housing into and out of Dublin City Centre were stated to be of great importance to respondents.

Respondents from the Howth Branch Line locality typically responded that the negative impacts of any potential loss of direct service from Howth would be exaggerated over time by planning and future population growth.

Response

The primary objective of the DART+ Coastal North project is to deliver the infrastructure to facilitate increased train frequency and capacity between Drogheda and Dublin City Centre (including the Howth Branch Line).

The DART+ Coastal North proposals will consider all current plans & policies relevant to land-use planning and will account for planned/predicted population growth in all areas and regions along the Northern and Howth Branch Lines in advance of the identification of the Preferred Option.

The comments and concerns raised during this Public Consultation will be assessed further and the findings from these assessments will be set out and presented as part of Public Consultation No.2.

4.8.2 Howth Area

Respondents feedback in relation to the Howth Branch stated that many An Bord Pleanála approved developments of housing and apartments were not, or may not have been, considered as part of the development of the DART+ Coastal North proposals. Developments at Sutton (Sanda Sebina), Deerpark (Howth Castle) and behind Howth DART Station (old Techrite site) were cited as being of particular concern by respondents. The future population of the Howth peninsula and the need for these future residents to have access to high quality public transport into Dublin City Centre was stated to be of significant concern to many respondents. The types of developments, apartment complexes with limited car-parking facilities, were of particular concern given the potential reliance of these future residents on public transport for access to Dublin City Centre.

Response

An assessment of current planning and policy documents has been undertaken as part of the development of DART+ Coastal North to date and has informed the Preferred Option considerations. It should be noted that the types of developments that have been identified in Public Consultation responses have been considered and consultation with relevant planning authorities is ongoing to ensure that future projected demand is taken into consideration.

It should also be noted that in the absence of the implementation of any measures (such as those proposed in DART+ Coastal North), the capacity of the current network will remain the same, resulting in the increased demand from the Howth Peninsula catchment not being met and inevitable negative impacts on the service as a result of existing constraints not being addressed.

The DART+ Coastal North proposals will continue to consider all current plans & policies relevant to land-use planning and will account for planned/predicted population growth in all areas and regions along the Northern and Howth Branch Lines in advance of the identification of the Preferred Option.

4.9 Access and Mobility

Respondents raised concerns in relation to access and mobility at DART stations along the Northern and Howth Branch Lines, with a particular emphasis being placed on Howth Junction & Donaghmede Station due to the proposed requirement for commuters to change DART services at this station when passenger demand requires the operation of a DART shuttle service on the Howth Branch Line.

Respondents stated that accessible service regardless of age, size, ability, or disability should be provided for in the proposed DART+ Coastal North project. Existing facilities, as well as provisions in DART+ Coastal North, for the visually impaired as well as those with reduced & impaired mobility were noted as lacking.

Response

Accessibility is an important aspect of the design of the DART+ Programme. Where new interventions are made as part of the DART+ Programme, Iarnród Éireann will ensure that step free access is provided at platforms and that all current access & mobility standards and guidelines are followed in the designs. Furthermore, Iarnród Éireann will continue its rollout of its accessibility programme under separately funded projects. Together, DART+ and the Accessibility Programme will improve access to persons with reduced & impaired mobility and passengers with sensory impairments including visual impairments.

A variety of significant modification works are proposed to Howth Junction and Donaghmede Station to both improve the passenger experience generally, and to develop the station to better serve as an interchange station into the future. The proposed works will involve modifying the entrances to provide a more accessible, user friendly and customer focused station for all rail users, as well as improving the connection to the surrounding areas of Donaghmede and Kilbarrack. Upgrades to the existing footbridge and connections to the centre platforms will also be carried out, as well as upgrades to lighting, signage, and finishes throughout.

Further to the above it should be noted that the new DART+ Fleet which will operate on the Northern and Howth Branch Lines will provide DART trains that are better equipped to cater for the needs of any passengers who may suffer from mobility issues. One of the primary objectives of the design of the DART+ Fleet is to provide improved accessibility for train users. Spacious entrances and aisles will ease passenger flow throughout the train while strategically placed and plentiful grab handles help passengers balance and wait safely for the train to stop. Low level flooring and entrance doors reduce the stepping height for passengers and improve access for persons with reduced mobility. A retractable step at every doorway is deployed automatically before the doors open, it moves outwards to minimise the horizontal gap between the train and the platform. This will greatly improve access for persons with reduced mobility and minimise the risk of people falling.

Inductive hearing loops will be placed strategically throughout the new DAT+ Fleet trains and 4 PIS displays in each carriage will provide transformed customer information on-board, with real-time updates and information from other public transport systems in the Transport for Ireland network. These are designed for sensory impaired customers.

4.10 Public Consultation Process.

A variety of issues and concerns were raised in relation to the Public Consultation process and published material. Respondents stated that the extents of the leaflet drop notifying residents potentially affected by the DART+ Coastal North Project was inadequate and resulted in people being unaware of the Public Consultation and the DART+ Coastal North Proposals. A number of respondents also stated that the Public Consultation was not adequately advertised, such as on DART carriages or at the train stations on the DART+ Coastal North line.

Respondents raised concerns regarding the lack of in person consultation and accessibility of the online Public Consultation material for those less comfortable with technology.

Respondents noted that the Public Consultation was lacking details in relation to journey times, level crossing closure times and their effect on surrounding road networks and traffic, and proposals/plans for addressing the many significant issues at Howth Junction & Donaghmede Station prior to the introduction of infrastructure to enable the use of a DART shuttle service on the Howth Branch Line.

It was noted by respondents that some key information was buried in technical reports rather than presented clearly in the leaflets & brochures. Information in relation to level crossing closure times was given as an example of information not being clearly presented.

Respondents recommended that more information could have been released to the public prior to Public Consultation No.1 to inform people that proposals such as the introduction of infrastructure to enable the use of a DART shuttle service were under consideration. The delivery of more information earlier in the overall process was stated to potentially lessen the shock that many residents on the Howth Peninsula and DART users have experienced as a result of Public Consultation No.1.

Respondents requested that further detail and data be made available in regard to project elements such as traffic modelling, level crossing closure data, and future timetables amongst other elements.

Response

As presented in Section 2 of this report, an extensive consultation process was undertaken at multiple levels to ensure that as many people as possible were informed of, and provided direction to access, the DART+ Coastal North project information.

All comments and feedback received will be taken on board in the planning for Public Consultation No.2 with the aim of ensuring all relevant members of the public are informed about the consultation process. A particular focus will be placed on improving the distribution of information through leaflet drops and station advertising based on feedback from this Public Consultation process.

The project leaflet and brochure were developed to provide readers with higher level information to inform them of the proposals with the details of how and why proposals were reached being contained within the technical reports.

DART+ Coastal North Emerging Preferred Option (EPO) information was not released to the public in advance of Public Consultation No.1 as all assessments and reports that would inform the EPO remained as 'work in progress' documents. The process of developing an Emerging Preferred Option for presentation at a Public Consultation is a standard approach to projects of this nature.

Detailed responses relating to those elements identified as lacking information, or requiring further information, are provided later in this report. In some cases, it will not be possible to present additional information or data until Public Consultation No.2.

4.11 Extension of DART to Drogheda & Change to Electric Power

Feedback from respondents in relation to the extension of DART services to Drogheda and the proposed shift from diesel trains to electricity powered trains was met with approval in general. The improved connectivity to Dublin City Centre and the move to greener, more sustainable, transport has been raised as a positive in a variety of submissions.

4.12 Scope of DART+ Coastal North

Some respondents have stated that they do not believe the scope of the DART+ Coastal North Project to be extensive or ambitious enough to deliver what is expected of a railway system by rail users in a city such as Dublin. Some of the areas where it is believed that the project falls short are listed below:

- Need for additional tracks between Howth Junction & Donaghmede and Dublin Connolly Stations;
- Need for greater separation between DART and Intercity and/or Enterprise services;
- Need for more express services rather than increased DART frequency;
- Need for underground railway in heavily built-up areas;
- Need for underground section of rail at Howth Junction & Donaghmede to remove existing clashing issues which limit capacity on the Northern Line;
- Need for the project to extend beyond its current extents to areas such as Dundalk, Swords, Dublin Airport;
- Need for a new and improved interchange between northern and southern railway lines; and
- Need for complete re-construction of Howth Junction & Donaghmede Station to address functional and security requirements.

Response

The DART+ Coastal North Project's objectives include delivering a higher frequency, higher capacity, reliable, electrified railway to enable an increased DART service frequency between Drogheda and Dublin City Centre. The project's remit, as agreed with NTA, is to electrify and maximise the potential of the existing railway line. New infrastructure outside of this scope would be proposed by the NTA and agreed with Irish Rail to be taken forward as a separate future project. All feedback received during Public Consultation No.1 for DART+ Coastal North will be reviewed by the Project Team and incorporated into project plans where appropriate. Suggestions and feedback relating to additional new infrastructure outside of the scope of DART+ Coastal North will be fed back to the NTA for consideration as part of a future project.

4.13 Noise & Vibration, and Impact on Landowners & Residents

4.13.1 Noise & Vibration

Respondents highlighted concerns with noise & vibration impacts resulting from the increase in volume and frequency of rail traffic associated with the DART+ Coastal North project as the project builds towards maximum service capacity and frequency.

Response

During the operational phase, as electric trains are quieter than diesel trains, it is not expected that noise levels will increase significantly when compared with existing noise levels.

The Environmental Impact Assessment Report will include a comprehensive noise and vibration impact assessment, which will consider the potential effects of noise during all stages of the project (construction and operation). Significant effects will be avoided where possible. If mitigation is required, then appropriate measures will be designed to ensure compliance with all relevant limits and to reduce any negative effects. The Environmental Impact Assessment Report (EIAR) will accompany the Railway Order application and An Bord Pleanála as the consent authority, will undertake the Environmental Impact Assessment (EIA) and will adjudicate on whether the consent should be granted and what (if any) conditions should be attached.

4.13.2 Impacts on Landowners & Residents

Landowners & residents in proximity to the Northern and Howth Branch Lines have raised concerns relating to the construction and operational impacts that the project will have on them.

Response

Construction Phase

Given that the Northern Line is already electrified between Connolly and Howth, and as far north as Malahide, potential construction impacts (from limited interventions) will likely be minimal in these areas. Some site-specific interventions will be required between Howth Junction & Donaghmede and Drogheda stations, associated with increasing the rail capacity. Between Malahide and Drogheda, DART+ Coastal North will involve the erection of overhead line infrastructure to facilitate the running of electric trains. In order to maintain services for our customers during the day, the majority of the construction works along the railway line will take place at night. Works outside of the live railway corridor will generally take place during daytime hours i.e. modifications to bridges, construction of substations, construction compounds. Every effort will be made to avoid, reduce, and/or mitigate negative impacts, however, there is likely to be some disturbance experienced for those near the railway line caused by noise, lighting or erected fencing/hoarding associated with the construction activities.

The types of construction work required at each specific location will determine the type of impact that may affect the surrounding area/properties. However, there will be general linear works required, such as:

- Overhead electrification equipment along the full extent of the railway line from Malahide to Drogheda. This will be similar in style to that currently used on the existing DART network;
- Modifications to the existing rail bridges such as modifications to the structure, track lowering or a combination of both;
- Substations will be required at intervals along the rail line to provide power to the railway system; and
- Signalling upgrades and additional signalling will be required as part of the upgraded infrastructure.

- Interfaces with existing utilities, roads, boundary treatments, drainage works, vegetation management and other ancillary works will be required. Prior to the commencement of construction works, a dedicated Community Liaison Officer will be appointed to communicate details of all upcoming works and to oversee the implementation of all required mitigation measures, thereby minimising any potential disruption resulting from the works.

During the construction phase, residents living in close proximity to any planned works will receive ongoing communication in advance of significant works - i.e. piling, works involving excavations, or traffic diversions / traffic management.

The Environmental Impact Assessment Report will consider the potential effect of the proposed works during the construction phase and where appropriate, suitable mitigation to minimise such impacts will be included. A Construction Environmental Management Plan will also be prepared and will accompany the Railway Order application to An Bord Pleanála.

Operational Phase

During the operational phase, levels of greenhouse gas emissions are likely to reduce significantly, with a positive impact on climate change. The engine noise from an electric train is also significantly quieter than a diesel train.

At certain locations, existing bridge parapets will be raised to prevent people from accidentally or otherwise falling onto Overhead Line Equipment. All likely significant effects during both the construction and operational phases will be identified and detailed in the Environmental Impact Assessment Report. This will include a detailed schedule of mitigation measures identified to reduce those potential effects.

4.14 Environmental & Heritage Impacts

4.14.1 Environmental Impacts – Emissions & Climate Change

Respondents have stated that the proposals contained in Public Consultation No.1, if implemented, will make them less likely to use public transport and more likely to use their cars which will in turn lead to an increase in emissions. Concerns have been raised in relation to the ongoing climate emergency and the need to move people away from car use and into sustainable forms of transport.

Response

One of the stated objectives of the DART+ Coastal North project is to help build a sustainable and connected city region, supporting the transition to a low carbon and climate resilient society. The investment in this infrastructure is needed to help achieve climate change targets, helping to reduce the transport sector greenhouse gas emissions and supporting the objectives of the Climate Action Plan. The intent is to encourage modal shift from private car to public transport going forward by the provision of a more reliable, higher capacity and more frequent DART service across the network.

It should also be noted that the EIAR accompanying the Railway Order application will include a comprehensive assessment of potential air quality and climate impacts from the proposed development.

4.14.2 Biodiversity Impacts

Respondents have raised concerns in relation to works proposed within environmentally sensitive areas. The potential for the DART+ Coastal North Project to have a negative impact on these sites and on the biodiversity of the surrounding areas has also been noted.

Response

A specialist Environmental Impact Assessment team has been engaged as part of the overall Multi-Disciplinary Consultant contract. This team will collaborate with the engineering design team during the design development. The environmental team will contribute to assessing the various project options.

A comprehensive Environmental Impact Assessment Report will be prepared based on the Preliminary Design. The project will also be subject to Appropriate Assessment consideration, as required under the Habitats Directive, which will assess any potential effects on the conservation objectives of European sites.

Therefore, at Railway Order Application stage, the project will have assessed the impact of the project on the environment and will provide avoidance, remedy, and mitigation measures to reduce environmental impacts during the construction and operational phases.

4.14.3 Heritage Impacts

Concerns were raised over the potential to impact on, or modify, protected structures over the length of the DART+ Coastal North project.

Response

The project team has considered the architectural heritage of relevant buildings and structures as part of the options assessment process carried out to date. Any physical interventions to these heritage structures will only be undertaken where absolutely necessary.

A comprehensive architectural heritage assessment of the proposed development and all protected structures impacted by the proposed works will be undertaken as part of the Environmental Impact Assessment Report.

4.15 Passenger Experience

Respondents raised concerns in relation to the absence of toilet facilities onboard existing DART services as well as onboard the new DART Fleet. This concern was particularly relevant to longer journeys from Drogheda to Dublin City Centre where passenger comfort was questioned, however it was also a general concern with DART services raised across the feedback received during Public Consultation No.1. Respondents stated that it was hoped that the new DART Fleet would be equipped with toilets. The general lack of operational toilets in stations was also cited by respondents as a cause for concern.

Respondents raised concerns with the general layout of the new DART+ fleet layout and the reduced number of seats per carriage compared to current DARTs. Concerns were raised that the potential need to stand for the journey from Drogheda to Dublin City Centre for example would not lead to a good passenger experience.

Response

The DART+ Coastal North Project, as noted previously, is responsible for the delivery of rail infrastructure to enable an increased frequency and capacity of rail services between Drogheda and Howth and Dublin City Centre.

The initial order of carriages for the new DART+ Fleet was made at the end of 2021 and does not have toilet facilities on board. The feedback received during consultation has been shared with the DART+ Fleet team and consideration will be given to onboard toilet facilities in advance of any future fleet orders.

The new DART+ Fleet interior configuration is still being finalised in consultation with staff and passenger focus groups. That being said, and contrary to the concerns raised, the new DART+ full length unit will offer more seating to passengers when compared with the 29000 8-car diesel carriages that currently operate between Dublin City Centre and Drogheda on the Northern Line. A new DART+ full length unit will consist of 404 seats (plus an additional number of tip-up seats which will be confirmed once the interior configuration is finalised). That is compared to 370 currently offered on the 29000 8-car unit. In direct comparison, but also considering the frequency uplift that this project will deliver, this is a significant increase in the seating available to passengers. In addition, there will be a larger number of priority seats on the DART+ Fleet, offering a minimum of 80 priority seats compared to 64 on the equivalent 29000.

Finally, one of the primary objectives of the design of the new DART+ Fleet is to provide improved accessibility for train users including;

- Larger wheelchair spaces with easy access from adjacent doors
- Uncluttered family areas to fit pushchairs and located close to doors
- A mixture of seating and standing layouts to accommodate diverse passenger needs
- Bike stowage areas
- A retractable step at each doorway to provide for unassisted access for all users
- E-bicycle and e-scooter charging spots
- Wide gangways between carriages to allow ease of movement, create a more open connected feel and a greater feeling of security
- USB charging points and Wi-Fi throughout
- 4 CCTV cameras per car to support passenger safety and security
- 4 (PIS) Passenger Information System screens per carriage for real time travel information.

Passenger experience is hugely important to Iarnród Éireann and all staff work extremely hard to provide a high level of service to anyone traveling by train each day.

5. SUMMARY AND NEXT STEPS

5.1 Summary

The purpose of this Public Consultation, PC1, process was to present the Emerging Preferred Option for the proposed DART+ Coastal North project and to request the views of the public. A total of c. 2,100 submissions were received during the consultation period covering a broad range of issues and concerns raised by respondents. All submissions received as part of the first round of Public Consultation will feed into the option selection process and the selection of the Preferred Option. The project team will analyse the submissions and consider all relevant information in the re-evaluation of the Multi Criteria Analysis (MCA). This re-evaluation will also include the further refinement of the options design and additional elements which will be brought forward in the selection of the Preferred Option

As part of this analysis the following items or options were identified as requiring further assessment prior to Public Consultation No.2:

1. Consider the methods of advertisement of the consultation event to the public to maximise the reach of notifications. Particular focus on station advertising, on-board train advertising and extended extents of leaflet drop have been identified as areas for improvement.
2. Further investigate options that would see the retention of direct services from the Howth Branch into and out of Dublin City Centre.
3. Consider the concerns raised in relation to safety and security at Howth Junction and Donaghmede Station in light of the concerns raised during Public Consultation No.1.
4. Consider the existing conditions and facilities at Howth Junction and Donaghmede Station in light of the concerns raised during Public Consultation No.1.
5. Consider the potential impacts relating to proposals for Howth Branch level crossing closure times and frequency. Potential impacts on road traffic, environmental impact, and modal shift shall be points of consideration.
6. Further consider impacts of increased frequency of service on the Howth Branch on level crossing closure frequency and duration upon validation of current modelling.
7. Ensure all future developments and population growth on the Howth peninsula are fully considered in the development of DART+ Coastal North.
8. Ensure that potential impacts on tourism and business in Howth are fully assessed and considered in the development of DART+ Coastal North including all planned tourism developments raised during Public Consultation No.1.

5.2 Next Steps

The Preferred Option is presented at Public Consultation No.2, during which all key stakeholders and the general public are again invited to consider what is presented and provide feedback as appropriate.

All feedback received on the Preferred Option at Public Consultation No.2 will feed into the development of the preliminary design, Railway Order and Environmental Impact Assessment Report (EIAR).



Rialtas na hÉireann
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Tionscadal Éireann
Project Ireland
2040



Iarnród Éireann
Irish Rail

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DART+
Coastal North

APPENDIX A

Media Review



Córas Iompair Éireann

DART+ Coastal North PC1 Media

from 25/02/2022 to 08/04/2022

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DART+ Coastal North plans unveiled to bring DART to Drogheda, and doubling of service levels

Irish Rail has unveiled plans to extend the DART from Malahide to Drogheda with an increased and improved electrified network, and allow more trains to run, and more commuters switch to public transport, between Drogheda and Dublin City Centre, including Howth to Howth Junction.

Also covered on the following syndicated bulletins:

LM FM 4:00pm

[Radio-Clip](#)



LMFM - 17:00 News | 24/02/2022

Media Source

Radio

Irish Rail has unveiled details of its new Dart+

Irish Rail has unveiled details of its new Dart+ coastal North route between Drogheda and Dublin.

[Radio-Clip](#)





breakingnews.ie | 24/02/2022

Media Source Online Visits 579,368

Live: Taoiseach condemns Russian invasion of Ukraine, plans for Dart+ Coastal North route

...the country in the coming hours and to follow the advice of local authorities. Advertisement **Minister** for Foreign Affairs Simon Coveney branded the Russian military assault on Ukraine a "murderous act..."

[CONTINUE READING](#)



East Coast FM | 25/02/2022

Media Source Online Visits 12,759

Also published in East Coast FM

Wicklow Residents Encouraged To Have Say On DART Expansion Plans

...Share on Twitter Share on Whatsapp You can now make submissions on the plan which will extend the **DART** from Malahide to Drogheda. Communities along the **DART+** Coastal North route are invited to give their...

[CONTINUE READING](#)



Laois Nationalist | 24/02/2022

Media Source Online Visits 48,652

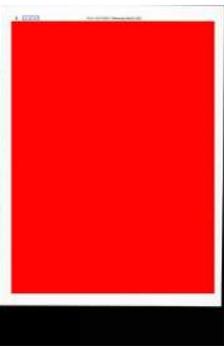
Also published in Kildare Nationalist [+ 4 more]



Public consultation begins for Dart+ Coastal North route

...Alstom for a new **Dart+** fleet of up to 750 **rail** carriages in December. The new fleet is planned to be delivered over the next decade. For further details, check out www.dartplus.ie. Comments are closed.

[CONTINUE READING](#)



DART is heading to North Fingal and beyond.

DART is set to travel north

IRISH RAIL UNVEILS PREFERRED ROUTE FOR EXTENSION OF DART FROM MALAHIDE NORTHWARDS ALL THE WAY TO DROGHEDA

By JOHN MANNING

IARNRÓD Éireann has unveiled details of the emerging preferred option for **DART+ Coastal North**, which will extend the **DART** from Malahide to Drogheda with an increased and improved electrified network, and allow more trains to run, and more commuters switch to **public transport** between Drogheda and **Dublin** City Centre, including Howth to Howth Junction.

Iarnród Éireann Chairman Frank Allen and CEO Jim Made were joined today by Mayor of Drogheda, Cllr James Byrne, Mayor of Fingal Cllr Seána Ó Ródaigh and Chair of Meath County Council Cllr Sean Drew at Drogheda MacBride Station to formally launch public consultation for **DART+ Coastal North**.

Funded by the **National Transport Authority** under Project Ireland 2040, this **rail** improvement project will offer an increase in peak passenger capacity and **train** frequency between **Dublin** City Centre and Drogheda MacBride Station - inclusive of the Howth Branch - facilitating more frequent and reliable **transport** to the surrounding communities.

It will deliver a more than doubling of service and passenger capacity from Drogheda to the city centre by increasing the number of trains from 11 to 24 and capacity for commuters from 12,500 - 26,600 per 3 hour peak period.

It will also build the potential for up to twice the number of DARTs between Howth and Howth Junction, subject to operational decisions on the use of a shuttle **train** service.

Key elements of the project works include the expansion of electrification from Malahide to Drogheda, including necessary bridge modifications and track alterations.

The project also includes signalling and telecoms modifications to support the increase in **train** frequency and the reconfiguration of Howth Junction & Donaghmede Station to enable the use of a shuttle service on the Howth Branch. (Final operational decisions will be made subject to demand requirements and assessment.)

It will also facilitate the future increase in frequency of trains through the construction of **train** stabling and other necessary **rail** infrastructure in the vicinity of Drogheda MacBride, Malahide, Clongriffin and Howth Junction & Donaghmede stations.

There will also be the modification of existing depots at Drogheda and Fairview to support the new **DART+** fleet.

According to **Irish Rail**, as well as enhancing access to sustainable **public transport** for new and existing communities, **DART+ Coastal North** will alleviate **road** congestion and build

a more connected, efficient, and safe **rail** network, supporting our transition to a low carbon and climate resilient society, less reliant on private cars.

The announcement comes following the signing of a contract, in December last year, between Iarnród Éireann and Alstom for the new **DART+** Fleet of up to 750 **rail** carriages over the coming decade, making this largest and most sustainable fleet order in Irish **transport** history.

An initial order has been placed for 95 electric and battery-electric powered **rail** cars which are set for delivery from mid-2024, entering service in 2025. The battery electric hybrid vehicles will operate on the Drogheda to **Dublin** City Centre route, seeing a capacity lift for commuters on the Northern line in advance of electrification of the line itself.

The Public Consultation, which commenced last Thursday for the **DART+ Coastal North** project, presents the 'Emerging Preferred Option' for the project design and is the first of two non-statutory public consultations seeking the public's feedback.

The knowledge and insight of customers, residents, and businesses adjacent to the route, as well as other stakeholders, will inform the design and help Iarnród Éireann to shape the project plans, ensuring that it will be beneficial for customers and the communities it will serve.

All are encouraged to review the full details at www.dartplus.ie which also features an interactive virtual room. Details of a dedicated phone line, email address and online feedback form are all available at www.dartplus.ie. A series of webinars for those who would like to learn more about the project will commence over the coming days.

Upon completion of this consultation, all submissions will be considered by the project design team, and these will be used to inform the subsequent design development and the Preferred Option. A second phase of public consultation will take place when a preferred option for the project has been identified.

Much of the project works will follow the existing **railway** corridor, including the overhead electrification of the existing line between Malahide and Drogheda. Some works such as the provision of new electrical substations and bridge modification may be required outside of the existing boundary.

The scale of service uplift will vary across the extend of the route from Drogheda to **Dublin** City Centre.

There will be a more than doubling of service and passenger capacity from Drogheda to the city centre by increasing the number of trains from 11 to 24, an increase in capacity for commuters from 12,500 - 26,600.

Promised is the delivery of a 50% increase in service and capacity from Malahide to City Centre through an increase from 20 to 30 trains. This will mean an increase in capacity from 23,300 - 33,800 passengers.

There will be a potential doubling of service frequency and capacity on the Howth Branch from 9 to 18 trains through the possible introduction of a shuttle **train** service between Howth and Howth Junction & Donaghmede stations. This would provide an increase in passenger capacity on the Howth Branch from 10,800 - 21,600 passengers per 3 hour peak period.

Welcoming the public consultation launch, **Minister for Transport Eamon Ryan** TD said: "**DART+ Coastal North** will bring frequent electrified **rail** to communities all along the North



Malahide Railway Station.

Dublin coastline. If we provide high quality, sustainable **public transport**, we know people will use it and this consultation marks an important step in delivering this infrastructure and improving our **rail** network in **Dublin**.

"We urge the public to get involved and give feedback so that we can facilitate regular, reliable and climate resilient **public transport** in the area and ultimately transform how we travel."

Chief Executive of Iarnród Éireann Jim Meade said: "This is another positive day for our customers and the communities around the Greater **Dublin** Area as we continue to progress the **DART+** Programme. **DART+ Coastal North** will ensure more communities along the Northern Line benefit from the increase in capacity, frequency and reliability the **DART** can provide. **DART+ Coastal North** is the next step in building a more sustainable **transport** network and will be the first of our routes on which the battery/electric hybrid carriages from the new **DART+** Fleet will be utilised when they come into service in 2025.

Feedback is important to us and will be central to the ongoing design process.

I encourage communities along the **DART+ Coastal North** route to engage with the consultation process and have your say in shaping the revolutionary **DART+** Programme."



Media Source Online

Visits 5,000

Public consultation launched on bringing the DART to Drogheda

...Meath Country Council Cllr Sean Drew and Mayor of Fingal Cllr Seana O'Rodaigh and we were briefed by **Iarnrod Eireann** officials on the project on what is a significant milestone in the modernisation of rail...

[CONTINUE READING](#)



East Meath locals invited to give feedback on DART link to Drogheda

RESIDENTS in east Meath are among those invited to give their feedback on plans to bring DART to Drogheda, and to double service levels along the Drogheda Dublin route.

The Cathaoirleach of Meath County Council, Sean Drew joined with Iarnród Éireann Chairman, Frank Allen and CEO, Jim Meade as well as Mayor of Drogheda, Cllr James Byrne, Mayor of Cllr Seána Ó Rodaigh at Drogheda MacBride Station to formally launch public consultation for DART - Coastal North. Iarnród Éireann has unveiled details of the emerging preferred option for the northern route which will extend the DART from Malahide to Drogheda, taking in the Laytown and Gormanston stations, with an increased and improved electrified network, and allow more trains to run.

Funded by the National Transport Authority under Project Ireland 2040, this rail improvement project will more than double service and passenger capacity from Drogheda to Dublin city centre by increasing the number of trains from 11 to 24 and capacity for commuters from 12,500 - 26,600 per three hour peak period.

Key elements of the project works include the expansion of electrification from Malahide to Drogheda, including necessary bridge modifications and track alterations, signalling and telecoms modifications to support the increase in train frequency and reconfiguration of Howth Junction and Donaghmede Station.

Last week's announcement of the public consultation comes following the signing of a contract, in December last year, between Iarnród Éireann and Alstom for the new DART- Fleet of up to 750 rail carriages over the coming decade, making this largest and most sustainable fleet order in Irish transport history.

An initial order has been placed for 95 electric and battery-electric powered rail cars which are set for delivery from mid-2024, entering service in 2025. The battery electric hybrid vehicles will operate on the Drogheda to Dublin City Centre route, seeing a capacity

lift for commuters on the Northern line in advance of electrification of the line itself.

The Public Consultation, which started last week, presents the 'Emerging Preferred Option' for the project design and is the first of two non-statutory public consultations seeking the public's feedback.

The full details are at www.dartplus.ie, which also features an interactive virtual room. Details of a dedicated phone line, email address and online feedback form are all available at www.dartplus.ie. A series of webinars for those who would like to learn more about the project will commence over the coming days.

The webinar for residents from Gormanston to Drogheda will take place on Tuesday 15th March at 7pm.

Upon completion of this consultation, all submissions will be carefully considered by the project design team, and these will be used to inform the subsequent design development and the Preferred Option.

A second phase of public consultation will take place when a preferred option for the project has been identified.

Much of the project works will follow the existing railway corridor, including the overhead electrification of the existing line between Malahide and Drogheda. Some works such as the provision of new electrical substations and bridge modification may be required outside of the existing boundary.

Meanwhile, Meath and Louth county councils are currently developing a Transport Strategy for the town of Drogheda and vicinity.

The strategy will determine the transport interventions required to increase sustainable transport modes in and around the Drogheda town area and east Meath area.

The purpose of the public consultation is to hear from the people who live, work, shop and go to school within the Transport Strategy Study Area. This will assist in understanding current issues and obtain views on potential solutions.

Media Source Online Visits 3,859,246

DART to Drogheda date is now 2028

...modernisation of rail transport in the region. The launch of the first public consultation stage of the **Dart** and **Coastal North** project took place on Thursday last week at the MacBride Station in Drogheda, announcing...

[CONTINUE READING](#)

Media Source Online Visits 3,859,246

Safety fears over plans for Dart passengers to change trains at Howth Junction

...passengers from Howth, Sutton and Bayside would change trains at Howth Junction during peak times **Irish Rail** is facing growing opposition to proposals that would see **Dart** passengers from three northside...

[CONTINUE READING](#)



Media Source Online Visits 579,368

Live: Casualties reported amid invasion of Ukraine, rallies held outside Leinster House



...service frequency and capacity in the Greater **Dublin** Area. It follows funding being announced by the **National Transport Authority** under Project **Ireland** 2040. According to **Iarnród Éireann**, **Dart+ Coastal North**...

[CONTINUE READING](#)

Evening Echo

Evening Echo | 24/02/2022

Media Source Online Visits 796,971

Also published in [breakingnews.ie](#)

Public consultation begins for Dart+ Coastal North route

...Iarnród Éireann and Alstom for a new **Dart+** fleet of up to 750 **rail** carriages in December. The new fleet is planned to be delivered over the next decade. For further details, check out [www.dartplus.ie](#).

[CONTINUE READING](#)



Public consultation begins for Dart+ Coastal North route

A public consultation has been launched on the emerging preferred option for the Dart+ coastal North programme between Drogheda and Dublin. Irish Rail has revealed the details of the project.

Also covered on the following syndicated bulletins:

Classic Hits 12pm
98 FM 12pm
LM FM 12pm
Q 102 12pm
Radio Nova 12pm
Sunshine FM 12pm

[Radio-Clip](#)



Public consultation on coastal **DART** upgrade starts

By NIAMH McGOVERN

The launch of the first public consultation stage of the **Dart** and **Coastal North** project took place on Thursday last week at the MacBride Station in Drogheda, announcing projected plans of completion by 2028.

Mayor James Byrne, Cathaoirleach of Meath County Council Cllr Sean Drew and Mayor of Fingal Cllr Sean O'Rodaigh were all briefed by Iarnrod Eireann officials on the project on what has been described as a significant milestone in the modernisation of **rail** transport in the region.

The project is aimed to extend the electrification of the **DART** to Drogheda, serving all existing stations along the **railway** corridor between Dublin Connolly and Drogheda, with the aim of completion by 2028.

A **Railway** Order to An Bord Pleanála is seeking planning permission for the works, expected to be submitted by early 2023, aiming to increase **rail** capacity between Dublin and Drogheda while will be achieved by increasing frequency along the route as well as using higher capacity trains.

Guidelines for the project include an increase from 11 trains to 24 trains from Drogheda to Dublin during the three hour peak period in the mornings, doubling the passenger capacity to over 26,000 each morning.

Similar additions are expected during peak hours in the



Mayor James Byrne, Cathaoirleach of Meath County Council Cllr Sean Drew and Mayor of Fingal Cllr Sean O'Rodaigh were all briefed by Iarnrod Eireann officials on the project on what has been described as a significant milestone in the modernisation of **rail** transport in the region.

evening, with an increase in the number of non-peak time trains throughout the rest of the day, improving journey time reliability and reducing journey times by around ten percent.

Mayor Byrne said, "This will hopefully encourage people to move from private car use alleviating road congestion."

As the full electrification of the Northern Line is being developed Iarnrod Eireann is planning to purchase these

so-called Battery Electric Multiple Units (BEMUs) which will allow the possibility of running enhanced services on the network by 2025 with orders to be placed for these trains later this year.

Mayor Byrne added, "It's really important that potential users of the improved network or those that may be affected by its development have their say while the design process is active. Local knowledge is vitally important."

Feedback at this initial stage of public consultation can be submitted between now and April 8 through the project website dartplus.ie which has gone live, by email to dartcoastalnorth@irishrail.ie, by phone on (01) 233 4515 and in writing to Community Liaison Officer, **DART+ Coastal North**, Iarnrod Eireann, Inchicore Parade, Dublin 8, D08K6Y3.

A series of public webinars is planned which are expected to commence in early March.

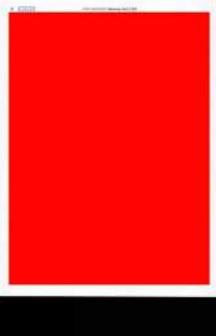


Fingal and the National Development Plan

...city centre. The service will also "provide passengers interchange opportunities with commuter rail, **DART**, Luas and numerous bus services along its route and support the development of a truly integrated ...

[CONTINUE READING](#)





DART is heading to North Fingal and beyond.

DART is set to travel north

IRISH RAIL UNVEILS PREFERRED ROUTE FOR EXTENSION OF DART FROM MALAHIDE NORTHWARDS ALL THE WAY TO DROGHEDA

By JOHN MANNING

IRARNRÓD Éireann has unveiled details of the emerging preferred option for DART+ Coastal North, which will extend the DART from Malahide to Drogheda with an increased and improved electrified network, and allow more trains to run, and more commuters switch to public transport between Drogheda and Dublin City Centre, including Howth to Howth Junction.

Iarnród Éireann Chairman Frank Allen and CEO Jim Meade were joined today by Mayor of Drogheda Cllr James Byrne, Mayor of Fingal Cllr Seána O Rodaigh and Chair of Meath County Council Cllr Sean Drew at Drogheda MacBride Station to formally launch public consultation for DART+ Coastal North.

Funded by the National Transport Authority under Project Ireland 2040, this rail improvement project will offer an increase in peak passenger capacity and train frequency between Dublin City Centre and Drogheda MacBride Station - inclusive of the Howth Branch - facilitating more frequent and reliable transport to the surrounding communities.

It will deliver a more than doubling of service and passenger capacity from Drogheda to the city centre by increasing the number of trains from 11 to 24 and capacity for commuters from 12,500 - 26,600 per 3 hour peak period.

It will also build the potential for up to twice the number of DARTs between Howth and Howth Junction, subject to operational decisions on the use of a shuttle train service.

Key elements of the project works include the expansion of electrification from Malahide to Drogheda, including necessary bridge modifications and track alterations.

The project also includes signalling and telecoms modifications to support the increase in train frequency and the reconfiguration of Howth Junction & Donaghmede Station to enable the use of a shuttle service on the Howth Branch. (Final operational decisions will be made subject to demand requirements and assessment.)

It will also facilitate the future increase in frequency of trains through the construction of train stabling and other necessary rail infrastructure in the vicinity of Drogheda MacBride, Malahide, Clongriffin and Howth Junction & Donaghmede stations.

There will also be the modification of existing depots at Drogheda and Fairview to support the new DART+ fleet.

According to Irish Rail, as well as enhancing access to sustainable public transport for new and existing communities, DART+ Coastal North will alleviate road congestion and build

a more connected, efficient, and safe rail network, supporting our transition to a low carbon and climate resilient society, less reliant on private cars.

The announcement comes following the signing of a contract, in December last year, between Iarnród Éireann and Alstom for the new DART+ Fleet of up to 750 rail carriages over the coming decade, making this largest and most sustainable fleet order in Irish transport history.

An initial order has been placed for 95 electric and battery-electric powered rail cars which are set for delivery from mid-2024, entering service in 2025. The battery electric hybrid vehicles will operate on the Drogheda to Dublin City Centre route, seeing a capacity lift for commuters on the Northern line in advance of electrification of the line itself.

The Public Consultation, which commenced last Thursday for the DART+ Coastal North project, presents the 'Emerging Preferred Option' for the project design and is the first of two non-statutory public consultations seeking the public's feedback.

The knowledge and insight of customers, residents, and businesses adjacent to the route, as well as other stakeholders, will inform the design and help Iarnród Éireann to shape the project plans, ensuring that it will be beneficial for customers and the communities it will serve.

All are encouraged to review the full details at www.dartplus.ie, which also features an interactive virtual room. Details of a dedicated phone line, email address and online feedback form are all available at www.dartplus.ie. A series of webinars for those who would like to learn more about the project will commence over the coming days.

Upon completion of this consultation, all submissions will be considered by the project design team, and these will be used to inform the subsequent design development and the Preferred Option. A second phase of public consultation will take place when a preferred option for the project has been identified.

Much of the project works will follow the existing railway corridor, including the overhead electrification of the existing line between Malahide and Drogheda. Some works such as the provision of new electrical substations and bridge modification may be required outside of the existing boundary.

The scale of service uplift will vary across the extent of the route from Drogheda to Dublin City Centre.

There will be a more than doubling of service and passenger capacity from Drogheda to the city centre by increasing the number of trains from 11 to 24, an increase in capacity for commuters from 12,500 - 26,600.

Promised is the delivery of a 50% increase in service and capacity from Malahide to City Centre through an increase from 20 to 30 trains. This will mean an increase in capacity from 23,300 - 33,800 passengers.

There will be a potential doubling of service frequency and capacity on the Howth Branch from 9 to 18 trains through the possible introduction of a shuttle train service between Howth and Howth Junction & Donaghmede stations. This would provide an increase in passenger capacity on the Howth Branch from 10,800 - 21,600 passengers per 3 hour peak period.

Welcoming the public consultation launch, Minister for Transport Eamon Ryan TD said: "DART+ Coastal North will bring frequent electrified rail to communities all along the North



Malahide Railway Station.

Dublin coastline. If we provide high quality, sustainable public transport, we know people will use it and this consultation marks an important step in delivering this infrastructure and improving our rail network in Dublin.

"We urge the public to get involved and give feedback so that we can facilitate regular, reliable and climate resilient public transport in the area and ultimately transform how we travel."

Chief Executive of Iarnród Éireann Jim Meade said: "This is another positive day for our customers and the communities around the Greater Dublin Area as we continue to progress the DART+ Programme. DART+ Coastal North will ensure more communities along the Northern Line benefit from the increase in capacity, frequency and reliability the DART can provide. DART+ Coastal North is the next step in building a more sustainable transport network and will be the first of our routes on which the battery/electric hybrid carriages from the new DART+ Fleet will be utilised when they come into service in 2025.

Feedback is important to us and will be central to the ongoing design process.

I encourage communities along the DART+ Coastal North route to engage with the consultation process and have your say in shaping the revolutionary DART+ Programme."



Transport

Iarnród Éireann says first Dart services due in Drogheda in 2025

The first battery-powered **Dart train** is expected to be in operation between Drogheda and Dublin within three years, **Iarnród Éireann** has said.

The National Development Plan proposes expanding Dublin's **Dart** network, boosting its reach from 50km to 150km.

The €450 million infrastructure investment in the **Dart+ Coastal North** will, according to programme manager Paul Wilcock, allow for up to five trains an hour from Drogheda to Dublin in each of the three morning peak hours.

There will be 37kms of new

electrification and a more than doubling of passenger capacity from Drogheda to the city centre by increasing the number of trains from 11 to 24 and capacity for commuters from 12,500 to 26,600 over the peak period. The travel time from Drogheda to Connolly will be 50 minutes.

As part of the programme, an additional **platform** will be built at McBride **train** station in Drogheda.

The investment will have the potential to double the number of Darts between Howth and Howth Junction.

ELAINE KEOGH

Iarnród Éireann says first Dart services due in Drogheda in 2025

French firm Alstom will supply up to 750 carriages to **Iarnród Éireann** over 10 years for the extended **Dart+** network. The first battery-powered **Dart train** is expected to be in operation between Drogheda and...

[CONTINUE READING](#)



Fingal is to be one of the more significant locales during the implementation of the newly revised National Development Plan, with the area set to benefit from two of the plan's most high-profile projects, and many more besides.

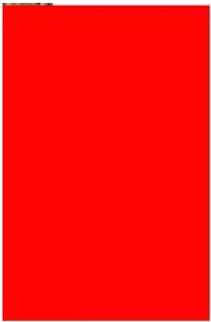
Balbriggan Harbour, to be redeveloped under the Our Balbriggan Rejuvenation Plan.

The **MetroLink** is the highest profile of the NDP projects to be associated with Fingal. The transport project is "likely the largest ever public investment project in the history of the State" according to the NDP, which also states that "this government is committed to its funding and delivery as quickly as possible", although subsequent developments following the publication of the plan have revealed that the plan will most likely not come to fruition until after 2030.

When completed, **MetroLink** will consist of a 19km carbon-neutral **railway** service running north-south, connecting Swords to **Dublin** City Centre, with stoppages at key destinations in between such as **Dublin** Airport. The line will serve 15 stations and

is estimated to have a journey time of approximately 25 minutes from Swords to the city centre. The service will also "provide passengers interchange opportunities with commuter **rail**, **DART**, Luas and numerous bus services along its route and support the development of a truly integrated **public transport** system in **Dublin**".

Also to benefit the area in terms of transport infrastructure will be the construction of the **DART+ Coastal North** line, which will run to Drogheda via Balbriggan. The **DART+** project "represents the single biggest investment in the Irish network" under Project **Ireland** 2040 and will both extend and electrify the **rail** line in order to "provide a sustainable,



REGIONAL FOCUS: FINGAL COUNTY COUNCIL

electrified and a more reliable **train** service with improved capacity". The **DART+** West programme received government approval in December 2021; **DART+** Coastal has "just commenced the concept phase", with contract award for construction "likely to be in 2024".

The second of the high profile NDP projects due to benefit the Fingal area is the Greater **Dublin** drainage project, which has been earmarked as a strategic investment priority in the water sector. The status of the project is given as being in the planning and design stage in the NDP, with an estimated cost of between €500 million and €1 billion and an estimated completion date of 2029, with these estimates given on the assumption that "Irish Water can commence construction in 2024/2025". It is stated that this "estimate will be reviewed and refreshed as the project progresses through the planning and procurement processes to account for any unforeseen planning/legal challenges or delays".

The Greater **Dublin** Drainage project represents a major investment in water infrastructure for the Greater **Dublin** region and is set to answer the projected increased demand in the area, where wastewater generation is predicted to increase by over 50 per cent by 2050. The project includes the development of a new regional wastewater treatment facility and associated infrastructure for **Dublin** and parts of Kildare and Meath.

It is said to be "vital for residential and commercial development across north **Dublin** and south Fingal as new homes and businesses can only be built when there is adequate wastewater infrastructure in place to support them". The population of Fingal has doubled to roughly 300,000 since 1994, and the local government area has the fastest growing population by rate (8.1 per cent) in the State. Coupled with Swords' status as an emerging city, the drainage project will answer the wastewater needs of a rapidly expanding area.

Also included under the NDP is the provisional funding support to be delivered from the Urban Regeneration and Development Fund (URDF), which will benefit Fingal in the form of its support of the Balbriggan Rejuvenation Project, which will receive over €25 million in funding from the URDF and is stated to currently be in its preliminary business case. The funding is to be pledged towards eight projects under the Balbriggan rejuvenation plan that will cost €33.9 million overall, with Fingal County Council providing the remainder of the funding. The eight planned public realm improvements to be completed with the funding are: Quay Street; Balbriggan Harbour; 2/4 **Dublin** Street; Bridge Street; **Railway** Street; Millpond Park; promenade and coastal improvements; and a cycleway from Bremore Castle to Ardgillan Castle, which will comprise the Balbriggan-Skerries portion of the Fingal Coastal Way.

The eight projects are to be delivered in phases, with the first phase scheduled for completion by the end of 2023. The first phase will involve the redesign of Quay Street, the upgrading of the Harbour area and the development of artists' studios and a digital innovation/maker space at 2/4 **Dublin** Street. The second phase, which will involve the redevelopment of buildings on Bridge Street, improvements to the promenade and coastal areas and the construction of the cycleway, is anticipated to complete in 2026, according to the council. The third and final phase is due for completion by 2027 and will be focused on the rejuvenation of **Railway** Street and Millpond Park.

Former Mayor of Fingal, Councillor David Healy said that the funding and project would transform Balbriggan town centre: "The infrastructure and public realm improvements which can now proceed will support a number of connected purposes. Improvements to public space will support quality of life and community life in Balbriggan. In doing so they will underpin the development of the local economy as well as the transition to a decarbonised economy and society which is at the core of both national and Fingal policies."



Imfm.ie | 24/02/2022

Media Source Online Visits 27,700

Commuter capacity to double with Dart+ project between Drogheda and Dublin

...expected to be fully completed by 2028. Full details and an online feedback form can be found at [dartplus.ie](#). Speaking in Drogheda this morning, [Irish Rail](#) Chief Executive Jim Meade said the project is...

[CONTINUE READING](#)



broadsheet.ie | 24/02/2022

Media Source Online Visits 75,270

The Dart To Drogheda

This morning. Via Iarnród Éireann We have unveiled details of the emerging preferred option for [DART+ Coastal North](#), the latest phase of the transformative [DART+](#) Programme, which will dramatically increase...

[CONTINUE READING](#)



Fingal Independent | 28/02/2022

Media Source Online Visits 3,859,246

Also published in Dublin People



Preferred option unveiled for DART extension northwards from Malahide to Drogheda

...and assessment.) It will also facilitate the future increase in frequency of trains through the **construction** of train stabling and other necessary rail infrastructure in the vicinity of Drogheda MacBride,...

CONTINUE READING



LMFM - 13:00 News | 24/02/2022

Media Source

Radio

Public consultation has been launched for the new Dart+

A public consultation has been launched for the new Dart+ Coastal North Programme between Drogheda and Dublin.

[Radio-Clip](#)

APPENDIX B

Public Representatives Pre-Public Consultation Briefings

- 24TH FEBRUARY 2022 – DUBLIN CITY COUNCIL & FINGAL COUNTY COUNCIL BRIEFING
- 24TH FEBRUARY 2022 – MEATH COUNTY COUNCIL & LOUTH COUNTY COUNCIL BRIEFING

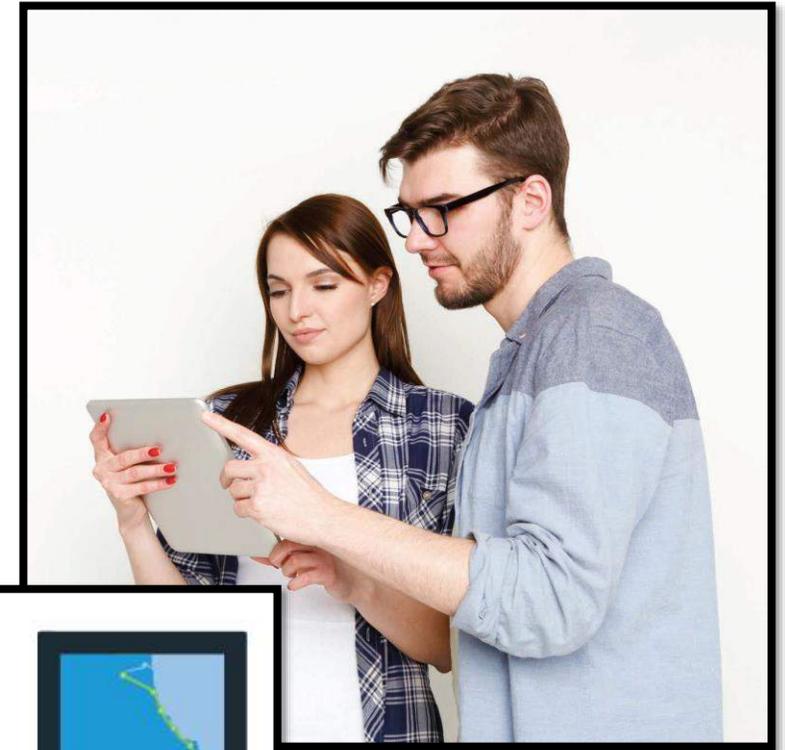


Public Consultation No.1
Briefing to Dublin City Council & Fingal
County Council
Elected Representatives

24.02.2022

Public Consultation No.1 – Briefing.

- Public Consultation No.1 has commenced on DART+ Coastal North;
 - PC No.1 commenced on **February 24th 2022**.
- Consultation will continue for 6 weeks;
 - PC No.1 will conclude on **April 8th 2022**.
- The purpose of the consultation is to seek feedback on the Emerging Preferred Option for DART+ Coastal North;
- The intention of this briefing is to take both Dublin City Council and Fingal County Council through the key elements of the project that are being presented at PC No.1.



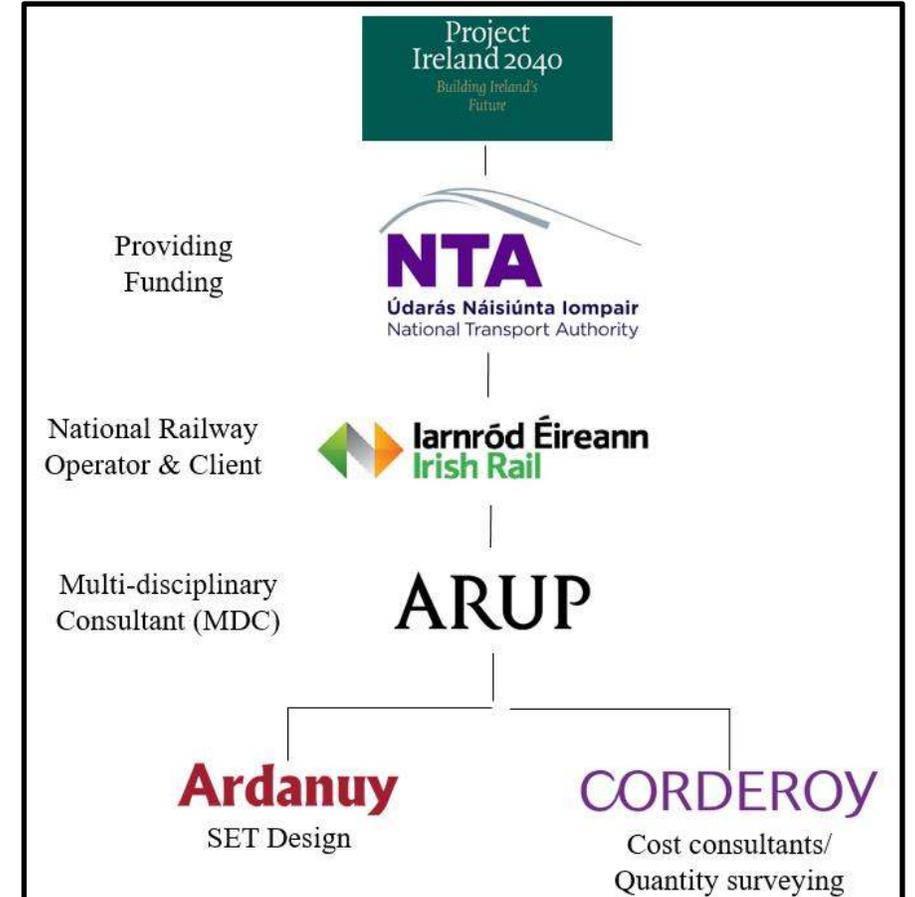
DART+ Coastal North Team

Iarnród Éireann

- Niamh Horan, Communications Manager, DART+ Programme
- Mark Conroy, Environmental Manager, DART+ Programme
- Laura Carolan, EIA Manager, DART+ Coastal North

Arup

- Gillian Sisk, Project Manager, DART+ Coastal North
- Clodagh O'Donovan, RO Manager, DART+ Coastal North



Why investment in DART+ Programme is needed

Provides Sustainable Transport Options

- Over-reliance on private car use and increasing congestion in Greater Dublin Area.
- DART trains are more sustainable and cleaner than current diesel trains.

Achieve Climate Change Targets

- Will help reduce the transport sector greenhouse gas emissions which continue to rise.
- Supporting the Government's Climate Action Plan.



Integration of Land-use & Transport Planning

- Co-ordination and integration of spatial planning with rail transport.
- Supporting compact growth and increased densities in the Greater Dublin Area.
- Supports the implementation of the Project Ireland 2040 and the National Planning Framework.

Facilitates Integration with other modes of transport

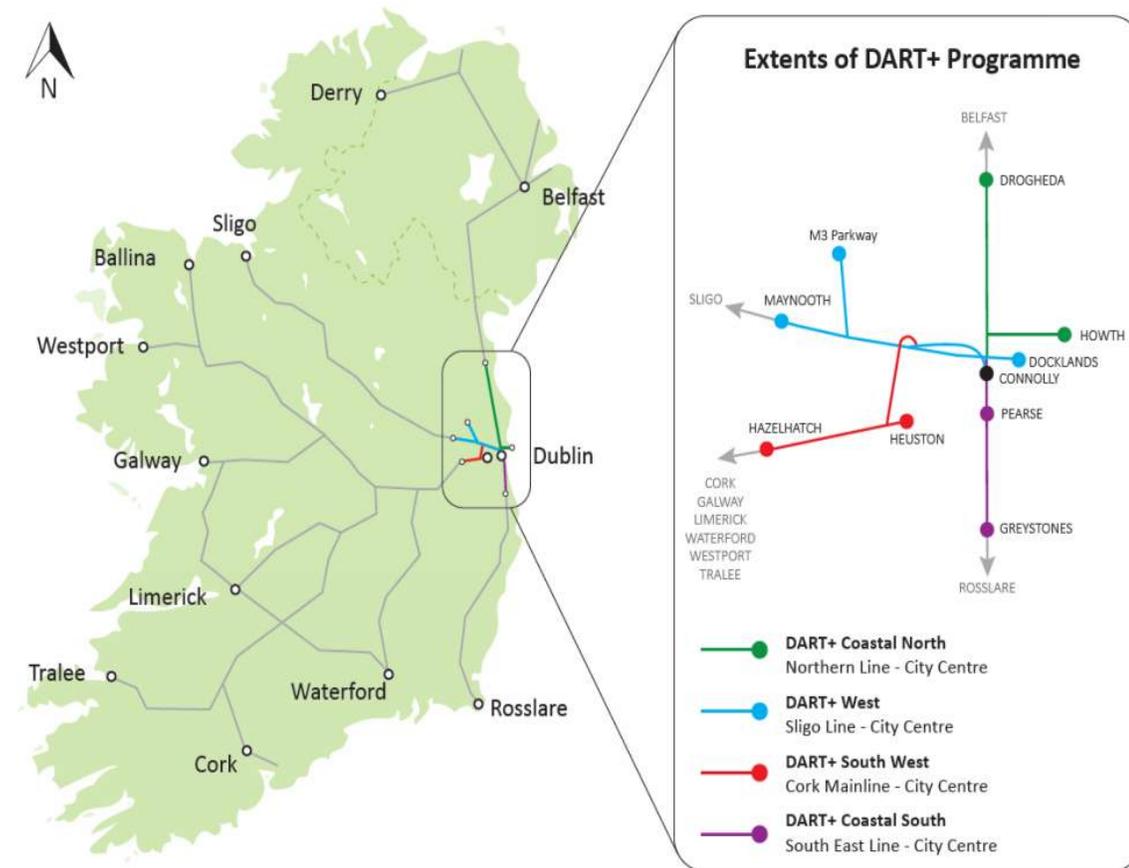
- Improves integration of rail services with active modes of travel (walking and cycling).
- Enables greater cross-modal journeys through improved integration with other modes – Bus, Luas, proposed MetroLink and Dublin Bikes.

Supporting Economic and Population Growth

- Congestion in Greater Dublin Area is increasing.
- Cost of Time Lost in the Dublin Region is - €350million/annum and forecast to rise to €2,000million/annum by 2033.
- Sustainable public transport infrastructure (pedestrian, cycling, bus and rail) will sustain economic and population growth while reducing emissions.

DART+ Programme - Geographical Extents

- Current DART network extends from Malahide/Howth to Greystones along 50km railway corridor;
- DART+ Programme will increase the extent of electrification to 150km of railway corridor;
- DART+ Programme extends to:
 - Maynooth/M3 Parkway on the Sligo Line (DART+ West)
 - Hazelhatch (Celbridge) on the Kildare Line (DART+ South West)
 - Battery Electric Multiple Units (BEMU) charging infrastructure at Drogheda
 - **Drogheda on Northern Line (DART+ Coastal North)**
 - Greystones on the Southeast Line (DART+ Coastal South)
- DART+ Programme will increase the frequency of services on the network and will provide high capacity trainsets.

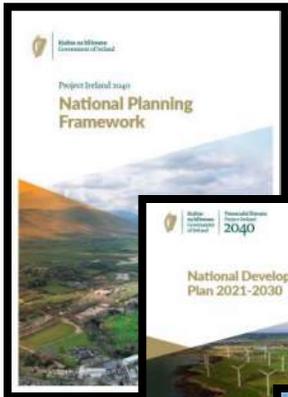


DART+ Programme – Policy Context (National)

The **DART+ Programme** is a key deliverable of National planning policy and boosts a number of National Strategic Outcomes of the National Planning Framework and Priorities of the National Development Plan (2021-2030)

Relevant National Strategic Outcomes:

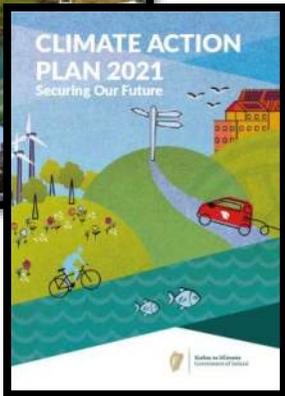
- NSO 1 – Compact Growth
- NSO 4 – Sustainable Mobility
- NSO 8 – Transition to a Low Carbon and Climate Resilient Society



*“Addressing the legacy of rapid unplanned growth, by facilitating amenities and services catch-up, jobs and/or **improved sustainable transport links...**”*



*“infrastructure, in particular **increased investment in public and sustainable transport and supporting amenities**, can act as crucial growth drivers.*



*“... investment in the **DART+ programme will address some of the constraints on the Dublin City Centre rail network** and provide for additional services for intercity rail services”*

Decarbonisation of Public Sector Transport

.... transition the rail fleet towards an electric model, increasing the length of electrified rail network from 50 kilometres to 150 kilometres by 2030, including DART+ project....

DART+ Programme – Policy Context (Regional)

Regional Spatial and Economic Strategy

- **Regional Policy Objective 5.2:**

“Support the delivery of key sustainable transport projects including Metrolink, DART and LUAS expansion programmes”

- **Guiding Principles for the growth of the Dublin Metropolitan Area:**

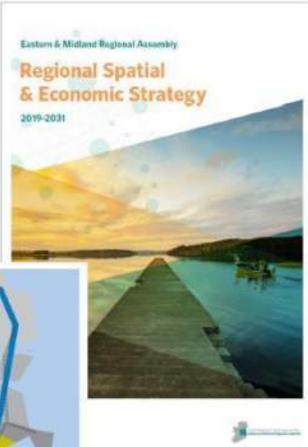
“To focus growth along existing and proposed high quality public transport corridors... and to support the delivery and integration of ‘BusConnects’, DART expansion and LUAS extension programmes.....”

- **RSES Metropolitan Area Strategy:**

“The DART Expansion Programme, to be delivered by 2027 will increase capacity on the northern commuter line and support ongoing large-scale urban expansion of the North Fringe lands and Donabate”

Transport Strategy for the GDA 2016-2035 (Draft Strategy 2022-2042)

- The delivery of the DART+ Programme forms a vital component of the overall rail strategy for the GDA in both the current and draft strategies.
- Iarnród Éireann is progressing all key projects in the Transport Strategy.





Project Overview





DART+ Coastal North Overview

Project Specific Objectives



- To deliver a higher frequency, higher capacity, reliable, electrified route to enable an increased DART service frequency between Drogheda and Dublin City Centre;
- To deliver solutions which improve the passenger experience where passenger infrastructure interventions are required to meet the Train Service Specification (i.e. 'desired' level of service).
- To deliver a sustainable, low carbon and climate resilient design solution including making use of existing infrastructure where possible with targeted improvement works;
- To identify cost-effective solutions from a capital, operations, and maintenance perspective;
- To minimise adverse impacts on the natural and built environment associated with construction, operation and maintenance of the project
- To minimise adverse impacts on existing rail services, road users and landowners associated with the construction, operation and maintenance of the project.
- To provide efficient and cost-effective integration of systems with the other DART+ projects.

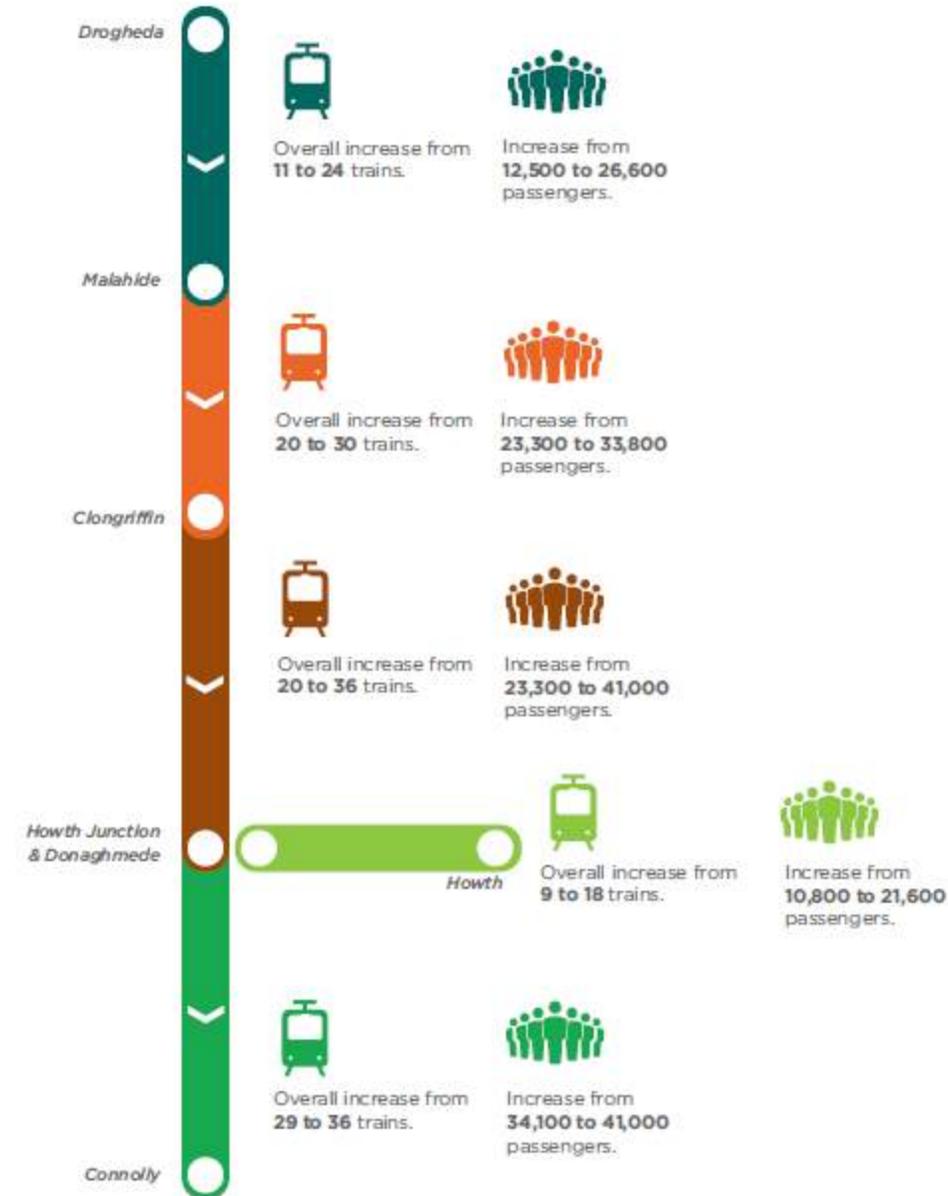
DART+ Coastal North Overview – Key Infrastructural Elements

- Extension of existing 1500V DC electrification, which currently terminates at Malahide, as far as Drogheda MacBride Station (approximately 37km);
- Reconfiguration of the existing track layout and associated infrastructure in the vicinity of Drogheda MacBride Station, Malahide Station, Clongriffin Station and Howth Junction & Donaghmede Station, as well as the provision of sections of additional track and station turnback facilities to allow for improved operational flexibility on the Northern Line;
- Construction of a new platform at Drogheda MacBride Station;
- Undertaking upgrades to existing signalling, telecoms and power supplies to support the planned increase in train services, including the introduction of new electrical substations at key locations alongside the railway line;
- Undertaking bridge improvements/modifications arising from capacity enhancements, track reconfigurations and/or electrical clearances to achieve necessary clearances;
- Modifications to existing depots at Drogheda and Fairview to support the new train fleet, including the provision of additional train stabling at Drogheda;
- Ancillary civils, drainage and power work to cater for the changes.

DART+ Coastal North

- Extended electrified network
- Increased passenger capacity and enhanced train service
- Improved performance and increased train frequencies in the AM and PM peak travel periods
- Shuttle service along the Howth Branch

Planned increase in train frequency and passenger capacity for the 3-hour AM peak period for inbound/southbound services to Dublin City Centre.



DART+ Coastal North - Benefits

- Increase peak passenger capacity and increased train frequency between Dublin City Centre and Drogheda MacBride Station - inclusive of the Howth Branch – facilitating frequent and reliable transport to the surrounding communities.
- Enhance public transport opportunities for work, education and leisure purposes.
- Facilitate the development and future growth of existing and new communities that will greatly benefit from the connectivity that the DART+ Coastal North project will deliver.
- Help alleviate road congestion.
- Build a sustainable and connected city region, supporting the transition to a low carbon and climate resilient society.
- Facilitate people to make sustainable travel choices by encouraging a move away from private cars to a reliable, efficient and safer public transport network.
- Improve multi-modal transport connectivity through the development of the wider DART+ Programme.
- Improve journey time reliability.



Emerging Preferred Option

DART+ Coastal North – Option Selection Process

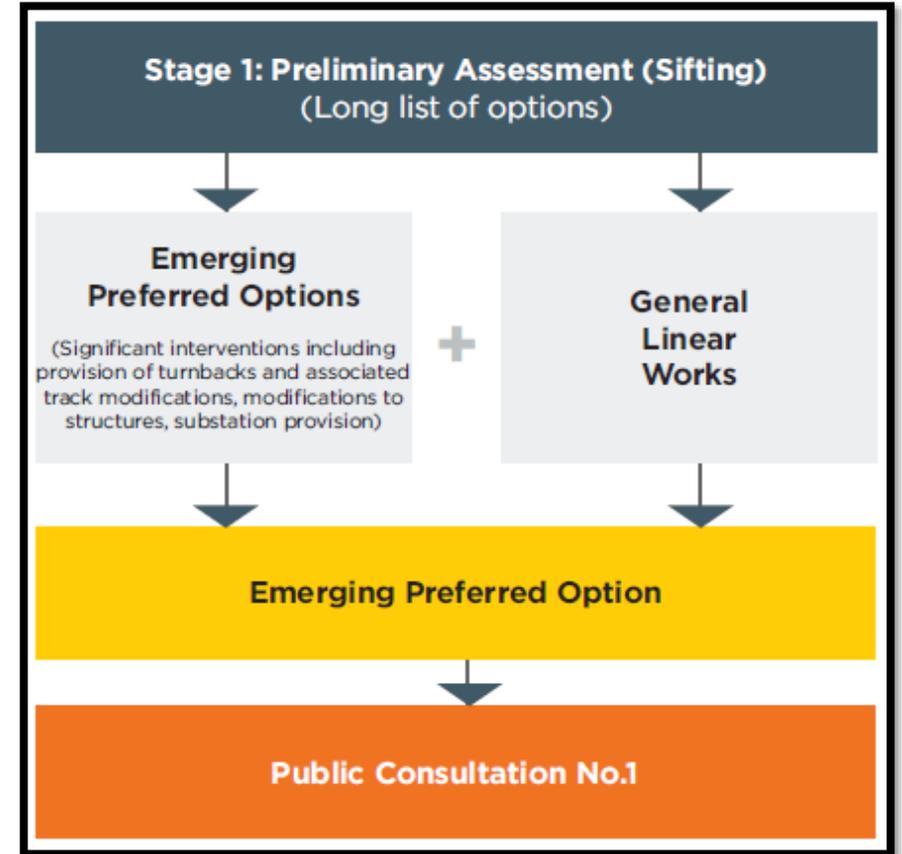
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- Detailed, multidisciplinary, comparative analysis of the feasible options from Stage 1 assessment;
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DART+ Coastal North

'Emerging Preferred Option (EPO)' Overview

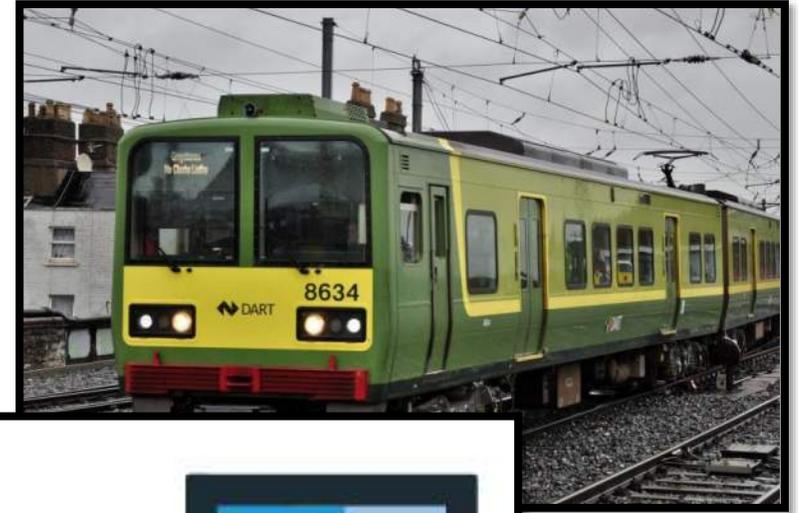
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DART+ Coastal North – EPO

General linear works to facilitate electrification



Signalling and Telecommunications

- Signalling upgrades and additional signalling required between Malahide and Drogheda;
- Minor changes will be required to signalling between East Wall Junction (Tolka River) and Malahide;
- Upgrades to the telecommunication systems will be required route wide.

Electrification

- Extension from Malahide to just beyond Drogheda MacBride Station. Similar to OHLE currently used on DART network.
- 8 new electrical substations will be required at intervals along the railway line and will be detailed at PC No.2.
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 - Lowering the rail track under the bridge;
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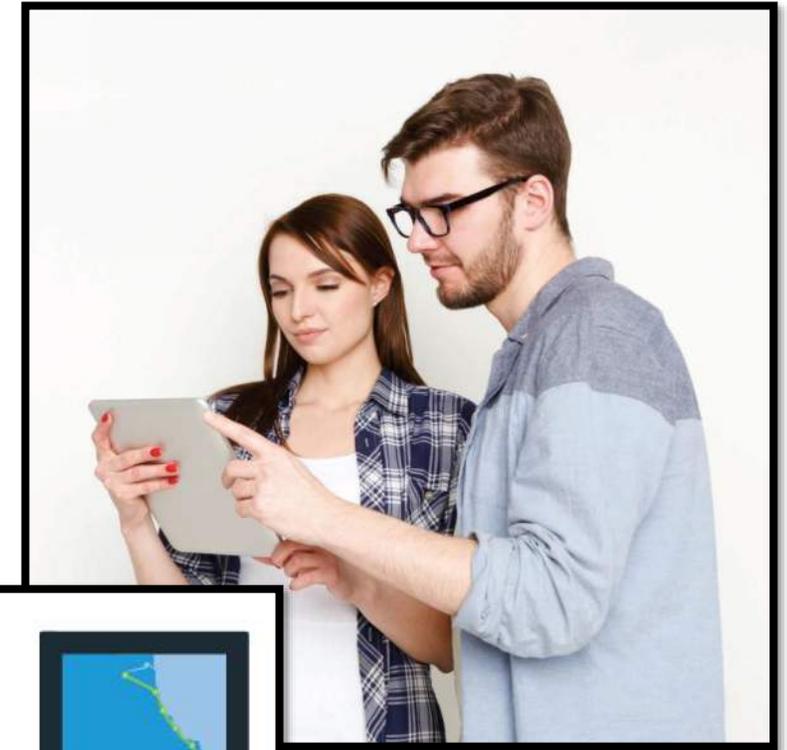


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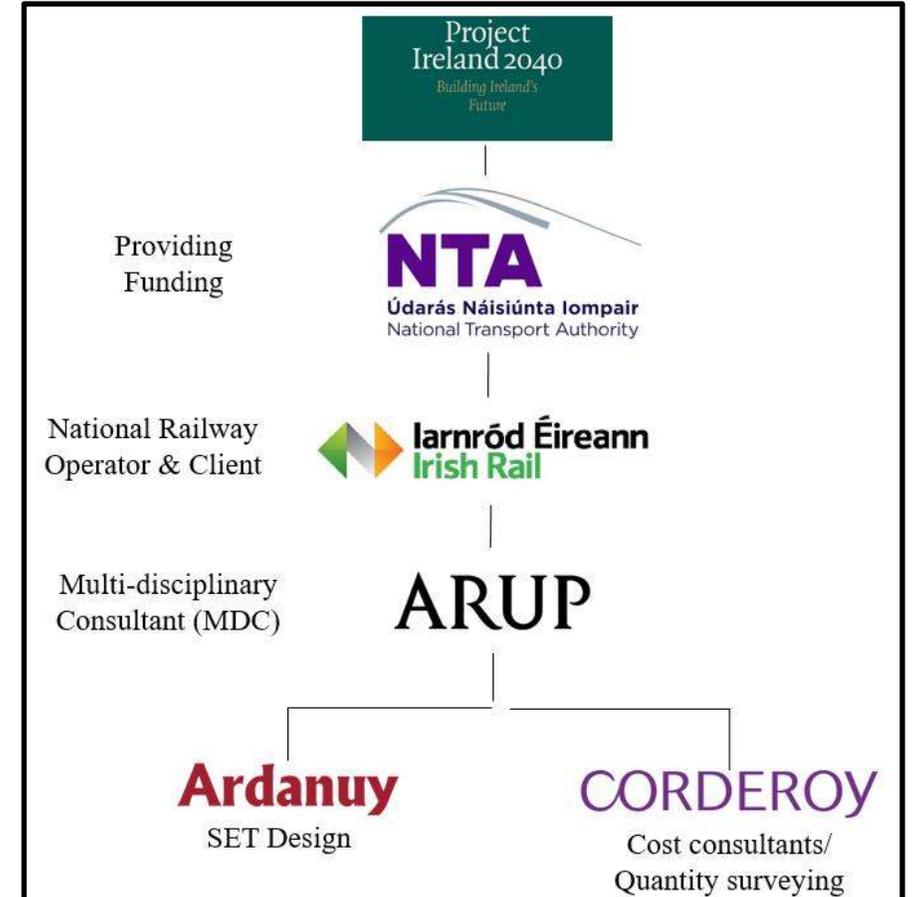
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Why investment in DART+ Programme is needed

Provides Sustainable Transport Options

- Over-reliance on private car use and increasing congestion in Greater Dublin Area.
- DART trains are more sustainable and cleaner than current diesel trains.

Achieve Climate Change Targets

- Will help reduce the transport sector greenhouse gas emissions which continue to rise.
- Supporting the Government's Climate Action Plan.



Integration of Land-use & Transport Planning

- Co-ordination and integration of spatial planning with rail transport.
- Supporting compact growth and increased densities in the Greater Dublin Area.
- Supports the implementation of the Project Ireland 2040 and the National Planning Framework.

Facilitates Integration with other modes of transport

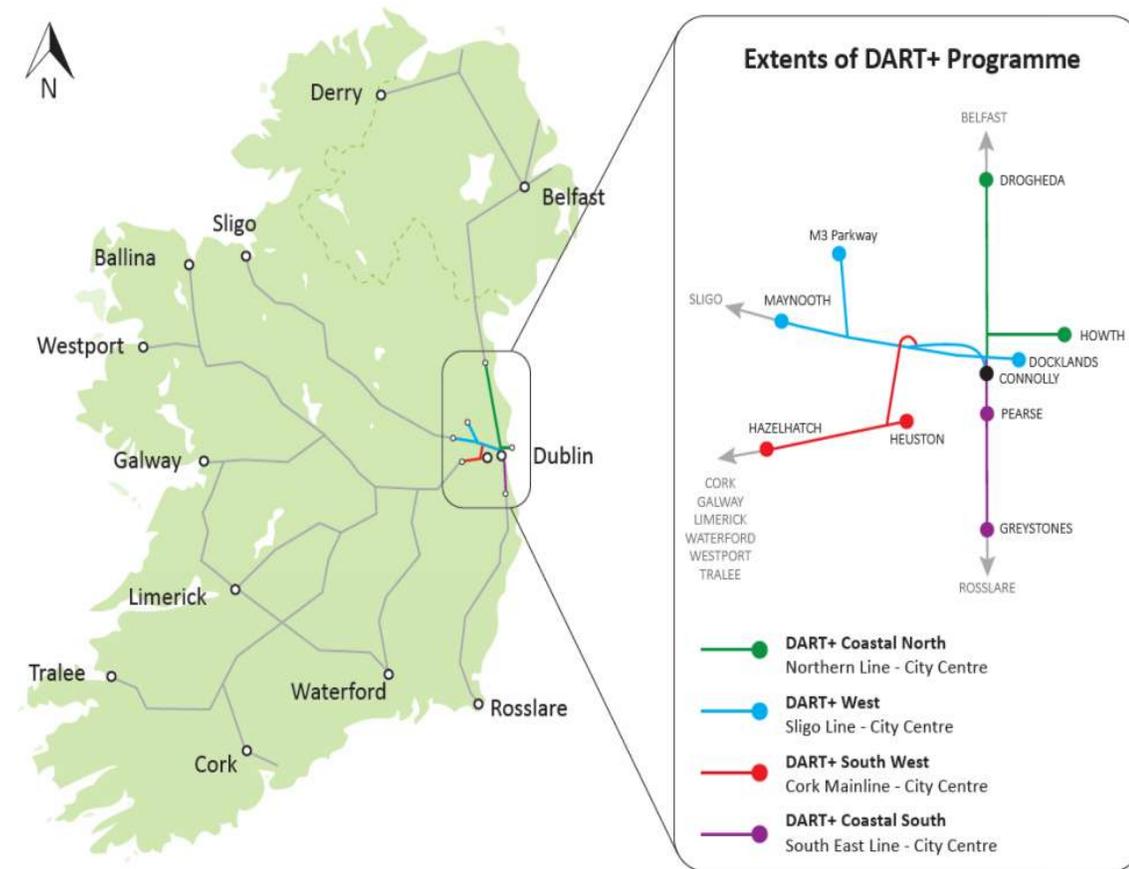
- Improves integration of rail services with active modes of travel (walking and cycling).
- Enables greater cross-modal journeys through improved integration with other modes – Bus, Luas, proposed MetroLink and Dublin Bikes.

Supporting Economic and Population Growth

- Congestion in Greater Dublin Area is increasing.
- Cost of Time Lost in the Dublin Region is - €350million/annum and forecast to rise to €2,000million/annum by 2033.
- Sustainable public transport infrastructure (pedestrian, cycling, bus and rail) will sustain economic and population growth while reducing emissions.

DART+ Programme - Geographical Extents

- Current DART network extends from Malahide/Howth to Greystones along 50km railway corridor;
- DART+ Programme will increase the extent of electrification to 150km of railway corridor;
- DART+ Programme extends to:
 - Maynooth/M3 Parkway on the Sligo Line (DART+ West)
 - Hazelhatch (Celbridge) on the Kildare Line (DART+ South West)
 - Battery Electric Multiple Units (BEMU) charging infrastructure at Drogheda
 - **Drogheda on Northern Line (DART+ Coastal North)**
 - Greystones on the Southeast Line (DART+ Coastal South)
- DART+ Programme will increase the frequency of services on the network and will provide high capacity trainsets.



DART+ Programme – Policy Context (National)

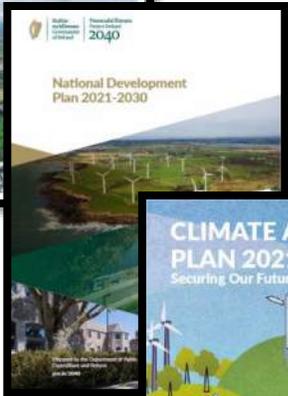
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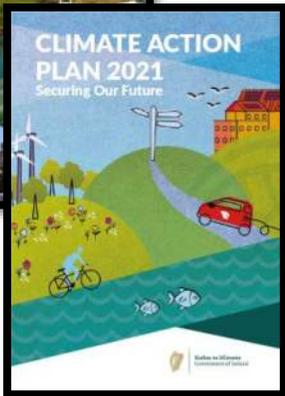
- NSO 1 – Compact Growth
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*“Addressing the legacy of rapid unplanned growth, by facilitating amenities and services catch-up, jobs and/or **improved sustainable transport links...**”*



*“infrastructure, in particular **increased investment in public and sustainable transport and supporting amenities**, can act as crucial growth drivers.*



*“... investment in the **DART+ programme will address some of the constraints on the Dublin City Centre rail network** and provide for additional services for intercity rail services”*

Decarbonisation of Public Sector Transport

.... transition the rail fleet towards an electric model, increasing the length of electrified rail network from 50 kilometres to 150 kilometres by 2030, including DART+ project....

DART+ Programme – Policy Context (Regional)

Regional Spatial and Economic Strategy

- **Regional Policy Objective 5.2:**

“Support the delivery of key sustainable transport projects including Metrolink, DART and LUAS expansion programmes”

- **Guiding Principles for the growth of the Dublin Metropolitan Area:**

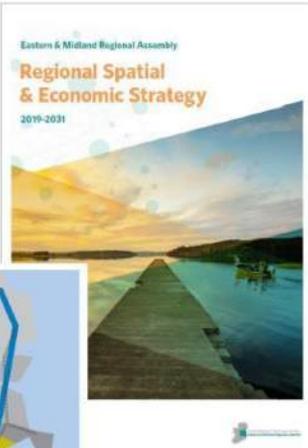
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Transport Strategy for the GDA 2016-2035 (Draft Strategy 2022-2042)

- The delivery of the DART+ Programme forms a vital component of the overall rail strategy for the GDA in both the current and draft strategies.
- Iarnród Éireann is progressing all key projects in the Transport Strategy.





Project Overview





DART+ Coastal North Overview

Project Specific Objectives



- To deliver a higher frequency, higher capacity, reliable, electrified route to enable an increased DART service frequency between Drogheda and Dublin City Centre;
- To deliver solutions which improve the passenger experience where passenger infrastructure interventions are required to meet the Train Service Specification (i.e. 'desired' level of service).
- To deliver a sustainable, low carbon and climate resilient design solution including making use of existing infrastructure where possible with targeted improvement works;
- To identify cost-effective solutions from a capital, operations, and maintenance perspective;
- To minimise adverse impacts on the natural and built environment associated with construction, operation and maintenance of the project
- To minimise adverse impacts on existing rail services, road users and landowners associated with the construction, operation and maintenance of the project.
- To provide efficient and cost-effective integration of systems with the other DART+ projects.

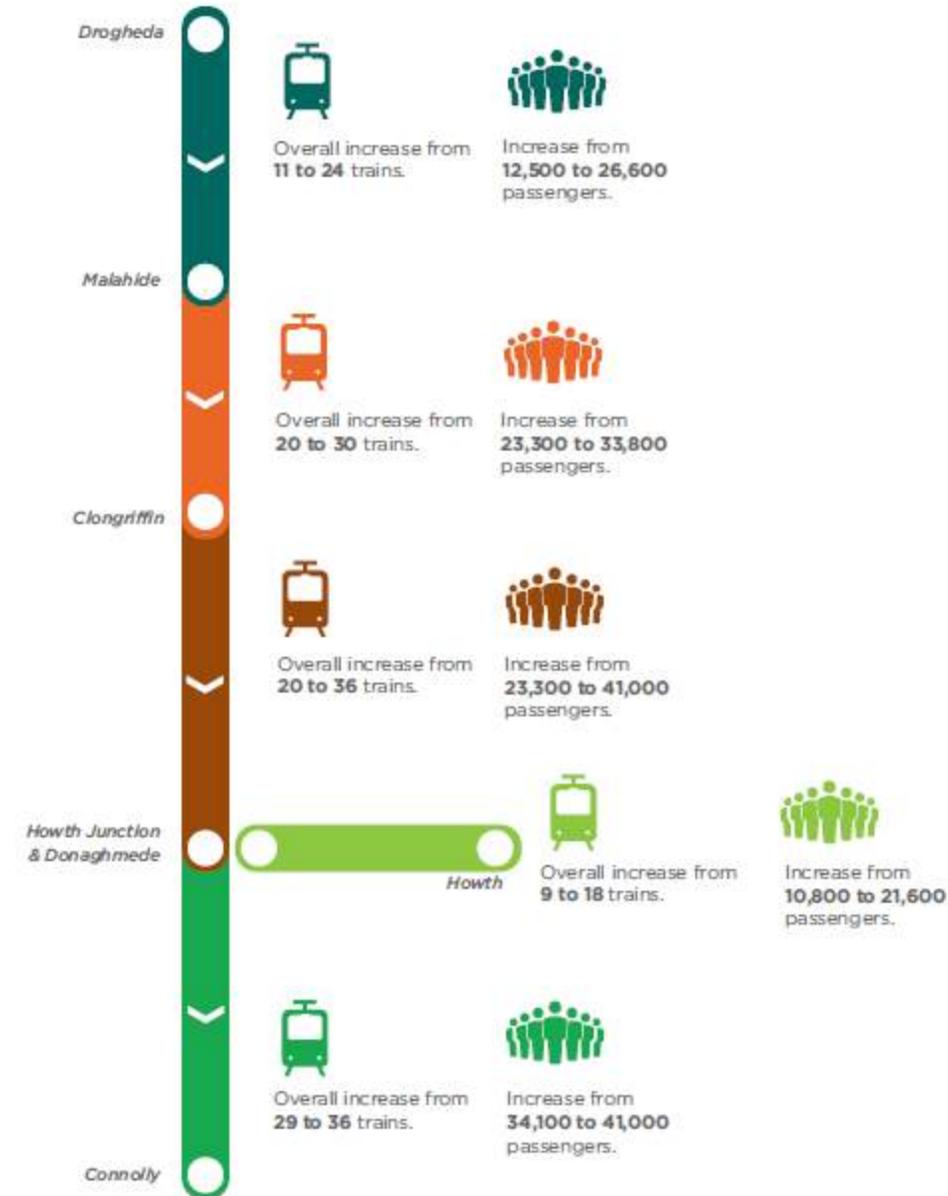
DART+ Coastal North Overview – Key Infrastructural Elements

- Extension of existing 1500V DC electrification, which currently terminates at Malahide, as far as Drogheda MacBride Station (approximately 37km);
- Reconfiguration of the existing track layout and associated infrastructure in the vicinity of Drogheda MacBride Station, Malahide Station, Clongriffin Station and Howth Junction & Donaghmede Station, as well as the provision of sections of additional track and station turnback facilities to allow for improved operational flexibility on the Northern Line;
- Construction of a new platform at Drogheda MacBride Station;
- Undertaking upgrades to existing signalling, telecoms and power supplies to support the planned increase in train services, including the introduction of new electrical substations at key locations alongside the railway line;
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DART+ Coastal North

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Emerging Preferred Option

DART+ Coastal North – Option Selection Process

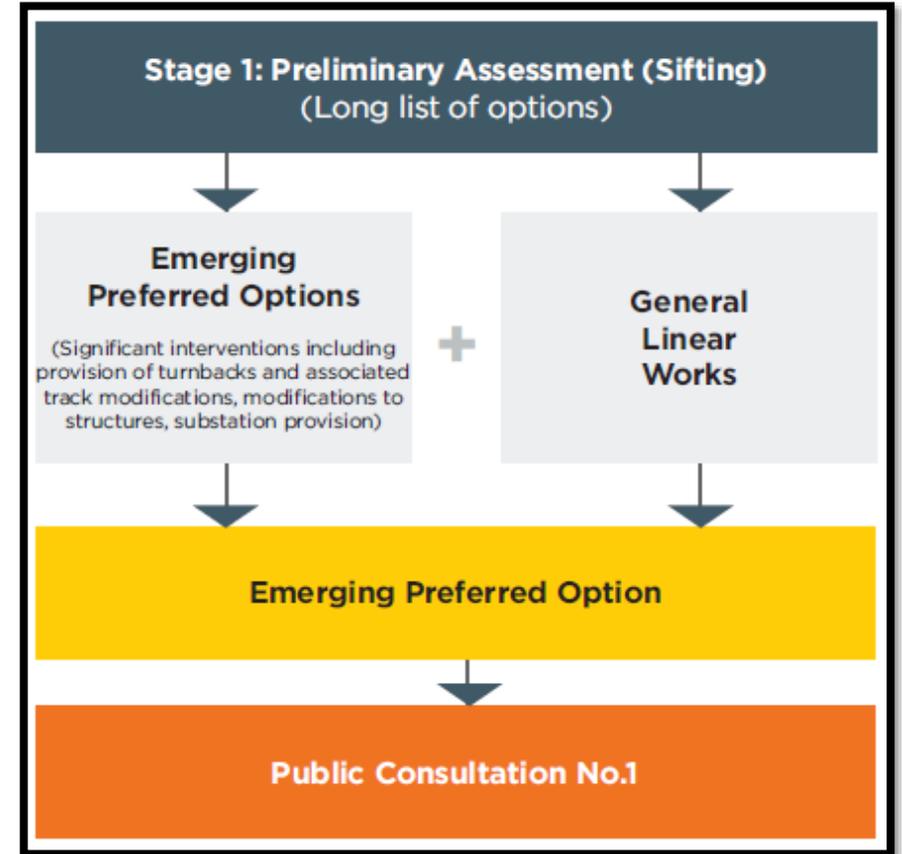
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DART+ Coastal North

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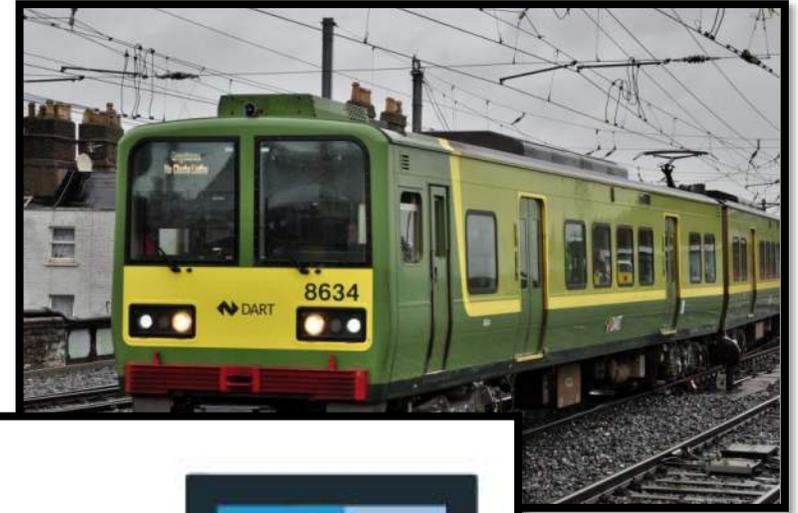
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DART+ Coastal North – EPO

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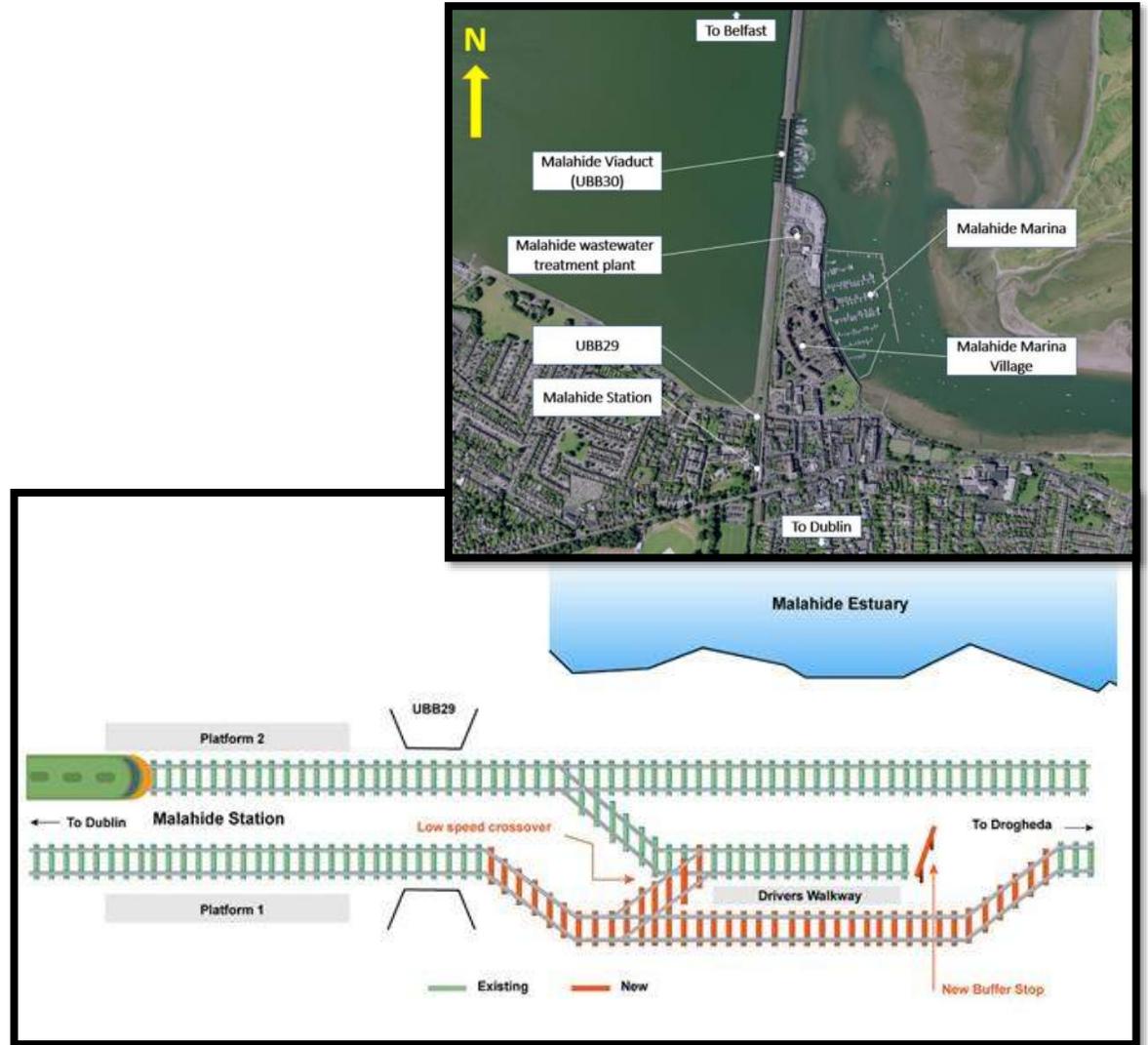
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DART+ Coastal North – EPO Within DCC & FCC

Works around Malahide Station

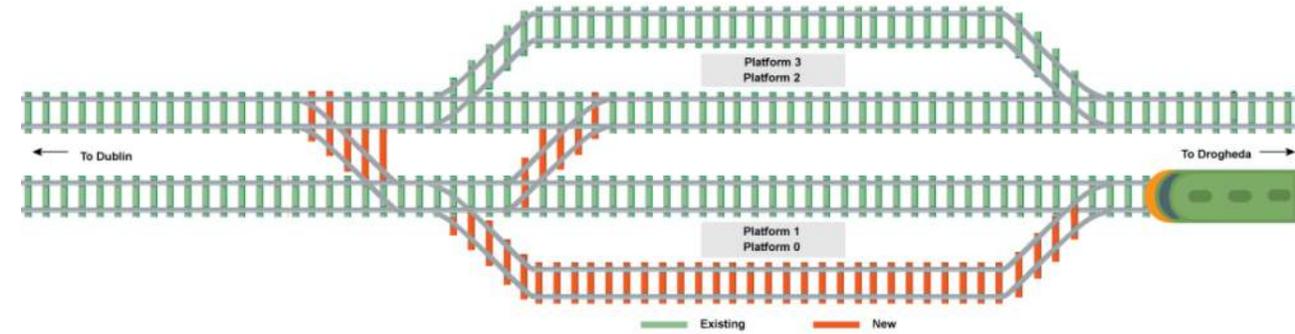
- The emerging preferred option is to introduce a turn back facility immediately north of Malahide Station.
- The works require the widening of the railway corridor along the eastern side of the existing embankment on which it is situated.
 - Achieved by constructing a retaining structure alongside the realigned track
- Widening located to east to avoid impacting the future Broadmeadow Greenway and designated ecological sites.
- Works will allow for a greater number of services to be turned back at Malahide and return to Dublin.
- New OHLE and signalling installations, as well as modifications to the existing systems, will be required.



DART+ Coastal North – EPO Within DCC & FCC

Works around Clongriffin Station

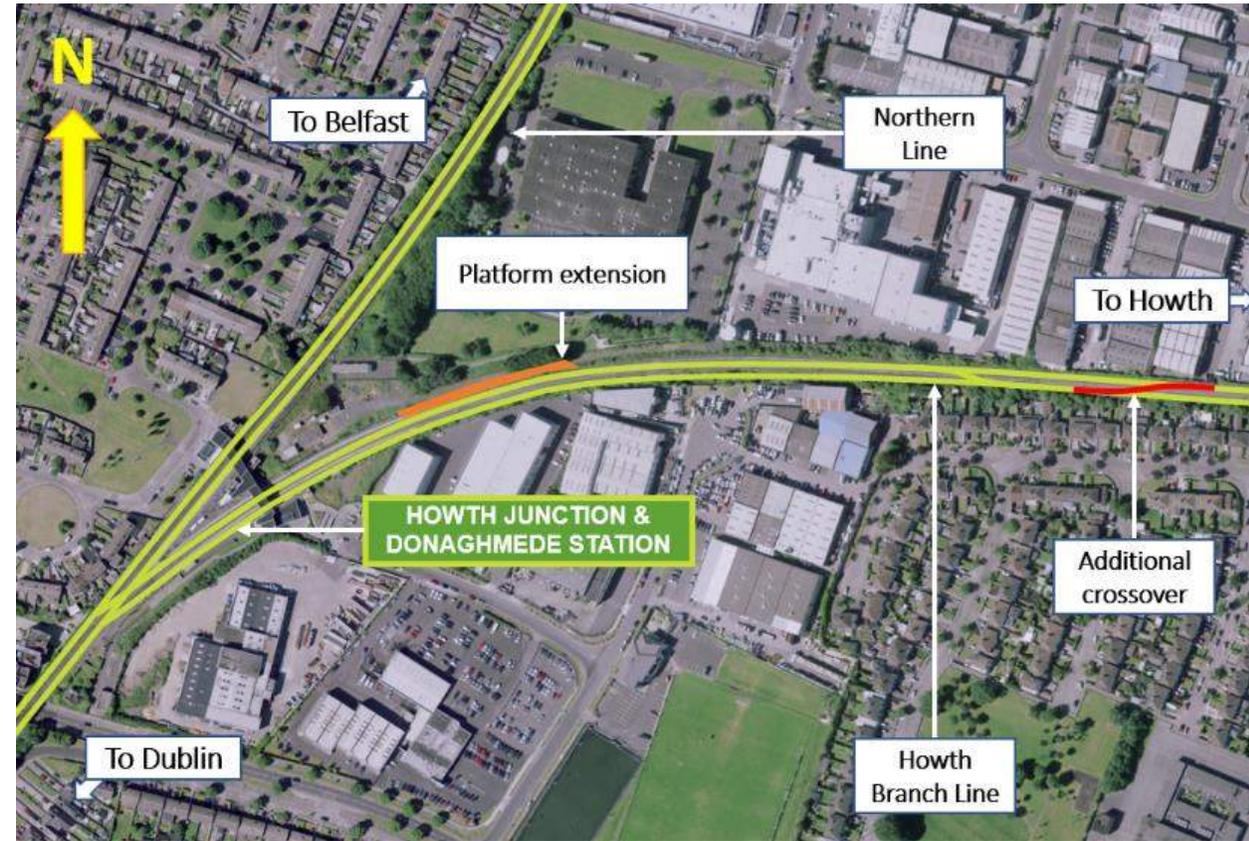
- The emerging preferred option is to introduce a new loop to serve a platform to the east side of Clongriffin station.
- The original station construction anticipated this construction requirement and therefore it will have minimal impact on the station building/existing infrastructure.
- Modifications will be made to the track alignment to the south of the Station to allow trains to access the new platform.
- These works will allow for a greater number of services to be turned back at Clongriffin and return to Dublin.
- New OHLE and signalling installations, as well as modifications to the existing systems, will be required.



DART+ Coastal North – EPO Within DCC & FCC

Works around Howth Junction & Donaghmede Station

- The works around Howth Junction & Donaghmede Station are linked to facilitating increased capacity on the Northern Line and also relate to allowing a greater number of DART services to turn back at the station.
- The emerging preferred option includes construction of an extension to the existing Platform 2 to allow the platform to be used by terminating services from Howth without impacting on services running along the Northern Line.
- Track modifications will be made to include a new crossover to the east of the existing station platforms.
- Alterations and modifications to existing OHLE, signalling and telecoms systems will also be required.
- As the Howth Branch will largely operate as a shuttle service, consideration will be given to what improvements to station facilities will be made to provide a satisfactory customer experience.



DART+ Coastal North – EPO Within DCC & FCC

Malahide, Rogerstown and Balbriggan Viaducts

- Bespoke fixing arrangements for OHLE will be required at some locations where the railway is supported on underbridges, including Malahide, Rogerstown and Balbriggan Viaducts.
- It is envisaged that typical OHLE foundations can be placed either side of underbridges with spans of less than 60m.
- Underbridges with spans exceeding 60m have been assessed based on possible OHLE support arrangements.
- The emerging preferred option for each structure is as follows:
 - UBB30 – Malahide Viaduct – installation of concrete foundations placed beneath the ballast under the tracks which allow a mast to be founded on them approximately at the location of the existing parapet;
 - UBB36 – Rogerstown Viaduct – installation of masts fixed off the existing abutments, either on the face or by replacing the top proportion of the existing stonework with a new concrete foundation;
 - UBB56 – Balbriggan Viaduct – installation of masts fixed off the existing wall located between the walkway and the track by replacing the top proportion of the existing stonework with a new concrete foundation;
- The positioning of OHLE masts along the length of the bridges has been considered, seeking to provide a visually preferable, symmetrical solution.

DART+ Coastal North – EPO Within DCC & FCC

Howth Branch Level Crossings



- The proposed changes to the Howth Branch will see the introduction of infrastructure to enable a shuttle service at regular intervals between Howth and Howth Junction & Donaghmede Stations.
 - Further information will be developed and presented at PC No.2.
- Initial assessment of the four existing level crossings along the Howth Branch line has indicated that these level crossings can continue to operate while still providing a more efficient service overall.
- Further survey and traffic data will be collected to validate the model and assumptions, and this information will be used to establish if the proposal to keep the level crossings in operation is feasible or if more significant interventions are required at the crossings.

DART+ Coastal North – EPO Within DCC & FCC

Level Crossing XB001 – User Worked Level Crossing

- Located close to the Malahide Estuary, south of Donabate, connecting farmlands across the railway;
- Intervention required due to:
 - Increased risk from the electrification of the railway line;
 - Increased risk from greater frequency of trains.
- The Emerging Preferred Option is to close the level crossing and purchase the land east of the railway such that third party access requirements are removed;
- The option presents the opportunity to improve biodiversity/ecological value of the land;
- Option will have no impact on the electrification design, nor will it require modification of signalling systems or structural/geotechnical interventions.



DART+ Coastal North – EPO Within DCC & FCC

Depot Works

- There will be localised works at Fairview Depot to modify the facilities to cater for the change in rolling stock.
- Modifications are predominantly internal to the buildings although they will also encompass some localised exterior changes to some track work and systems.



DART+ Coastal North – Overview of remaining EPO

Works around Drogheda MacBride Station

- The Emerging Preferred Option is to construct a new single platform, that will extend over the Dublin Road Underbridge, on the Drogheda freight siding at Drogheda MacBride Station.

**Works at Drogheda will allow for a greater number of services to be turned back and return to Dublin. Works are linked to facilitating increased capacity and flexibility on the Northern Line.*

Depot Works

- There will be localised works at Drogheda Depot to modify the facilities to cater for the change in rolling stock.
- The depot at Drogheda MacBride Station will be electrified with OHLE.



What's Next?



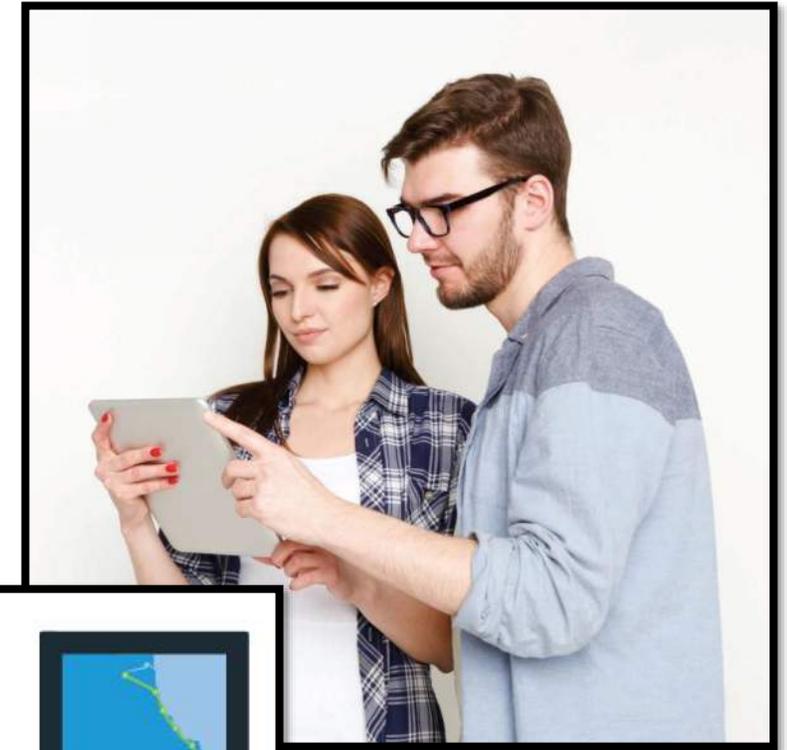


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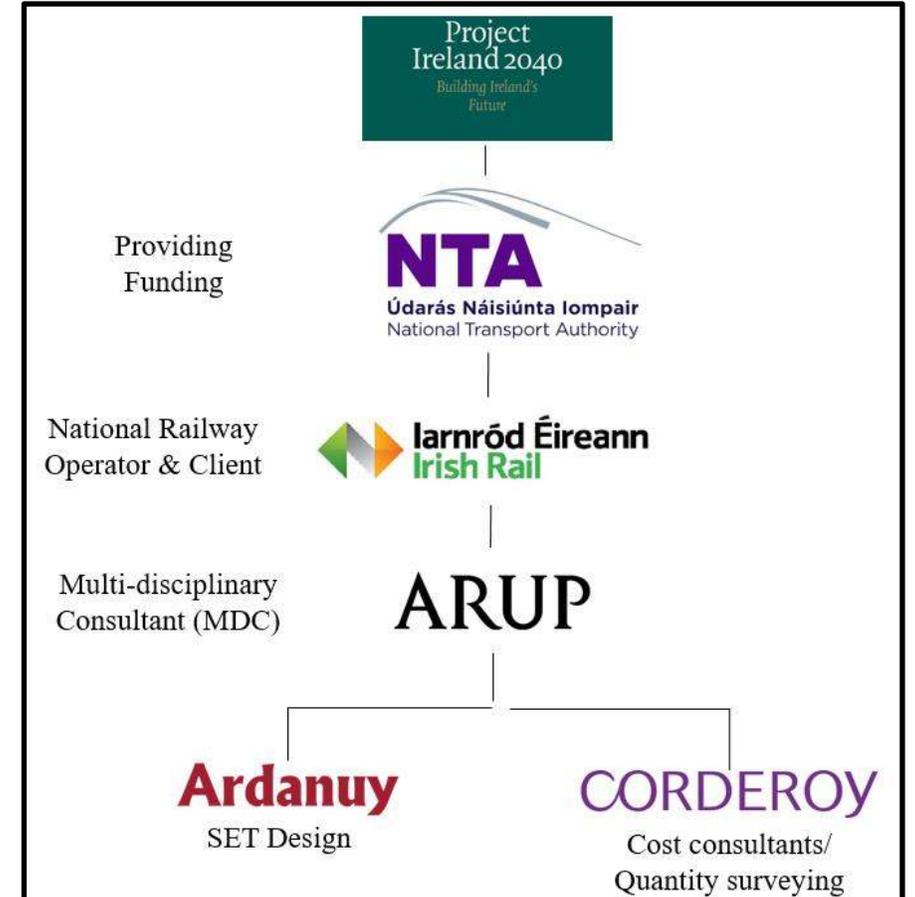
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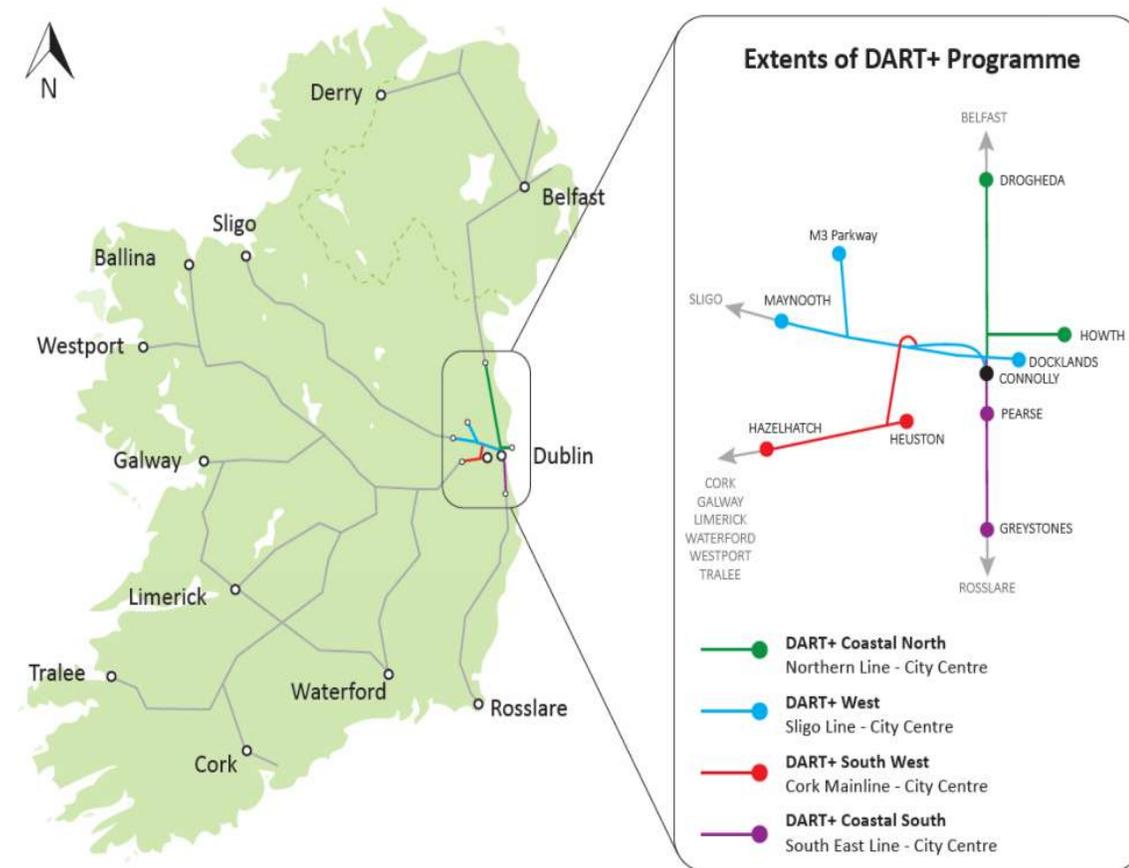
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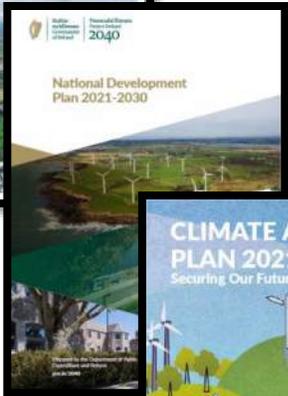
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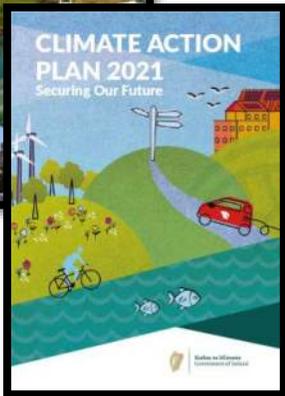
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Regional Spatial and Economic Strategy

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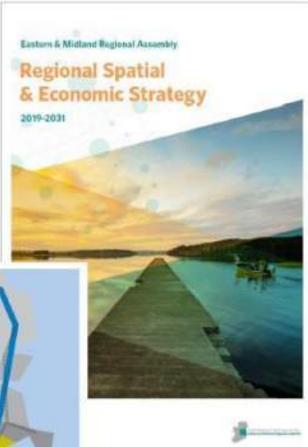
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- The delivery of the DART+ Programme forms a vital component of the overall rail strategy for the GDA in both the current and draft strategies.
- Iarnród Éireann is progressing all key projects in the Transport Strategy.





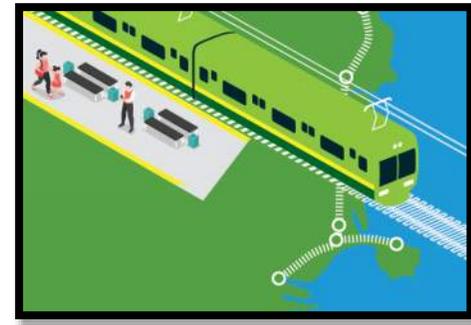
Project Overview





DART+ Coastal North Overview

Project Specific Objectives



- To deliver a higher frequency, higher capacity, reliable, electrified route to enable an increased DART service frequency between Drogheda and Dublin City Centre;
- To deliver solutions which improve the passenger experience where passenger infrastructure interventions are required to meet the Train Service Specification (i.e. 'desired' level of service).
- To deliver a sustainable, low carbon and climate resilient design solution including making use of existing infrastructure where possible with targeted improvement works;
- To identify cost-effective solutions from a capital, operations, and maintenance perspective;
- To minimise adverse impacts on the natural and built environment associated with construction, operation and maintenance of the project
- To minimise adverse impacts on existing rail services, road users and landowners associated with the construction, operation and maintenance of the project.
- To provide efficient and cost-effective integration of systems with the other DART+ projects.

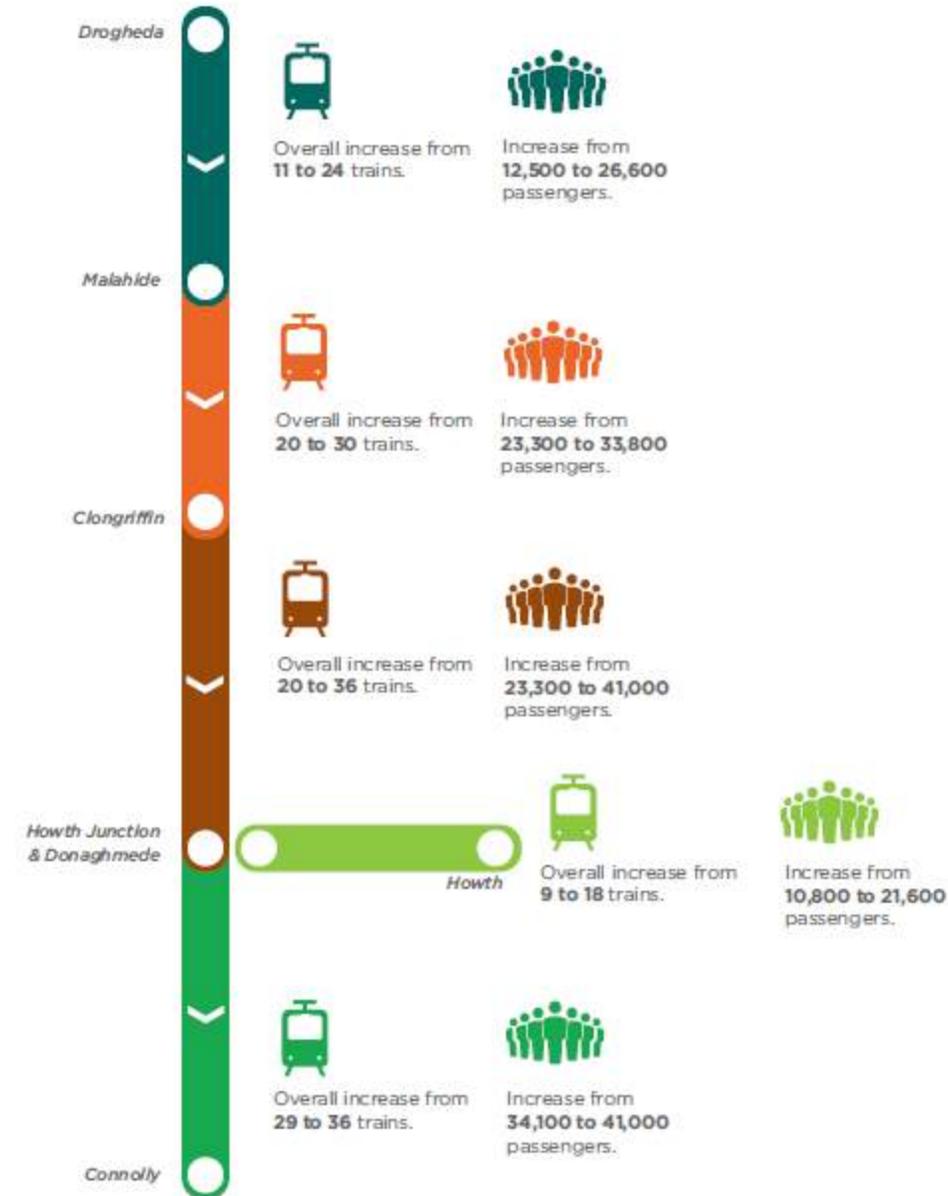
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- Construction of a new platform at Drogheda MacBride Station;
- Undertaking upgrades to existing signalling, telecoms and power supplies to support the planned increase in train services, including the introduction of new electrical substations at key locations alongside the railway line;
- Undertaking bridge improvements/modifications arising from capacity enhancements, track reconfigurations and/or electrical clearances to achieve necessary clearances;
- Modifications to existing depots at Drogheda and Fairview to support the new train fleet, including the provision of additional train stabling at Drogheda;
- Ancillary civils, drainage and power work to cater for the changes.

DART+ Coastal North

- Extended electrified network
- Increased passenger capacity and enhanced train service
- Improved performance and increased train frequencies in the AM and PM peak travel periods
- Shuttle service along the Howth Branch

Planned increase in train frequency and passenger capacity for the 3-hour AM peak period for inbound/southbound services to Dublin City Centre.



DART+ Coastal North - Benefits

- Increase peak passenger capacity and increased train frequency between Dublin City Centre and Drogheda MacBride Station - inclusive of the Howth Branch – facilitating frequent and reliable transport to the surrounding communities.
- Enhance public transport opportunities for work, education and leisure purposes.
- Facilitate the development and future growth of existing and new communities that will greatly benefit from the connectivity that the DART+ Coastal North project will deliver.
- Help alleviate road congestion.
- Build a sustainable and connected city region, supporting the transition to a low carbon and climate resilient society.
- Facilitate people to make sustainable travel choices by encouraging a move away from private cars to a reliable, efficient and safer public transport network.
- Improve multi-modal transport connectivity through the development of the wider DART+ Programme.
- Improve journey time reliability.





Emerging Preferred Option



DART+ Coastal North – Option Selection Process

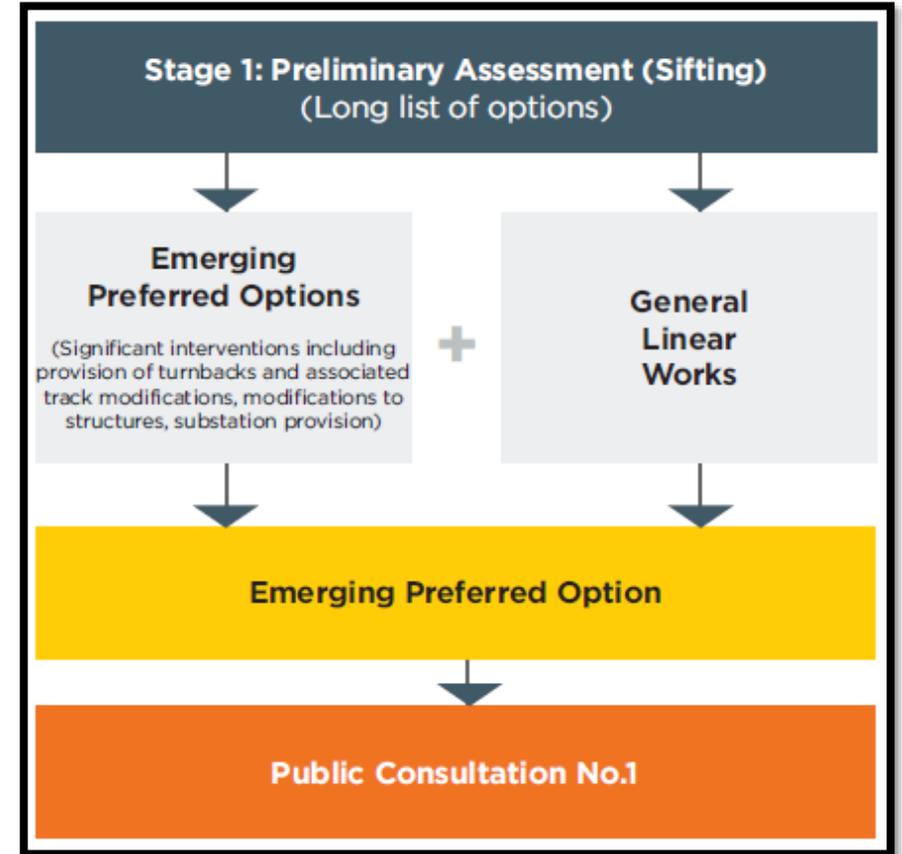
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Stage 1 – Preliminary Assessment (sifting process)

- Assessment of a long list of options against engineering, economic and environmental criteria;
- Evaluation of the ‘feasibility’ of each option to meet the project objectives / requirements;
- Options filtered to a shorter list of feasible options brought forward to Stage 2.

Stage 2 – The Multi-Criteria Analysis

- Detailed, multidisciplinary, comparative analysis of the feasible options from Stage 1 assessment;
- This structured process evaluates a number of different options and is based on ‘Guidelines on a Common Appraisal Framework for Transport Projects and Programmes’ (CAF) published by the Department of Transport March 2016 (updated October 2021);
 - Options have been assessed against the six appraisal criteria - economy, safety, environment, accessibility and social inclusion, integration and physical activity.



DART+ Coastal North

'Emerging Preferred Option (EPO)' Overview

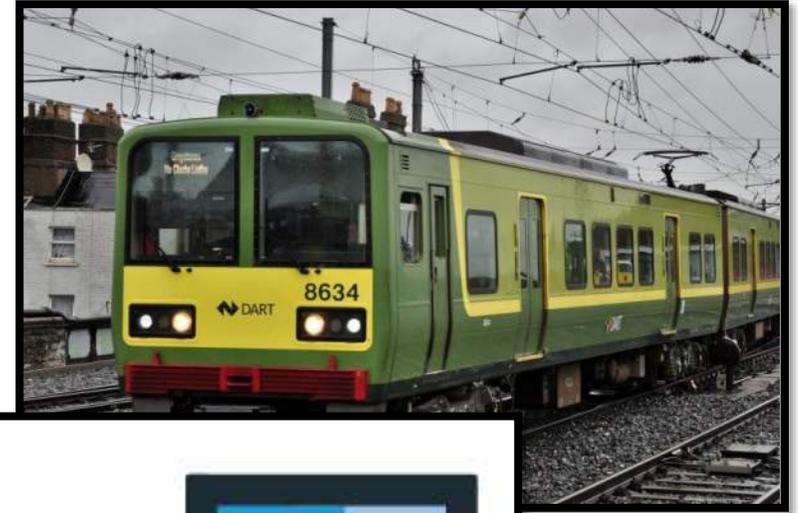
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The Emerging Preferred Option end-to-end for the project can best be described as follows:

- General linear works to facilitate electrification;
- Works around Drogheda MacBride Station;
- Works around Malahide Station;
- Works around Clongriffin Station;
- Works around Howth Junction & Donaghmede Station and the Howth Branch.



DART+ Coastal North – EPO

General linear works to facilitate electrification



Signalling and Telecommunications

- Signalling upgrades and additional signalling required between Malahide and Drogheda;
- Minor changes will be required to signalling between East Wall Junction (Tolka River) and Malahide;
- Upgrades to the telecommunication systems will be required route wide.

Electrification

- Extension from Malahide to just beyond Drogheda MacBride Station. Similar to OHLE currently used on DART network.
- 8 new electrical substations will be required at intervals along the railway line and will be detailed at PC No.2.
- Options being considered where necessary height clearances are not available at structures:
 - Electrical solutions with reduced clearance;
 - Lowering the rail track under the bridge;
 - Modification of the existing structure;
 - Removal of the existing structure;
 - Combination of the above.
- OHLE to be fixed and require localised modifications to underbridges/viaducts at:
 - Malahide Viaduct;
 - Rogerstown Viaduct;
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- Modifications to existing overbridge parapets;
 - Reduced risk of people contacting the OHLE;
- Interfaces with utilities, boundaries, drainage works, ancillary works along the line;
- Existing user worked Level Crossing (XB001) located south of Donabate to be closed.

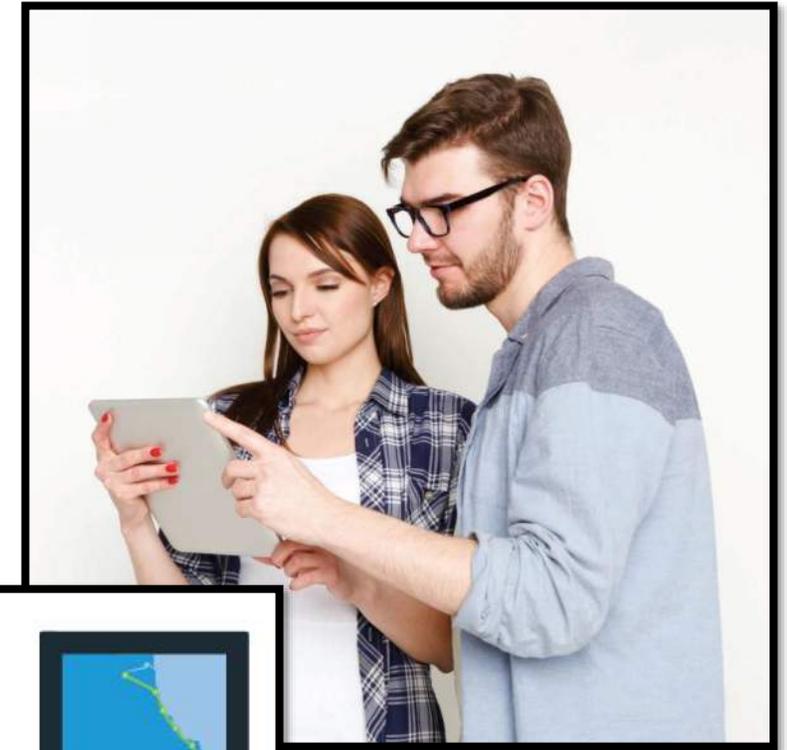


Public Consultation No.1
Briefing to Dublin City Council & Fingal
County Council
Elected Representatives

24.02.2022

Public Consultation No.1 – Briefing.

- Public Consultation No.1 has commenced on DART+ Coastal North;
 - PC No.1 commenced on **February 24th 2022**.
- Consultation will continue for 6 weeks;
 - PC No.1 will conclude on **April 8th 2022**.
- The purpose of the consultation is to seek feedback on the Emerging Preferred Option for DART+ Coastal North;
- The intention of this briefing is to take both Dublin City Council and Fingal County Council through the key elements of the project that are being presented at PC No.1.



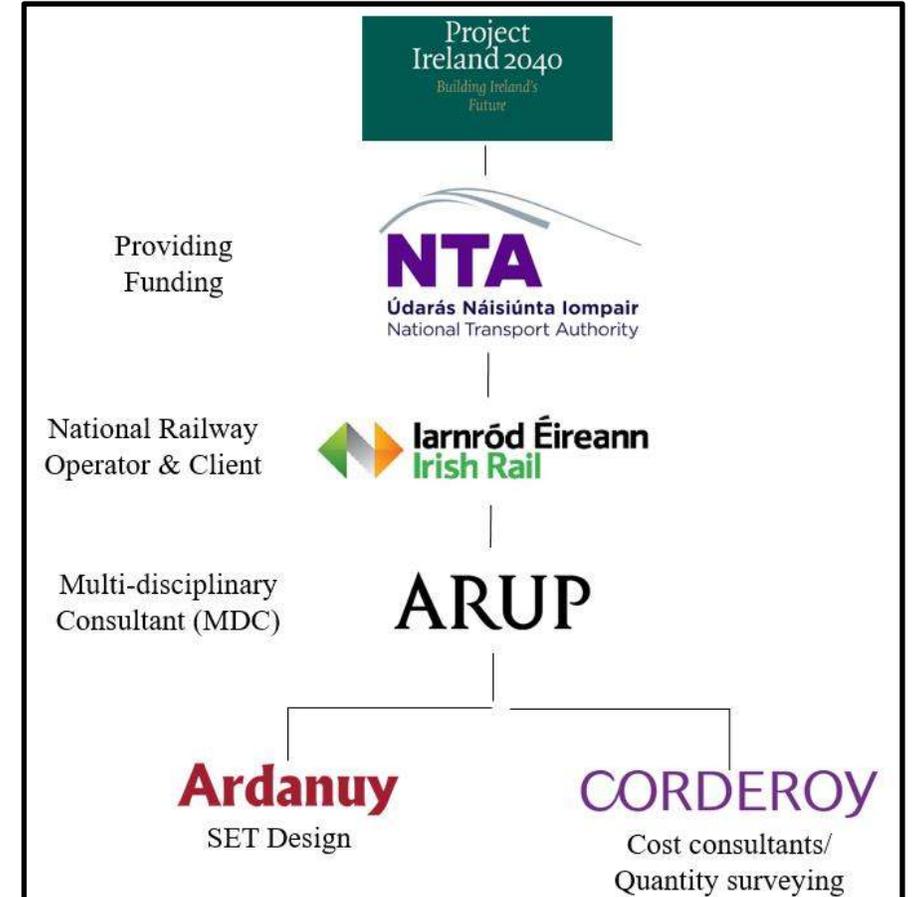
DART+ Coastal North Team

Iarnród Éireann

- Niamh Horan, Communications Manager, DART+ Programme
- Mark Conroy, Environmental Manager, DART+ Programme
- Laura Carolan, EIA Manager, DART+ Coastal North

Arup

- Gillian Sisk, Project Manager, DART+ Coastal North
- Clodagh O'Donovan, RO Manager, DART+ Coastal North



Why investment in DART+ Programme is needed

Provides Sustainable Transport Options

- Over-reliance on private car use and increasing congestion in Greater Dublin Area.
- DART trains are more sustainable and cleaner than current diesel trains.

Achieve Climate Change Targets

- Will help reduce the transport sector greenhouse gas emissions which continue to rise.
- Supporting the Government's Climate Action Plan.



Integration of Land-use & Transport Planning

- Co-ordination and integration of spatial planning with rail transport.
- Supporting compact growth and increased densities in the Greater Dublin Area.
- Supports the implementation of the Project Ireland 2040 and the National Planning Framework.

Facilitates Integration with other modes of transport

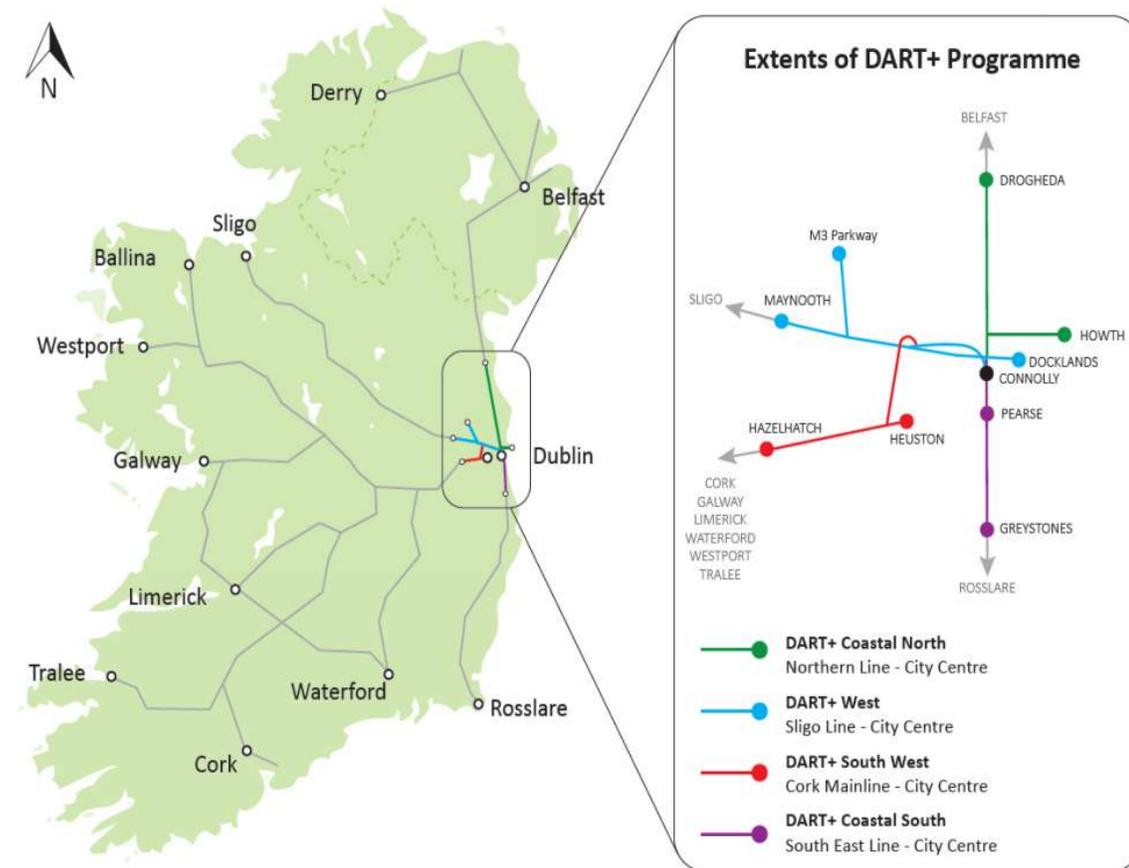
- Improves integration of rail services with active modes of travel (walking and cycling).
- Enables greater cross-modal journeys through improved integration with other modes – Bus, Luas, proposed MetroLink and Dublin Bikes.

Supporting Economic and Population Growth

- Congestion in Greater Dublin Area is increasing.
- Cost of Time Lost in the Dublin Region is - €350million/annum and forecast to rise to €2,000million/annum by 2033.
- Sustainable public transport infrastructure (pedestrian, cycling, bus and rail) will sustain economic and population growth while reducing emissions.

DART+ Programme - Geographical Extents

- Current DART network extends from Malahide/Howth to Greystones along 50km railway corridor;
- DART+ Programme will increase the extent of electrification to 150km of railway corridor;
- DART+ Programme extends to:
 - Maynooth/M3 Parkway on the Sligo Line (DART+ West)
 - Hazelhatch (Celbridge) on the Kildare Line (DART+ South West)
 - Battery Electric Multiple Units (BEMU) charging infrastructure at Drogheda
 - **Drogheda on Northern Line (DART+ Coastal North)**
 - Greystones on the Southeast Line (DART+ Coastal South)
- DART+ Programme will increase the frequency of services on the network and will provide high capacity trainsets.

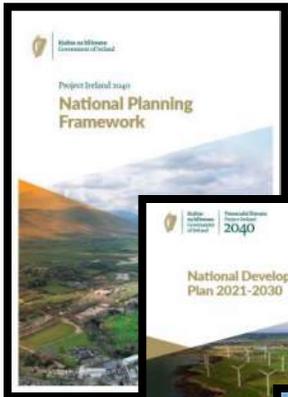


DART+ Programme – Policy Context (National)

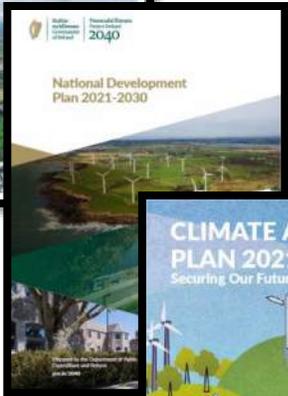
The **DART+ Programme** is a key deliverable of National planning policy and boosts a number of National Strategic Outcomes of the National Planning Framework and Priorities of the National Development Plan (2021-2030)

Relevant National Strategic Outcomes:

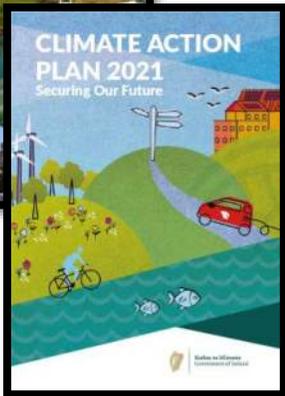
- NSO 1 – Compact Growth
- NSO 4 – Sustainable Mobility
- NSO 8 – Transition to a Low Carbon and Climate Resilient Society



*“Addressing the legacy of rapid unplanned growth, by facilitating amenities and services catch-up, jobs and/or **improved sustainable transport links...**”*



*“infrastructure, in particular **increased investment in public and sustainable transport and supporting amenities**, can act as crucial growth drivers.*



*“... investment in the **DART+ programme will address some of the constraints on the Dublin City Centre rail network** and provide for additional services for intercity rail services”*

Decarbonisation of Public Sector Transport

.... transition the rail fleet towards an electric model, increasing the length of electrified rail network from 50 kilometres to 150 kilometres by 2030, including DART+ project....

DART+ Programme – Policy Context (Regional)

Regional Spatial and Economic Strategy

- **Regional Policy Objective 5.2:**

“Support the delivery of key sustainable transport projects including Metrolink, DART and LUAS expansion programmes”

- **Guiding Principles for the growth of the Dublin Metropolitan Area:**

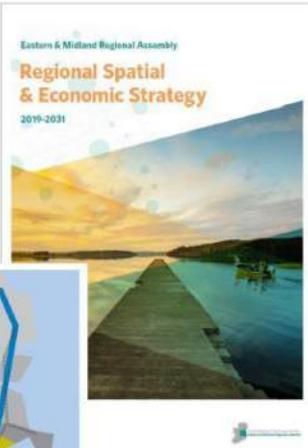
“To focus growth along existing and proposed high quality public transport corridors... and to support the delivery and integration of ‘BusConnects’, DART expansion and LUAS extension programmes.....”

- **RSES Metropolitan Area Strategy:**

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Project Overview





DART+ Coastal North Overview

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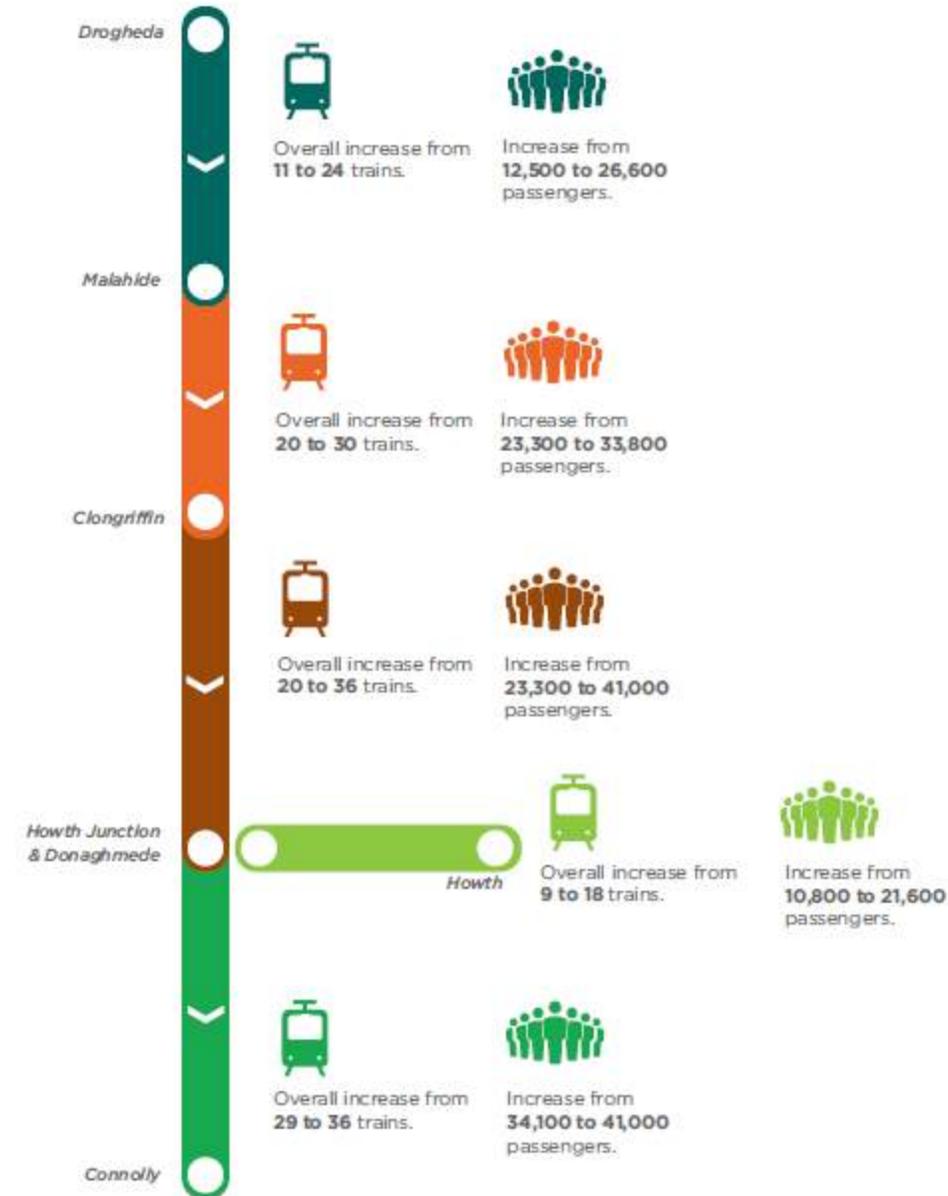
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DART+ Coastal North

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Emerging Preferred Option

DART+ Coastal North – Option Selection Process

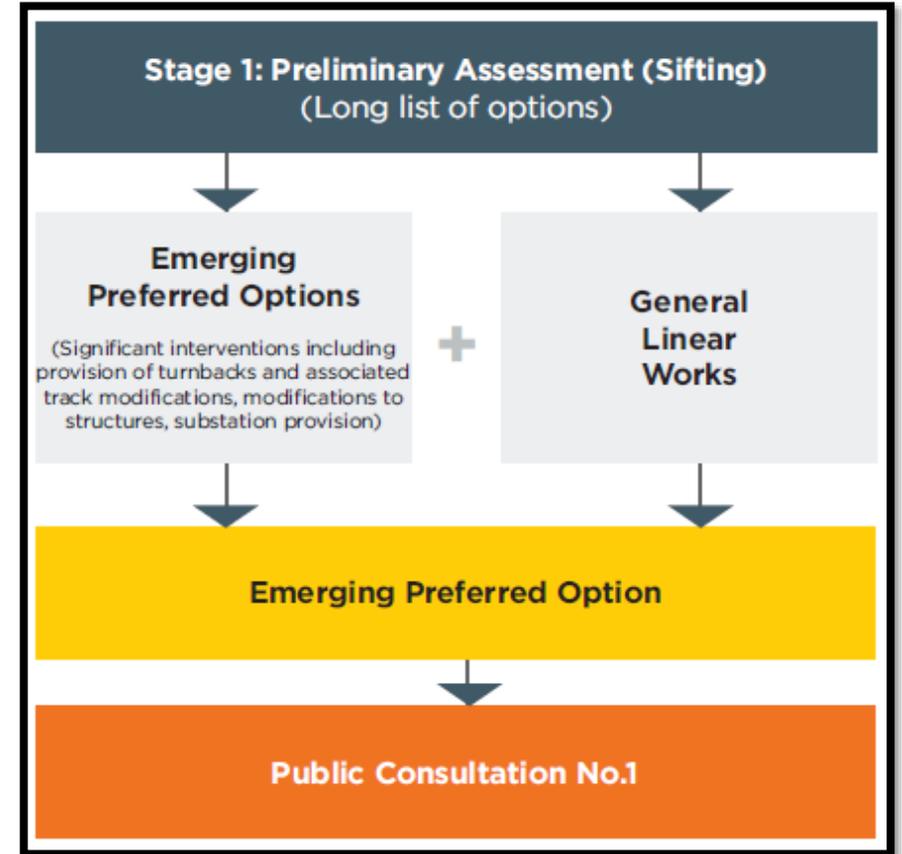
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DART+ Coastal North

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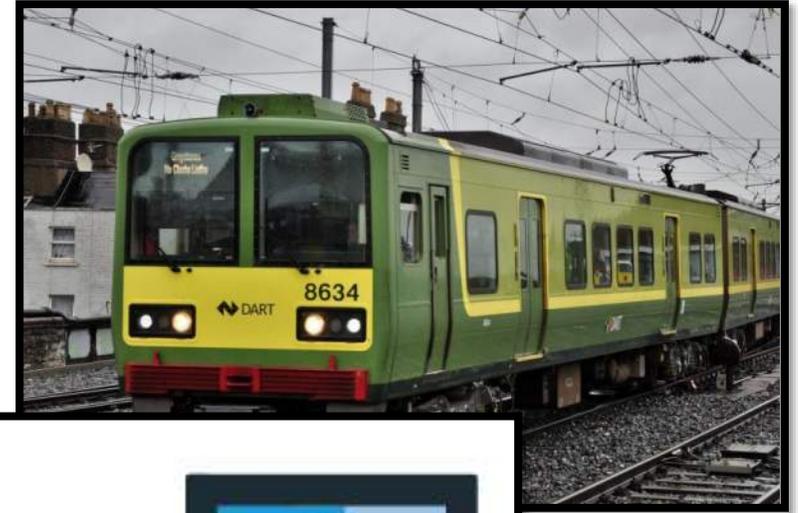
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DART+ Coastal North – EPO

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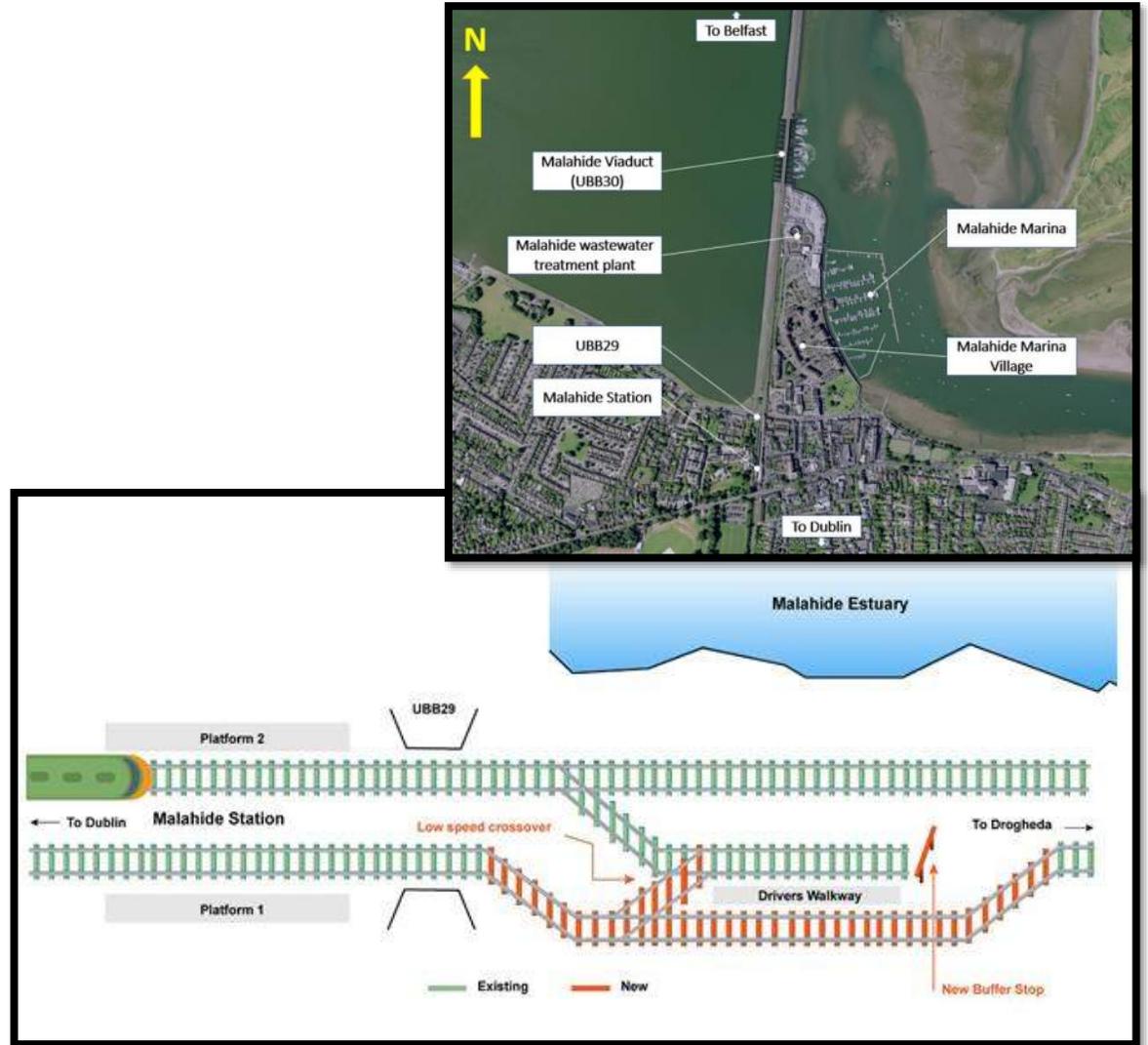
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DART+ Coastal North – EPO Within DCC & FCC

Works around Malahide Station

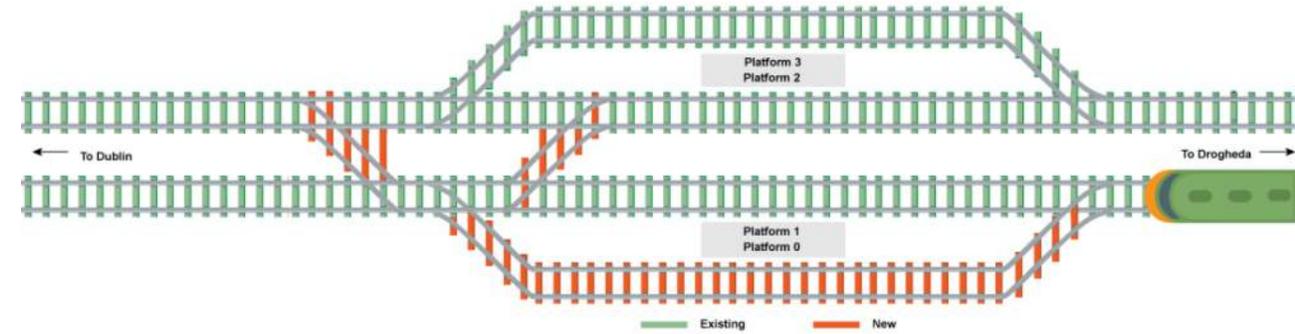
- The emerging preferred option is to introduce a turn back facility immediately north of Malahide Station.
- The works require the widening of the railway corridor along the eastern side of the existing embankment on which it is situated.
 - Achieved by constructing a retaining structure alongside the realigned track
- Widening located to east to avoid impacting the future Broadmeadow Greenway and designated ecological sites.
- Works will allow for a greater number of services to be turned back at Malahide and return to Dublin.
- New OHLE and signalling installations, as well as modifications to the existing systems, will be required.



DART+ Coastal North – EPO Within DCC & FCC

Works around Clongriffin Station

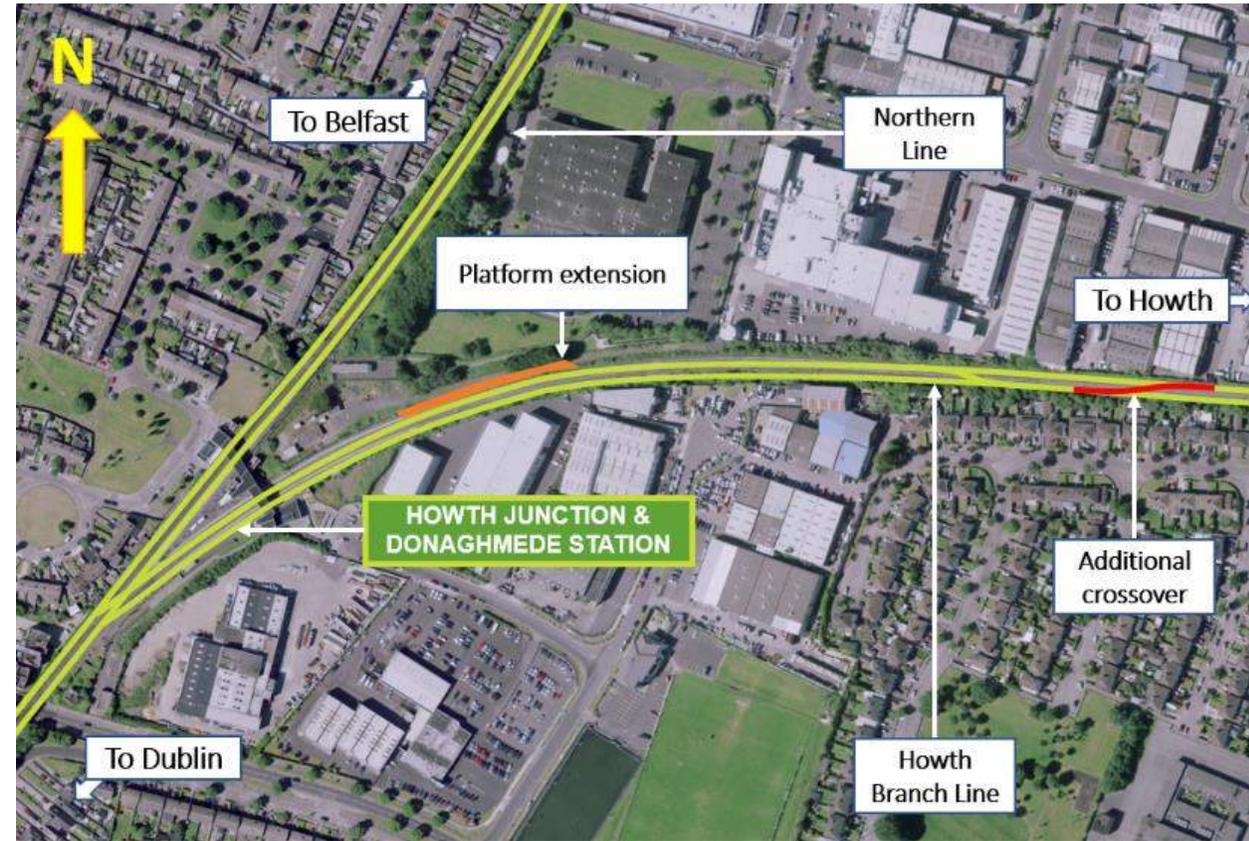
- The emerging preferred option is to introduce a new loop to serve a platform to the east side of Clongriffin station.
- The original station construction anticipated this construction requirement and therefore it will have minimal impact on the station building/existing infrastructure.
- Modifications will be made to the track alignment to the south of the Station to allow trains to access the new platform.
- These works will allow for a greater number of services to be turned back at Clongriffin and return to Dublin.
- New OHLE and signalling installations, as well as modifications to the existing systems, will be required.



DART+ Coastal North – EPO Within DCC & FCC

Works around Howth Junction & Donaghmede Station

- The works around Howth Junction & Donaghmede Station are linked to facilitating increased capacity on the Northern Line and also relate to allowing a greater number of DART services to turn back at the station.
- The emerging preferred option includes construction of an extension to the existing Platform 2 to allow the platform to be used by terminating services from Howth without impacting on services running along the Northern Line.
- Track modifications will be made to include a new crossover to the east of the existing station platforms.
- Alterations and modifications to existing OHLE, signalling and telecoms systems will also be required.
- As the Howth Branch will largely operate as a shuttle service, consideration will be given to what improvements to station facilities will be made to provide a satisfactory customer experience.



DART+ Coastal North – EPO Within DCC & FCC

Malahide, Rogerstown and Balbriggan Viaducts

- Bespoke fixing arrangements for OHLE will be required at some locations where the railway is supported on underbridges, including Malahide, Rogerstown and Balbriggan Viaducts.
- It is envisaged that typical OHLE foundations can be placed either side of underbridges with spans of less than 60m.
- Underbridges with spans exceeding 60m have been assessed based on possible OHLE support arrangements.
- The emerging preferred option for each structure is as follows:
 - UBB30 – Malahide Viaduct – installation of concrete foundations placed beneath the ballast under the tracks which allow a mast to be founded on them approximately at the location of the existing parapet;
 - UBB36 – Rogerstown Viaduct – installation of masts fixed off the existing abutments, either on the face or by replacing the top proportion of the existing stonework with a new concrete foundation;
 - UBB56 – Balbriggan Viaduct – installation of masts fixed off the existing wall located between the walkway and the track by replacing the top proportion of the existing stonework with a new concrete foundation;
- The positioning of OHLE masts along the length of the bridges has been considered, seeking to provide a visually preferable, symmetrical solution.

DART+ Coastal North – EPO Within DCC & FCC

Howth Branch Level Crossings



- The proposed changes to the Howth Branch will see the introduction of infrastructure to enable a shuttle service at regular intervals between Howth and Howth Junction & Donaghmede Stations.
 - Further information will be developed and presented at PC No.2.
- Initial assessment of the four existing level crossings along the Howth Branch line has indicated that these level crossings can continue to operate while still providing a more efficient service overall.
- Further survey and traffic data will be collected to validate the model and assumptions, and this information will be used to establish if the proposal to keep the level crossings in operation is feasible or if more significant interventions are required at the crossings.

DART+ Coastal North – EPO Within DCC & FCC

Level Crossing XB001 – User Worked Level Crossing

- Located close to the Malahide Estuary, south of Donabate, connecting farmlands across the railway;
- Intervention required due to:
 - Increased risk from the electrification of the railway line;
 - Increased risk from greater frequency of trains.
- The Emerging Preferred Option is to close the level crossing and purchase the land east of the railway such that third party access requirements are removed;
- The option presents the opportunity to improve biodiversity/ecological value of the land;
- Option will have no impact on the electrification design, nor will it require modification of signalling systems or structural/geotechnical interventions.



DART+ Coastal North – EPO Within DCC & FCC

Depot Works

- There will be localised works at Fairview Depot to modify the facilities to cater for the change in rolling stock.
- Modifications are predominantly internal to the buildings although they will also encompass some localised exterior changes to some track work and systems.



DART+ Coastal North – Overview of remaining EPO

Works around Drogheda MacBride Station

- The Emerging Preferred Option is to construct a new single platform, that will extend over the Dublin Road Underbridge, on the Drogheda freight siding at Drogheda MacBride Station.

**Works at Drogheda will allow for a greater number of services to be turned back and return to Dublin. Works are linked to facilitating increased capacity and flexibility on the Northern Line.*

Depot Works

- There will be localised works at Drogheda Depot to modify the facilities to cater for the change in rolling stock.
- The depot at Drogheda MacBride Station will be electrified with OHLE.



What's Next?



DART+ Coastal North

Public Consultation



We have commenced Public Consultation No. 1 on the Emerging Preferred Option.

We are asking the public, as potential users of the improved services, and those likely to be affected by its development for their views of our plans to inform the emerging preferred design and help us improve the project.

As the design process advances and the designs are further developed and matured another public consultation will take place.



*Note: Dates to be confirmed.

DART+ Coastal North

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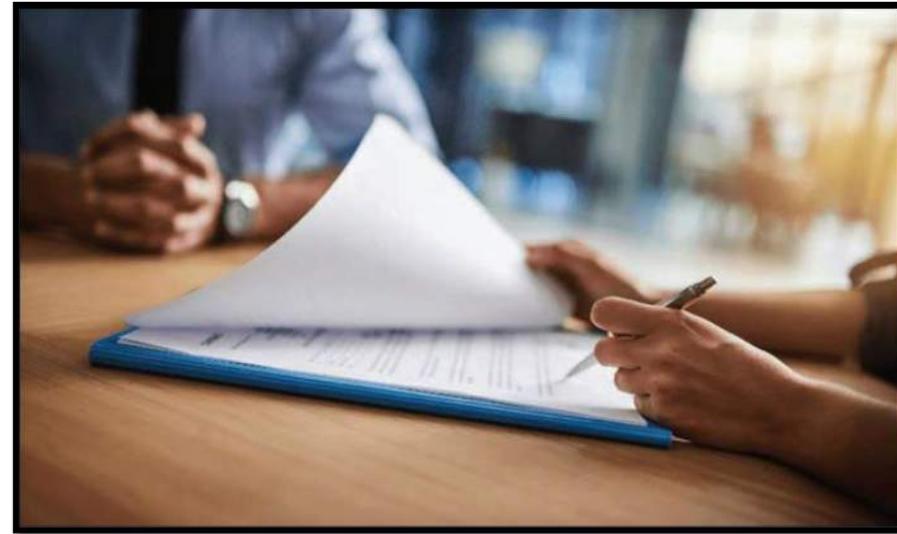
Public Consultation Documentation

- Letters to potentially affected landowners
- Letters to prescribed bodies
- Leaflet to adjacent communities
- Virtual consultation room
 - Multi-media engagement tools
- Dedicated website - www.dartplus.ie
 - Project documentation
 - Brochure
 - Preliminary Options Selection Report
 - Technical documentation



Public Consultation Webinars

- Iarnród Éireann will host a number of public engagement webinars for communities along the route:
 - Residents from Dublin City Centre to Donaghmede area 8th March 2022 @ 19:00hrs
 - Residents from Bayside to Howth area 9th March 2022 @ 19:00hrs
 - Residents from Clongriffin to Malahide area 10th March 2022 @ 19:00hrs
 - Residents from Donabate to Balbriggan area 14th March 2022 @ 19:00hrs
 - Residents from Gormanston to Drogheda area 15th March 2022 @ 19:00hrs



DART+ Coastal North – How People can Engage

Contact via the following means:

Website: www.dartplus.ie

Email: DARTCoastalNorth@irishrail.ie

Phone line: 01 233 4515

Or in writing to:

Community Liaison Officer

DART+ Coastal North,

Iarnród Éireann,

Inchicore Works,

Inchicore Parade,

Dublin 8.

D08K6Y3





DART+ Programme, Legal Statement.

DART+ Programme, Legal Statement

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All press releases in connection with the DART+ Programme will be issued by Iarnród Éireann through its Corporate Communications Department at Connolly Station, Dublin 1 and all requests for information and/or press releases in connection with the DART+ Programme should be routed through our Corporate Communications Department.



Thank You



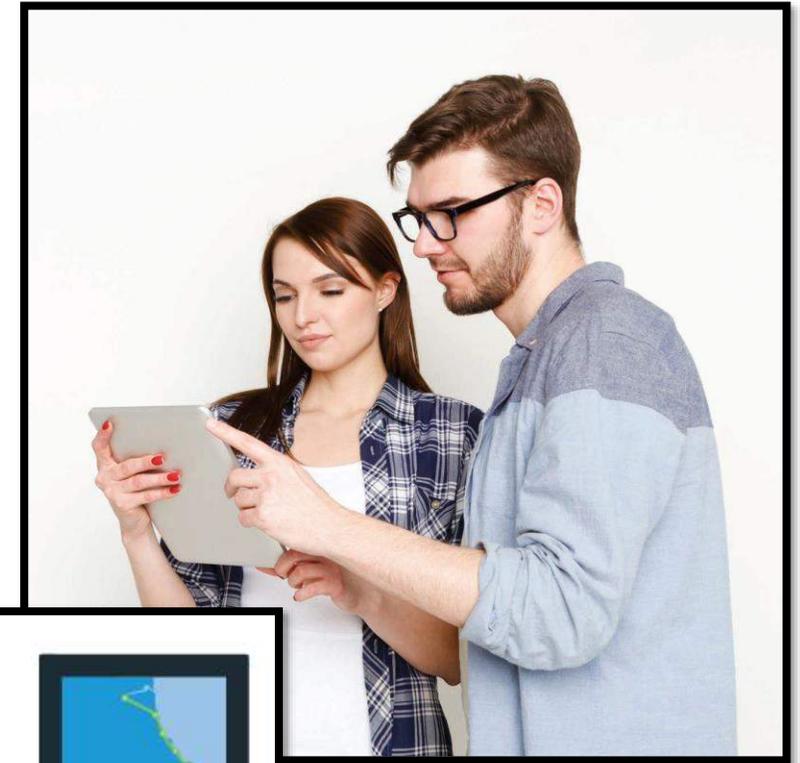


Public Consultation No.1
Briefing to Meath County Council &
Louth County Council
Elected Representatives

24.02.2022

Public Consultation No.1 – Briefing.

- Public Consultation No.1 has commenced on DART+ Coastal North;
 - PC No.1 commenced on **February 24th 2022**.
- Consultation will continue for 6 weeks;
 - PC No.1 will conclude on **April 8th 2022**.
- The purpose of the consultation is to seek feedback on the Emerging Preferred Option for DART+ Coastal North;
- The intention of this briefing is to take both Meath County Council and Louth County Council through the key elements of the project that are being presented at PC No.1.



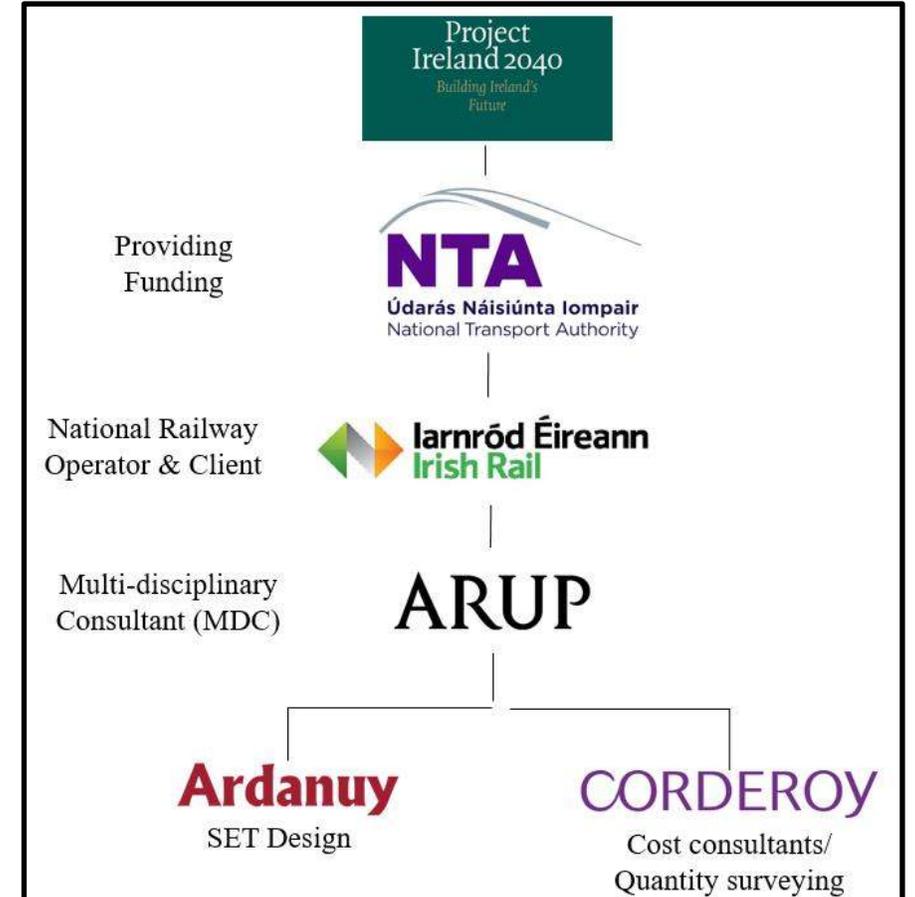
DART+ Coastal North Team

Iarnród Éireann

- Niamh Horan, Communications Manager, DART+ Programme
- Laura Carolan, EIA Manager, DART+ Coastal North

Arup

- Gillian Sisk, Project Manager, DART+ Coastal North
- Clodagh O'Donovan, RO Manager, DART+ Coastal North



Why investment in DART+ Programme is needed

Provides Sustainable Transport Options

- Over-reliance on private car use and increasing congestion in Greater Dublin Area.
- DART trains are more sustainable and cleaner than current diesel trains.

Achieve Climate Change Targets

- Will help reduce the transport sector greenhouse gas emissions which continue to rise.
- Supporting the Government's Climate Action Plan.



Integration of Land-use & Transport Planning

- Co-ordination and integration of spatial planning with rail transport.
- Supporting compact growth and increased densities in the Greater Dublin Area.
- Supports the implementation of the Project Ireland 2040 and the National Planning Framework.

Facilitates Integration with other modes of transport

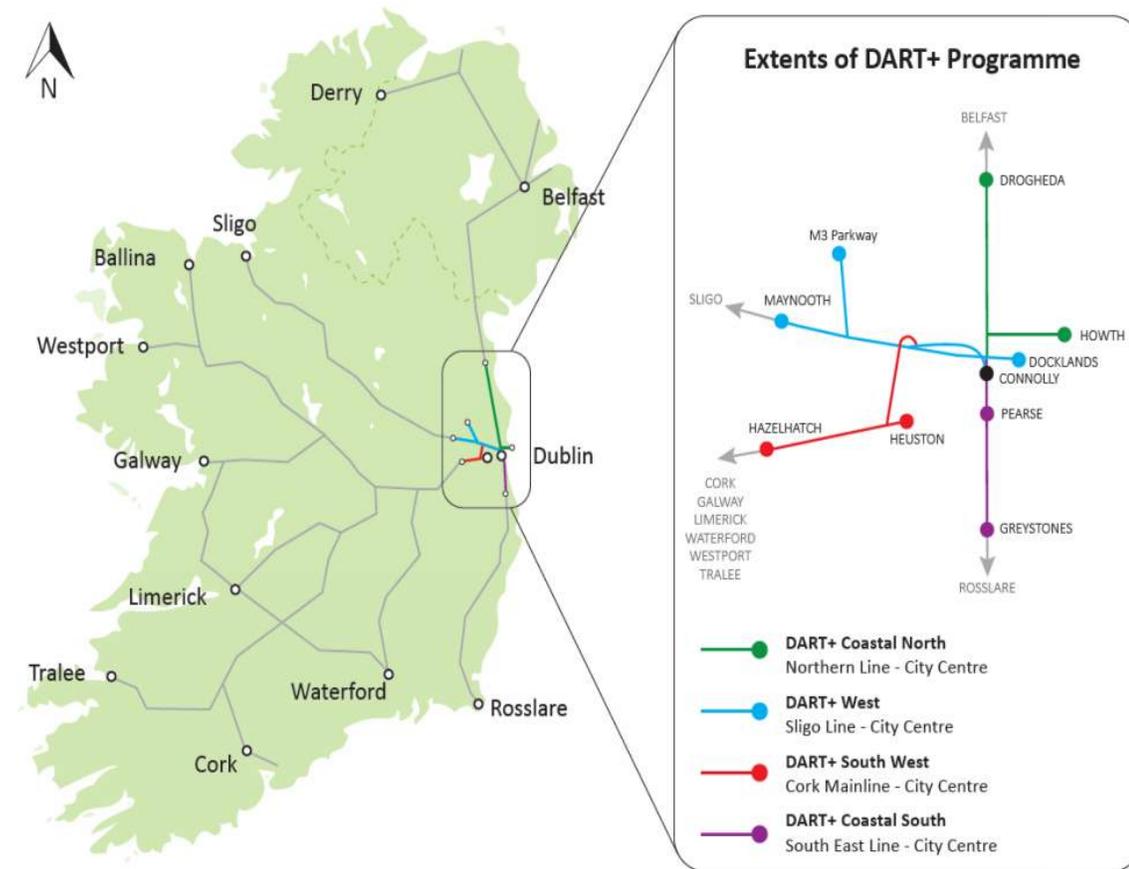
- Improves integration of rail services with active modes of travel (walking and cycling).
- Enables greater cross-modal journeys through improved integration with other modes – Bus, Luas, proposed MetroLink and Dublin Bikes.

Supporting Economic and Population Growth

- Congestion in Greater Dublin Area is increasing.
- Cost of Time Lost in the Dublin Region is - €350million/annum and forecast to rise to €2,000million/annum by 2033.
- Sustainable public transport infrastructure (pedestrian, cycling, bus and rail) will sustain economic and population growth while reducing emissions.

DART+ Programme - Geographical Extents

- Current DART network extends from Malahide/Howth to Greystones along 50km railway corridor;
- DART+ Programme will increase the extent of electrification to 150km of railway corridor;
- DART+ Programme extends to:
 - Maynooth/M3 Parkway on the Sligo Line (DART+ West)
 - Hazelhatch (Celbridge) on the Kildare Line (DART+ South West)
 - Battery Electric Multiple Units (BEMU) charging infrastructure at Drogheda
 - **Drogheda on Northern Line (DART+ Coastal North)**
 - Greystones on the Southeast Line (DART+ Coastal South)
- DART+ Programme will increase the frequency of services on the network and will provide high capacity trainsets.



DART+ Programme – Policy Context (National)

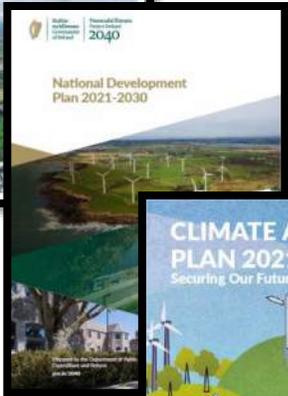
The **DART+ Programme** is a key deliverable of National planning policy and boosts a number of National Strategic Outcomes of the National Planning Framework and Priorities of the National Development Plan (2021-2030)

Relevant National Strategic Outcomes:

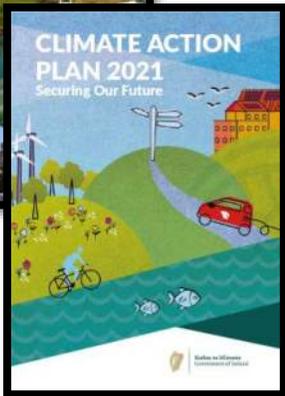
- NSO 1 – Compact Growth
- NSO 4 – Sustainable Mobility
- NSO 8 – Transition to a Low Carbon and Climate Resilient Society



*“Addressing the legacy of rapid unplanned growth, by facilitating amenities and services catch-up, jobs and/or **improved sustainable transport links...**”*



*“infrastructure, in particular **increased investment in public and sustainable transport and supporting amenities**, can act as crucial growth drivers.*



*“... investment in the **DART+ programme will address some of the constraints on the Dublin City Centre rail network** and provide for additional services for intercity rail services”*

Decarbonisation of Public Sector Transport

.... transition the rail fleet towards an electric model, increasing the length of electrified rail network from 50 kilometres to 150 kilometres by 2030, including DART+ project....

DART+ Programme – Policy Context (Regional)

Regional Spatial and Economic Strategy

- **Regional Policy Objective 5.2:**

“Support the delivery of key sustainable transport projects including Metrolink, DART and LUAS expansion programmes”

- **Guiding Principles for the growth of the Dublin Metropolitan Area:**

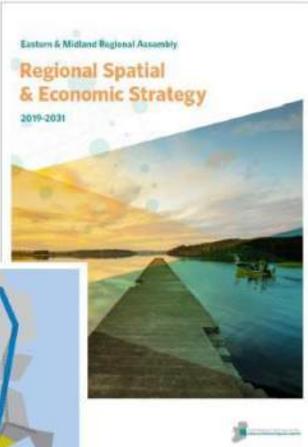
“To focus growth along existing and proposed high quality public transport corridors... and to support the delivery and integration of ‘BusConnects’, DART expansion and LUAS extension programmes.....”

- **RSES Metropolitan Area Strategy:**

“The DART Expansion Programme, to be delivered by 2027 will increase capacity on the northern commuter line and support ongoing large-scale urban expansion of the North Fringe lands and Donabate”

Transport Strategy for the GDA 2016-2035 (Draft Strategy 2022-2042)

- The delivery of the DART+ Programme forms a vital component of the overall rail strategy for the GDA in both the current and draft strategies.
- Iarnród Éireann is progressing all key projects in the Transport Strategy.





Project Overview





DART+ Coastal North Overview

Project Specific Objectives



- To deliver a higher frequency, higher capacity, reliable, electrified route to enable an increased DART service frequency between Drogheda and Dublin City Centre;
- To deliver solutions which improve the passenger experience where passenger infrastructure interventions are required to meet the Train Service Specification (i.e. 'desired' level of service).
- To deliver a sustainable, low carbon and climate resilient design solution including making use of existing infrastructure where possible with targeted improvement works;
- To identify cost-effective solutions from a capital, operations, and maintenance perspective;
- To minimise adverse impacts on the natural and built environment associated with construction, operation and maintenance of the project
- To minimise adverse impacts on existing rail services, road users and landowners associated with the construction, operation and maintenance of the project.
- To provide efficient and cost-effective integration of systems with the other DART+ projects.

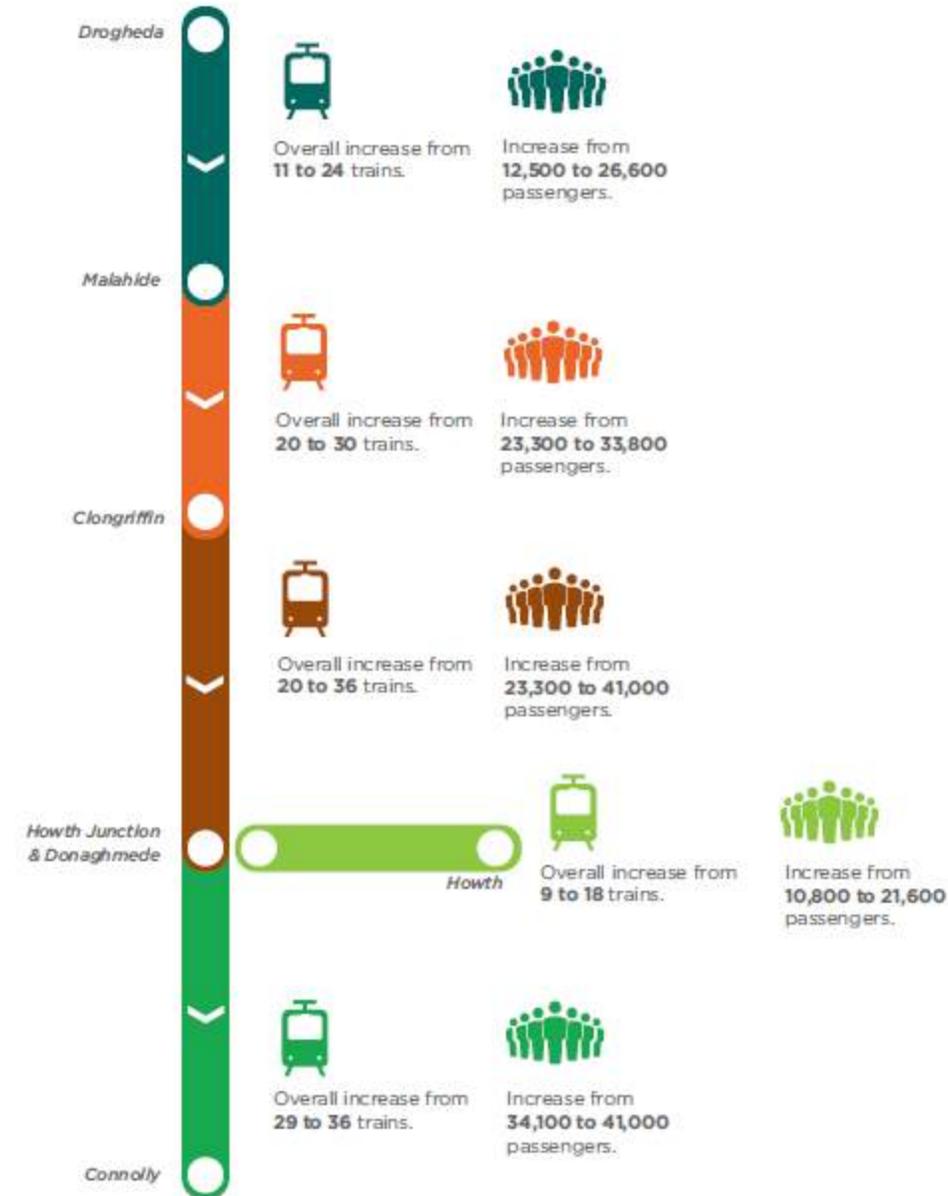
DART+ Coastal North Overview – Key Infrastructural Elements

- Extension of existing 1500V DC electrification, which currently terminates at Malahide, as far as Drogheda MacBride Station (approximately 37km);
- Reconfiguration of the existing track layout and associated infrastructure in the vicinity of Drogheda MacBride Station, Malahide Station, Clongriffin Station and Howth Junction & Donaghmede Station, as well as the provision of sections of additional track and station turnback facilities to allow for improved operational flexibility on the Northern Line;
- Construction of a new platform at Drogheda MacBride Station;
- Undertaking upgrades to existing signalling, telecoms and power supplies to support the planned increase in train services, including the introduction of new electrical substations at key locations alongside the railway line;
- Undertaking bridge improvements/modifications arising from capacity enhancements, track reconfigurations and/or electrical clearances to achieve necessary clearances;
- Modifications to existing depots at Drogheda and Fairview to support the new train fleet, including the provision of additional train stabling at Drogheda;
- Ancillary civils, drainage and power work to cater for the changes.

DART+ Coastal North

- Extended electrified network
- Increased passenger capacity and enhanced train service
- Improved performance and increased train frequencies in the AM and PM peak travel periods
- Shuttle service along the Howth Branch

Planned increase in train frequency and passenger capacity for the 3-hour AM peak period for inbound/southbound services to Dublin City Centre.



DART+ Coastal North - Benefits

- Increase peak passenger capacity and increased train frequency between Dublin City Centre and Drogheda MacBride Station - inclusive of the Howth Branch – facilitating frequent and reliable transport to the surrounding communities.
- Enhance public transport opportunities for work, education and leisure purposes.
- Facilitate the development and future growth of existing and new communities that will greatly benefit from the connectivity that the DART+ Coastal North project will deliver.
- Help alleviate road congestion.
- Build a sustainable and connected city region, supporting the transition to a low carbon and climate resilient society.
- Facilitate people to make sustainable travel choices by encouraging a move away from private cars to a reliable, efficient and safer public transport network.
- Improve multi-modal transport connectivity through the development of the wider DART+ Programme.
- Improve journey time reliability.



Emerging Preferred Option

DART+ Coastal North – Option Selection Process

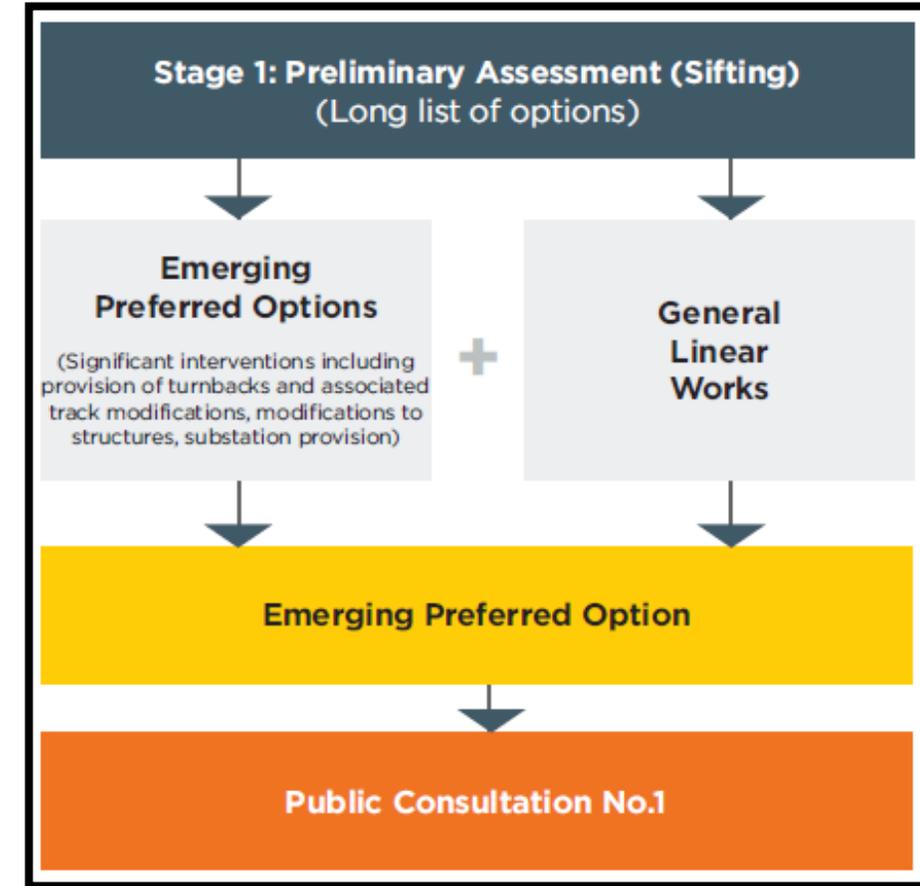
Assessment Methodology

Stage 1 – Preliminary Assessment (sifting process)

- Assessment of a long list of options against engineering, economic and environmental criteria;
- Evaluation of the ‘feasibility’ of each option to meet the project objectives / requirements;
- Options filtered to a shorter list of feasible options brought forward to Stage 2.

Stage 2 – The Multi-Criteria Analysis

- Detailed, multidisciplinary, comparative analysis of the feasible options from Stage 1 assessment;
- This structured process evaluates a number of different options and is based on ‘Guidelines on a Common Appraisal Framework for Transport Projects and Programmes’ (CAF) published by the Department of Transport March 2016 (updated October 2021);
 - Options have been assessed against the six appraisal criteria - economy, safety, environment, accessibility and social inclusion, integration and physical activity.



DART+ Coastal North

'Emerging Preferred Option (EPO)' Overview

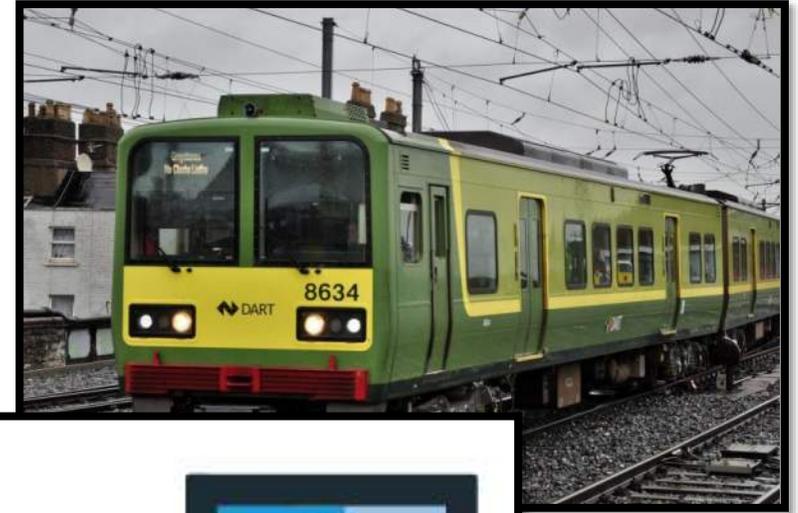
The process to determine the 'Emerging Preferred Option' has been based on a structured optioneering process involving:

Stage 1 – Preliminary Assessment of Options (sifting / removal of options that did not meet the project objectives and requirements), followed by:

Stage 2 – Multi-Criteria Analysis of short-listed options.

The Emerging Preferred Option end-to-end for the project can best be described as follows:

- General linear works to facilitate electrification;
- Works around Drogheda MacBride Station;
- Works around Malahide Station;
- Works around Clongriffin Station;
- Works around Howth Junction & Donaghmede Station and the Howth Branch.



DART+ Coastal North – EPO

General linear works to facilitate electrification



Signalling and Telecommunications

- Signalling upgrades and additional signalling required between Malahide and Drogheda;
- Minor changes will be required to signalling between East Wall Junction (Tolka River) and Malahide;
- Upgrades to the telecommunication systems will be required route wide.

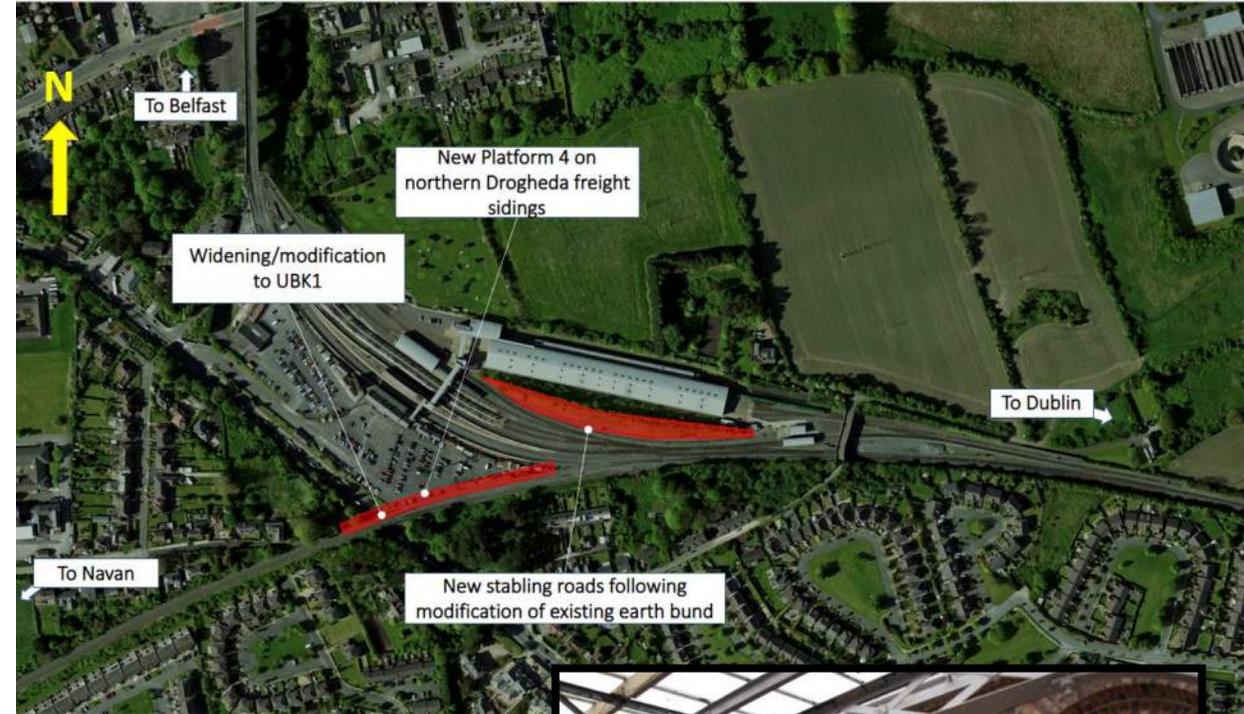
Electrification

- Extension from Malahide to just beyond Drogheda MacBride Station. Similar to OHLE currently used on DART network.
- 8 new electrical substations will be required at intervals along the railway line and will be detailed at PC No.2.
- Options being considered where necessary height clearances are not available at structures:
 - Electrical solutions with reduced clearance;
 - Lowering the rail track under the bridge;
 - Modification of the existing structure;
 - Removal of the existing structure;
 - Combination of the above.
- OHLE to be fixed and require localised modifications to underbridges/viaducts at:
 - Malahide Viaduct;
 - Rogerstown Viaduct;
 - Balbriggan Viaduct;
 - Laytown Viaduct.
- Modifications to existing overbridge parapets
→ Reduced risk of people contacting the OHLE
- Interfaces with utilities, boundaries, drainage works, ancillary works along the line;
- Existing user worked Level Crossing (XB001) located south of Donabate to be closed.

DART+ Coastal North - EPO Within both MCC & LCC

Works around Drogheda MacBride Station

- The Emerging Preferred Option is to construct a new platform on the Drogheda Freight Siding.
 - Platform will extend over the R132 Dublin Road Underbridge (UBK1) necessitating widening of the bridge.
 - At-grade access will be provided between the new platform and the existing Platform 1
 - Direct access to the new platform from the car park will be provided.
- The existing Drogheda freight siding and a new stabling track located adjacent the depot will be utilised to provide additional train stabling at Drogheda MacBride Station.
- The new stabling track will require works to the existing landscape bund.



DART+ Coastal North – EPO Within both MCC & LCC Depot Works

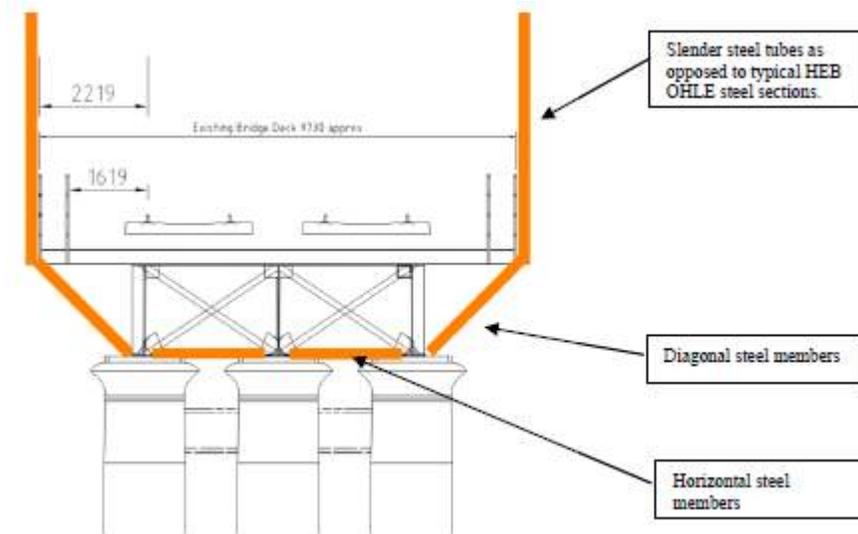
- There will be localised works at Drogheda Depot to modify the facilities to cater for the change in rolling stock.
- Modifications are predominantly internal to the buildings although they will also encompass some localised exterior changes to some track work and systems.
- The depot at Drogheda MacBride Station will be electrified with OHLE.



DART+ Coastal North – EPO Within MCC & LCC

Laytown Viaduct

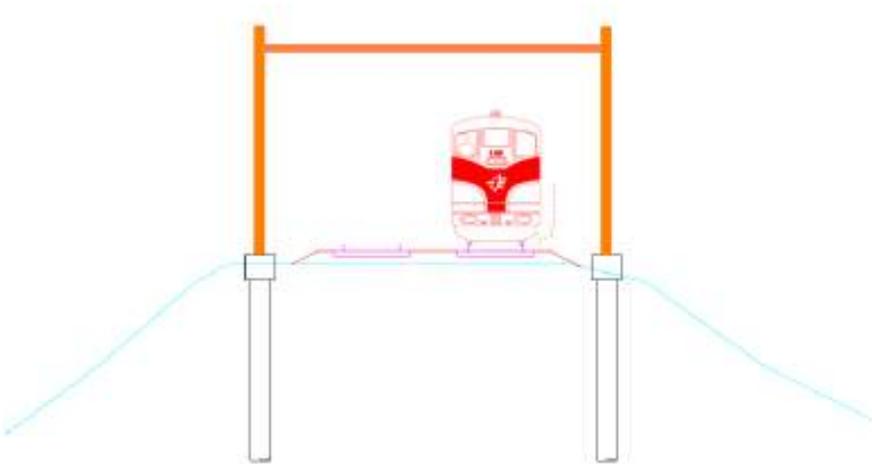
- Bespoke fixing arrangements for OHLE will be required at some locations where the railway is supported on underbridges, including Laytown Viaduct.
- It is envisaged that typical OHLE foundations can be placed either side of underbridges with spans of less than 60m.
- Underbridges with spans exceeding 60m have been assessed based on possible OHLE support arrangements.
- The emerging preferred option for Laytown Viaduct is as follows:
 - UBB72 – Laytown Viaduct – Installation of additional supporting steelwork within the structure to provide sufficient strength for a mast to be fixed.
- The positioning of OHLE masts along the length of the bridges has been considered, seeking to provide a visually preferable, symmetrical solution.



DART+ Coastal North – EPO Within MCC & LCC

Gormanston Viaduct

- Required electrification on the Gormanston Viaduct, a protected structure (UBB65).
- The emerging preferred option on the Gormanston Viaduct is to construct independent supports for the required OHLE.
- Independent OHLE foundations to be constructed at top of the embankment on approach to the bridge.
 - Incurs the least CAPEX and OPEX costs;
 - Has comparable safety advantages over other options for both construction and maintenance;
 - Avoids physical alterations to a protected structure.



DART+ Coastal North – Overview of remaining EPO

Works around Malahide Station

- Works to introduce a turn back facility immediately north of Malahide Station requiring the widening of the railway corridor and the existing embankment.

Works around Clongriffin Station

- Works requiring track modifications to the south of the station that will introduce a new loop to serve a platform to the east side of the station.

Works around Howth Junction & Donaghmede Station

- Works include construction of an extension to the existing Platform 2 and a new crossover to the east of the existing station platforms.

**Works at Malahide, Clongriffin and Howth Junction and Donaghmede Stations will allow for a greater number of services to be turned back and return to Dublin. Works are linked to facilitating increased capacity and flexibility on the Northern Line.*

Howth Branch, Level Crossings

- The works at Howth Junction & Donaghmede Station will enable the use of a shuttle service on the Howth Branch between Howth and Howth Junction & Donaghmede Stations.



What's Next?



DART+ Coastal North

Public Consultation



We have commenced Public Consultation No. 1 on the Emerging Preferred Option.

We are asking the public, as potential users of the improved services, and those likely to be affected by its development for their views of our plans to inform the emerging preferred design and help us improve the project.

As the design process advances and the designs are further developed and matured another public consultation will take place.



*Note: Dates to be confirmed.

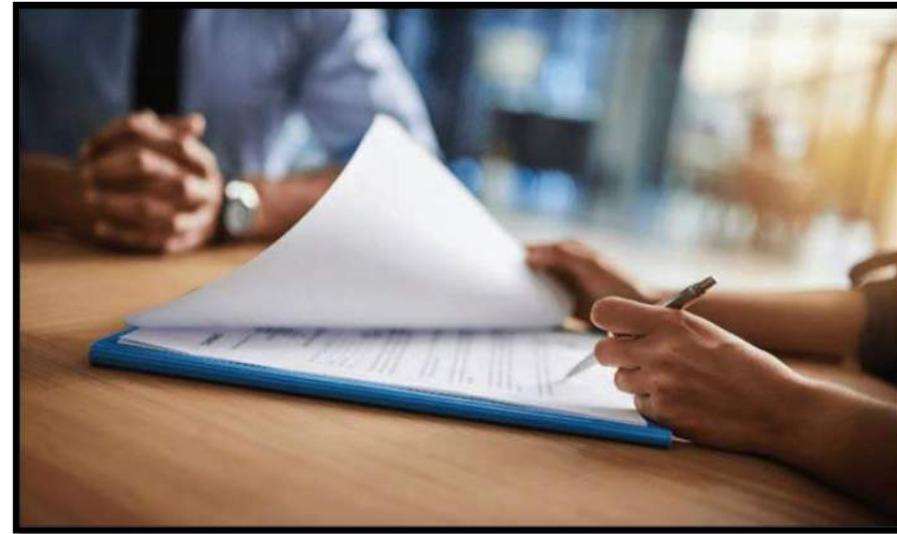
Public Consultation Documentation

- Letters to potentially affected landowners
- Letters to prescribed bodies
- Leaflet to adjacent communities
- Virtual consultation room
 - Multi-media engagement tools
- Dedicated website - www.dartplus.ie
 - Project documentation
 - Brochure
 - Preliminary Options Selection Report
 - Technical documentation



Public Consultation Webinars

- Iarnród Éireann will host a number of public engagement webinars for communities along the route:
 - Residents from Dublin City Centre to Donaghmede area 8th March 2022 @ 19:00hrs
 - Residents from Bayside to Howth area 9th March 2022 @ 19:00hrs
 - Residents from Clongriffin to Malahide area 10th March 2022 @ 19:00hrs
 - Residents from Donabate to Balbriggan area 14th March 2022 @ 19:00hrs
 - Residents from Gormanston to Drogheda area 15th March 2022 @ 19:00hrs



DART+ Coastal North – How People can Engage

Contact via the following means:

Website: www.dartplus.ie

Email: DARTCoastalNorth@irishrail.ie

Phone line: 01 233 4515

Or in writing to:

**Community Liaison Officer
DART+ Coastal North,
Iarnród Éireann,
Inchicore Works,
Inchicore Parade,
Dublin 8.
D08K6Y3**





DART+ Programme, Legal Statement.

DART+ Programme, Legal Statement

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Thank You





Rialtas
na hÉireann
Government
of Ireland
Tionscadal Éireann
Project Ireland
2040



APPENDIX C

Frequently Asked Questions (FAQ's)

Q. How will the local community benefit?

A. *DART+ Coastal North is seeking to increase the frequency and capacity of train services between Drogheda and Dublin City Centre. This can be achieved by introducing electrified, high-capacity DART trains and increasing the frequency of these trains. Delivery of this project will support the existing communities along the railway and support future sustainable development. DART+ Coastal North will serve all existing stations along the route using electrical power that has a lower carbon footprint than the existing diesel trains. The frequency and quality of service will provide a viable transport alternative to communities along the route and will encourage people to switch from private car use. This will assist in Ireland reducing transport related greenhouse gas emissions and help combat climate change. The electrification of the rail line will predominantly follow the existing railway corridor and works will mostly be carried out within the extents of the existing railway corridor.*

Q. What are the main objectives of the DART+ Coastal North project?

A. *The main objectives of the DART+ Coastal North project include delivering a higher frequency, higher capacity, reliable, electrified route to enable an increased DART service frequency between Drogheda and Dublin City Centre. Further information can be found in the project brochure or the project website.*

Q. How long will the public consultation period extend for?

A. *The first public consultation period will continue for a period of 6 weeks. (24th February - 08th April 2022). The second public consultation is scheduled to be held in Autumn 2022.*

Q. What do you mean by shuttle service between Howth and Howth Junction & Donaghmede?

A. *The primary objective of the DART+ Coastal North project is to deliver increased train frequency and capacity between Drogheda and Howth and Dublin City Centre. To support this objective, the project is proposing infrastructure that would enable the use of a shuttle train service on the Howth branch line. If a shuttle service were to operate, the priority would be to maximise capacity during the morning and evening peak 3 hour period, where passengers from Howth, Sutton and Bayside would be required to change trains at Howth Junction and Donaghmede. This proposal has been developed to remove the conflicts currently experienced at Howth Junction & Donaghmede Station which limit the frequency and capacity that can be achieved on the Northern Line. The proposed infrastructure will not prevent a direct service running and it is envisaged that direct services would run at off peak times and weekends. Final operational decisions will be made at a later stage and are subject to passenger demand and train frequency on the Northern Line and Howth Branch.*

Q. How can I voice my thoughts and opinions in relation to the project?

A. *This consultation is our way of asking you, as potential users of the service or those likely to be affected by its development, for your views on our plans. Your local knowledge will inform the emerging design, help us to improve the scheme and ensure it will be a beneficial for you and the communities the route will serve.*

You can engage with us via the following means:

Website | www.dartplus.ie

Email | DARTCoastalNorth@irishrail.ie

Phone line | 01 233 4515

Postal Address

Community Liaison Officer

DART+ Coastal North

Iarnród Éireann

Inchicore Works

Inchicore Parade

Dublin 8

D08K6Y3

Q. How does the Railway Order application process work?

A. *The Railway Order application is essentially an application seeking statutory consent (planning permission and acquisition of land) for the DART+ Coastal North railway infrastructure. The project is categorised as a Strategic Infrastructure Development (SID) and Iarnród Éireann applies directly to An Bord Pleanála for permission. The Railway Order application process is set out in the Transport (Railway Infrastructure) Act 2001 as amended by the Strategic Infrastructure Act 2006. Following the proposed two phases of non-statutory public consultation, Iarnród Éireann will submit the Railway Order application. Any person or body may make a submission or observation in writing to An Bord Pleanála in relation to the application. The Railway Order application will include a number of technical documents and project drawings as well as an Environmental Impact Assessment Report and Appropriate Assessment documentation (AA screening / Natura Impact Statement (NIS)). All these documents and drawings together with any feedback/submissions received from the public as part of the statutory public consultation process will be reviewed and considered by An Bord Pleanála before a decision on the application is made. We expect that An Bord Pleanála will conduct an Oral Hearing before a decision is made. At an Oral Hearing the authors of relevant reports and experts will give evidence on the submissions received and will be available for questioning. Further information on making a submission / observation in writing to the Board and Oral Hearing procedures are available from the An Bord Pleanála website.*

Q. How many extra services will be provided by DART+ Coastal North as a result of the infrastructure upgrade?

A. The scale of increase in services will vary across the extents of DART+ Coastal North. The following increase in services is currently expected to be delivered by the DART+ Coastal North project across the duration of 3-hour peak AM peak period for inbound / southbound services to Dublin City Centre:

- Drogheda to Malahide: 11 to 24 trains
- Malahide to Clongriffin: 20 to 30 trains
- Clongriffin to Howth Junction & Donaghmede: 20 to 36 trains
- Howth Branch: 9 to 18 trains
- Howth Junction & Donaghmede to Connolly: 29 to 36 trains

This overall increase is inclusive of DART, Commuter and Enterprise services. The AM and PM peak periods will be extended from 1 hour to 3 hour periods (i.e. 7-10 AM and 4-7 PM).

Q. What is the timeline for commencement of construction?

A. The commencement of construction is contingent on the timely securing of the Railway Order. DART+ Coastal North remains in the later stages of the concept phase; this will be followed by the preliminary design phase and statutory planning approval phases. When the necessary permissions have been granted, the detailed design and procurement phases will be undertaken. Pending further approvals, the contract award for the construction phase is anticipated to be in 2025.

Q. Is the construction of any new stations included in the DART+ Coastal North Project?

A. The delivery of new stations is not included as part of the DART+ Coastal North project and will be progressed by Iarnród Éireann as separate projects. The 'Emerging Preferred Option' will be compatible with any future development of any potential new stations, such as that proposed at Bettystown in the East Meath Local Area Plan, along the Northern Line.

Q. How close will the new tracks / OHLE / sub-station be to my house/back wall?

A. In general, the track layout along the route will remain predominantly unaltered, therefore trains will be no closer to property boundaries than at present. Track modifications are proposed at specific locations such as Drogheda MacBride, Malahide, Clongriffin and Howth Junction & Donaghmede stations. These required works are currently expected to remain within the extents of the existing railway corridor.

The OHLE infrastructure will follow the alignment of the existing and modified tracks, remaining within the extents of the railway corridor.

It is not yet known where exactly the required substations will ultimately be located. Work on identifying these substation locations is ongoing and potential locations will be presented as part of Public Consultation No. 2.

Q. My house backs on to the existing railway line. What will the impact be for me both during construction and when the service comes into operation?

A. Construction Phase

Given that the line between Connolly and Howth is already electrified, potential construction impacts (from limited interventions) will likely be minimal. Some site-specific interventions will be required between Howth Junction & Donaghmede and Drogheda stations, associated with increasing the rail capacity. Between Malahide and Drogheda, DART+ Coastal North will involve the erection of overhead line infrastructure to facilitate the running of electric trains. In order to maintain services for our customers during the day, the majority of the construction works along the railway line itself will take place at night. Works outside of the live railway corridor can progress during the day i.e. modifications to bridges, construction of substations, construction compounds. Every effort will be made to avoid, reduce, and/or mitigate negative impacts, however, there is likely to be some disturbance experienced for those near the railway line caused by noise, lighting or erected fencing/hoarding associated with the construction activities.

The types of construction work required at each specific location will determine the type of impact that may affect the area/your property. However, there will be general linear works required, such as:

- Overhead electrification equipment along the full extent of the railway line from Malahide to Drogheda. This will be similar in style to that currently used on the existing DART network.*
- Modifications to the existing rail bridges such as modifications to the structure, track lowering or a combination of both.*
- Substations will be required at intervals along the rail line to provide power to the network.*
- Signalling upgrades and additional signalling will be required as part of the upgraded infrastructure.*
- Interfaces with existing utilities, roads, boundary treatments, drainage works, vegetation management and other ancillary works will be required. Prior to the commencement of construction works, a dedicated Community Liaison Officer will be appointed to communicate details of all upcoming works and to oversee the implementation of all required mitigation measures, thereby minimising any potential disruption resulting from the works.*

During the construction phase, residents living in close proximity to any planned works will receive ongoing communication in advance of significant works - i.e. piling or ground penetrating surveys.

Operational Phase

During the operational phase, levels of greenhouse gas emissions are likely to reduce significantly, with a positive impact on climate change. The engine noise from an electric train is also significantly quieter than a diesel train. At certain locations, existing bridge parapets will be raised to prevent people from accidentally or otherwise falling onto Overhead Line Equipment. All likely significant effects during both the construction and operational phases will be identified and detailed in the Environmental Impact Assessment Report. This will include a detailed schedule of mitigation measures identified to reduce those potential effects.

Q. This route goes through some of the most biodiverse locations in the country, how do I know that these environments will not be detrimentally impacted by construction?

A. A specialist Environmental Impact Assessment team has been engaged as part of the overall Multi-Disciplinary Consultant contract. This team will collaborate with the engineering design team during the design development. The environmental team will contribute to assessing the various project options. Prior to the submission of the Railway Order Application, the design development will also be presented to the public at two public consultation events during the project, this is the first of these consultations. This will enable the general public to review and comment on the proposals and provide meaningful feedback on the project, including any environmental issues that they consider important. A comprehensive Environmental Impact Assessment Report will be prepared based on the Preliminary Design. The project will be subject to Appropriate Assessment consideration, as required under the Habitats Directive, which will assess any potential effects on the conservation objectives of European sites. Therefore, at Railway Order Application stage, the project will have assessed the impact of the project on the environment and will provide avoidance, remedy, and mitigation measures to reduce environmental impacts during the construction and operational phases.

Q. Parking is already challenging at some stations along this route, will there be an increase in parking facilities as part of this project?

A. Additional parking facilities at stations are not included as part of DART+ Coastal North's project scope. However, Iarnród Éireann's Network Enhancement Division and the National Transport Authority's Park & Ride Development Office are working on other projects to deliver enhanced parking at stations, for cars and bicycles. These projects are being developed in parallel to DART+ Coastal North.

Q. When will we know what the future timetables will be?

A. A timetable will be designed based upon business and passenger demands nearer to the time of construction completion.

Every substantial timetable change goes through a public consultation process of its own, organised by the NTA, known as the Timetable Customer Consultation Process. Iarnród Éireann are required by the National Transport Authority (NTA) to publish timetable proposals online for customers to comment on and input to the service proposals.

This process is usually live for approximately 3 weeks and takes place a number of months in advance of the proposed timetable changes. Once all inputs are received, they are compiled and reviewed in conjunction with the NTA.

Q. Will there be improved cycling facilities at the existing stations?

A. Additional cycle facilities at stations are not included as part of DART+ Coastal North's project scope. However, Iarnród Éireann's Network Enhancement Division and the National Transport Authority's Park & Ride Development Office are working on other projects to deliver enhanced facilities at stations, for cars and bicycles. These projects are being developed in parallel to DART+ Coastal North.

Q. Will this project definitely go ahead?

A. *As well as Iarnród Éireann being committed to this project, it is provided for in the Programme for Government, the National Development Plan and the Transport Strategy for the Greater Dublin Area. The project will go ahead subject to receipt of funding, granting of the Railway Order approval from An Bord Pleanála and approval of the Project Business Case by Government.*

Q. Is this project dependent on DART Underground going ahead?

A. *No, the project does not depend on any other project in order to advance. The project will link Iarnród Éireann, DART, Dublin Bus, Luas, MetroLink and Dublin Bike services to create a fully integrated public transport system in the Greater Dublin Area. The project team is working closely with the relevant agencies in order to ensure that all current and planned projects can be developed with all due consideration of each other.*

Q. Will trees need to be cut down?

A. *Yes, some trees will need to be cut down to accommodate the new overhead line electrical equipment (OHLE) and infrastructure. The Environmental Impact Assessment Report will consider this issue in detail and provide mitigation measures. Trees and branches from trees overreaching into Iarnród Éireann property will need to be cut down where they may come into contact with OHLE and trains. In cases where land is being acquired it is likely that trees within this land will be felled. All tree clearance will be undertaken in accordance with seasonal constraints and where this is not feasible trees will be examined by an ecologist to determine the presence of nesting birds and bats in advance of any felling or clearance. A landscape plan will be developed for the scheme to mitigate impacts.*

Q. Will there be an Environmental Impact Assessment Report (EIAR)?

A. *Yes, an EIAR will be prepared for the project which will contain detailed analysis of the potential impacts of the proposed project on the existing environment and will include sufficient information to allow the consenting authority, in this case, An Bord Pleanála, to decide on whether consent should be given to the project.*

The EIAR will present a description of the existing environment, an assessment of the potential impacts of the scheme, will set out measures to avoid or reduce any adverse impacts and will identify any remaining residual effects. The impacts will be assessed and presented in line with the environmental topics, and in accordance with Transport (Railway Infrastructure) Act 2001 as amended and the EIA Directive 2014/52/EU.

Q. How/Where will the process of the Public Consultation be communicated?

A. *Information on the DART+ Coastal North project and Public Consultation can be found on www.dartplus.ie. All public consultation launches are further highlighted through in-station posters and a leaflet drop along the project route, briefing of elected representatives, email notification to the project database, targeted digital advertising and advertising in print media and on radio where appropriate. Public feedback will be accepted during all stages of the design development and can be submitted through the project website, e-mail address, phone or by written correspondence. For further details see the How to Engage / Contact Us section on www.dartplus.ie.*

Q. How will the project interact with Active Travel provisions?

A. *Where practicable, DART+ Coastal North will integrate with cycleways, greenways, and other active travel facilities proposed in existing and draft future transport strategies. The DART+ Project Team is actively engaging with the sponsoring authorities for these projects to ensure due consideration is given to them. Any further information will be presented as part of Public Consultation No. 2 to be held in Autumn 2022.*

Q. Are any surveys being done on the DART+ Coastal North route?

A. *A wide range of surveys are required as part of the DART+ Coastal North project. These include, but are not limited to, Topographical Surveys, Ecological and other environmental Surveys, Ground Investigation Surveys.*

Should you have any queries or concerns regarding these surveys please contact the Community Liaison Officer for this Project Garry Keegan at 01 233 4515 or by email at DARTCoastalNorth@irishrail.ie

Q. I am a regular commuter between Drogheda and Connolly, what benefits will DART+ Coastal North deliver for me?

A. *The DART+ Coastal North project, as part of the DART+ Programme, will deliver an improved electrified network, with increased passenger capacity and enhanced train service between Dublin City Centre and Drogheda. The project will provide the infrastructure to deliver a planned increase in train frequency from 11 to 24 trains, and a planned increase in passenger capacity from 12,500 to 26,600 passengers, for the new 3-hour AM peak period for inbound / southbound services from Drogheda to Dublin City Centre.*

DART+ Coastal North will provide a sustainable, electrified and a more reliable train service. The electrification of the Northern Line to Drogheda will support building a sustainable and connected City Region and facilitate the transition to a low carbon and climate resilient society.

Q. How will the Drogheda capacity enhancement be achieved?

A. *DART+ Coastal North is seeking to extend the existing electrified rail network from Malahide to Drogheda as well as increasing rail capacity on the Northern Line between Dublin City Centre and Drogheda MacBride Station, including the Howth Branch. This increased rail capacity can be achieved by implementing an extended electrified railway network with high-capacity DART trains and an increased frequency of train services. In addition, the DART+ Coastal North project requires that some track modifications are implemented, including the provision of turnback facilities at Malahide, Clongriffin and Howth Junction & Donaghmede Stations. These modifications are essential to facilitate the increase in train services by allowing trains to be turned back clear of continuing services and to allow for a higher frequency and a more reliable service.*

Q. I am a regular commuter between Howth and Connolly, what benefits will DART+ Coastal North deliver for me?

A. The DART+ Coastal North project, as part of the DART+ Programme, will deliver an improved electrified network, with increased passenger capacity and enhanced train service between Dublin City Centre and Drogheda.

To achieve the peak capacity increases proposed by the DART+ Programme, DART+ Coastal North will seek a reconfiguration of Howth Junction & Donaghmede Station and the removal of crossing conflicts at the station. These works will enable the use of a shuttle DART operation between Howth and Howth Junction & Donaghmede stations which will maximise train frequency and reliability on the Northern Line. The interchange at Howth Junction & Donaghmede station will be facilitated by an increase in Northern Line stopping trains.

The removal of crossing conflicts at Howth Junction will also result in a more frequent and reliable Howth Branch DART service with frequency of service increasing to every ten minutes each way, with a change at Howth Junction to access the Northern Line. This would represent an increase in train frequency to a maximum of 18 trains in a 3-hour AM peak period per direction from the current 9 trains.

Initial assessment of the four existing level crossings along the Howth Branch line has indicated that these level crossings can continue to operate while still providing a more efficient service overall.

By removing the crossing conflicts, and running a shuttle service on the Howth Branch, the interchange at Howth Junction & Donaghmede Station will facilitate a planned increase in train frequency of 29 to 36 trains and a planned increase in passenger capacity of 34,100 to 41,000 passengers between Howth Junction & Donaghmede and Dublin City Centre.

Final operational decisions lie with Irish Rail and will be made subject to demand requirements and assessment.

DART+ Coastal North will provide a sustainable, electrified and a more reliable train service. The electrification of the Northern Line to Drogheda will support building a sustainable and connected City Region and facilitate the transition to a low carbon and climate resilient society.

Q. How will more trains on the Howth Branch affect vehicles and pedestrians/cyclists waiting at the level crossings?

A. The assessment of the impact of proposed upgrades to the Howth Branch on pedestrians and cyclists at level crossings has shown the change to be slightly positive.

Further detail on the modelling can be viewed in the PC1 published materials.

Q. Are level crossings likely to be affected by DART+ Coastal North?

A. An existing user worked Level Crossing (XB001) located to the south of Donabate Station is to be closed as a part of DART+ Coastal North. This is as a result of the introduction of electrification and increase in train frequency on the Northern Line which significantly increases the safety risks at this level crossing to users of the crossing and to rail traffic. Level crossings on the Howth Branch are not currently expected to close, initial assessment of the four existing level crossings on the Howth Branch line has indicated that these level crossings can continue to operate while still providing a more efficient and optimised service overall.

Q. Can you advise the proposed DART journey times from Drogheda to Dublin City Centre resulting from the proposed changes to the services?

A. Whilst the technical characteristics of the new DART+ Fleet are still being finalised it is expected a circa 50 minutes all stop run time should be comfortably achieved. Today, the commuter service running between Drogheda and Connolly varies but it can take over one hour.



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APPENDIX D

Virtual Exhibition Room Boards



Public Consultation No.1

Emerging Preferred Option

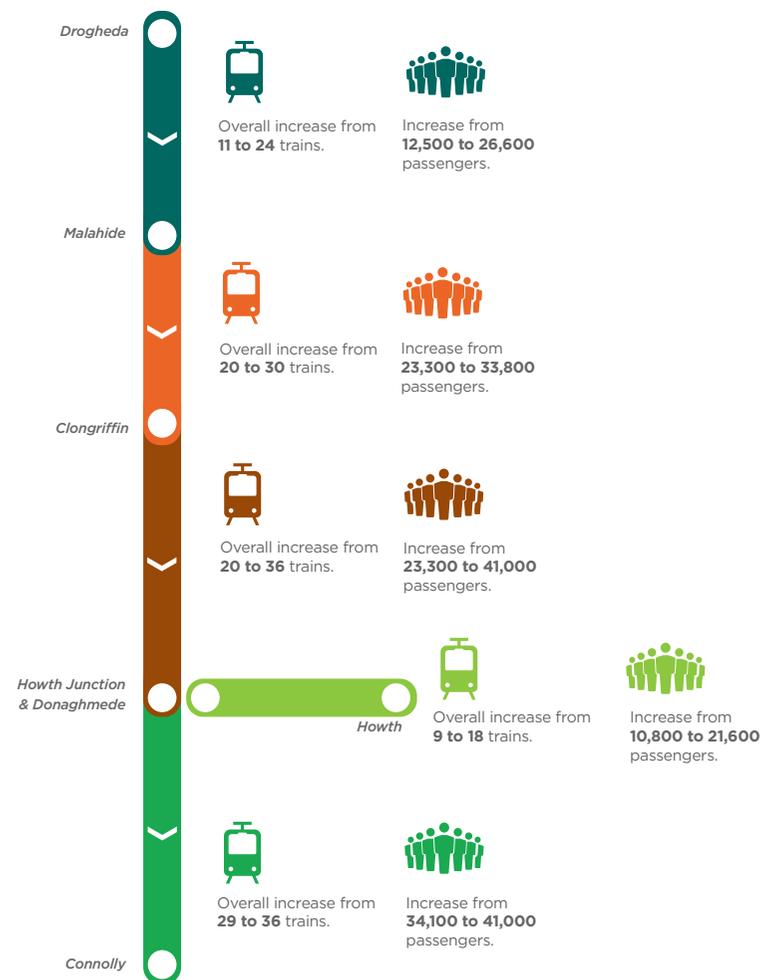
What is DART+ Coastal North

The DART+ Coastal North project, as part of the DART+ Programme, will deliver an improved and extended electrified network, with increased passenger capacity and enhanced train service between Dublin City Centre and Drogheda, including the Howth Branch.

The project will predominantly follow the existing railway corridor and will include the installation of overhead electrification of the existing railway line between Malahide and Drogheda. It will also entail some reconfiguration of the existing track layout and infrastructure in the vicinity of Drogheda MacBride, Malahide, Clongriffin, and Howth Junction & Donaghmede Stations. The majority of proposed works and interventions are expected to be carried out within the existing railway corridor boundary. Some works relating to the provision of new electrical substations and bridge modifications may be required outside of the existing boundary.

The DART+ Coastal North project will improve performance and increase train frequency in the AM and PM peak travel periods along the Northern Line, providing enhanced capacity from the city centre to Drogheda.

Delivery of the DART+ Coastal North project will support existing communities along the railway and support future sustainable development. The project will serve all existing stations along the railway corridor between Dublin City Centre and Drogheda MacBride Station, including those located on the Howth Branch, with electric powered trains that have a lower carbon footprint than the existing diesel trains. The frequency and quality of service will provide a viable transport alternative to communities along the route and help encourage people to migrate from private car use. This will assist Ireland in reducing greenhouse gas emissions and help combat climate change.



Planned increase in train frequency and passenger capacity for the 3-hour AM peak period for inbound/southbound services to Dublin City Centre.

Benefits of DART+ Coastal North



Increase peak passenger capacity and increased train frequency between Dublin City Centre and Drogheda MacBride Station - inclusive of the Howth Branch - facilitating frequent and reliable transport to the surrounding communities.



Enhance public transport opportunities for work, education and leisure purposes.



Facilitate the development and future growth of existing and new communities that will greatly benefit from the connectivity that the DART+ Coastal North project will deliver.



Alleviate road congestion.



Build a sustainable and connected city region, supporting the transition to a low carbon and climate resilient society.



Facilitate people to make sustainable travel choices by encouraging a move away from private cars to a reliable, efficient and safer public transport network.



Improve multi-modal transport connectivity through the development of the wider DART+ Programme.



Improve journey time reliability.

DART+ Coastal North Map



- Existing Stations
- Locations of Proposed Interventions
- Proposed Electrification
- Existing Electrification

Key Infrastructural Elements

The key infrastructural elements of the DART+ Coastal North project includes:

- Extension of existing 1500V DC electrification, which currently terminates at Malahide, as far as Drogheda MacBride Station (approximately 37km);
- Reconfiguration of the existing track layout and associated infrastructure in the vicinity of Drogheda MacBride Station, Malahide Station, Clongriffin Station and Howth Junction & Donaghmede Station, as well as the provision of sections of additional track and station turnback facilities to allow for improved operational flexibility on the Northern Line;
- Construction of a new platform at Drogheda MacBride Station;
- Undertaking upgrades to existing signalling, telecoms and power supplies to support the planned increase in train services, including the introduction of new electrical substations at key locations alongside the railway line;
- Undertaking bridge improvements/modifications arising from capacity enhancements, track reconfigurations and/or electrical clearances to achieve necessary clearances;
- Modifications to existing depots at Drogheda and Fairview to support the new train fleet, including the provision of additional train stabling at Drogheda;
- Ancillary civils, drainage and power work to cater for the changes.



Emerging Preferred Option

The DART+ Coastal North project includes general linear works required along the full length of the project to enable the extended electrification of the railway line. There will be specific interventions, predominantly at stations, aimed at facilitating increased frequency and improved reliability of DART services. Additional train turn back facilities will be introduced to enable an increased frequency of service as part of DART+ Coastal North. For the purposes of describing the Emerging Preferred Option, the project corridor is divided into the following sections:

General Linear Works

A range of general linear works are required to modernise and electrify the existing railway line between Malahide and Drogheda as part of DART+ Coastal North including additions of, and upgrades to, signalling and telecommunications infrastructure project wide.

An extension of electrification equipment (OHLE) will be required by DART+ Coastal North as well as the introduction of 8 new substations and localised bridge modifications to facilitate the introduction of OHLE. Modification of some bridge parapets and additional boundary treatments will be required to ensure that the safety of the public is maintained.

Works around Drogheda MacBride Station

The Emerging Preferred Option is to construct a new single platform, that will extend over the Dublin Road Underbridge, on the Drogheda freight siding at Drogheda MacBride Station. These works will allow for a greater number of services to be turned back at Drogheda and return to Dublin.

Works around Malahide Station

The Emerging Preferred Option is to introduce a turn back facility constructed on the eastern side of the existing tracks, immediately north of Malahide Station requiring the widening of the railway corridor and the existing embankment on which it is situated. These works will allow for a greater number of services to be turned back at Malahide and return to Dublin.

Works around Clongriffin Station

The Emerging Preferred Option is to introduce a new loop to serve a platform to the east side of the station. Modifications will be made to the track alignment to the south of the station to allow trains to access the new platform. These works will allow for a greater number of services to be turned back at Clongriffin and return to Dublin.

Depot Works

There will be localised works at Drogheda and Fairview Depots to modify the facilities to cater for the change in rolling stock.

Works around Howth Junction & Donaghmede Station

The works around Howth Junction and Donaghmede Station are linked to facilitating increased capacity on the Northern Line and also relate to allowing a greater number of DART services to turn back at the station.

The Emerging Preferred Option includes construction of an extension to the existing Platform 2 to allow the platform to be used by services from Howth without impacting on services running along the Northern Line.

Track modifications will be made to include a new crossover to the east of the existing station platforms.

Howth Branch, Level Crossings

The infrastructure outlined above at Howth Junction & Donaghmede Station will enable the use of a shuttle service on the Howth Branch between Howth and Howth Junction & Donaghmede Stations.

Initial assessment of the four existing level crossings along the Howth Branch line has indicated that these level crossings can continue to operate while still providing a more efficient service overall.

Public Consultation Process

Public participation during the design process is a key element to the delivery of major infrastructure projects, such as DART+ Coastal North.

Public Consultations are our way of asking you, as potential users of the improved services or those likely to be affected by its development, for your views on our plans, whilst the design process is active. Your local knowledge and comments will inform the design and help us improve the project, ensuring it will be a success for you and the communities it will serve.

This project has two non-statutory Public Consultations and one Statutory Consultation Period as part of the Railway Order application process. This current consultation is Public Consultation No. 1 seeking feedback on the **'Emerging Preferred Option'**.

- Public Consultation No.1 Emerging Preferred Option – **Current Stage**
- Public Consultation No.2 Preferred Option (Autumn 2022*)
- Statutory Consultation Period as part of the Railway Order application process (Spring 2023*)

*Note: Dates to be confirmed

Iarnród Éireann invites you to engage in the design process and all feedback is welcome. Your feedback will be accepted during all stages of the design development and can be submitted through the project website, e-mail address, phone line or by written correspondence.

For further details on how to submit your feedback please see the **'How to Engage'** section or visit our website www.dartplus.ie.

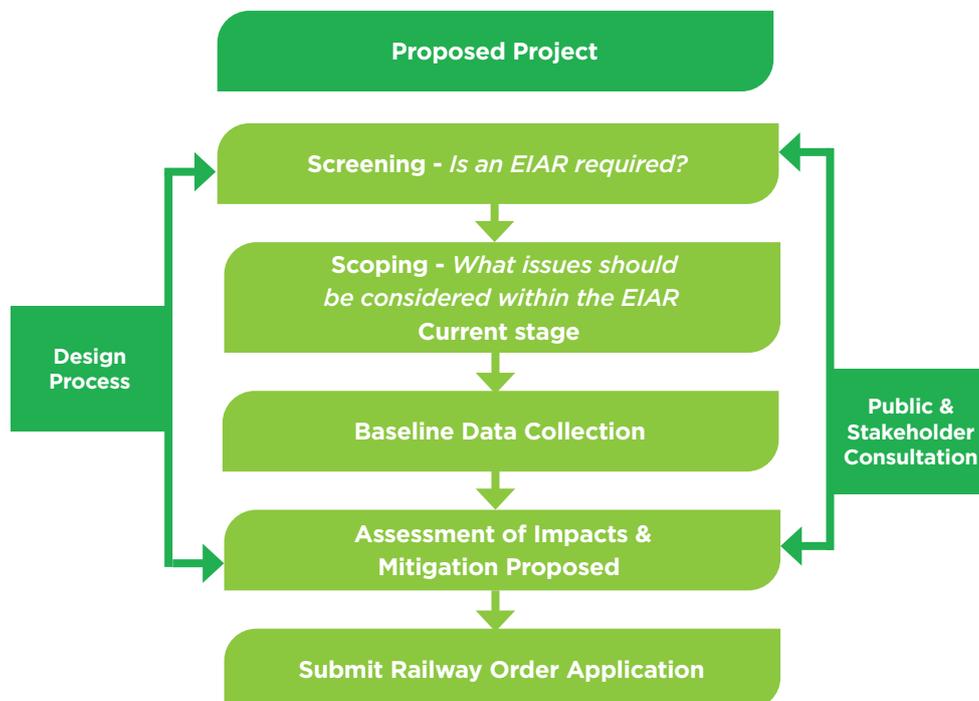
Next Steps

Feedback received during this public consultation will be considered and will inform the development of the 'Preferred Option' which will be presented at a later Public Consultation event scheduled for Autumn 2022.

The options selection and early stage design development that has been undertaken has led to the development of the **'Emerging Preferred Option'** which is the focus of this public consultation stage.

When this public consultation process on the **'Emerging Preferred Option'** closes, all feedback and submissions received will be reviewed and assessed as part of the next stage of the design development. Following a full appraisal of the feedback, a public consultation report will be prepared to document this process and it will be included in an Emerging Preferred Route Public Consultation Findings Report (to be presented at Public Consultation No. 2).

The feedback and inputs gathered from the public during this consultation process, along with further assessment and design development, will inform the project development process allowing for the **'Emerging Preferred Option'** to be refined and the **'Preferred Option'** to be determined. All information gathered by the project team will be used to inform the design development of the project which will be the subject of the Environmental Impact Assessment Report (EIAR) and Appropriate Assessment (AA) (if required), and ultimately the Railway Order application will be submitted to An Bord Pleanála.



The EIA Process leading to submission of Railway Order to An Bord Pleanála

How to Engage

The project team would like to hear your views on the ‘Emerging Preferred Option’ to inform us in the development of the project.

We welcome your feedback on any issues or information, related to the project, which you think should be considered by the project team in progressing the ‘Preferred Option’.

All project information, including maps and reports are available to view on the project website.

The DART+ Coastal North project team are available to answer any of your questions and to assist you regarding the project via the following means:

Website | www.dartplus.ie

Email | DARTCoastalNorth@irishrail.ie

Phone line | (01) 233 4515

Postal Address

If you would prefer to write to us, please send any correspondence to:

Community Liaison Officer

DART+ Coastal North

Iarnród Éireann

Inchicore Works

Inchicore Parade

Dublin 8

D08K6Y3

All feedback for Public Consultation No. 1 should be returned to the project team by the **8th April 2022**.





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APPENDIX E

DART+ Coastal North Brochure



PUBLIC CONSULTATION NO. 1 BROCHURE

EMERGING PREFERRED OPTION

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01

Introduction to
DART+ Programme

1. Introduction to DART+ Programme

The current DART network is 50km long, extending from Malahide / Howth to Greystones. The DART+ Programme will increase the length of the DART network to 150km of railway corridor through the electrification and upgrade of existing lines, transforming commuter train travel in the Greater Dublin Area (GDA). The DART+ Programme also includes the purchase of a new train fleet. The DART+ Programme will deliver frequent, modern, electrified services from Dublin City Centre to:

- Maynooth, M3 Parkway (DART+ West);
- Hazelhatch & Celbridge (DART+ South West);
- Drogheda (DART+ Coastal North); and
- Greystones (DART+ Coastal South).

The DART+ Programme is a key transportation improvement to form a high quality and integrated public transport system. It will deliver benefits for the residents of the Greater Dublin Area and also those living in surrounding regions. The DART+ Programme is the transformative programme that will ensure train travel is at the heart of Ireland's sustainable transport network.

DART+ Programme will seek to maximise use of the existing railway corridors and implement a modernisation programme to achieve the capacity increase necessary to meet current and future demands.





Schematic diagram of DART+ Programme extent

Why investment in DART+ Programme is needed

Provides Sustainable Transport Options

- Over-reliance on private car use and increasing congestion in Greater Dublin Area.
- DART trains are more sustainable and cleaner than current diesel trains.

Achieve Climate Change Targets

- Will help reduce the transport sector greenhouse gas emissions which continue to rise.
- Supporting the Government's Climate Action Plan.



Supporting Economic and Population Growth

- Congestion in Greater Dublin Area is increasing.
- Cost of Time Lost in the Dublin Region is ~ €350million/annum and forecast to rise to €2,000million/annum by 2033.
- Sustainable public transport infrastructure (pedestrian, cycling, bus and rail) will sustain economic and population growth while reducing emissions.

Integration of Land-use & Transport Planning

- Co-ordination and integration of spatial planning with rail transport.
- Supporting compact growth and increased densities in the Greater Dublin Area.
- Supports the implementation of the Project Ireland 2040 and the National Planning Framework.

Facilitates Integration with other modes of transport

- Improves integration of rail services with active modes of travel (walking and cycling).
- Enables greater cross-modal journeys through improved integration with other modes – Bus, Luas, proposed MetroLink and Dublin Bikes.



02

DART+ Coastal North

2. DART+ Coastal North

Overview

The delivery of the DART+ Coastal North project will form the third infrastructural project of the DART+ Programme in addition to DART+ West and DART+ South West.

DART+ Coastal North is seeking to extend the existing electrified rail network from Malahide to Drogheda as well as increasing rail capacity on the Northern Line between Dublin City Centre and Drogheda MacBride Station, including the Howth Branch. This increased rail capacity can be achieved by implementing an extended electrified railway network with high-capacity DART trains and an increased frequency of train services. In addition, the DART+ Coastal North project requires that some track modifications are implemented, including the provision of turnback facilities at Malahide, Clongriffin and Howth Junction & Donaghmede Stations. These modifications are essential to facilitate the increase in train services by allowing trains to be turned back clear of continuing services and allow for a higher frequency and a more reliable service.

Delivery of the DART+ Coastal North project will support existing communities along the railway and support future sustainable development. The project will serve all existing stations along the railway corridor between Dublin City Centre and Drogheda MacBride Station, including those located on the Howth Branch, with electric powered trains that have a lower carbon footprint than the existing diesel trains. The frequency and quality of service will provide a viable transport alternative to communities along the route and help encourage people to migrate from private car use. This will assist Ireland in reducing greenhouse gas emissions from transport and help combat climate change.

The extended electrification of the Northern Line will predominantly follow the existing railway corridor. Works outside of Iarnród Éireann lands will be required at several locations for some of the scheme elements such as:

- Bridge modifications/improvements to facilitate extended electrification;
- Construction of substations (to facilitate the provision of power to the line); and
- Use of land for temporary construction/storage compounds.

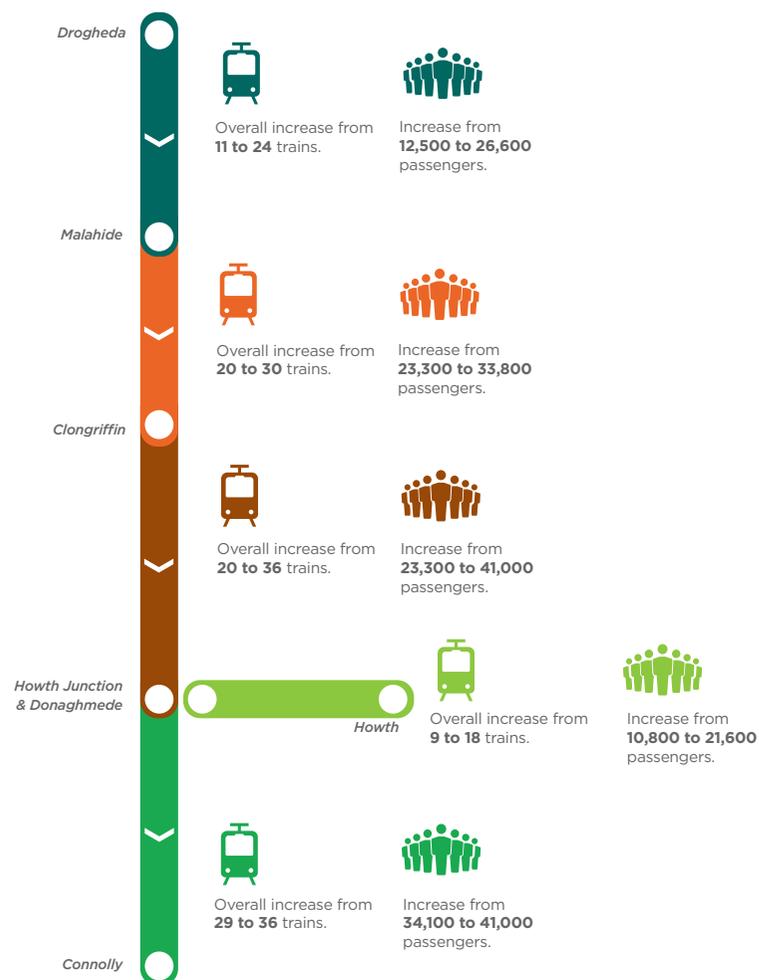
To achieve the peak capacity increases proposed by the DART+ Programme, DART+ Coastal North will seek a reconfiguration of Howth Junction & Donaghmede Station and the removal of crossing conflicts at the station. These works will enable the use of a shuttle DART operation between Howth and Howth Junction & Donaghmede stations which will maximise train frequency and reliability on the Northern Line. The interchange at Howth Junction & Donaghmede station will be facilitated by an increase in Northern Line stopping trains.

The removal of crossing conflicts at Howth Junction will also result in a more frequent and reliable Howth DART service with frequency of service increasing to every ten minutes each way, with a change at Howth Junction to access the Northern Line. This would represent an increase in train frequency to a maximum of 18 trains in a 3-hour AM peak period per direction from the current 9 trains.

Initial assessment of the four existing level crossings along the Howth Branch line has indicated that these level crossings can continue to operate while still providing a more efficient service overall.



Planned increase in train frequency and passenger capacity for the 3-hour AM peak period for inbound/southbound services to Dublin City Centre.



Note: Overall increases are inclusive of DART, Commuter and Enterprise services.

Capacity increases associated with DART+ Coastal North

The DART+ Coastal North project will improve performance and increase train frequencies in the AM and PM peaks along the Northern Line, providing enhanced capacity from the city centre to Drogheda. Customers will experience enhanced levels of service in both AM and PM peaks, and in both southbound and northbound directions.

Additionally, through the delivery of the DART+ Coastal North project, the current AM and PM peak hours will become peak periods, with DART extending the proportion of the day it provides its maximum number of trains from 1 hour to 3 hours. DART+ Coastal North customers can look forward to these enhanced frequencies commencing earlier and ending later both in the morning and evening peak periods. This extension of enhanced peak service frequencies will take advantage of infrastructure enhancements and new rolling stock, providing more flexibility, comfort, and capacity to DART customers.

In addition to the improvements in the AM and PM peaks, DART+ Coastal North customers will also benefit from increases in the number of services operating throughout the day, outside the peak periods. During both peak and non-peak times, customers will benefit from enhanced reliability, with DART able to provide a service designed to incur fewer delays, and robust enough to recover from delays when they do occur.

Battery Electric Multiple Units (BEMUs)

Iarnród Éireann, supported by the NTA, will be purchasing Battery Electric Multiple Units (BEMUs) in advance of the DART+ Coastal North project. The provision of these BEMUs will allow for the possibility of running enhanced services on the network in advance of the planned full electrification of the line. Iarnród Éireann have identified the Northern Line as the most suitable route for BEMU deployment and Drogheda Station and depot area as the preferred charging station location. These BEMU works will be delivered under a separate project and the increase in service level provided will be in advance of the electrification under the DART+ Coastal North project. Accordingly, the increase in service level referred to in the adjacent figure is in comparison to the service level post-BEMU (as opposed to the current service level).



03

Public Consultation
Process

3. Public Consultation Process

Public participation during the design process is a key element to the delivery of major infrastructure projects such as DART+ Coastal North.

This project has a two-stage non-statutory Public Consultation process. This current consultation is seeking feedback on the **'Emerging Preferred Option'**. As the design process advances and the designs are further developed and matured, another public consultation will take place.

Public Consultations are our way of asking you, as potential users of the improved services or those likely to be affected by its development, for your views on our plans, whilst the design process is active. Your local knowledge and comments will inform the design and help us improve the project and ensure it will be a success for you and the communities it will serve.

The main public participation/feedback stages as part of the project development include:

- **Public Consultation No.1** on the Emerging Preferred Option - Current Stage.
- **Public Consultation No.2*** on the Preferred Option (Autumn 2022)
- **Statutory Consultation Period*** as part of the Railway Order application process (Spring 2023)

**Note: Dates to be confirmed*

Public feedback is welcomed and will be accepted during all stages of the design development. Feedback can be submitted through the project website, e-mail address, phone line or by written correspondence. For further details see the **'How to Engage'** section.



*Note: Dates to be confirmed.

Graphic demonstrating public participation as part of the option selection, design, and Railway Order application process



04

Current Design
Status

4. Current Design Status

The DART+ Coastal North project is currently at 'Concept Design Stage'. This brochure explains the current design status of the project, its benefits, potential impacts, and how you can send us your queries, thoughts and ideas.

The design and environmental impact assessment process for the DART+ Coastal North project has commenced, and we are at a key early stage in the project. DART+ Coastal North has defined an '**Emerging Preferred Option**' which will be developed in greater detail as the project progresses.

Before we proceed any further, we would like your views on the DART+ Coastal North project '**Emerging Preferred Option**' which is being put forward by Iarnród Éireann as part of this first Public Consultation.

The '**Emerging Preferred Option**' is the preferred combination of design options that have been identified at this stage of the project development for each of the individual elements forming the end-to-end proposed solution for DART+ Coastal North.

Studies are still ongoing in this regard, and therefore some site-specific design aspects have yet to be concluded. These studies will be progressed with your local knowledge and will inform the design, thereby ensuring it will be a success for you and the communities the project will ultimately serve.

Following these further studies, assessments, design development and a review of your feedback, the '**Emerging Preferred Option**' will be refined, and the '**Preferred Option**' will be presented at Public Consultation No. 2 due to take place later in 2022.

The project will culminate with a Railway Order application to An Bord Pleanála, in accordance with the Transport (Railway Infrastructure) Act 2001 (as amended). This is essential to secure building consent. It is currently anticipated that the Railway Order application will be submitted to An Bord Pleanála for approval in Spring of 2023, although exact dates for this submission are yet to be confirmed.

Your participation and feedback are an essential part of this stage in the design and assessment process.





DART

DART

5

WARNING

05

Key Infrastructural Elements

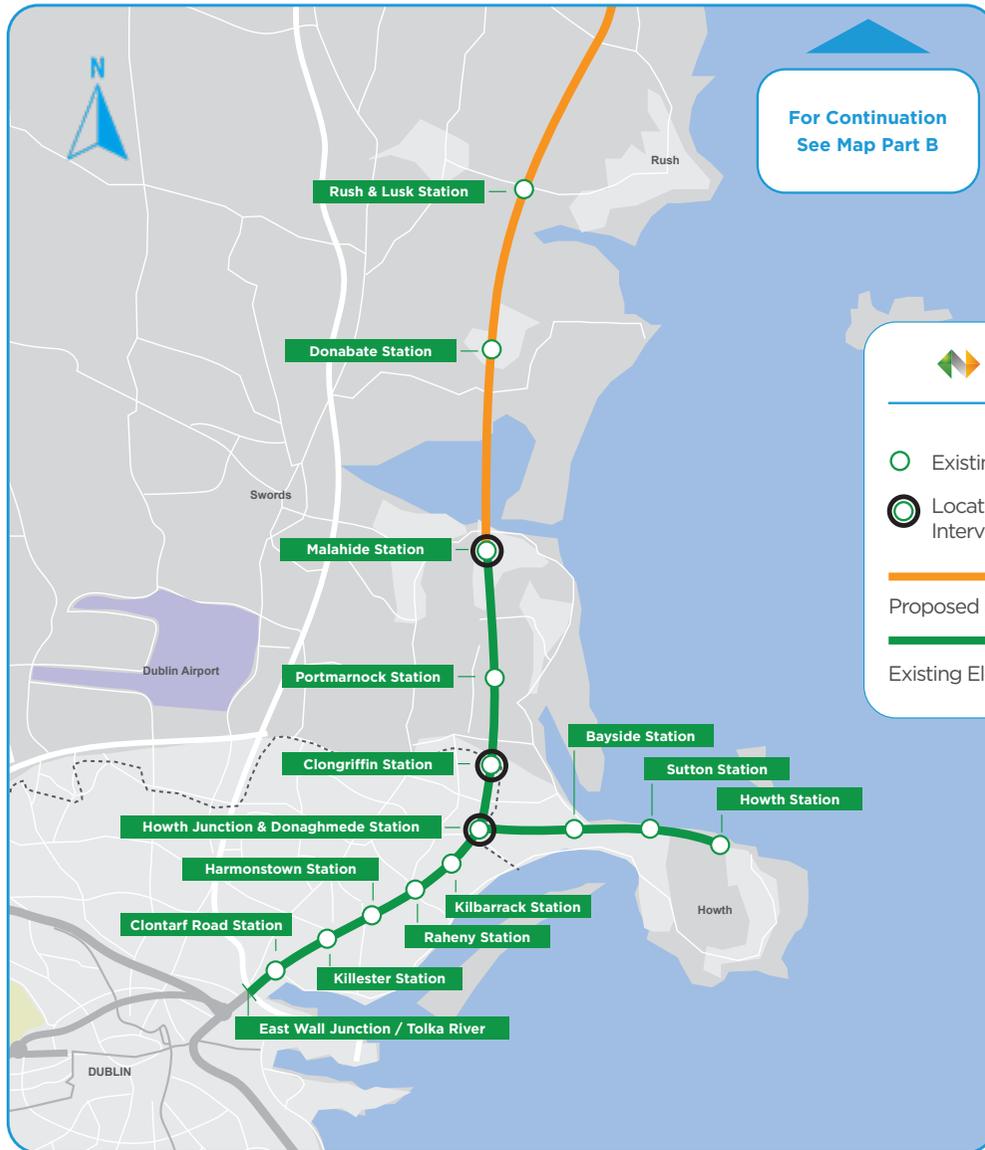
5. Key Infrastructural Elements of DART+ Coastal North

The following is a high-level summary of the key infrastructural elements of the DART+ Coastal North project:

- Extension of existing 1500V DC electrification, which currently terminates at Malahide, as far as Drogheda MacBride Station (approximately 37km);
- Reconfiguration of the existing track layout and associated infrastructure in the vicinity of Drogheda MacBride Station, Malahide Station, Clongriffin Station and Howth Junction & Donaghmede Station, as well as the provision of sections of additional track and station turnback facilities to allow for improved operational flexibility on the Northern Line;
- Construction of a new platform at Drogheda MacBride Station;
- Undertaking upgrades to existing signalling, telecoms and power supplies to support the planned increase in train services, including the introduction of new electrical substations at key locations alongside the railway line;
- Undertaking bridge improvements/modifications arising from capacity enhancements, track reconfigurations and/or electrical clearances to achieve necessary clearances;
- Modifications to existing depots at Drogheda and Fairview to support the new train fleet, including the provision of additional train stabling at Drogheda;
- Ancillary civils, drainage and power work to cater for the changes.



Map Part A



Map Part B



DART+
Coastal North

- Existing Stations
- ⊙ Locations of Proposed Interventions
- Proposed Electrification
- Existing Electrification



06

Benefits of
DART+ Coastal North

6. Benefits of DART+ Coastal North

The DART+ Coastal North project will have far reaching, positive transportation effects for communities along the railway corridor. It will facilitate increased train and passenger capacity that is currently constrained on the network. It will transport passengers in high-quality trains that are designed to best suit the needs of growing communities, providing all day capacity – especially during peak morning and evening commuter periods.

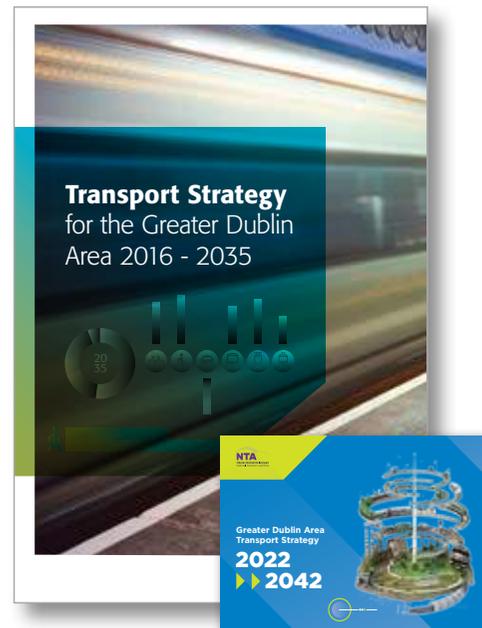
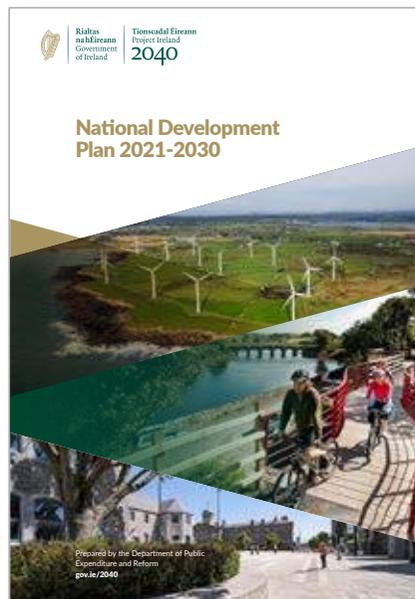
The project will link good quality public transport to sustainable land use management and will also assist in local regeneration, economic development and in supporting the development of new communities along the route. This is a key objective of Project Ireland 2040 and the National Planning Framework. The integration of public transport with sustainable land use planning will reduce the dependency on private car use and ultimately support reductions in greenhouse gas emissions from the transport sector.

Availability of good quality rail transport, which is integrated with other public transport modes (Bus, Luas, and the future MetroLink), as well as walking and cycling infrastructure,

will have a positive effect on transport patterns and lifestyle factors. The provision of a sustainable transport network supports sustainable options for where people live, work, study and access services and amenities. It can promote more active and healthy modes of travel by supporting people to walk or cycle to public transport links for onward transfer to their end destinations.

The DART+ Programme is consistent with Project Ireland 2040, the National Development Plan 2021-2030, the Climate Action Plan 2021, the National Planning Framework and the Transport Strategy for the Greater Dublin Area 2016-2035 (noting the Transport Strategy for the Greater Dublin Area 2022-2042 has been published in draft). The DART+ Programme will look to align with any updates to these documents once they are published.

The DART+ Programme is a key deliverable measure identified in the Climate Action Plan 2021 and supports the achievement of targets for mode shift from private car to public transport.



National Policy Drivers

6. Benefits of DART+ Coastal North



Increase peak passenger capacity and increase train frequency between Dublin City Centre and Drogheda MacBride Station - inclusive of the Howth Branch - facilitating frequent and reliable transport to the surrounding communities.



Enhance public transport opportunities for work, education and leisure purposes.



Facilitate the development and future growth of existing and new communities that will greatly benefit from the connectivity that the DART+ Coastal North project will deliver.



Alleviate road congestion.



Build a sustainable and connected city region, supporting the transition to a low carbon and climate resilient society.



Facilitate people to make sustainable travel choices by encouraging a move away from private cars to a reliable, efficient and safer public transport network.



Improve multi-modal transport connectivity through the development of the wider DART+ Programme.



Improve journey time reliability.



STOP

07

Option Selection
Process

7. Option Selection Process

Option Selection Process

To assist the design development process and to consider various options to determine the **'Emerging Preferred Option'** for DART+ Coastal North, a structured optioneering process has been followed:

Stage 1 – Preliminary Assessment of Options (sifting / removal of options that did not meet the project objectives and requirements), followed by:

Stage 2 – Multi-Criteria Analysis of short-listed options.

This structured process evaluates a number of different options and is based on 'Guidelines on a Common Appraisal Framework for Transport Projects and Programmes' (CAF) published by the Department of Transport March 2016 (updated October 2021), NTA Project Approval Guidelines (December 2020), and Iarnród Éireann's Project Management Procedures.

Development of Options

The engineering design will enhance the existing railway network to meet train capacity requirements to cater for current and future projected passenger demand. Options were developed for individual components, including the following:

- Works around Drogheda MacBride Station;
- Works around Malahide Station;
- Works around Clongriffin Station;
- Works around Howth Junction & Donaghmede Station;
- Works associated with electrification, including bridge improvements/modifications and power supply locations.

These individual components, along with the general linear works (such as overhead line equipment and signalling and telecoms upgrades) together provide the infrastructure required for the increased network capacity.

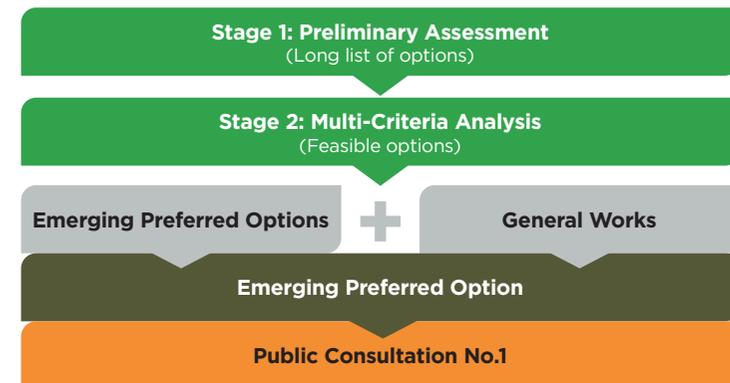
Assessment Methodology

Stage 1 – Preliminary Assessment process - comprised the assessment of a long list of options against engineering, economic and environmental criteria to evaluate the 'feasibility' of each option to meet the project objectives / requirements. This approach allowed for the long list of options to be filtered to a shorter list of feasible options. All feasible options were brought forward to Stage 2 where they could be explored in greater detail.

Stage 2 – The Multi-Criteria Analysis process comprised a more detailed, multidisciplinary, comparative analysis of the feasible options which passed through the Stage 1 assessment. The feasible options were assessed against the six appraisal criteria set out in the NTA's Common Appraisal Framework (CAF), namely: economy, safety, environment, accessibility and social inclusion, integration and physical activity.

Options were then compared to each other based on whether an option had 'some' or 'significant' advantage or disadvantage over other options, or whether all options were 'comparable / neutral', leading to the determination of Emerging Preferred Options for the intervention required.

The various Emerging Preferred Options in respect of particular elements or interventions were then combined with the general linear works needed to upgrade and modernise the railway to form the **'Emerging Preferred Option'** for DART+ Coastal North.



Graphic showing the assessment methodology



08

**The Emerging
Preferred Option**

8. Emerging Preferred Option

Description of proposed Emerging Preferred Option

The process to determine the **'Emerging Preferred Option'**, as described in Section 7 - Option Selection Process, has led to the identification of Emerging Preferred Options in respect of works required. These, and general linear works required along the full length of the project, are the key elements of the Emerging Preferred Option. For the purpose of describing the Emerging Preferred Option end-to-end for the project, general linear works to facilitate electrification are described first followed by interventions at specific locations (from north to south) as follows:

- Works around Drogheda MacBride Station;
- Works around Malahide Station;
- Works around Clongriffin Station;
- Works around Howth Junction & Donaghmede Station;
- Howth Branch Level Crossings.

8.1 General Linear Works

The project is predominantly located within the corridor of the existing railway and will deliver the necessary infrastructure to support the proposed increased train capacity. The works are necessary to provide for the planned increased capacity and enable a higher frequency of DART services. The provision of new infrastructure will comprise general linear works together with a number of localised interventions which are predominantly at stations. In the following section we introduce the range of general linear works required to modernise and electrify the existing railway line between Malahide and Drogheda as part of DART+ Coastal North.

Signalling and Telecommunications

- Signalling upgrades and additional signalling will be required between Malahide and Drogheda;
- Minor changes will be required to signalling between East Wall Junction (Tolka River), north of Connolly Station and Malahide;
- Upgrades to the telecommunication systems will be required routewide.

Electrification

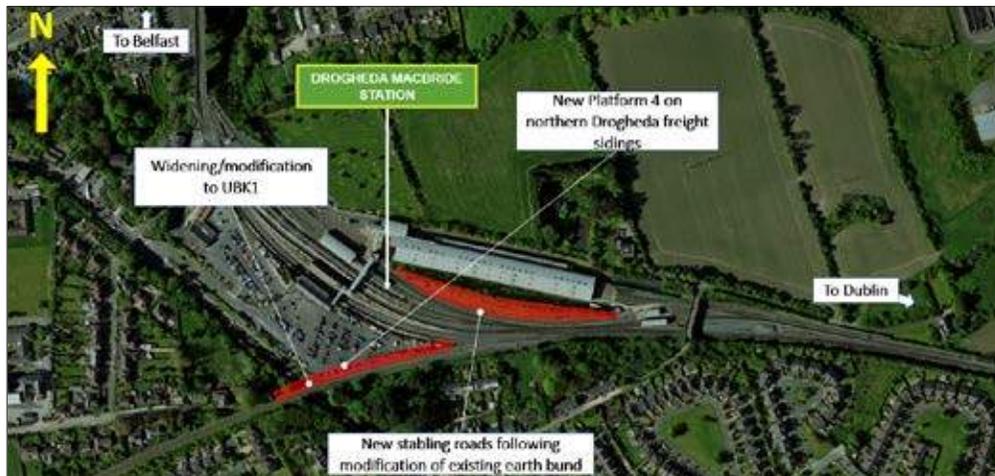
- An extension of the existing electrification equipment (OHLE) will be required as part of DART+ Coastal North. This will extend from the current limit of electrification at Malahide through to Drogheda. This will be similar to the OHLE currently used on the existing DART network;
- 8 new electrical substations will be required at intervals along the rail line between Malahide and Drogheda to provide power to the network;
- An assessment has been undertaken to review the existing clearances at all overbridges along the route in regard to future electrification requirements. The preliminary findings from the assessment conclude that a large proportion of the bridges have the necessary clearances and are unlikely to be impacted by the project. However, where existing bridges do not provide the necessary height for overhead electrification of the lines, options are being considered on a case-by-case basis, these include:
 - Provision of specialist electrical solutions for the OHLE with reduced clearance;
 - Lowering the rail track under the bridge;
 - Modification of the existing structure;
 - Removal of the existing structure and provision of a replacement structure; or
 - A combination of the above.
- OHLE will be required to be fixed and require localised modifications to underbridges/viaducts at:
 - Malahide Viaduct;
 - Rogerstown Viaduct;
 - Balbriggan Viaduct;
 - Laytown Viaduct.
- Modifications to existing overbridge parapets between Malahide and Drogheda will be required to ensure that parapets are imperforate, climb-resistant and at least 1.8m high. This will reduce the risk of people coming into contact with the OHLE;
- Interfaces with existing utilities, boundary treatments (including new retaining walls), drainage works, vegetation management and other ancillary works will be required along the length of the project.

- Existing user worked Level Crossing (XB001) located to the south of Donabate Station to be closed. This is as a result of the introduction of electrification and increase in train frequency on the Northern Line which significantly increases the safety risks at this level crossing to users of the crossing and to rail traffic.

8.2 Works around Drogheda MacBride Station

The works at Drogheda MacBride Station predominately relate to allowing a greater number of services to turn back at Drogheda to return to Dublin. There are currently an insufficient number of platforms to cater for the proposed service frequency at Drogheda MacBride, therefore an additional platform to turn back services is required.

The Emerging Preferred Option is to construct a new single platform on the Drogheda freight siding. This new platform will extend over the Dublin Road Underbridge necessitating widening of the bridge. At-grade access will be provided between the new platform and the existing Platform 1 and a new gateline will likely be installed. The Drogheda freight siding will be slewed (realigned) and railway infrastructure modified as necessary.



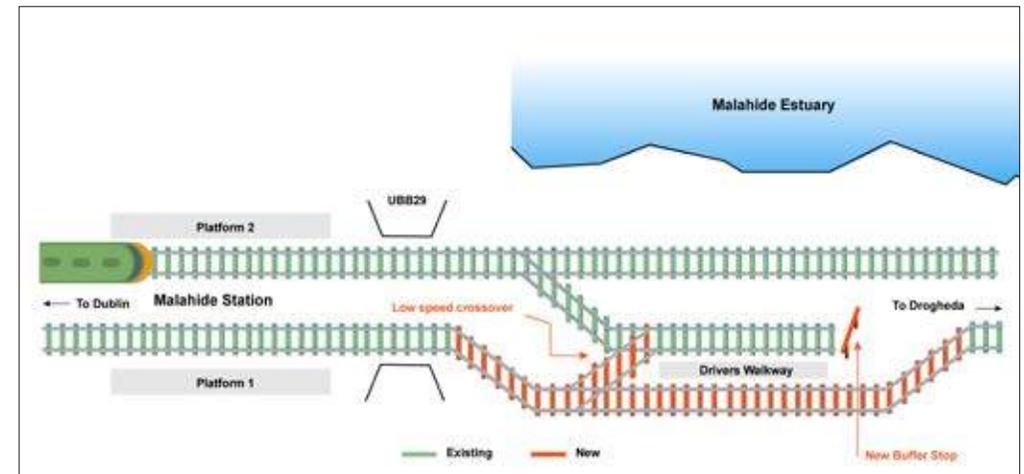
In terms of train stabling, the existing Drogheda freight siding and a new stabling track, located adjacent to the depot, will be utilised. The new stabling track will require works to the existing landscape bund. The extent of works to the bund will be developed in the next stage of the design process.

8.3 Works around Malahide Station

The works at Malahide relate to the provision of new infrastructure which will facilitate a greater number of train services to turn back at Malahide and return to Dublin.

The Emerging Preferred Option is to introduce a turn back facility constructed on the eastern side of the existing tracks, immediately north of Malahide Station, between the Strand Road Underbridge and the Malahide Viaduct. The option requires widening of the rail corridor and the existing embankment on which it is situated. This widening will be facilitated by the construction of a retaining structure which will be built alongside the realigned track.

New OHLE and signalling installations, as well as modifications to the existing systems, will be required. The turnback will have an illuminated staff walking route alongside it.

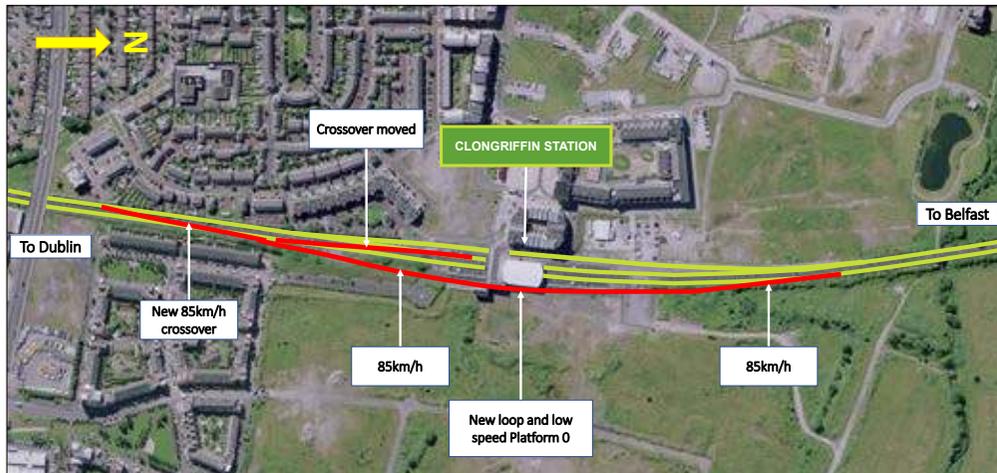


8.4 Works around Clongriffin Station

The works at Clongriffin Station relate to allowing a greater number of services to turn back at Clongriffin to return to the centre of Dublin.

The Emerging Preferred Option is to introduce a new loop to serve a platform to the east side of the station. It is proposed to use the platform face that was constructed when the station was originally built but is not currently served by any tracks. The original station construction anticipated this construction requirement and therefore it will have minimal impact on the station building/existing infrastructure.

Modifications will be made to the track alignment to the south of the Station to allow trains to access the new platform. New OHLE and signalling installations, as well as modifications to the existing systems, will be required.



8.5 Works around Howth Junction & Donaghmede Station

The works around Howth Junction and Donaghmede Station are linked to facilitating increased capacity on the Northern Line and relate to allowing a greater number of DART services to turn back at the station.

The Emerging Preferred Option includes construction of an extension to the existing Platform 2 to allow the platform to be used by terminating services from Howth without impacting on services running along the Northern Line. Track modifications will be made to include a new crossover to the east of the existing station platforms. Alterations and modifications to existing OHLE, signalling and telecoms systems will also be required.

As part of the works to facilitate a shuttle service on the Howth Branch, improvements to station facilities will be considered in order to provide a satisfactory customer experience. These will be developed in greater detail as the project progresses through to Public Consultation No. 2.



8.6 Howth Branch Level Crossings

The proposed changes to the Howth Branch will facilitate the introduction of a shuttle service at regular intervals between Howth and Howth Junction & Donaghmede Stations. These changes will result in an increase to both train service frequency and overall carrying capacity along the Howth Branch, as well as improvement to the reliability of associated timetabling. Services are expected to increase from the current frequency of 9 trains in a 3-hour AM peak period to a future frequency of 18 trains.

The Emerging Preferred Option for the Howth Branch level crossings is for them to remain open, as they are currently. Initial assessment of the four existing level crossings along the Howth Branch line has indicated that these level crossings can continue to operate while still providing a more efficient service overall.

Further survey data will be collected prior to Public Consultation No. 2 to validate the model and assumptions, and this information will be used to establish if the proposal to keep the level crossings in operation is feasible, or if more significant interventions are required at the crossings.



8.7 Depot Works

There will be localised works at Drogheda and Fairview Depots to modify the facilities to cater for the change in rolling stock. These modifications are predominantly internal to the buildings although they will also encompass some localised exterior changes to some track work and systems. The depot at Drogheda MacBride Station will be electrified with OHLE.





09

Transport
Integration

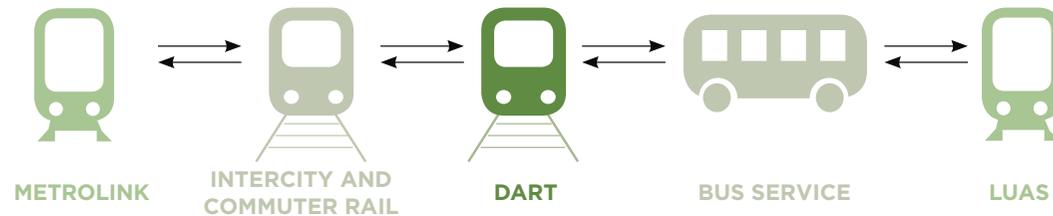
9. Transport Integration

The DART+ Coastal North project, as part of the DART+ Programme, will deliver an improved electrified network, with increased passenger capacity and enhanced train service between Dublin City Centre and Drogheda MacBride Station. DART+ Coastal North includes the Howth Branch of the DART Northern Line.

The project will link Iarnród Éireann, DART, Dublin Bus, Luas, MetroLink and Dublin Bike services to create a fully integrated public transport system in the Greater Dublin Area. Although no direct link will be provided between DART+ Coastal North and MetroLink, they can each be considered integral components in the overall integrated system.

DART+ Coastal North is planned to enhance access and movement of pedestrian and cyclists and reduce reliance on private car. DART+ Coastal North will integrate with the Metropolitan Cycle Network where potential interfaces are identified.

Where practicable, DART+ Coastal North will integrate with cycleways, greenways, and other active travel facilities proposed in existing and draft future transport strategies.



Public Transport Integration



10

Issues to Consider

10. Issues to Consider

All possible efforts will be made to sensitively address issues and challenges associated with the project at the earliest stages of the design process and public consultation. Several potential issues are detailed below, and the public consultation and stakeholder engagement phases will help us to better understand some of the issues and challenges we face.



Property Acquisition

The DART+ Coastal North project will predominantly seek to confine the railway improvement works within the existing railway corridor. However, where works are required to extend beyond the confines of the existing railway corridor, it may be necessary to acquire some additional lands to facilitate the projects development. This land acquisition may be required to allow for the provision of new electrical sub-stations that will facilitate the extension of electrification of the network, track modifications to introduce additional turn-back facilities to improve operational flexibility, or where additional train stabling is required.

We are now embarking on an extensive programme of consultation with the potentially affected property owners and if your property is likely to be directly affected by the works you should already have heard from us, separately. Our Community Liaison Officer will be available throughout the process to ensure you are regularly updated on the current proposals and your views are taken into consideration as we progress the design to the **'Preferred Option'**.



Environmental Impacts

The project will involve changes to the local environment during both the construction and operation stages, which will result in both temporary and permanent impacts. In order to maintain daytime passenger services during the construction phase night-time works will be necessary. The design process will make every effort to ensure that negative impacts are avoided, reduced or mitigated as far as reasonably practicable, and positive impacts are maximised.

The coastal environments which are interacted with along the DART+ Coastal North route will present environmental challenges. Highly detailed environmental assessments will be carried out over the course of the project to ensure that the proposed works are carried out without negatively impacting on these highly sensitive constraints.



Bridge Improvements/Reconstruction

Where existing bridges do not, or may not, provide the necessary clearance for OHLE, a range of options to reduce impacts have been considered on a case-by-case basis. The options include modifications to the track layout and structural solutions to gain the necessary vertical and horizontal clearance. The options considered include the following (either standalone or in combination):

- Provision of specialist electrical solutions for the OHLE with reduced clearance;
- Lowering the rail track under the bridge;
- Modification of the existing bridge structure;
- Removal of the existing structure and provision of a replacement structure.

An assessment has been undertaken to review the existing clearances at all overbridges along the route in regard to future electrification requirements. The preliminary findings from the assessment conclude that a large proportion of the bridges have the necessary clearances and are unlikely to be impacted by the project.

At this stage, the structures which will require reconstruction are those located in and around Drogheda MacBride Station and depot. Further studies and surveys are on-going for a number of other bridges along the route to confirm the extent of interventions required to achieve the necessary clearance for OHLE.



Electrification of the Line

Overhead line electrification equipment will be required to provide electrical power to the DART trains. This will involve considerations such as:

- The supply of power from the grid which will need to be agreed and assessed as part of the Railway Order application process;
- The development of substations, and associated land and access requirements, along the line to provide the power to the electrified train fleet over the additional 37km of electrified track;
- The equipment carrying the power lines requires certain height clearances from the trains. Several bridges on the existing line have been identified as having insufficient clearances to this electrical equipment. A range of options are being considered at these locations - some of which include modifications to protected structures;
- Boundary walls and fencing along the existing railway may need to be modified. Where necessary, the heights of walls may need to be increased to ensure the security of the railway is maintained in the interest of both railway operations and public safety. This is especially relevant in areas where new overhead electric lines are erected to ensure that members of the public do not come into contact with electricity equipment.





11

Next Steps

11. Next Steps

Further Design Development & Option Selection

The preliminary option selection and design development that has been undertaken has led to the development of the **'Emerging Preferred Option'** which is the focus of this public consultation stage.

Once the public consultation process is complete, all feedback and submissions received will be reviewed and assessed as part of the next stage of the design development. Following a full appraisal of the feedback, a public consultation report will be prepared to document this process and it will be incorporated into the Option Selection Report.

Further studies, assessments and consultations will lead to development of the **'Preferred Option'** which will be presented to the public at Public Consultation later in 2022.

All information gathered by the project team will be used to inform the design development of the project which will be the subject of the Environmental Impact Assessment (EIA) and Appropriate Assessment (AA) (if required), and ultimately the Railway Order application will be submitted to An Bord Pleanála.

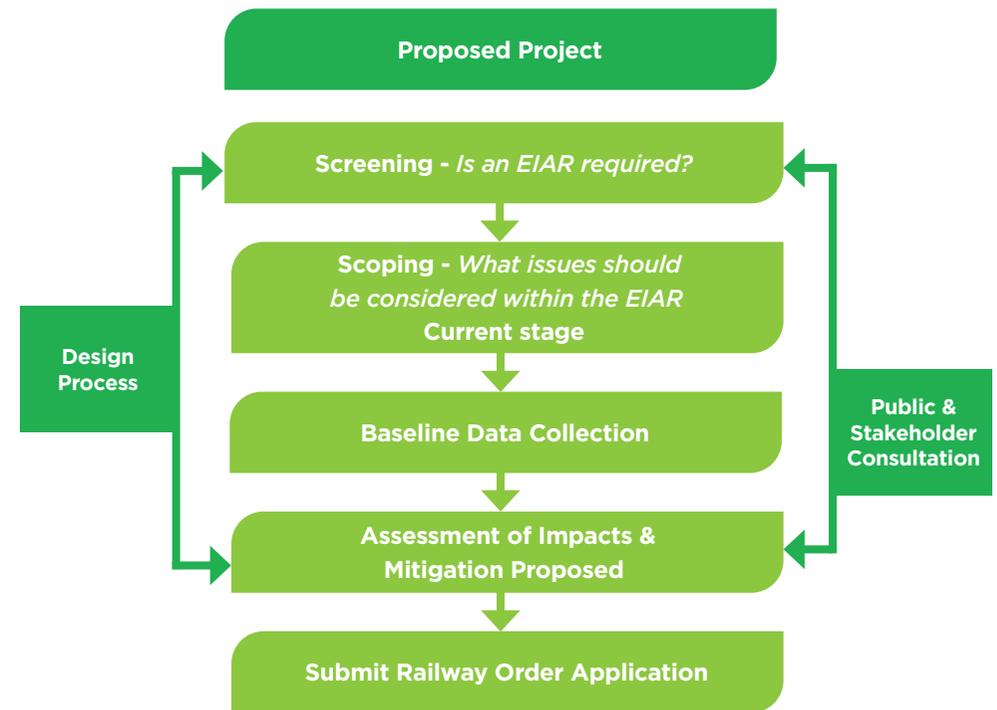
The Railway Order Process

The application to An Bord Pleanála for a Railway Order is broadly similar to the planning process which most people are familiar.

The Railway Order application process is set out in the Transport (Railway Infrastructure) Act 2001 (as amended) and the application will be made to An Bord Pleanála. The Environmental Impact Assessment Report (EIAR) will detail the nature and extent of the proposed project and identify and describe the impacts on the environment. It will also detail measures which will be taken to avoid, reduce and/or monitor these impacts. Following the submission of the Railway Order application to An Bord Pleanála, the public are invited, through public notices, to make submissions which will be duly considered by An Bord Pleanála as part of the decision-making process.

We expect that An Bord Pleanála will conduct an oral hearing, to provide the public with further participation in the decision-making process for this project. At an oral hearing the Iarnród Éireann project team will provide responses to submissions and will be available for questioning. Any person or body may make a submission or observation in writing to the Board in relation to the Railway Order application including the EIAR and the Compulsory Purchase Order (CPO) requirements.

We expect to make the application to An Bord Pleanála in the Spring of 2023.



The EIA Process leading to submission of Railway Order to An Bord Pleanála



12

How to Engage

12. How to Engage

This consultation is our way of asking you, as potential users of the service or those likely to be affected by its development, for your views on our plans. Your local knowledge will inform the emerging design, help us to improve the scheme and ensure it will be a beneficial for you and the communities the route will serve.

The consultation period is now open, full details including closing dates for receipt of submissions are available on the project website.

You can engage with us via the following means:

Website | www.dartplus.ie

Email | DARTCoastalNorth@irishrail.ie

Phone line | (01) 233 4515

Postal Address

If you would prefer to write to us, please send any correspondence to:

Community Liaison Officer

DART+ Coastal North

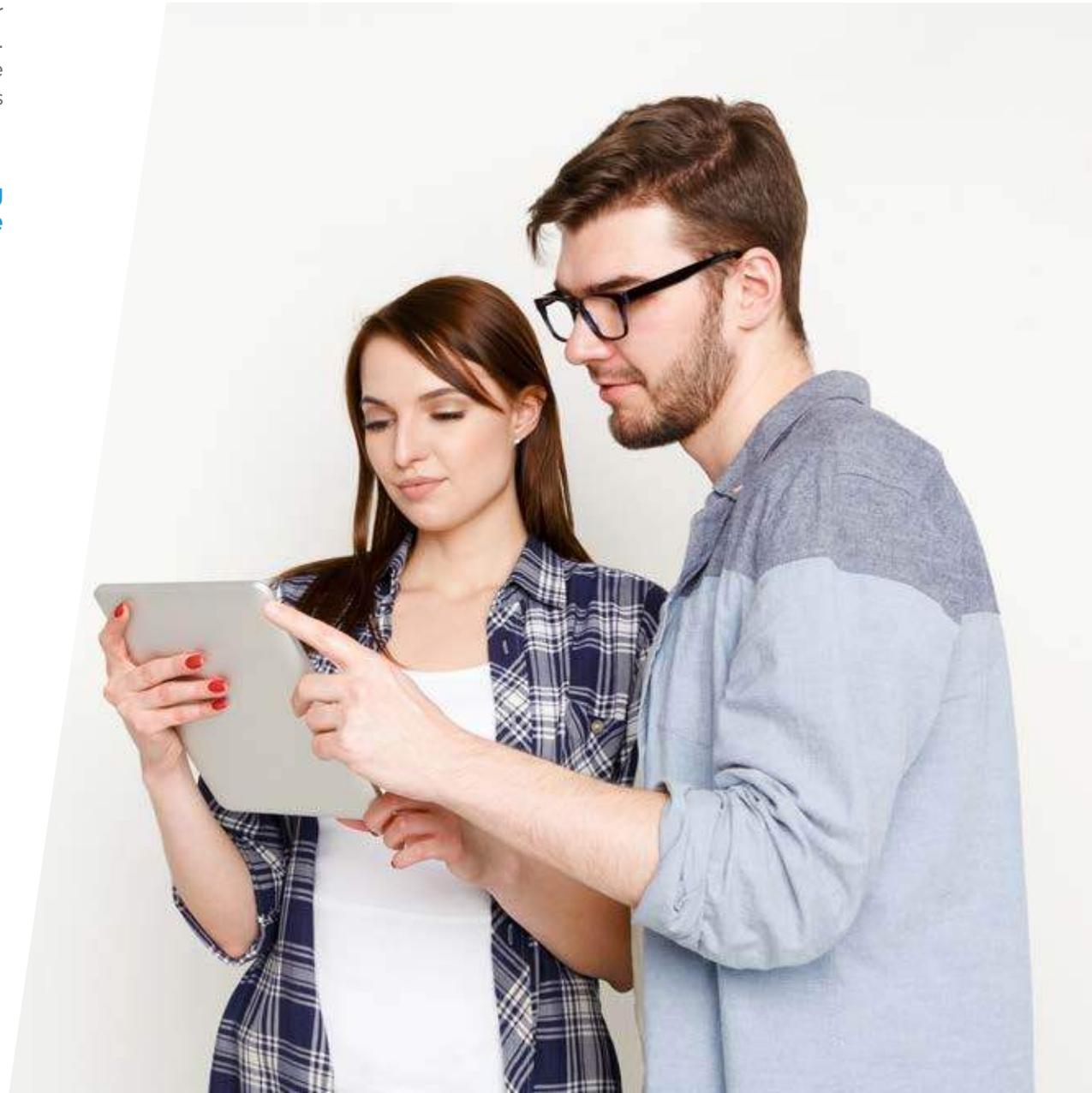
Iarnród Éireann

Inchicore Works

Inchicore Parade

Dublin 8

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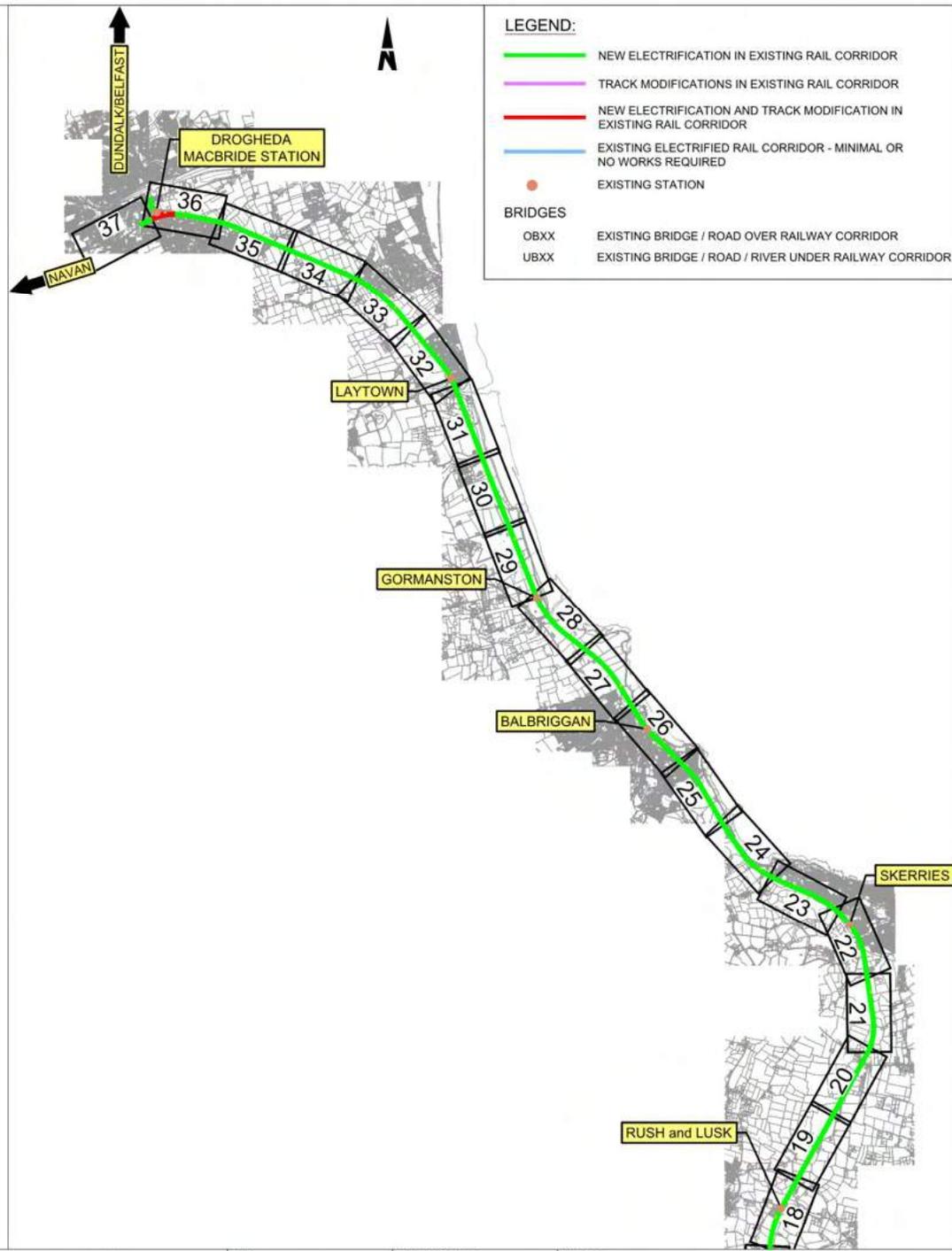
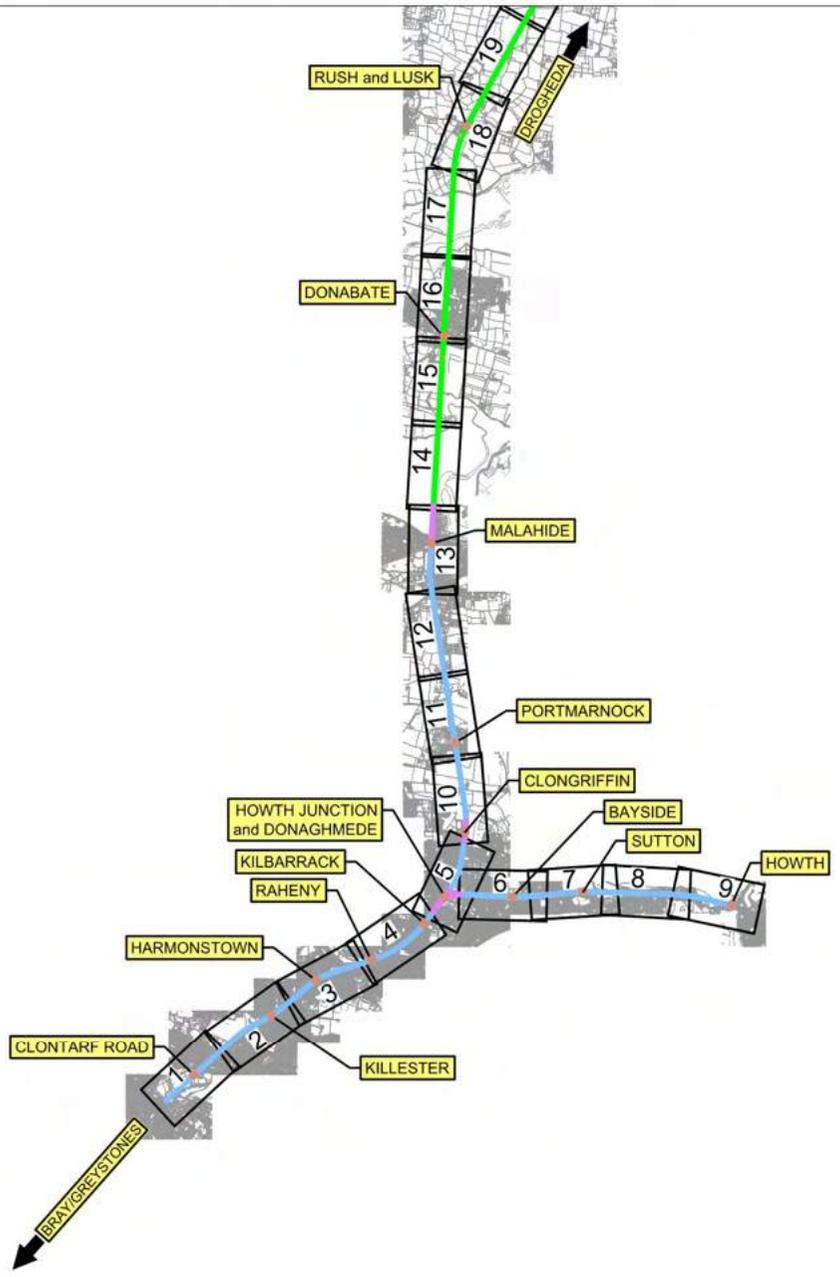




13

Alignment
Figures

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LEGEND:

- NEW ELECTRIFICATION IN EXISTING RAIL CORRIDOR
- TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
- NEW ELECTRIFICATION AND TRACK MODIFICATION IN EXISTING RAIL CORRIDOR
- EXISTING ELECTRIFIED RAIL CORRIDOR - MINIMAL OR NO WORKS REQUIRED
- EXISTING STATION

BRIDGES

- OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
- UBXX EXISTING BRIDGE / ROAD / RIVER UNDER RAILWAY CORRIDOR

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Rev	Date	Dr	Chkd	App'd	Description
P01	07/12/2021	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client
Iarnród Éireann
Irish Rail

Engineering Designer
ARUP

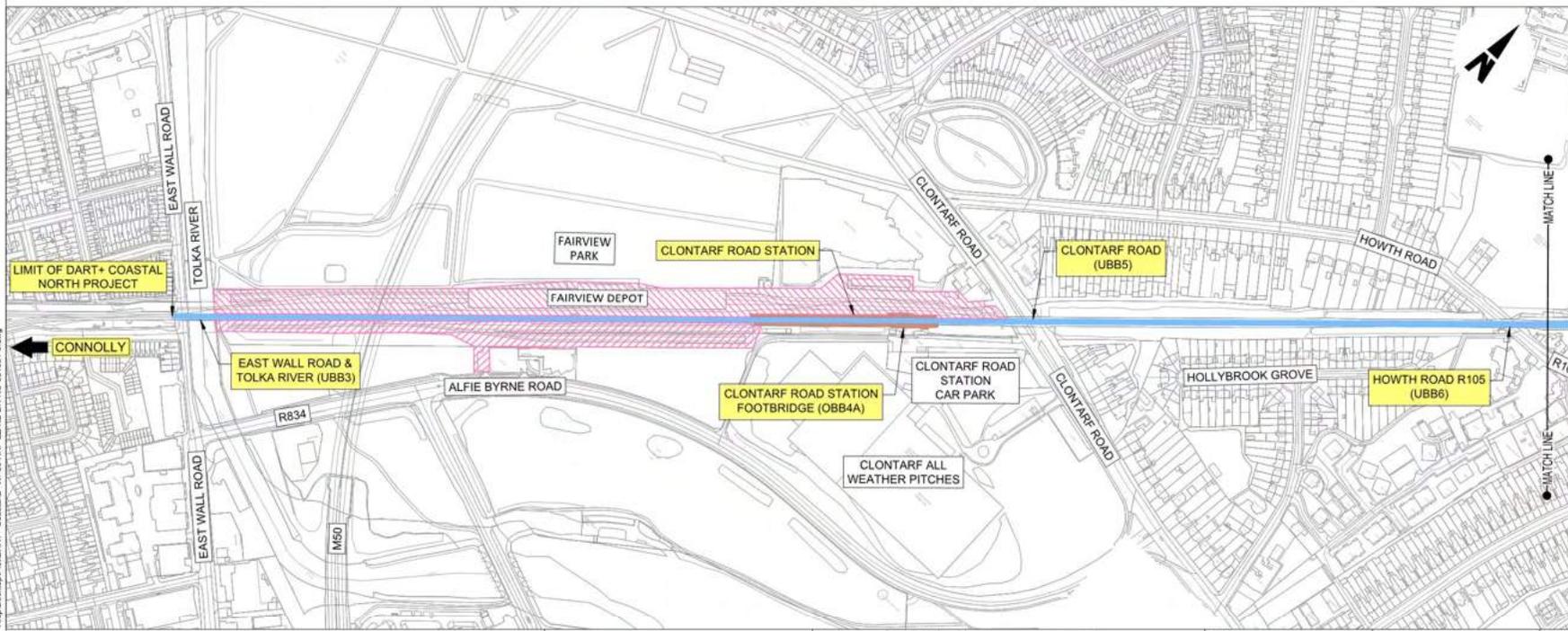
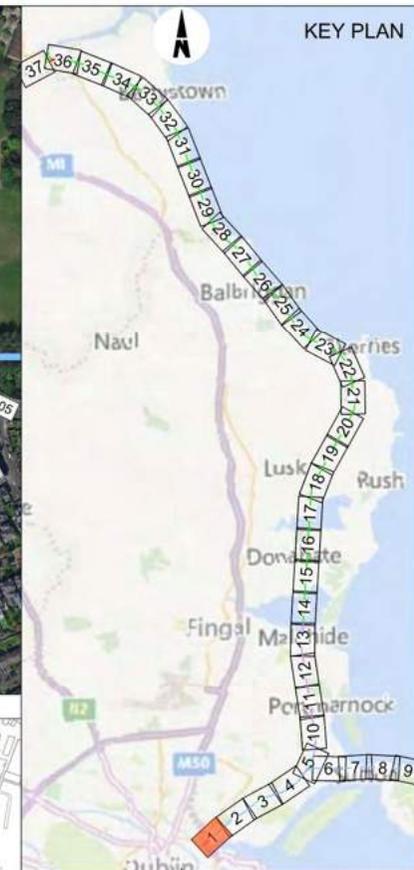
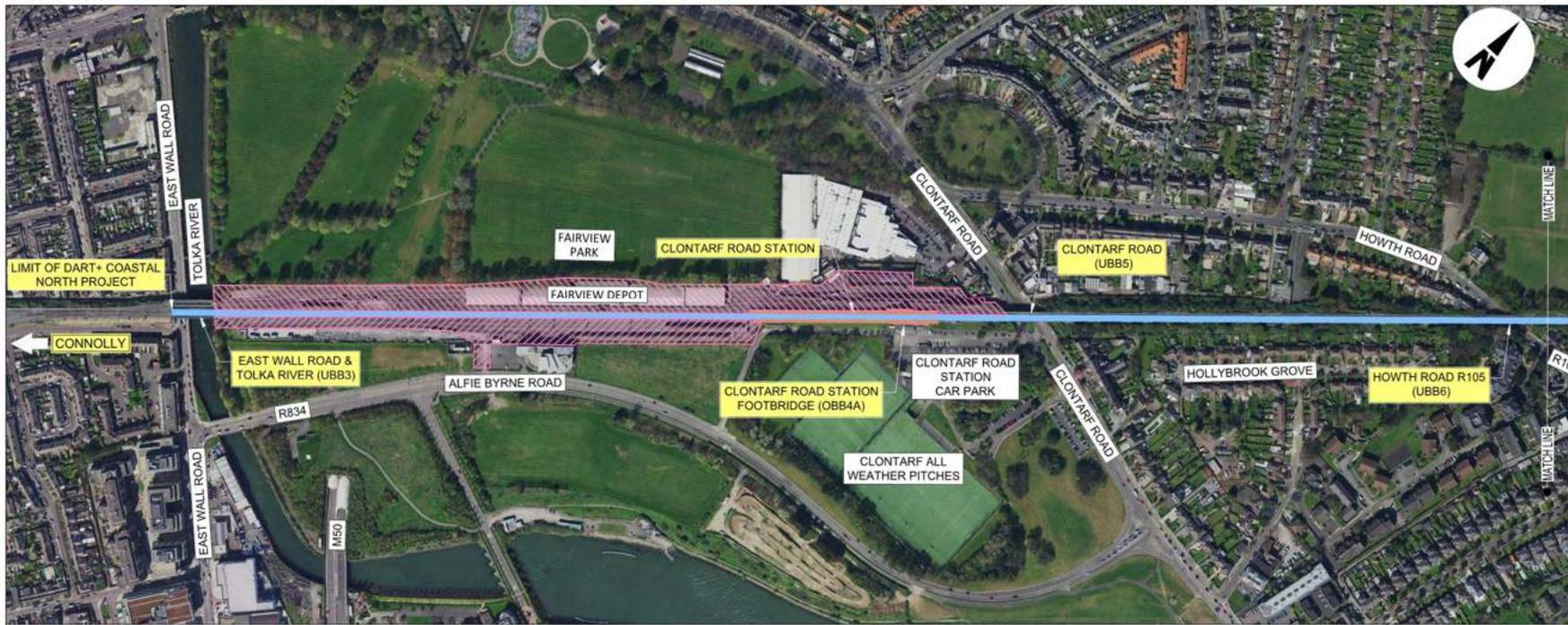
Date	07/12/2021	Scale	N.T.S.	Drawn	SR	Checked	RS	Approved	GS
Project Code	D+WP56	Originator Code	ARP	QMS Code	280275-00				

Project Title
DART+ COASTAL NORTH

Drawing Title
EMERGING PREFERRED OPTION
KEY PLAN MAP

Drawing File Name	D+WP56-ARP-ZZ-NL-DR-RO-001000	Sheet Number	01 of 01	Status	S3	Rev	P01
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DO NOT SCALE USE FIGURED DIMENSIONS ONLY



INFORMATION IS PRESENTED FOR PUBLIC CONSULTATION NO.1

- NOT ALL DESIGN DETAIL OR CONSTRUCTION RELATED DETAILS ARE KNOWN AT THIS TIME, E.G. SUBSTATION LOCATIONS, CONSTRUCTION COMPOUNDS, TEMPORARY BRIDGE REQUIREMENTS, TEMPORARY UTILITY DIVERSIONS AND OTHER ELEMENTS.
- POTENTIAL INTERFERENCE WITH PROPERTY RIGHTS IS BASED ON THE LEVEL OF INFORMATION AND DESIGN AVAILABLE AT THIS TIME. FURTHER WORK INCLUDING DETAILED DESIGN AND TECHNICAL AND CONSTRUCTION RELATED SOLUTIONS WILL SEEK TO MINIMISE POTENTIAL INTERFERENCE WITH PROPERTY RIGHTS.

NOTE:

- BRIDGE PARAPET MODIFICATIONS REQUIRED AT A NUMBER OF OVERBRIDGES BETWEEN MALAHIDE AND DROGHEDA TO PROVIDE PROTECTION FROM OVERHEAD LINE EQUIPMENT.

LEGEND:

- NEW ELECTRIFICATION IN EXISTING RAIL CORRIDOR
- TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
- NEW ELECTRIFICATION AND TRACK MODIFICATION IN EXISTING RAIL CORRIDOR
- EXISTING ELECTRIFIED RAIL CORRIDOR - MINIMAL OR NO WORKS REQUIRED
- SIGNIFICANT WORK / INTERVENTION REQUIRED (INCLUDING BRIDGE RECONSTRUCTION)
- MINOR WORK / INTERVENTION REQUIRED
- MINOR WORK REQUIRED
- EXISTING STATION

BRIDGES:

- OBXX - EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
- UBXX - EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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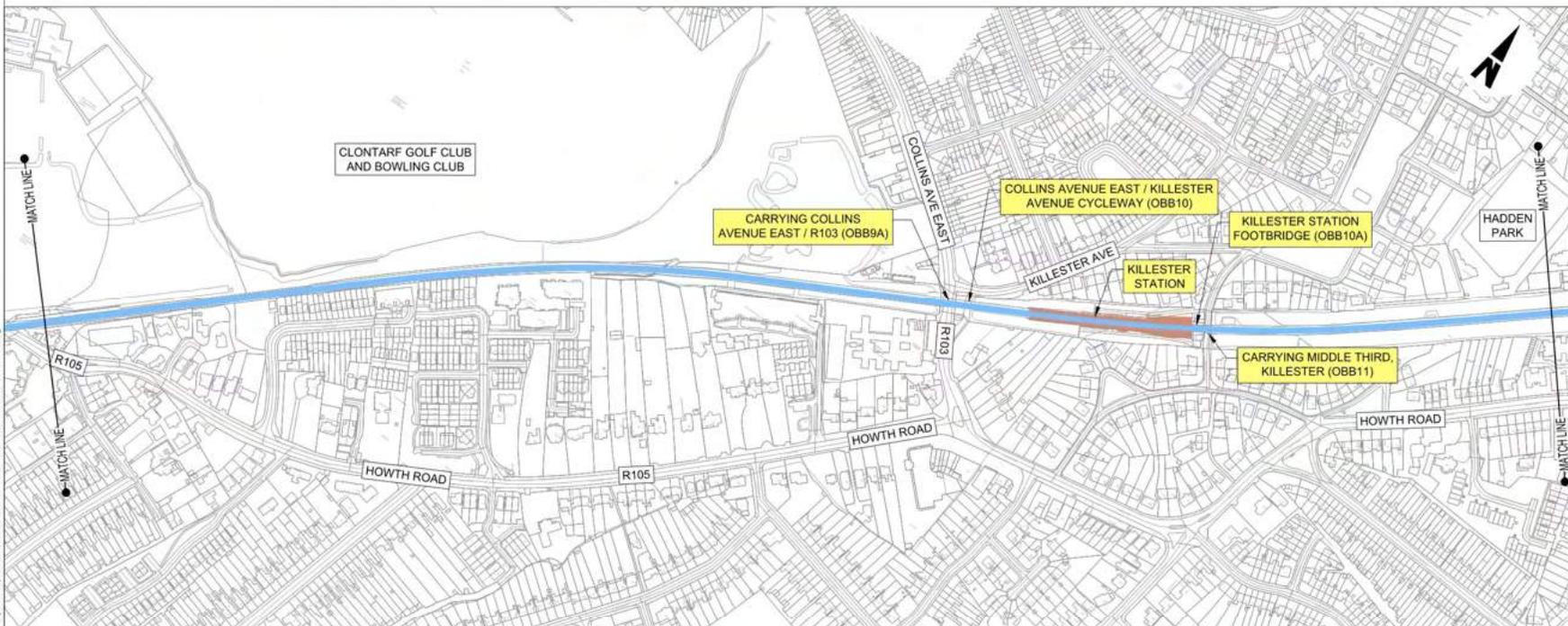
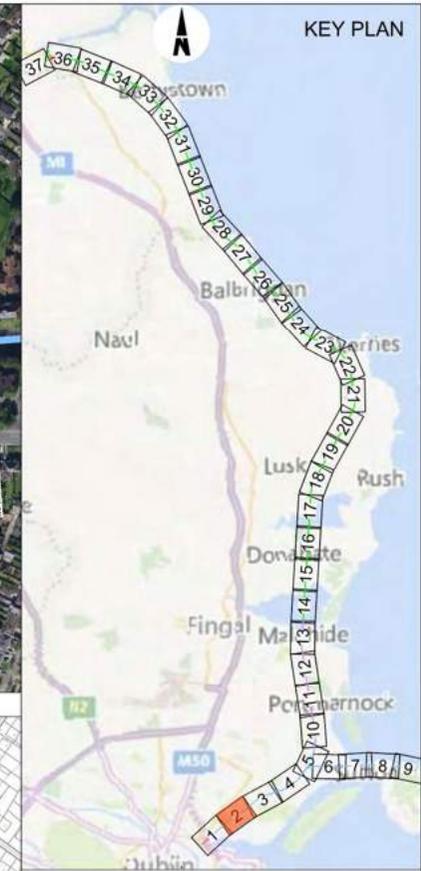
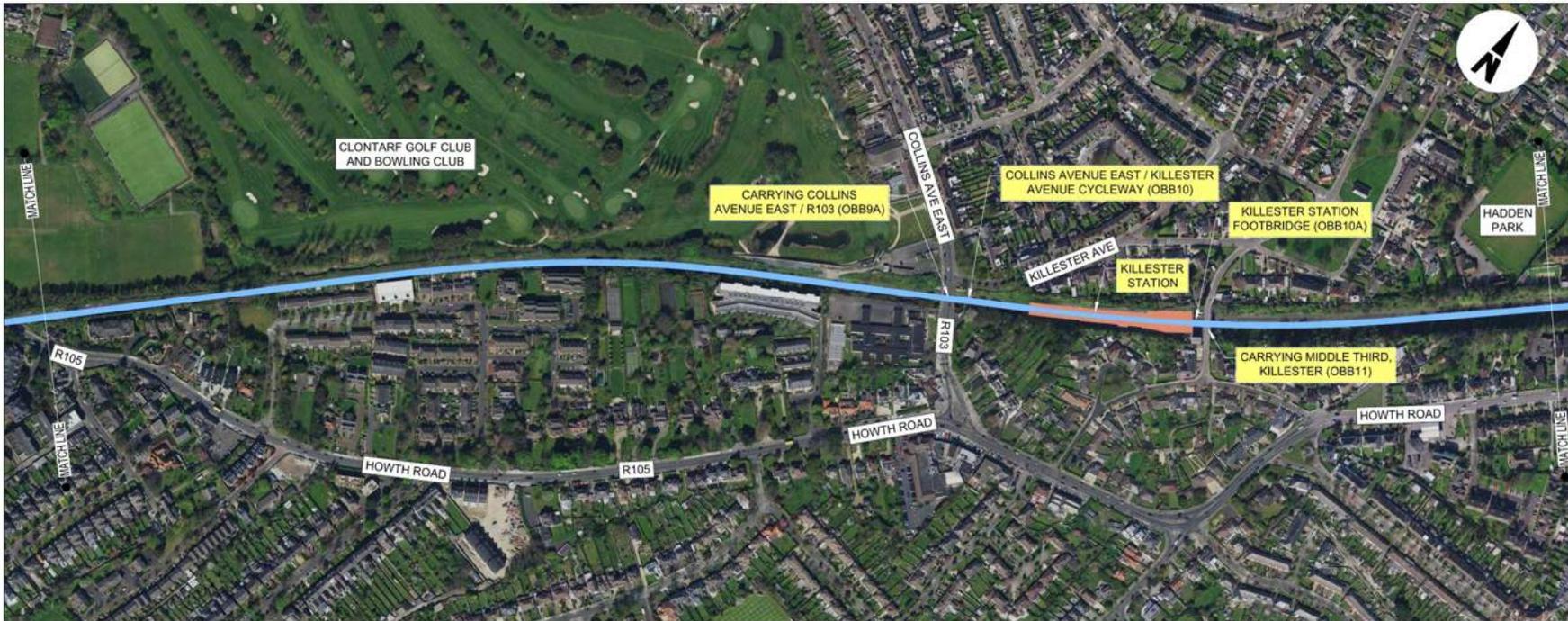


Rev	Date	Dr	Chkd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client		Engineering Designer		Project Title	
Iarnród Éireann Irish Rail		ARUP		DART+ COASTAL NORTH	
Date	Scale	Drawn	Checked	Approved	
04/01/2022	1:2500 @ A1 1:5000 @ A3	SR	RS	GS	
Project Code	Originator Code	QMS Code			
D+WP56	ARP	280275-00			

Drawing Title		Drawing File Name		Sheet Number		Status		Rev	
EMERGING PREFERRED OPTION - MAP 1 OF 37 CLONTARF ROAD STATION AND BURROUNDS		D+WP56-ARP-ZZ-NL-DR-RO-001001		1 of 37		S3		P01	

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- TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
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- ▨ MINOR WORK / INTERVENTION REQUIRED
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- EXISTING STATION

BRIDGES

- OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
- UBXX EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

Description:

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Malin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OS active GPS station Tallaght College (TLG).

Rev	Date	Dr	Chkd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client
Iarnród Éireann
Irish Rail

Engineering Designer
ARUP

Date: 04/01/2022 Scale: 1:2500 @ A1
1:5000 @ A3

Project Code: D+WP56 Originator Code: ARP QMS Code: 280275-00

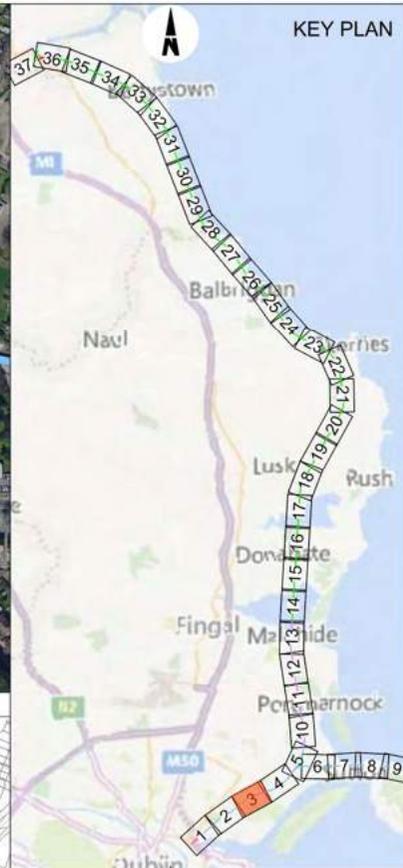
Drawn: SR Checked: RS Approved: GS

Project Title
DART+ COASTAL NORTH

Drawing Title
EMERGING PREFERRED OPTION - MAP 3 of 37
KILLESTER STATION AND SURROUNDS

Drawing File Name: D+WP56-ARP-ZZ-NL-DR-RO-001002 Sheet Number: 2 of 37 Status: S3 Rev: P01

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 - ▨ MINOR WORK / INTERVENTION REQUIRED
 - MINOR WORK REQUIRED
 - EXISTING STATION
- BRIDGES**
- ▭ OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
 - ▭ UBXX EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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Rev	Date	Dr	Chkd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client
Iarnród Éireann
Irish Rail

Engineering Designer
ARUP

Date: 04/01/2022 Scale: 1:2500 @ A1
1:5000 @ A3

Project Code: D+WP56 Originator Code: ARP QMS Code: 280275-00

Drawn: SR Checked: RS Approved: GS

Project Title
DART+ COASTAL NORTH

Drawing Title
EMERGING PREFERRED OPTION - MAP 3 OF 37
HARMONSTOWN STATION AND SURROUNDS

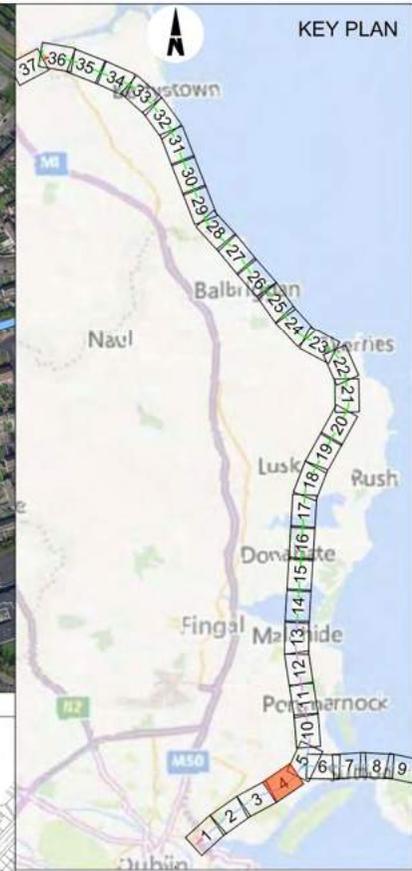
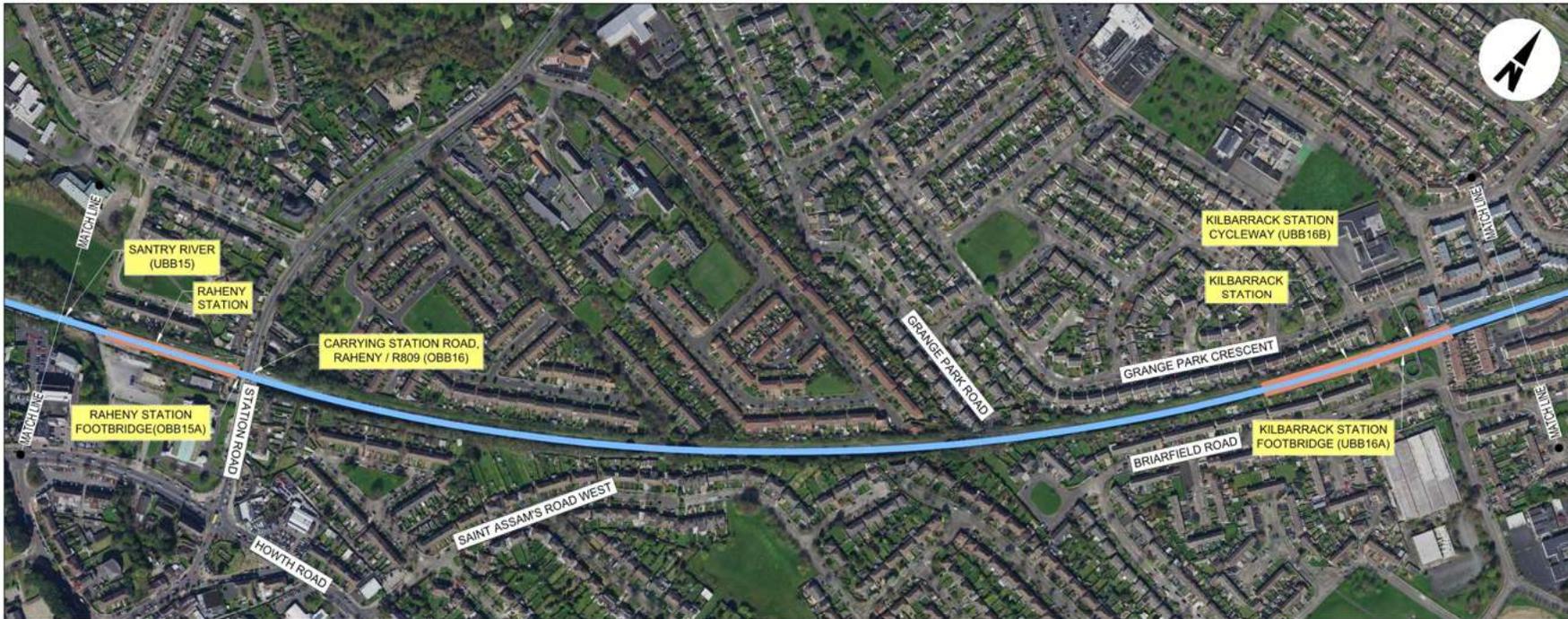
Drawing File Name
D+WP56-ARP-ZZ-NL-DR-RO-001003

Sheet Number
3 of 37

Status
S3

Rev
P01

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 - BRIDGES
 - OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
 - UBXX EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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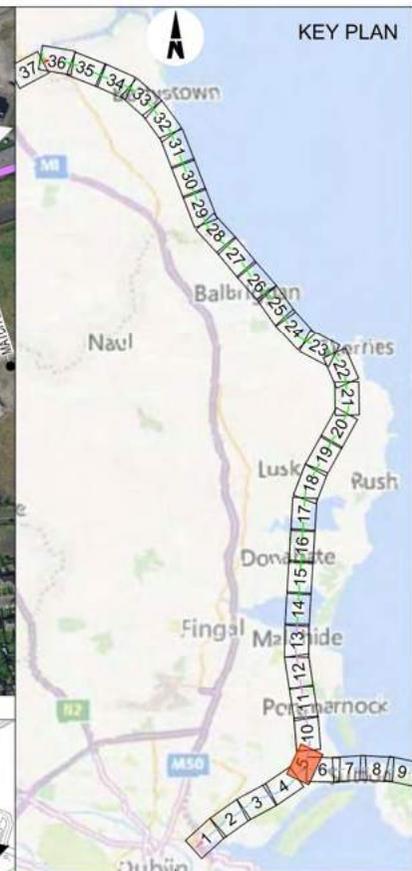


Rev	Date	Dr	Chkd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client larnród Éireann Irish Rail		Engineering Designer ARUP	
Date 04/01/2022	Scale 1:2500 @ A1 1:5000 @ A3	Drawn SR	Checked RS
Project Code D+WP56	Originator Code ARP	QMS Code 280275-00	Approved GS

Project Title DART+ COASTAL NORTH	Sheet Number 4 of 37	Status S3	Rev P01
Drawing Title EMERGING PREFERRED OPTION - MAP 4 OF 37 RAHENY STATION TO KILBARRACK STATION AND SURROUNDS	Drawing File Name D+WP56-ARP-ZZ-NL-DR-RO-001004		

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 - OBXX - EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
 - UBXX - EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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Rev	Date	Dm	Chkd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client: **larnród Éireann Irish Rail**

Engineering Designer: **ARUP**

Date: 04/01/2022 Scale: 1:2500 @ A1
 1:5000 @ A3

Project Code: D+WP56 Originator Code: ARP QMS Code: 280275-00

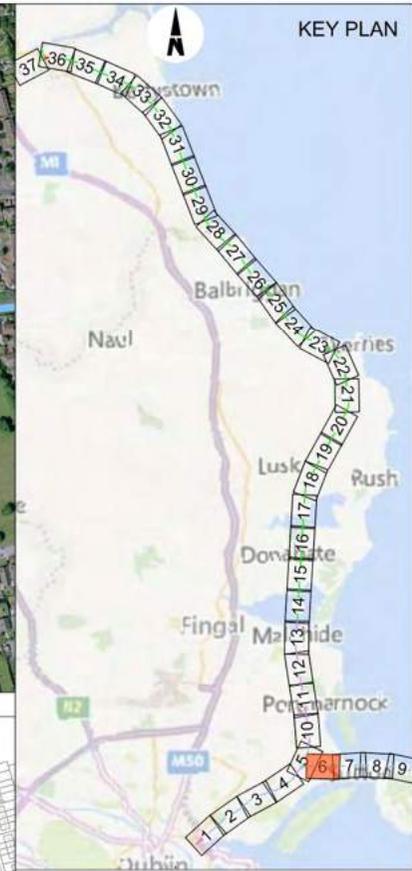
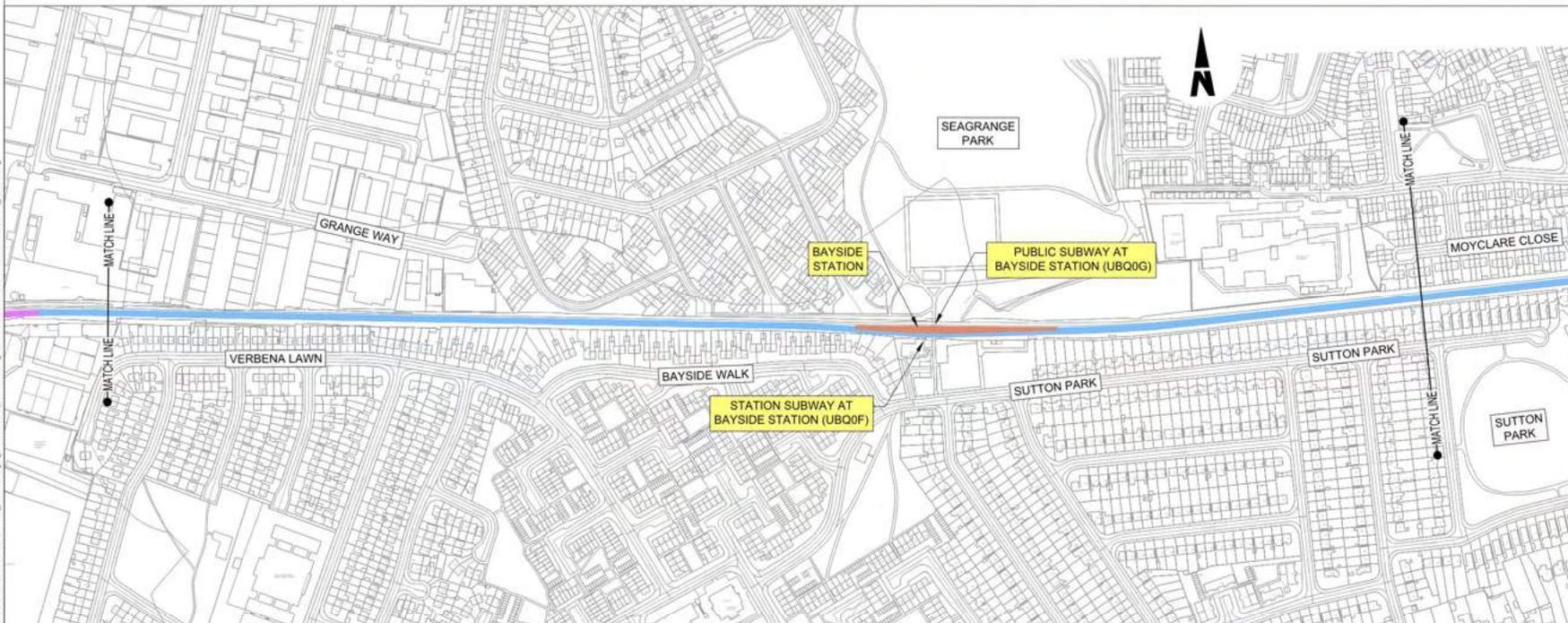
Drawn	Checked	Approved
SR	RS	GS

Project Title: **DART+ COASTAL NORTH**

Drawing Title: **EMERGING PREFERRED OPTION - MAP 5 OF 37 HOWTH JUNCTION AND DONAGHMEADE STATION AND SURROUNDS**

Drawing File Name: D+WP56-ARP-ZZ-NL-DR-RO-001005 Sheet Number: 5 of 37 Status: S3 Rev: P01

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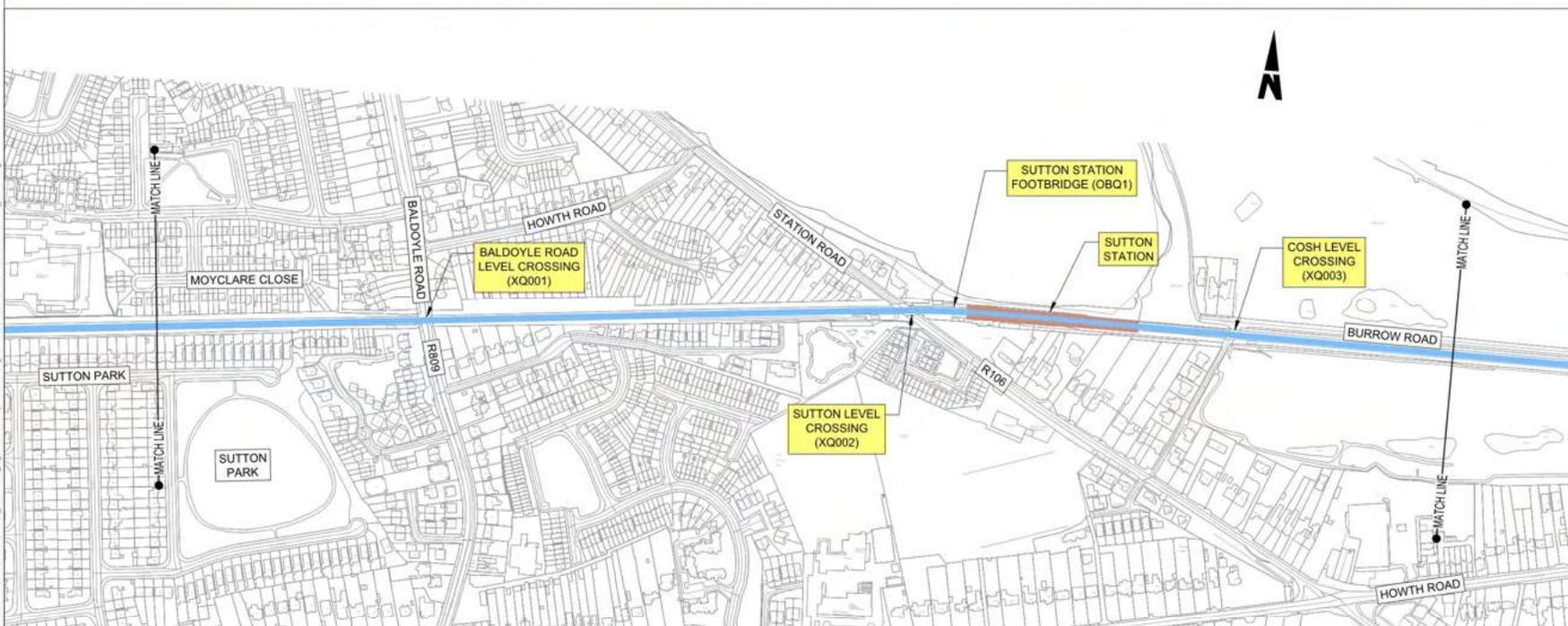
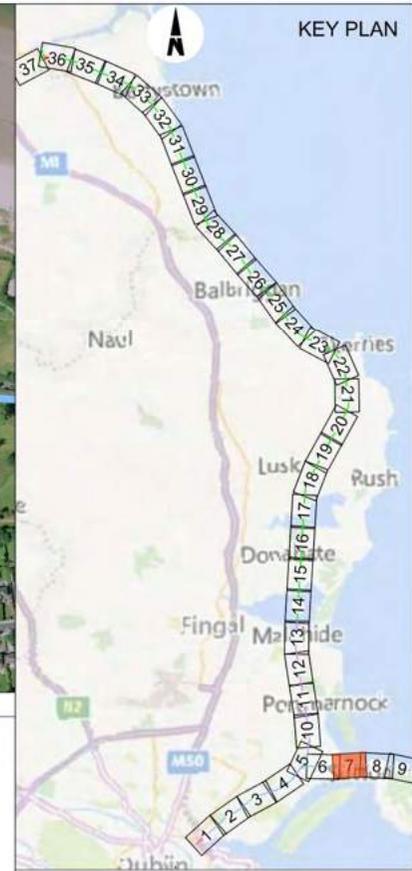
LEGEND:

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	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Rev</th> <th>Date</th> <th>Dr</th> <th>Chkd</th> <th>App'd</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>P01</td> <td>04/01/2022</td> <td>SR</td> <td>RS</td> <td>GS</td> <td>FOR PUBLIC CONSULTATION No 1</td> </tr> </tbody> </table>	Rev	Date	Dr	Chkd	App'd	Description	P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;"> larnród Éireann Irish Rail </td> <td style="text-align: center;"> </td> </tr> <tr> <td> Date: 04/01/2022 Project Code: D+WP56 </td> <td> Scale: 1:2500 @ A1 1:5000 @ A3 Originator Code: ARP QMS Code: 280275-00 </td> </tr> </table>	 larnród Éireann Irish Rail		Date: 04/01/2022 Project Code: D+WP56	Scale: 1:2500 @ A1 1:5000 @ A3 Originator Code: ARP QMS Code: 280275-00	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Client</td> <td>Engineering Designer</td> <td>Project Title</td> </tr> <tr> <td> </td> <td> </td> <td>DART+ COASTAL NORTH</td> </tr> <tr> <td> </td> <td> </td> <td>Drawing Title</td> </tr> <tr> <td> </td> <td> </td> <td>EMERGING PREFERRED OPTION - MAP 6 OF 37 BAYSIDE STATION AND SURROUNDS</td> </tr> <tr> <td> </td> <td> </td> <td>Drawing File Name</td> </tr> <tr> <td> </td> <td> </td> <td>D+WP56-ARP-ZZ-NL-DR-RO-001006</td> </tr> <tr> <td> </td> <td> </td> <td>Sheet Number</td> </tr> <tr> <td> </td> <td> </td> <td>6 of 37</td> </tr> <tr> <td> </td> <td> </td> <td>Status</td> </tr> <tr> <td> </td> <td> </td> <td>S3</td> </tr> <tr> <td> </td> <td> </td> <td>Rev</td> </tr> <tr> <td> </td> <td> </td> <td>P01</td> </tr> </table>	Client	Engineering Designer	Project Title			DART+ COASTAL NORTH			Drawing Title			EMERGING PREFERRED OPTION - MAP 6 OF 37 BAYSIDE STATION AND SURROUNDS			Drawing File Name			D+WP56-ARP-ZZ-NL-DR-RO-001006			Sheet Number			6 of 37			Status			S3			Rev			P01
Rev	Date	Dr	Chkd	App'd	Description																																																		
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DART+ COASTAL NORTH

EMERGING PREFERRED OPTION - MAP 7 OF 37 SUTTON STATION AND SURROUNDS

Client	Iarnród Éireann Irish Rail		Engineering Designer	ARUP	
Date	04/01/2022	Scale	1:2500 @ A1 1:5000 @ A3	Drawn	Checked
Project Code	D+WP56	Originator Code	ARP	RS	GS
		QMS Code	280275-00		

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 7 OF 37 SUTTON STATION AND SURROUNDS

Drawing File Name: D+WP56-ARP-ZZ-NL-DR-RO-001007

Sheet Number: 7 of 37

Status: S3

Rev: P01

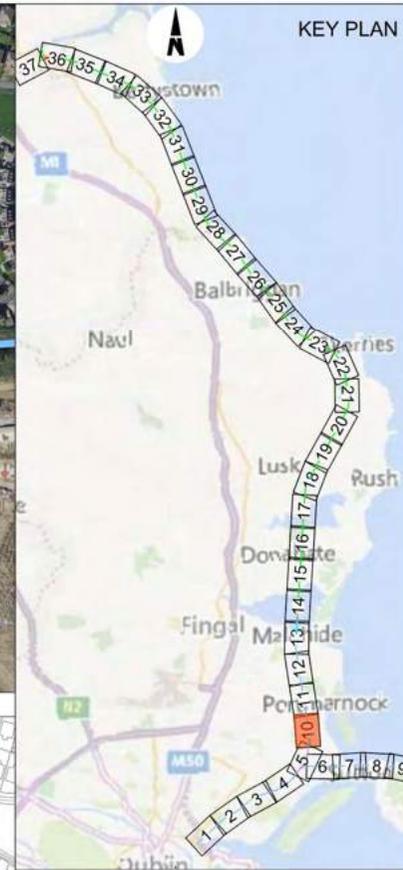
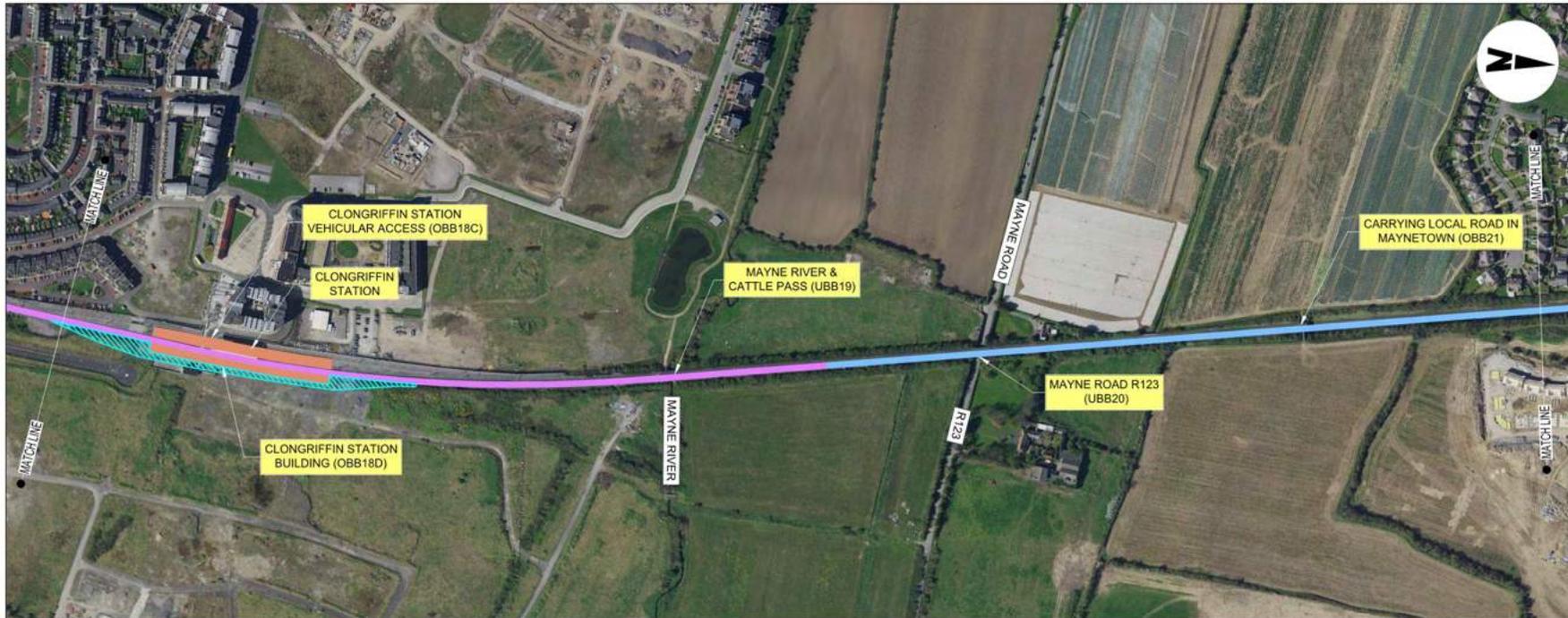
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 Malin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active GPS station Tallaght College (TLG).



Rev	Date	Drn	Chkd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client	Iarnród Éireann Irish Rail		Engineering Designer	ARUP	
Date	04/01/2022	Scale	1:2500 @ A1 1:5000 @ A3	Drawn	Checked
Project Code	D+WP56	Originator Code	ARP	RS	GS
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NOTE:

- BRIDGE PARAPET MODIFICATIONS REQUIRED AT A NUMBER OF OVERBRIDGES BETWEEN MALAHIDE AND DROGHEDA TO PROVIDE PROTECTION FROM OVERHEAD LINE EQUIPMENT.

LEGEND:

- NEW ELECTRIFICATION IN EXISTING RAIL CORRIDOR
- TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
- NEW ELECTRIFICATION AND TRACK MODIFICATION IN EXISTING RAIL CORRIDOR
- EXISTING ELECTRIFIED RAIL CORRIDOR - MINIMAL OR NO WORKS REQUIRED
- SIGNIFICANT WORK / INTERVENTION REQUIRED (INCLUDING BRIDGE RECONSTRUCTION)
- MINOR WORK / INTERVENTION REQUIRED
- MINOR WORK REQUIRED
- EXISTING STATION

BRIDGES

- OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
- UBXX EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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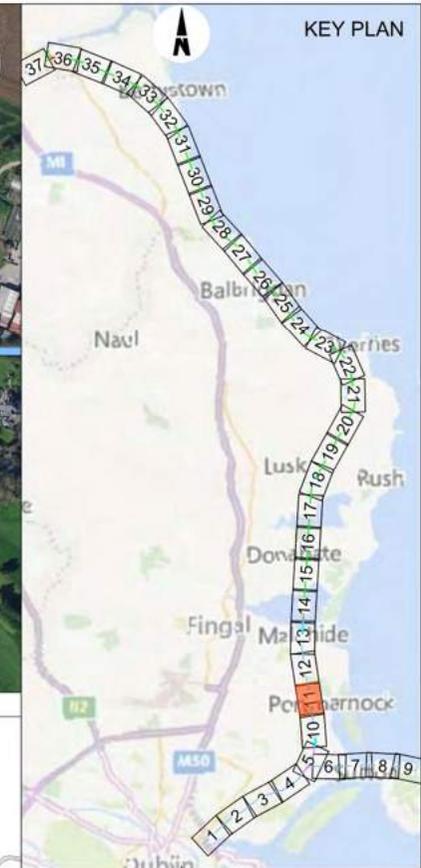
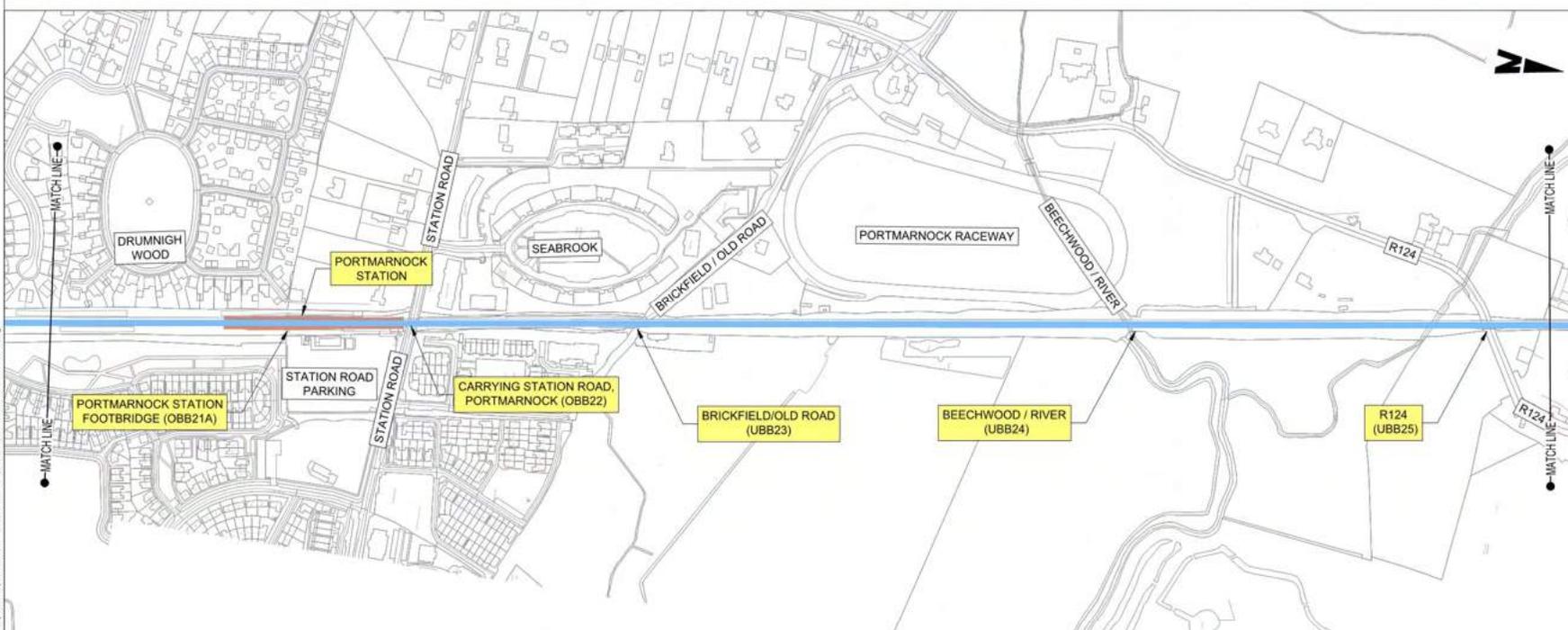


Rev	Date	Drn	Chk'd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client larnród Éireann Irish Rail		Engineering Designer ARUP	
Date 04/01/2022	Scale 1:2500 @ A1 1:5000 @ A3	Drawn SR	Checked RS
Project Code D+WP56	Originator Code ARP	QMS Code 280275-00	Approved GS

Project Title DART+ COASTAL NORTH	Sheet Number 10 of 37	Status S3	Rev P01
Drawing Title EMERGING PREFERRED OPTION - MAP 10 OF 37 CLONGRIFFIN STATION AND SURROUNDS	Drawing File Name D+WP56-ARP-ZZ-NL-DR-RO-001010		

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KEY PLAN

INFORMATION IS PRESENTED FOR PUBLIC CONSULTATION NO.1

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 - TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
 - NEW ELECTRIFICATION AND TRACK MODIFICATION IN EXISTING RAIL CORRIDOR
 - EXISTING ELECTRIFIED RAIL CORRIDOR - MINIMAL OR NO WORKS REQUIRED
 - SIGNIFICANT WORK / INTERVENTION REQUIRED (INCLUDING BRIDGE RECONSTRUCTION)
 - MINOR WORK / INTERVENTION REQUIRED
 - MINOR WORK REQUIRED
 - EXISTING STATION
- BRIDGES**
- OBBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
 - UBBXX EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

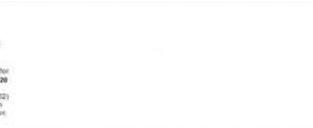
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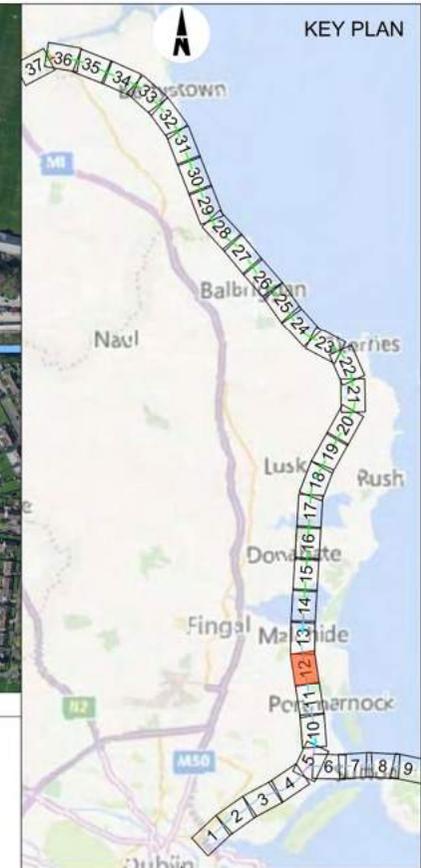
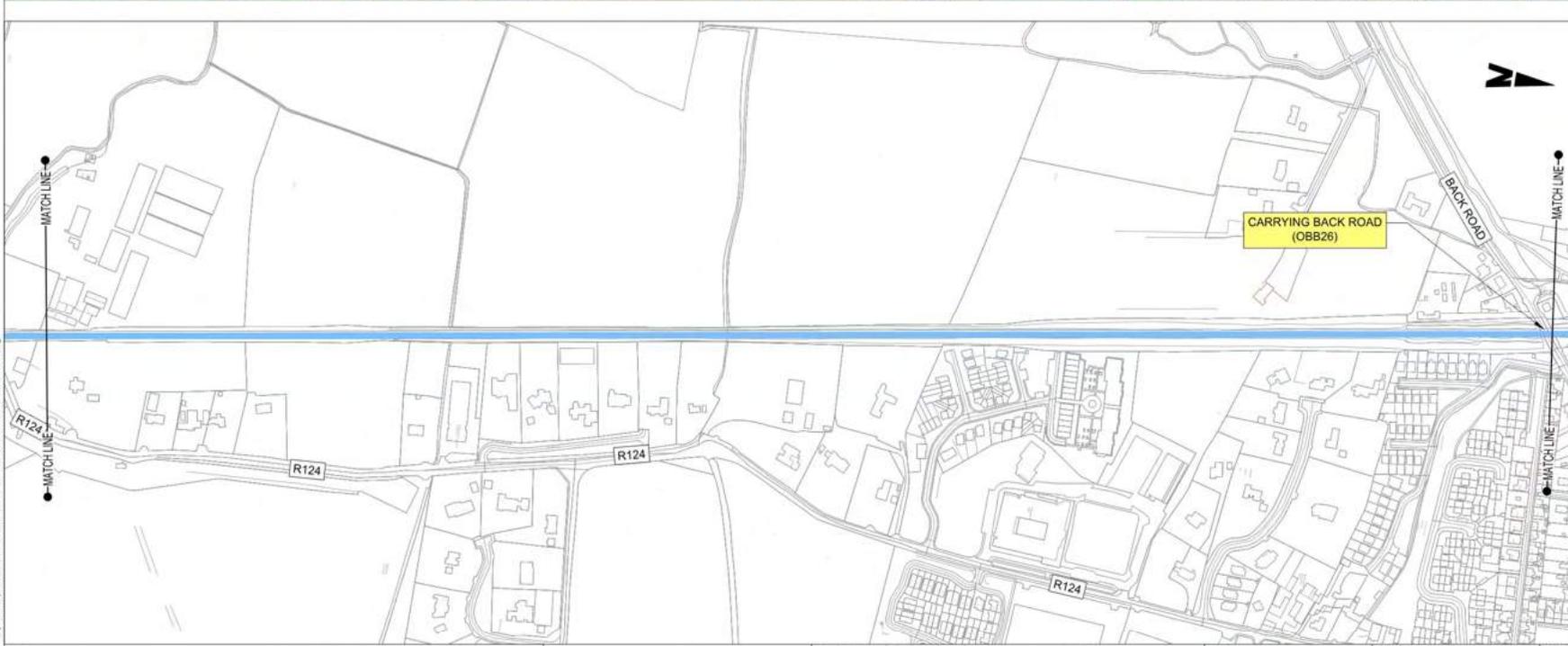


Rev	Date	Drn	Chk'd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client		Engineering Designer		Project Title	
Iarnród Éireann Irish Rail		ARUP		DART+ COASTAL NORTH	
Date	Scale	Drawn	Checked	Approved	Drawing Title
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Project Code	Originator Code	QMS Code		Drawing File Name	Sheet Number
D+WP56	ARP	280275-00		D+WP56-ARP-ZZ-NL-DR-RO-001011	11 of 37
				Status	Rev
				S3	P01

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Date	Scale	Drawn	Checked	Approved	Project Title
04/01/2022	1:2500 @ A1 1:5000 @ A3	SR	RS	GS	DART+ COASTAL NORTH
Project Code	Originator Code	QMS Code		Drawing File Name	Sheet Number
D+WP56	ARP	280275-00		D+WP56-ARP-ZZ-NL-DR-RO-001011	11 of 37
				Status	Rev
				S3	P01



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- NEW ELECTRIFICATION IN EXISTING RAIL CORRIDOR
- TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
- NEW ELECTRIFICATION AND TRACK MODIFICATION IN EXISTING RAIL CORRIDOR
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- SIGNIFICANT WORK / INTERVENTION REQUIRED (INCLUDING BRIDGE RECONSTRUCTION)
- MINOR WORK / INTERVENTION REQUIRED
- MINOR WORK REQUIRED
- EXISTING STATION

BRIDGES

- EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
- EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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Rev	Date	Drn	CHK'd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client

larnród Éireann
Irish Rail

Engineering Designer

ARUP

Date: 04/01/2022 Scale: 1:2500 @ A1, 1:5000 @ A3

Project Code: D+WP56 Originator Code: ARP QMS Code: 280275-00

Drawn: SR Checked: RS Approved: GS

Project Title

DART+ COASTAL NORTH

Drawing Title

EMERGING PREFERRED OPTION - MAP 12 OF 37 SOUTH MALAHIDE AND SURROUNDS

Drawing File Name

D+WP56-ARP-ZZ-NL-DR-RO-001012

Sheet Number

12 of 37

Status

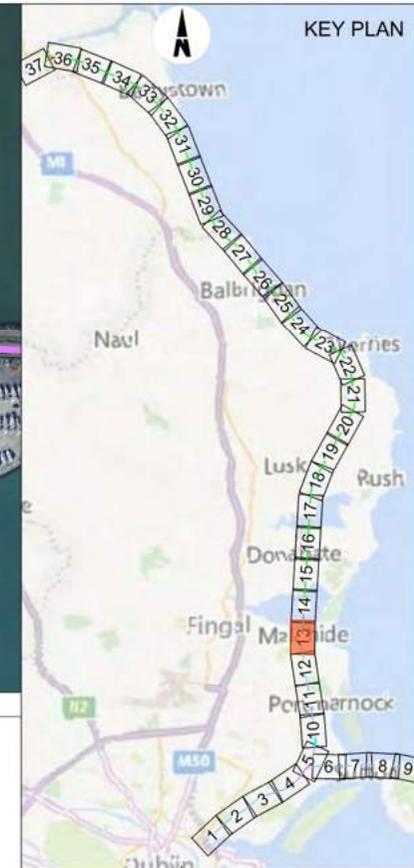
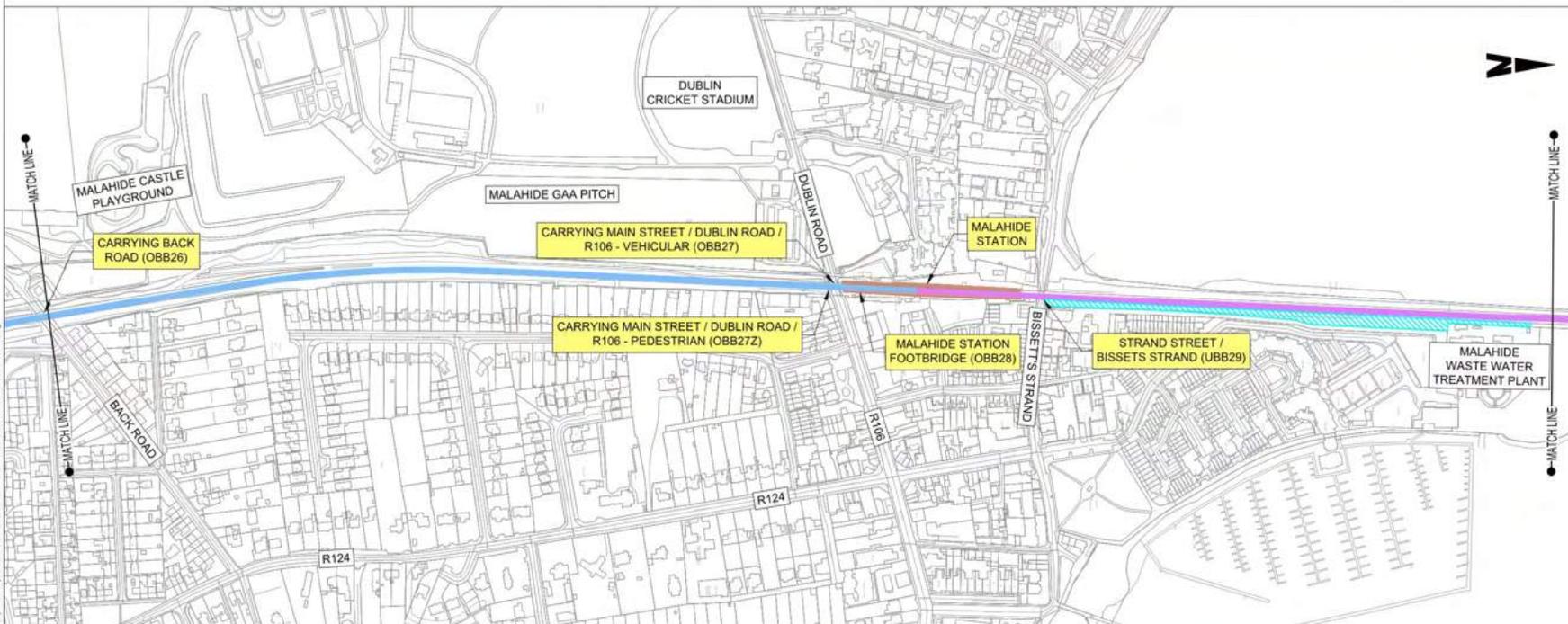
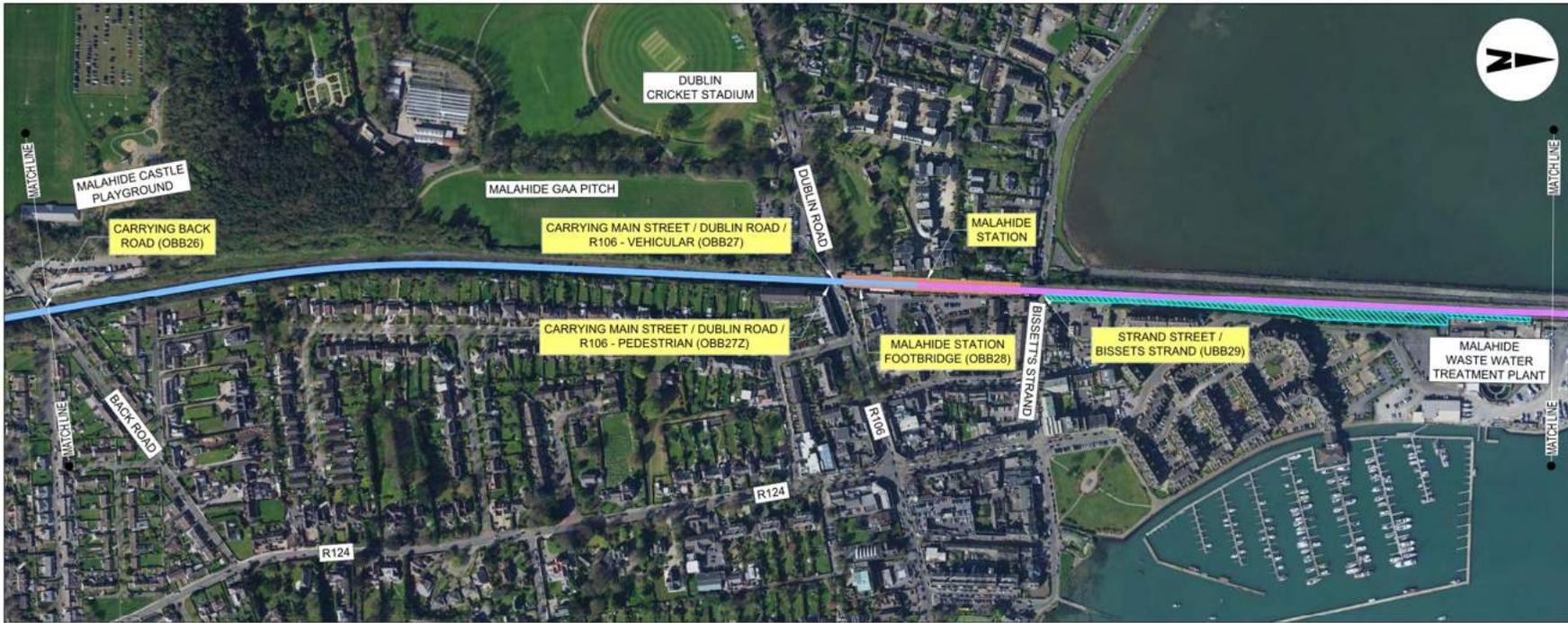
S3

Rev

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 - TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
 - NEW ELECTRIFICATION AND TRACK MODIFICATION IN EXISTING RAIL CORRIDOR
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 - MINOR WORK / INTERVENTION REQUIRED
 - MINOR WORK REQUIRED
 - EXISTING STATION
- BRIDGES**
- OBBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
 - UBBXX EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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Rev	Date	Drn	Chkd	App'd	Description
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Client: **Irish Rail**

Engineering Designer: **ARUP**

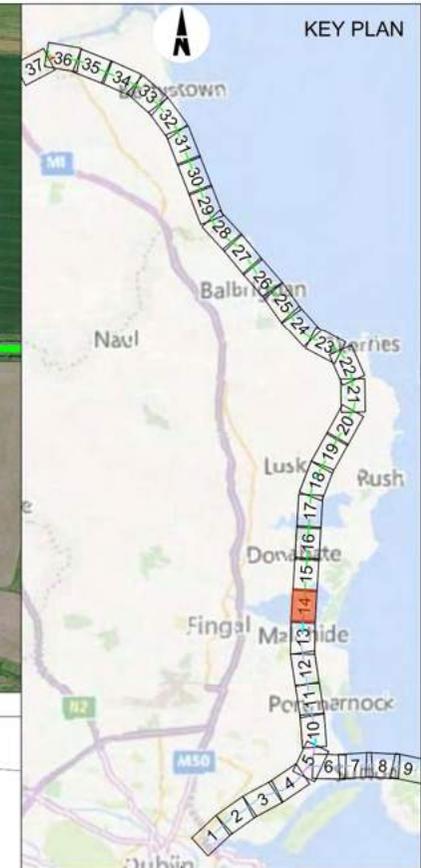
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Project Code: D+WP56 Originator Code: ARP QMS Code: 280275-00

Drawn: SR Checked: RS Approved: GS

Project Title:	DART+ COASTAL NORTH		
Drawing Title:	EMERGING PREFERRED OPTION - MAP 13 OF 37 MALAHIDE STATION AND SURROUNDINGS		
Drawing File Name:	D+WP56-ARP-ZZ-NL-DR-RO-001013	Sheet Number:	13 of 37
Status:	S3	Rev:	P01

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LEGEND:

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- █ TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
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- MINOR WORK REQUIRED
- EXISTING STATION

BRIDGES

- EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
- EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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Client
DART+ Coastal North

Client
Iarnród Éireann Irish Rail

Engineering Designer
ARUP

Project Title
DART+ COASTAL NORTH

Drawing Title
 EMERGING PREFERRED OPTION - MAP 14 OF 37
 MALAHIDE VIADUCT AND SURROUNDS

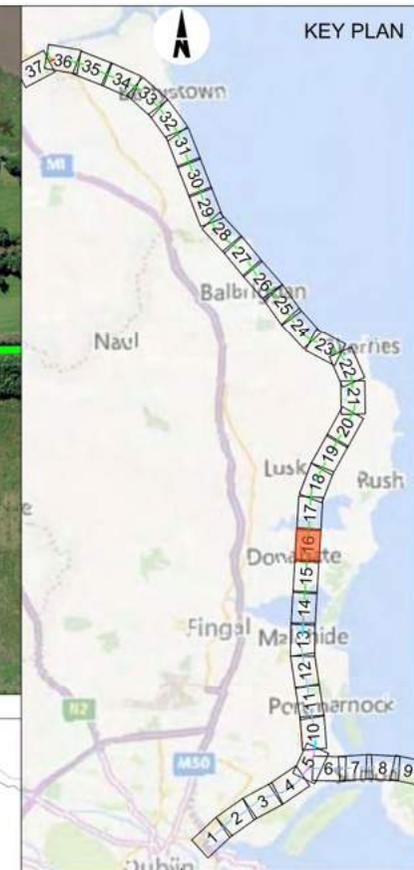
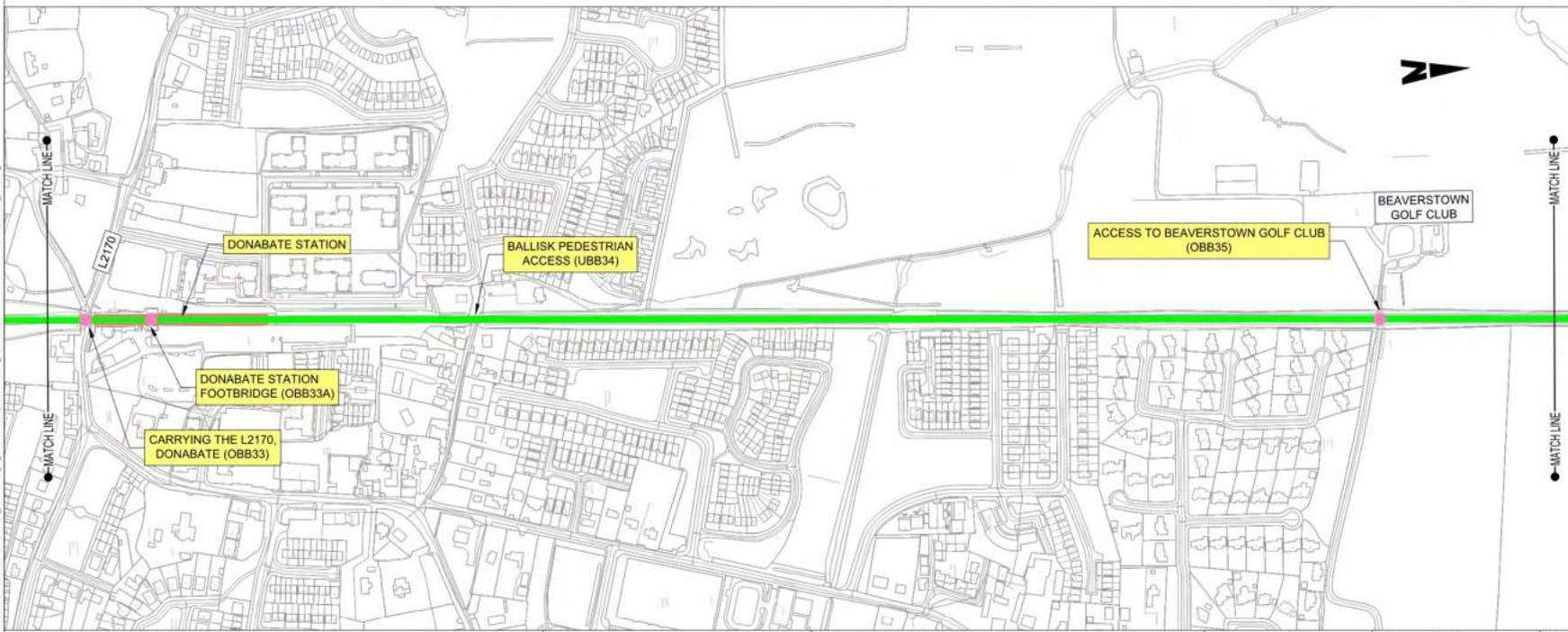
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Project Code D+WP56 **Originator Code** ARP **QMS Code** 280275-00

Drawing File Name D+WP56-ARP-ZZ-NL-DR-RO-001014 **Sheet Number** 14 of 37 **Status** S3 **Rev** P01

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P01	07/12/2021	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

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 - UBXX - EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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P01	07/12/2021	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client
Iarnród Éireann
Irish Rail

Engineering Designer
ARUP

Date: 07/12/2021
Scale: 1:2500 @ A1
1:5000 @ A3

Project Code: D+WP56
Originator Code: ARP
QMS Code: 280275-00

Drawn: SR
Checked: RS
Approved: GS

Project Title
DART+ COASTAL NORTH

Drawing Title
EMERGING PREFERRED OPTION - MAP 16 OF 37
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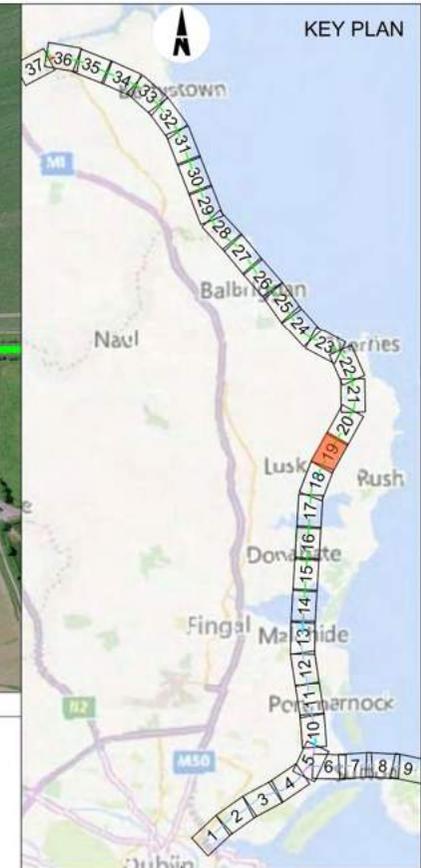
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D+WP56-ARP-ZZ-NL-DR-RO-001016

Sheet Number
16 of 37

Status
S3

Rev
P01

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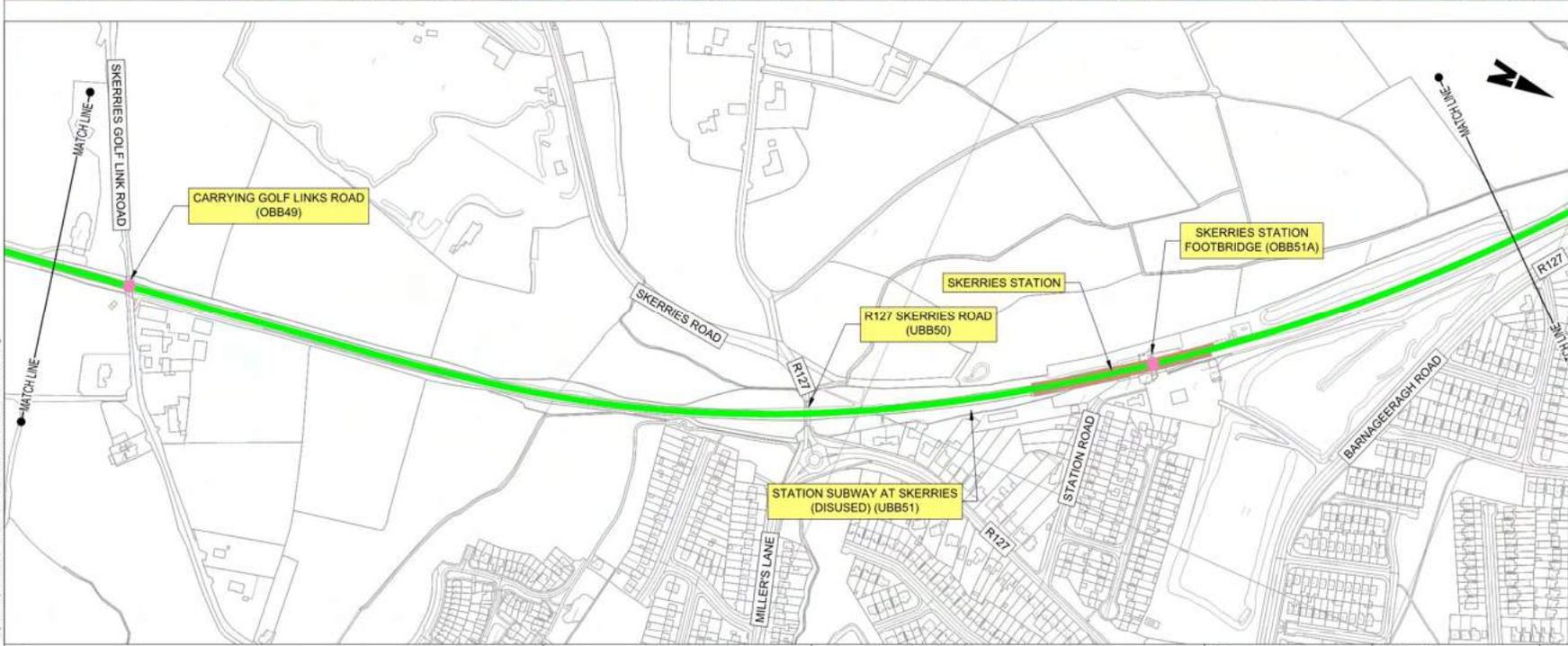
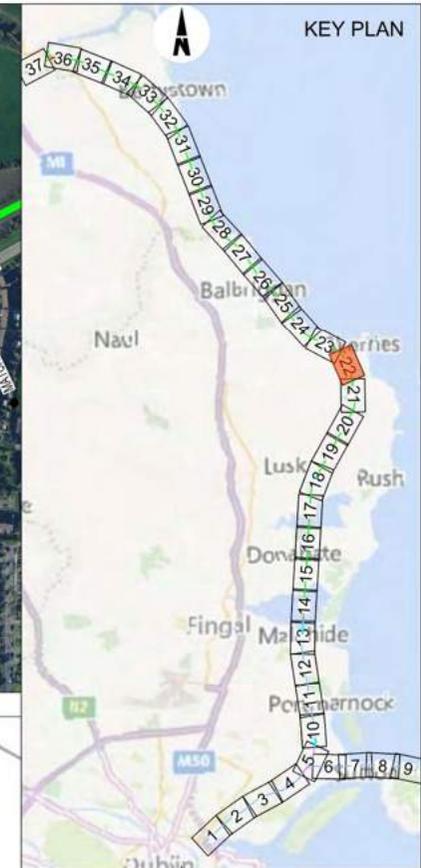
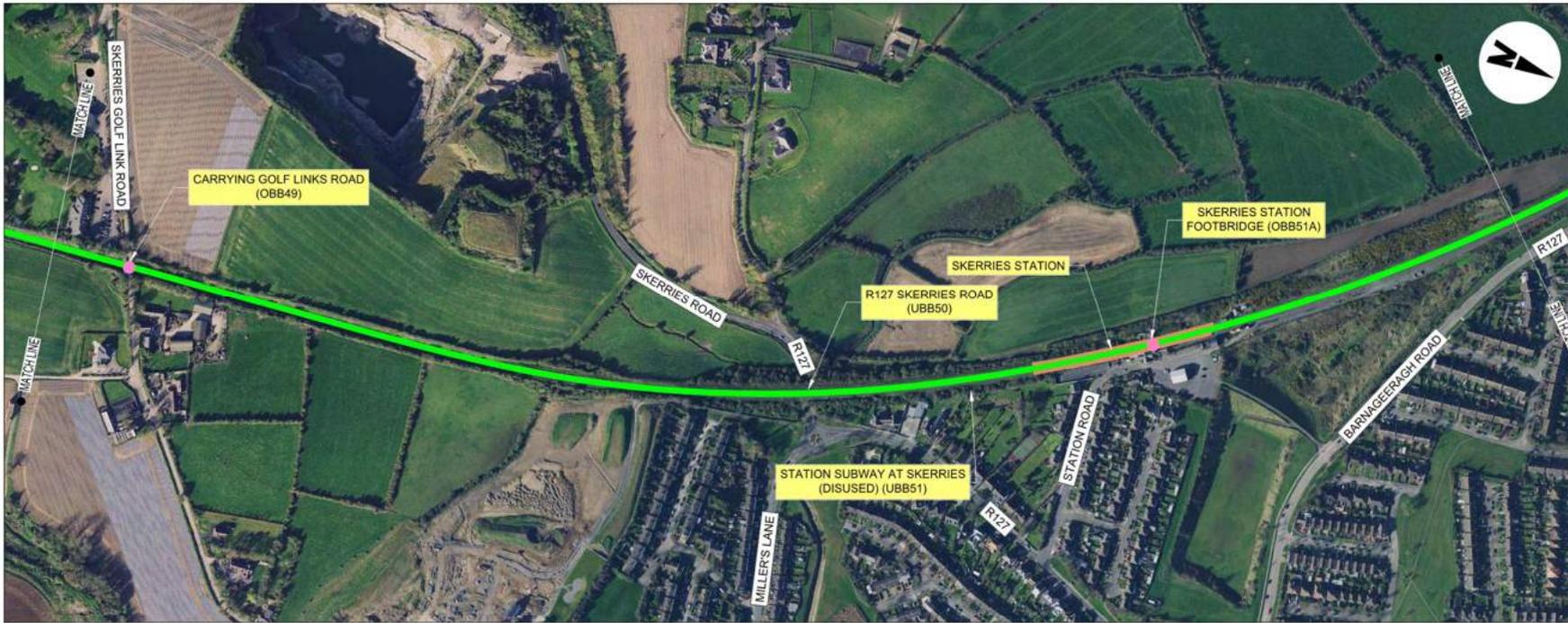
BRIDGES

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	Rev	Date	Drn	Chkd	App'd	Description															
P01	07/12/2021	SR	RS	GS	FOR PUBLIC CONSULTATION No 1																
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Date	07/12/2021	Scale	1:2500 @ A1 1:5000 @ A3	Drawn	SR	Checked	RS	Approved	GS												
Project Code	D+WP56	Originator Code	ARP	QMS Code	280275-00																
Drawing File Name D+WP56-ARP-ZZ-NL-DR-RO-001019		Sheet Number 19 of 37	Status S3	Rev P01																	

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NOTE:

1. BRIDGE PARAPET MODIFICATIONS REQUIRED AT A NUMBER OF OVERBRIDGES BETWEEN MALAHIDE AND DROGHEDA TO PROVIDE PROTECTION FROM OVERHEAD LINE EQUIPMENT.

LEGEND:

- NEW ELECTRIFICATION IN EXISTING RAIL CORRIDOR
- TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
- NEW ELECTRIFICATION AND TRACK MODIFICATION IN EXISTING RAIL CORRIDOR
- EXISTING ELECTRIFIED RAIL CORRIDOR - MINIMAL OR NO WORKS REQUIRED
- SIGNIFICANT WORK / INTERVENTION REQUIRED (INCLUDING BRIDGE RECONSTRUCTION)
- MINOR WORK / INTERVENTION REQUIRED
- MINOR WORK REQUIRED
- EXISTING STATION

BRIDGES:

- OBBX - EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
- UBXX - EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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Rev	Date	Drn	Chk'd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Date: 04/01/2022 Scale: 1:2500 @ A1, 1:5000 @ A3

Project Code: D+WP56 Originator Code: ARP QMS Code: 280275-00

Drawn: SR, Checked: RS, Approved: GS

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 22 OF 37 SKERRIES STATION AND SURROUNDS

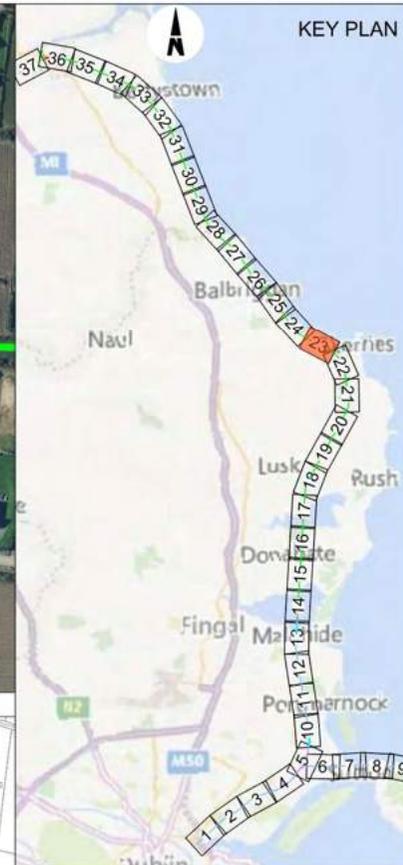
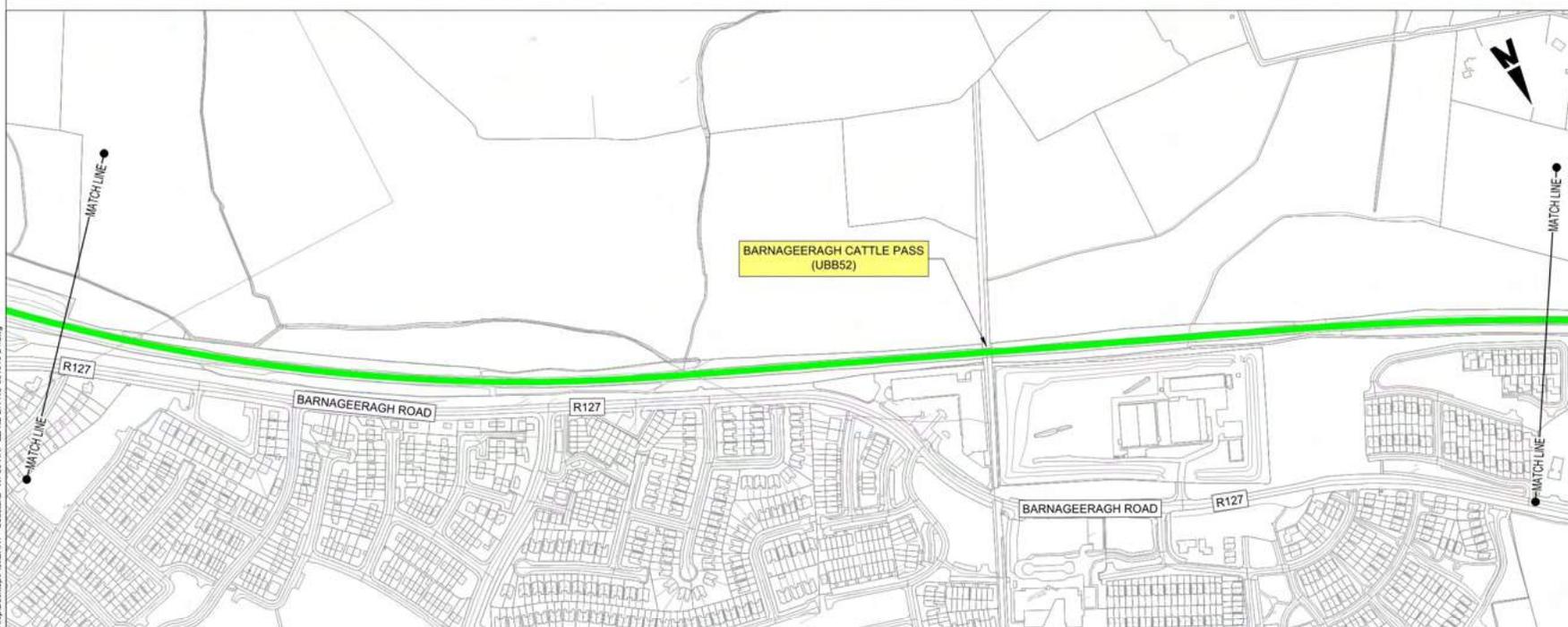
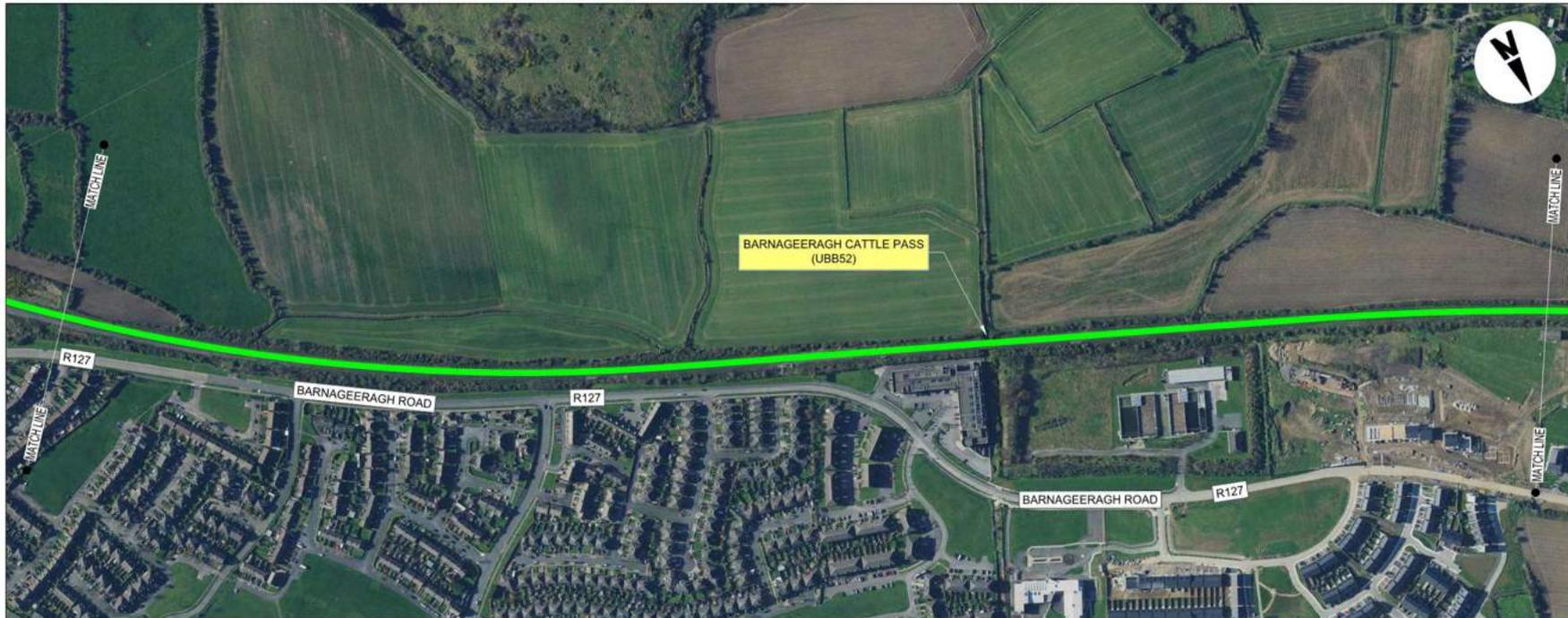
Drawing File Name: D+WP56-ARP-ZZ-NL-DR-RO-001022

Sheet Number: 22 of 37

Status: S3

Rev: P01

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NOTE:

- BRIDGE PARAPET MODIFICATIONS REQUIRED AT A NUMBER OF OVERBRIDGES BETWEEN MALAHIDE AND DROGHEDA TO PROVIDE PROTECTION FROM OVERHEAD LINE EQUIPMENT.

- LEGEND:**
- NEW ELECTRIFICATION IN EXISTING RAIL CORRIDOR
 - TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
 - NEW ELECTRIFICATION AND TRACK MODIFICATION IN EXISTING RAIL CORRIDOR
 - EXISTING ELECTRIFIED RAIL CORRIDOR - MINIMAL OR NO WORKS REQUIRED
 - SIGNIFICANT WORK / INTERVENTION REQUIRED (INCLUDING BRIDGE RECONSTRUCTION)
 - MINOR WORK / INTERVENTION REQUIRED
 - MINOR WORK REQUIRED
 - EXISTING STATION
- BRIDGES**
- OBXX - EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
 - UBXX - EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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Rev	Date	Dr	CHK'd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

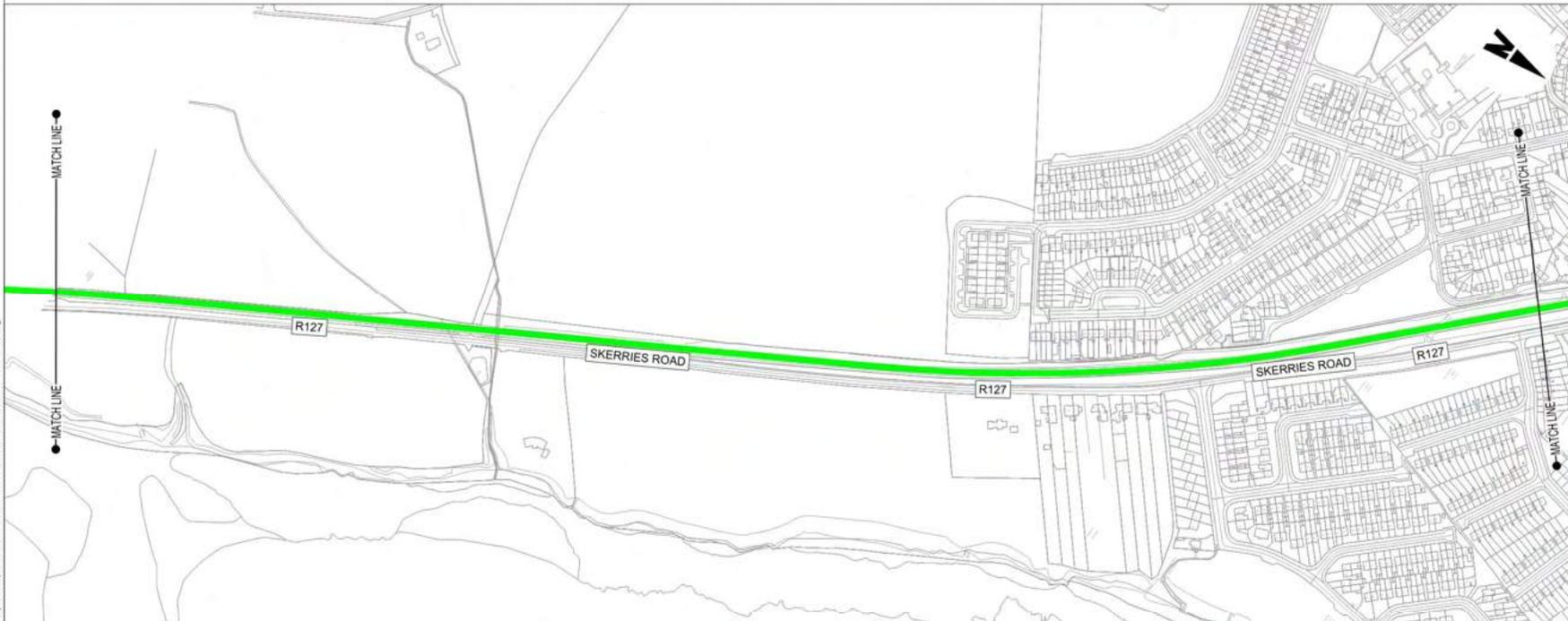
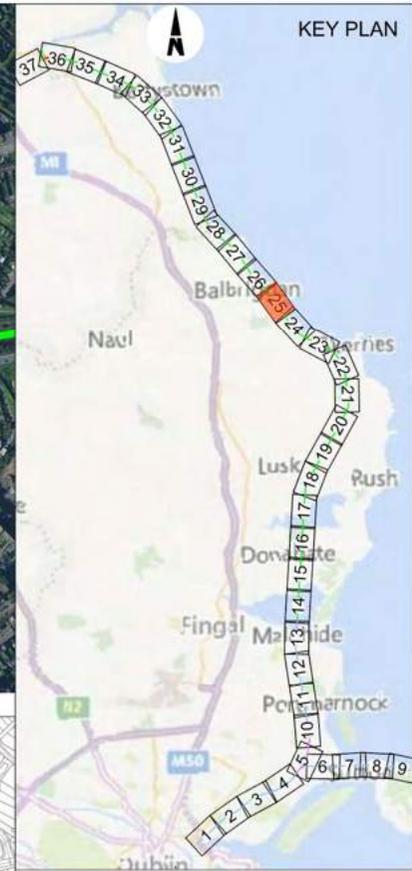
Date: 04/01/2022 Scale: 1:2500 @ A1, 1:5000 @ A3

Project Code: D+W\56 Originator Code: ARP QMS Code: 280275-00

Drawn: SR Checked: RS Approved: GS

Project Title:	DART+ COASTAL NORTH		
Drawing Title:	EMERGING PREFERRED OPTION - MAP 23 OF 37 BARNAGEERAGH AND SURROUNDS		
Drawing File Name:	D+W\56-ARP-ZZ-NL-DR-RO-001023	Sheet Number:	23 of 37
Status:	S3	Rev:	P01

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NOTE:

- BRIDGE PARAPET MODIFICATIONS REQUIRED AT A NUMBER OF OVERBRIDGES BETWEEN MALWADE AND DROGHEDA TO PROVIDE PROTECTION FROM OVERHEAD LINE EQUIPMENT.

LEGEND:

- NEW ELECTRIFICATION IN EXISTING RAIL CORRIDOR
- TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
- NEW ELECTRIFICATION AND TRACK MODIFICATION IN EXISTING RAIL CORRIDOR
- EXISTING ELECTRIFIED RAIL CORRIDOR - MINIMAL OR NO WORKS REQUIRED
- SIGNIFICANT WORK / INTERVENTION REQUIRED (INCLUDING BRIDGE RECONSTRUCTION)
- MINOR WORK / INTERVENTION REQUIRED
- MINOR WORK REQUIRED
- EXISTING STATION

BRIDGES

- OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
- UBXX EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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Rev	Date	Dr	Chkd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client: **larnród Éireann Irish Rail**

Engineering Designer: **ARUP**

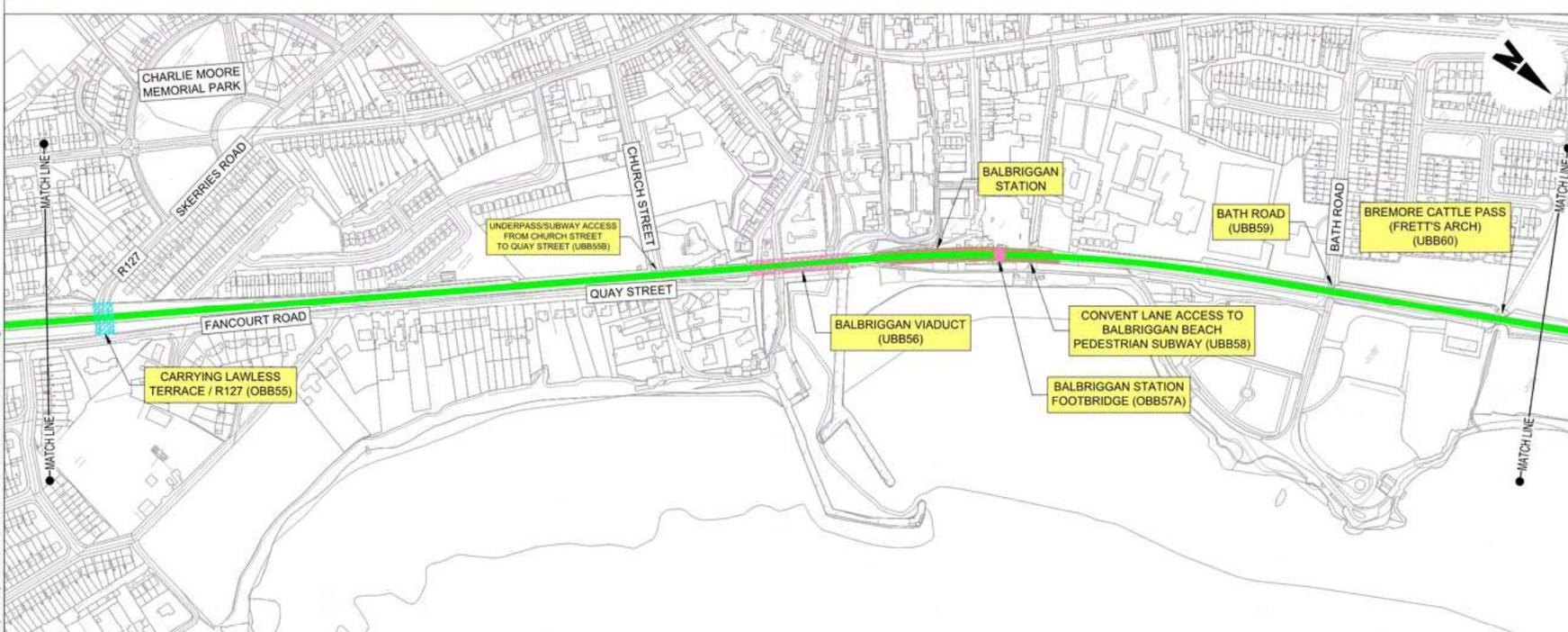
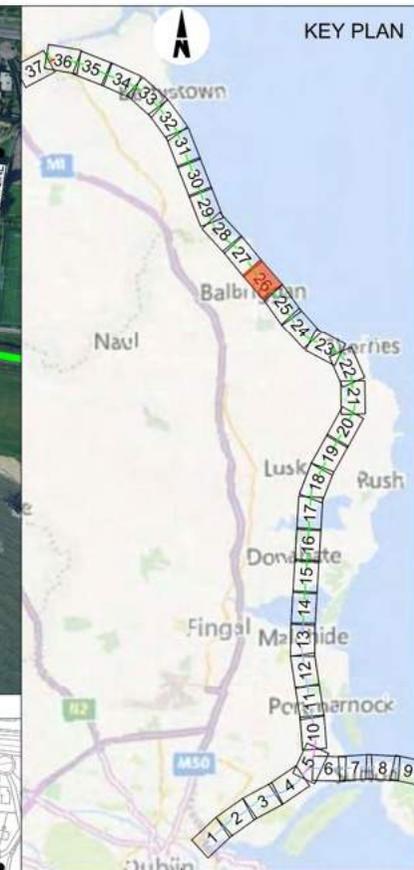
Date: 04/01/2022 Scale: 1:2500 @ A1
1:5000 @ A3

Project Code: D+WP56 Originator Code: ARP QMS Code: 280275-00

Drawn: SR	Checked: RS	Approved: GS
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Project Title: DART+ COASTAL NORTH	Sheet Number: 25 of 37	Status: S3	Rev: P01
Drawing Title: EMERGING PREFERRED OPTION - MAP 25 OF 37 HAMPTON COVE AND SURROUNDINGS	Drawing File Name: D+WP56-ARP-ZZ-NL-DR-RO-001025		

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NOTE:

1. BRIDGE PARAPET MODIFICATIONS REQUIRED AT A NUMBER OF OVERBRIDGES BETWEEN MALAHIDE AND DROGHEDA TO PROVIDE PROTECTION FROM OVERHEAD LINE EQUIPMENT.

LEGEND:

- NEW ELECTRIFICATION IN EXISTING RAIL CORRIDOR
- TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
- NEW ELECTRIFICATION AND TRACK MODIFICATION IN EXISTING RAIL CORRIDOR
- EXISTING ELECTRIFIED RAIL CORRIDOR - MINIMAL OR NO WORKS REQUIRED
- SIGNIFICANT WORK / INTERVENTION REQUIRED (INCLUDING BRIDGE RECONSTRUCTION)
- MINOR WORK / INTERVENTION REQUIRED
- MINOR WORK REQUIRED
- EXISTING STATION

BRIDGES

- OBXX - EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
- UBXX - EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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Rev	Date	Dr	Chkd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client
Iarnród Éireann
Irish Rail

Engineering Designer
ARUP

Date: 04/01/2022 Scale: 1:2500 @ A1
 Project Code: D+WP56 Originator Code: ARP
 Drawn: SR Checked: RS Approved: GS
 QMS Code: 280275-00

Project Title
DART+ COASTAL NORTH

Drawing Title
EMERGING PREFERRED OPTION - MAP 26 OF 37
BALBRIGGAN STATION AND SURROUNDS

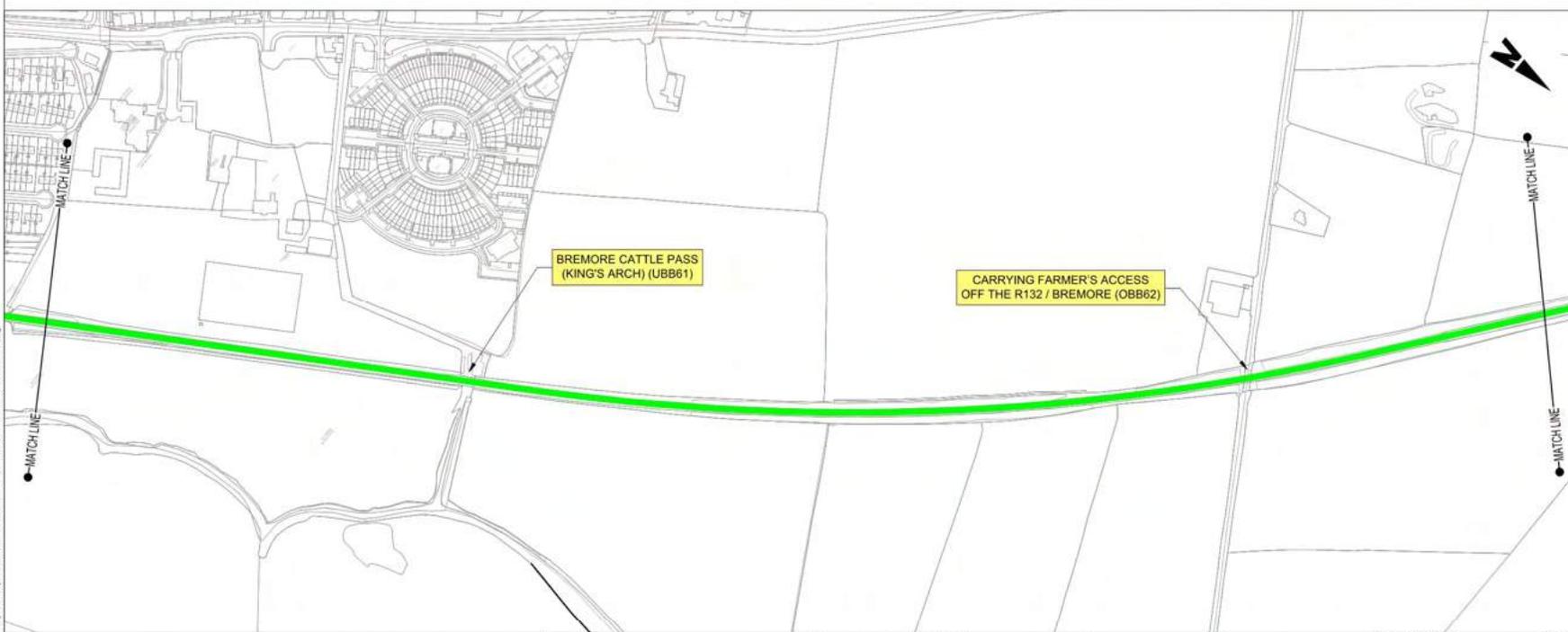
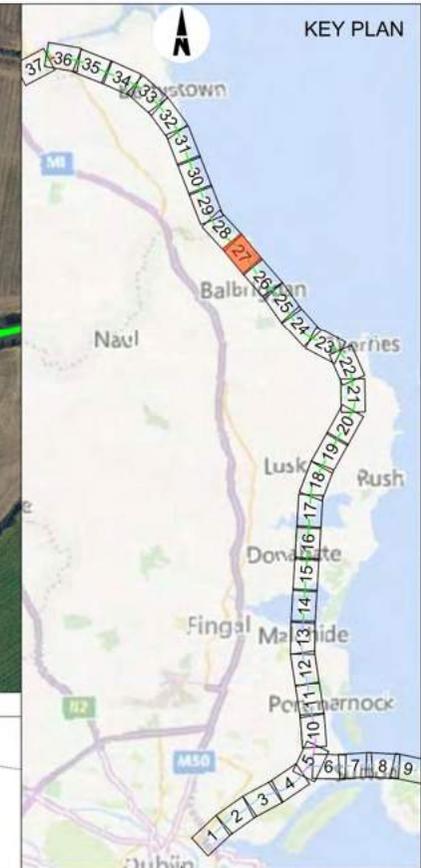
Drawing File Name
D+WP56-ARP-ZZ-NL-DR-RO-001026

Sheet Number
26 of 37

Status
S3

Rev
P01

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NOTE:

- BRIDGE PARAPET MODIFICATIONS REQUIRED AT A NUMBER OF OVERBRIDGES BETWEEN MALAHIDE AND DROGHEDA TO PROVIDE PROTECTION FROM OVERHEAD LINE EQUIPMENT.

LEGEND:

- █ NEW ELECTRIFICATION IN EXISTING RAIL CORRIDOR
- █ TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
- █ NEW ELECTRIFICATION AND TRACK MODIFICATION IN EXISTING RAIL CORRIDOR
- █ EXISTING ELECTRIFIED RAIL CORRIDOR - MINIMAL OR NO WORKS REQUIRED
- SIGNIFICANT WORK / INTERVENTION REQUIRED (INCLUDING BRIDGE RECONSTRUCTION)
- MINOR WORK / INTERVENTION REQUIRED
- MINOR WORK REQUIRED
- EXISTING STATION

BRIDGES

- OBXX - EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
- UBXX - EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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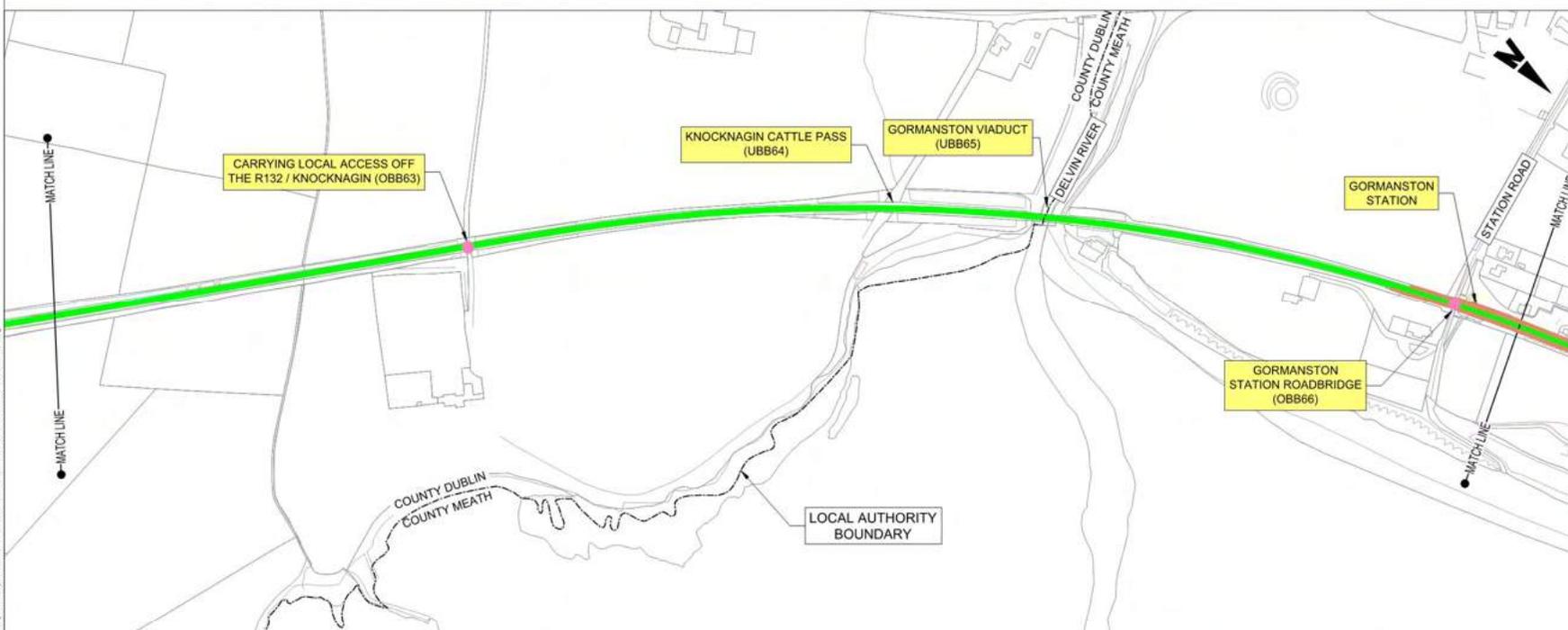
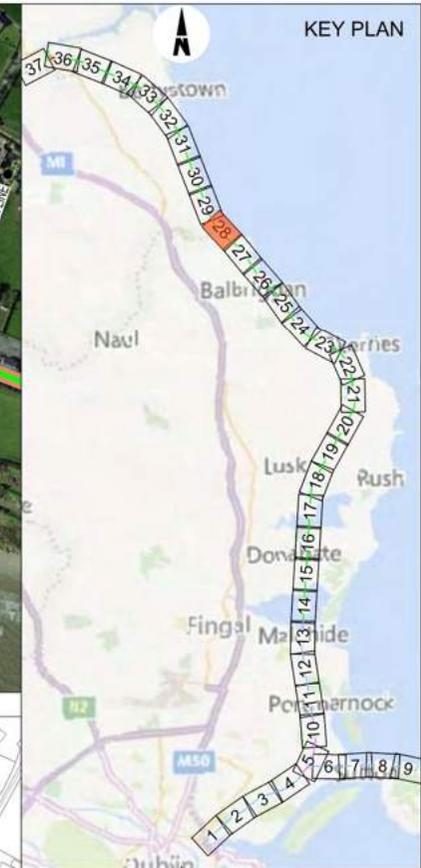
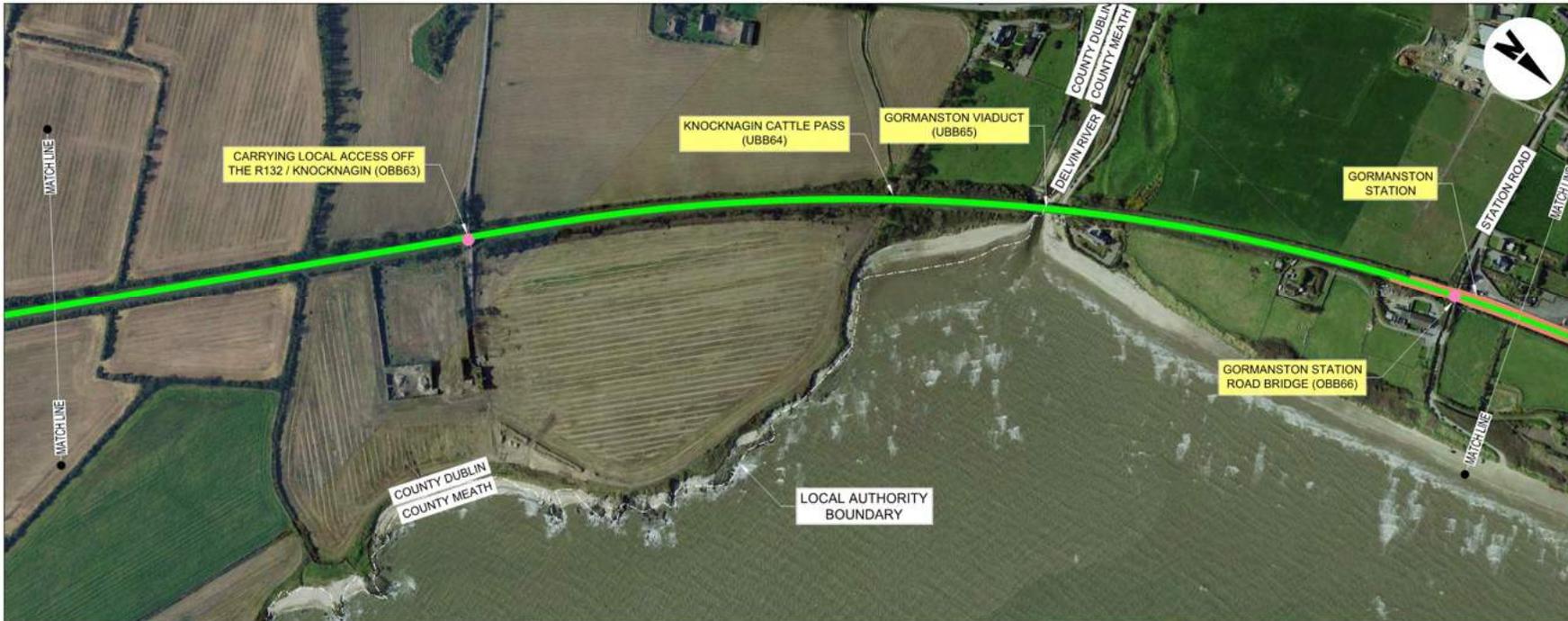
Rev	Date	Dr	Chkd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client		Engineering Designer		Project Title	
Iarnród Éireann Irish Rail		ARUP		DART+ COASTAL NORTH	
Date	Scale	Drawn	Checked	Approved	Drawing Title
04/01/2022	1:2500 @ A1 1:5000 @ A3	SR	RS	GS	EMERGING PREFERRED OPTION - MAP 27 OF 37 BREMORE BAY AND SURROUNDS
Project Code	Originator Code	QMS Code	Drawing File Name		
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001027		

Date	Scale	Drawn	Checked	Approved
04/01/2022	1:2500 @ A1 1:5000 @ A3	SR	RS	GS
Project Code	Originator Code	QMS Code	Drawing File Name	
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001027	

Sheet Number	Status	Rev
27 of 37	S3	P01

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NOTE:

- BRIDGE PARAPET MODIFICATIONS REQUIRED AT A NUMBER OF OVERBRIDGES BETWEEN MALAHIDE AND DROGHEDA TO PROVIDE PROTECTION FROM OVERHEAD LINE EQUIPMENT.

LEGEND:

- NEW ELECTRIFICATION IN EXISTING RAIL CORRIDOR
- TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
- NEW ELECTRIFICATION AND TRACK MODIFICATION IN EXISTING RAIL CORRIDOR
- EXISTING ELECTRIFIED RAIL CORRIDOR - MINIMAL OR NO WORKS REQUIRED
- SIGNIFICANT WORK / INTERVENTION REQUIRED (INCLUDING BRIDGE RECONSTRUCTION)
- MINOR WORK / INTERVENTION REQUIRED
- MINOR WORK REQUIRED
- EXISTING STATION

BRIDGES

- OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
- UBXX EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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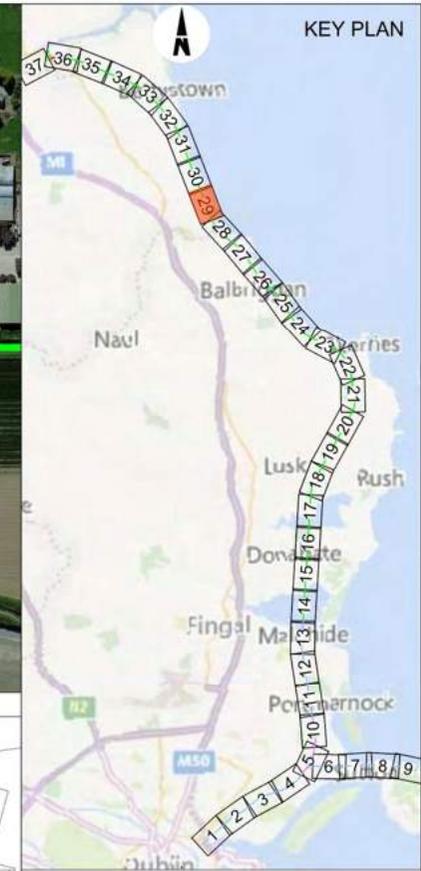


Rev	Date	Dr	Chkd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client		Engineering Designer		Project Title	
Iarnród Éireann Irish Rail		ARUP		DART+ COASTAL NORTH	
Date	Scale	Drawn	Checked	Approved	GS
04/01/2022	1:2500 @ A1 1:5000 @ A3	SR	RS	GS	
Project Code	Originator Code	QMS Code			
D+WP56	ARP	280275-00			

Drawing Title		Drawing File Name		Sheet Number		Status		Rev	
EMERGING PREFERRED OPTION - MAP 28 OF 37 GORMANSTON VIADUCT AND SURROUNDS		D+WP56-ARP-ZZ-NL-DR-RO-001028		28 of 37		S3		P01	

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NOTE:

- BRIDGE PARAPET MODIFICATIONS REQUIRED AT A NUMBER OF OVERBRIDGES BETWEEN MALAHIDE AND DROGHEDA TO PROVIDE PROTECTION FROM OVERHEAD LINE EQUIPMENT.

LEGEND:

- NEW ELECTRIFICATION IN EXISTING RAIL CORRIDOR
- TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
- NEW ELECTRIFICATION AND TRACK MODIFICATION IN EXISTING RAIL CORRIDOR
- EXISTING ELECTRIFIED RAIL CORRIDOR - MINIMAL OR NO WORKS REQUIRED
- SIGNIFICANT WORK / INTERVENTION REQUIRED (INCLUDING BRIDGE RECONSTRUCTION)
- MINOR WORK / INTERVENTION REQUIRED
- MINOR WORK REQUIRED
- EXISTING STATION

BRIDGES

- OBXX - EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
- UBXX - EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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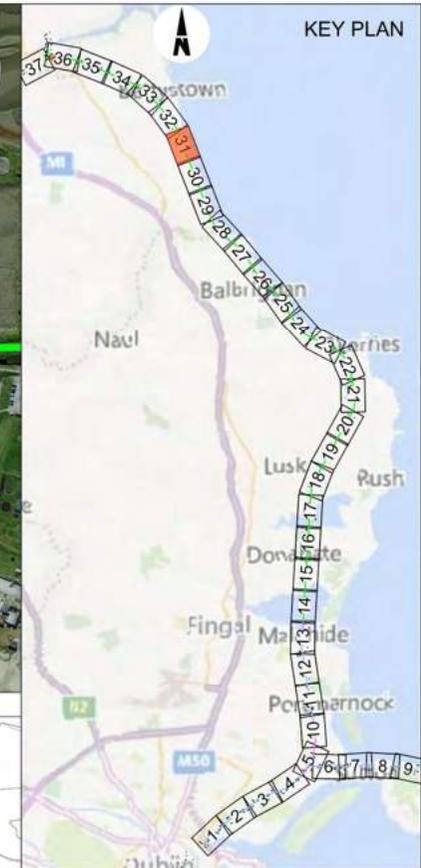
Rev	Date	Drn	Chkd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client		Engineering Designer		Project Title	
Iarnród Éireann Irish Rail		ARUP		DART+ COASTAL NORTH	
Date	Scale	Drawn	Checked	Approved	GS
04/01/2022	1:2500 @ A1 1:5000 @ A3	SR	RS	GS	
Project Code	Originator Code	QMS Code		Drawing File Name	
D+WP56	ARP	280275-00		D+WP56-ARP-ZZ-NL-DR-RO-001029	

Sheet Number	Status	Rev
29 of 37	S3	P01

EMERGING PREFERRED OPTION - MAP 29 OF 37
 GORMANSTON STATION AND SURROUNDS

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NOTE:

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LEGEND:

- NEW ELECTRIFICATION IN EXISTING RAIL CORRIDOR
- TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
- NEW ELECTRIFICATION AND TRACK MODIFICATION IN EXISTING RAIL CORRIDOR
- EXISTING ELECTRIFIED RAIL CORRIDOR - MINIMAL OR NO WORKS REQUIRED
- SIGNIFICANT WORK / INTERVENTION REQUIRED (INCLUDING BRIDGE RECONSTRUCTION)
- MINOR WORK / INTERVENTION REQUIRED
- MINOR WORK REQUIRED
- EXISTING STATION

BRIDGES

- OBXX - EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
- UBXX - EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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Rev	Date	Dr	Chkd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client
Iarnród Éireann
Irish Rail

Engineering Designer
ARUP

Date: 04/01/2022
Scale: 1:2500 @ A1
1:5000 @ A3

Project Code: D+WP56
Originator Code: ARP
QMS Code: 280275-00

Drawn: SR
Checked: RS
Approved: GS

Rev	Date	Dr	Chkd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Project Title
DART+ COASTAL NORTH

Drawing Title
EMERGING PREFERRED OPTION - MAP 31 OF 37
LAYTOWN VIADUCT AND SURROUNDS

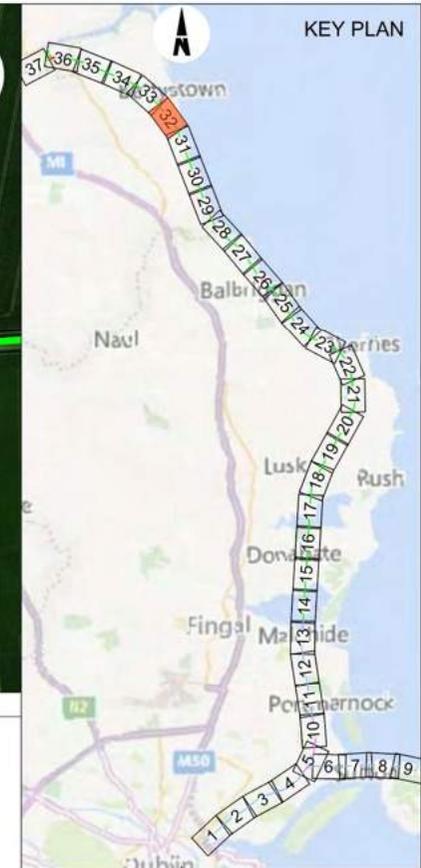
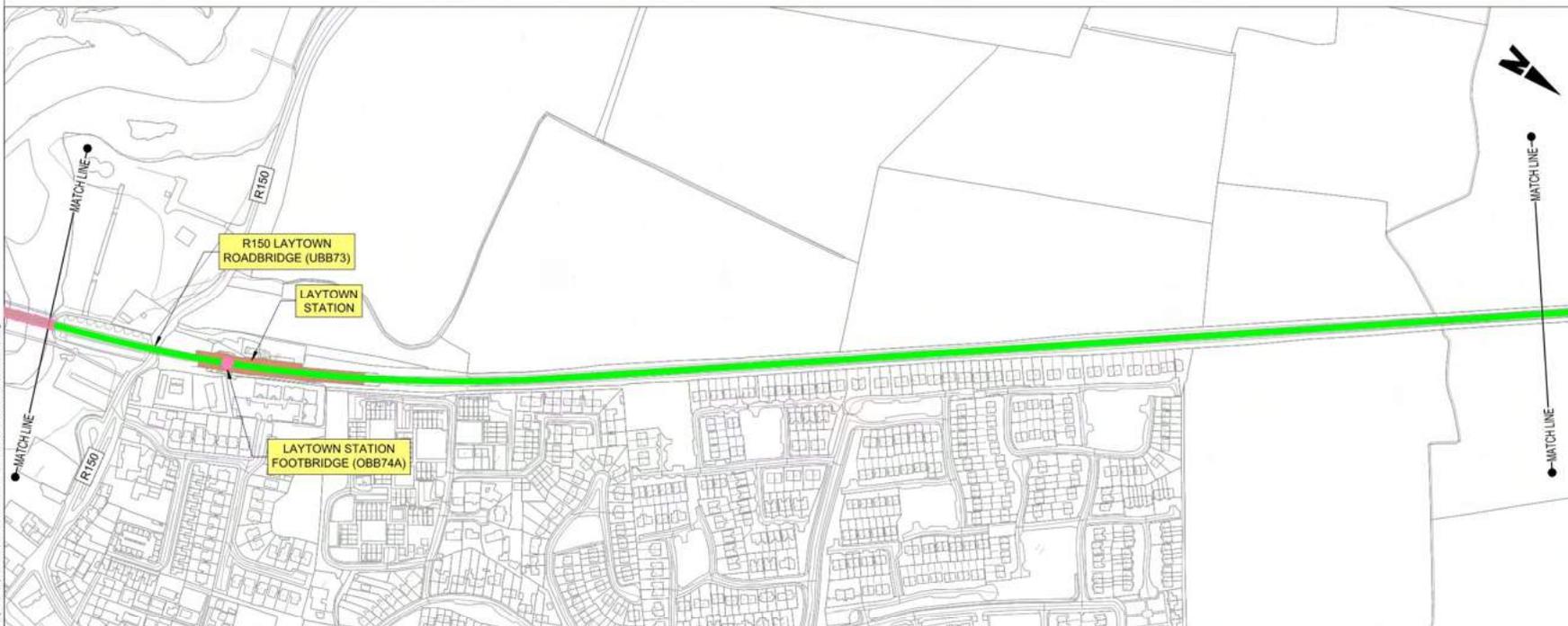
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D+WP56-ARP-ZZ-NL-DR-RO-001031

Sheet Number
31 of 37

Status
S3

Rev
P01

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NOTE:

- BRIDGE PARAPET MODIFICATIONS REQUIRED AT A NUMBER OF OVERBRIDGES BETWEEN MALAHIDE AND DROGHEDA TO PROVIDE PROTECTION FROM OVERHEAD LINE EQUIPMENT.

LEGEND:

- NEW ELECTRIFICATION IN EXISTING RAIL CORRIDOR
- TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
- NEW ELECTRIFICATION AND TRACK MODIFICATION IN EXISTING RAIL CORRIDOR
- EXISTING ELECTRIFIED RAIL CORRIDOR - MINIMAL OR NO WORKS REQUIRED
- SIGNIFICANT WORK / INTERVENTION REQUIRED (INCLUDING BRIDGE RECONSTRUCTION)
- MINOR WORK / INTERVENTION REQUIRED
- MINOR WORK REQUIRED
- EXISTING STATION

BRIDGES

- OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
- UBXX EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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DART+ Coastal North

NTA

2040

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Maplin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active GPS station Tallaght College (TLG).

Rev	Date	Dm	Chkd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client
larnród Éireann
Irish Rail

Engineering Designer
ARUP

Date: 04/01/2022 Scale: 1:2500 @ A1
Project Code: D+WP56 Originator Code: ARP QMS Code: 280275-00

Drawn: SR Checked: RS Approved: GS

Project Title
DART+ COASTAL NORTH

Drawing Title
EMERGING PREFERRED OPTION - MAP 32 OF 37
LAYTOWN STATION AND SURROUNDS

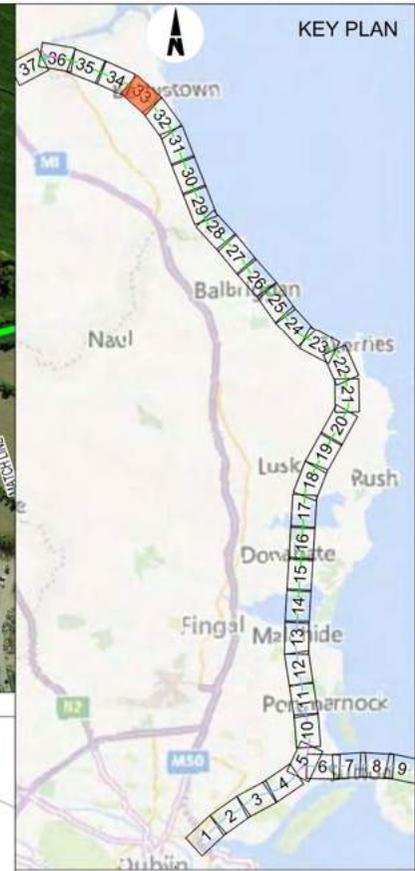
Drawing File Name
D+WP56-ARP-ZZ-NL-DR-RO-001032

Sheet Number
32 of 37

Status
S3

Rev
P01

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LEGEND:

- NEW ELECTRIFICATION IN EXISTING RAIL CORRIDOR
- TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
- NEW ELECTRIFICATION AND TRACK MODIFICATION IN EXISTING RAIL CORRIDOR
- EXISTING ELECTRIFIED RAIL CORRIDOR - MINIMAL OR NO WORKS REQUIRED
- ▨ SIGNIFICANT WORK / INTERVENTION REQUIRED (INCLUDING BRIDGE RECONSTRUCTION)
- ▨ MINOR WORK / INTERVENTION REQUIRED
- MINOR WORK REQUIRED
- EXISTING STATION

BRIDGES

- OBXX - EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
- UBXX - EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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DART+ Coastal North

NTA

2040

Rev	Date	Dr	Chkd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client: **Iarnród Éireann Irish Rail**

Engineering Designer: **ARUP**

Date: 04/01/2022 Scale: 1:2500 @ A1
1:5000 @ A3

Project Code: D+WP56 Originator Code: ARP QMS Code: 280275-00

Drawn: SR Checked: RS Approved: GS

Project Title: **DART+ COASTAL NORTH**

Drawing Title: EMERGING PREFERRED OPTION - MAP 33 OF 37 PILLTOWN ROAD AND SURROUNDS

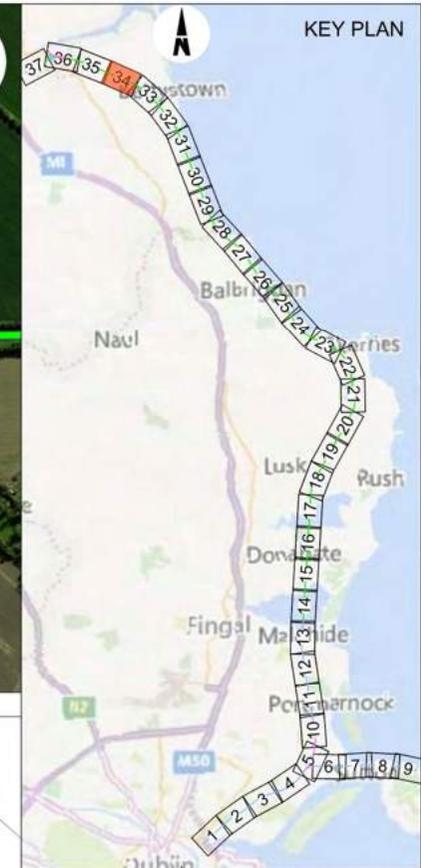
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Sheet Number: 33 of 37

Status: S3

Rev: P01

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KEY PLAN

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 - MINOR WORK REQUIRED
 - EXISTING STATION
- BRIDGES**
- OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
 - UBXX EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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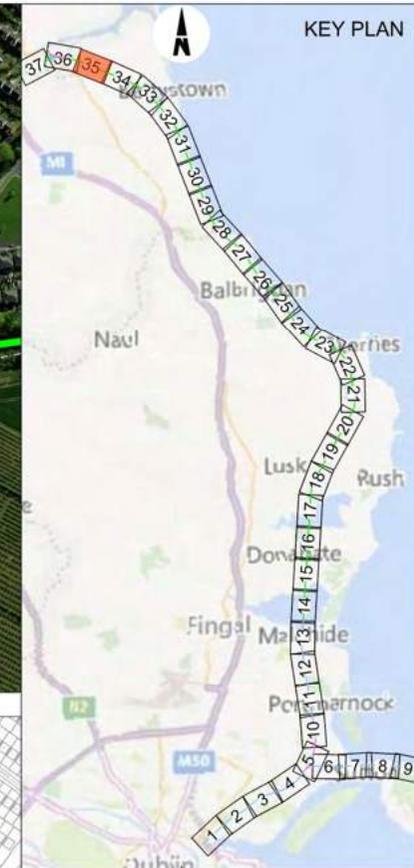
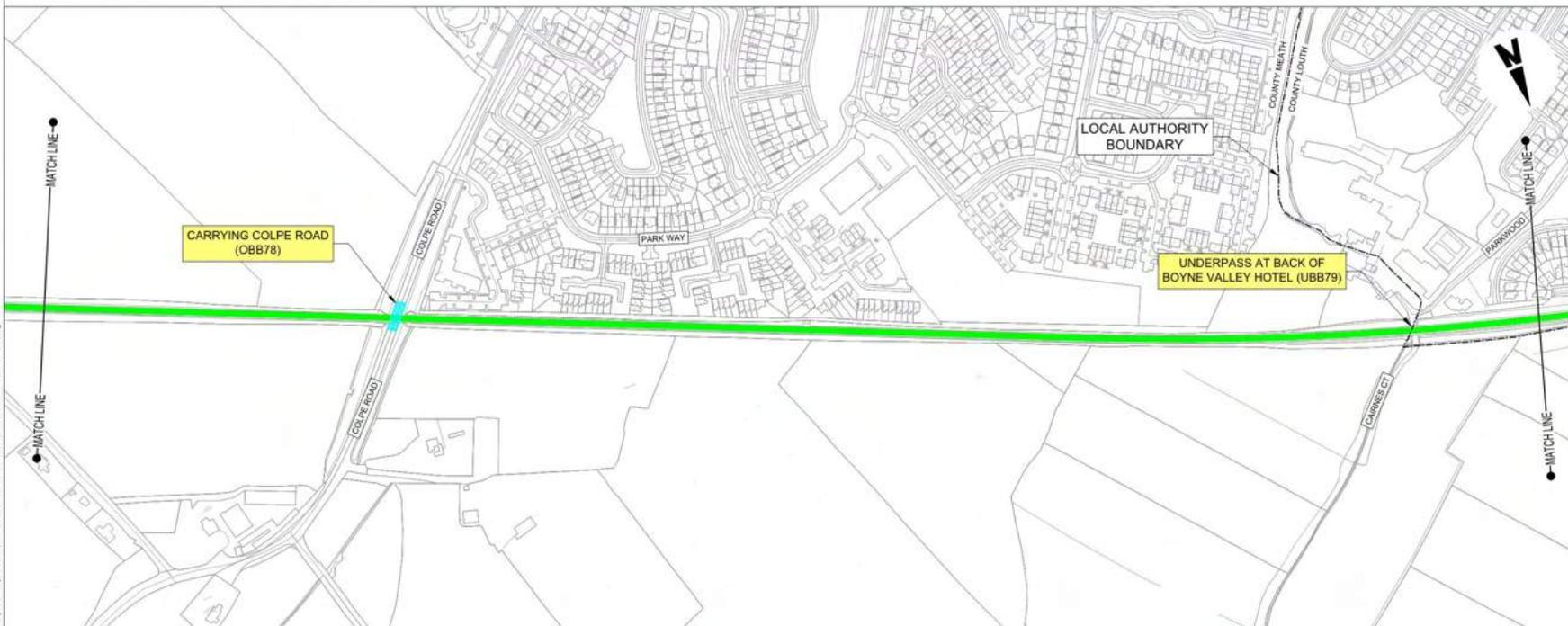


Rev	Date	Drn	Chk'd	App'd	Description
		SR	RS	GS	
P01	04/01/2022				FOR PUBLIC CONSULTATION No 1

Client larnród Éireann Irish Rail		Engineering Designer ARUP		
Date 04/01/2022	Scale 1:2500 @ A1 1:5000 @ A3	Drawn SR	Checked RS	Approved GS
Project Code D+WP56	Originator Code ARP	QMS Code 280275-00		

Project Title DART+ COASTAL NORTH	
Drawing Title EMERGING PREFERRED OPTION - MAP 34 OF 37 PILLTOWN AND SURROUNDS	
Drawing File Name D+WP56-ARP-ZZ-NL-DR-RO-001034	Sheet Number 34 of 37
Status S3	Rev P01

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 - MINOR WORK / INTERVENTION REQUIRED
 - MINOR WORK REQUIRED
 - EXISTING STATION
- BRIDGES**
- OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
 - UBXX EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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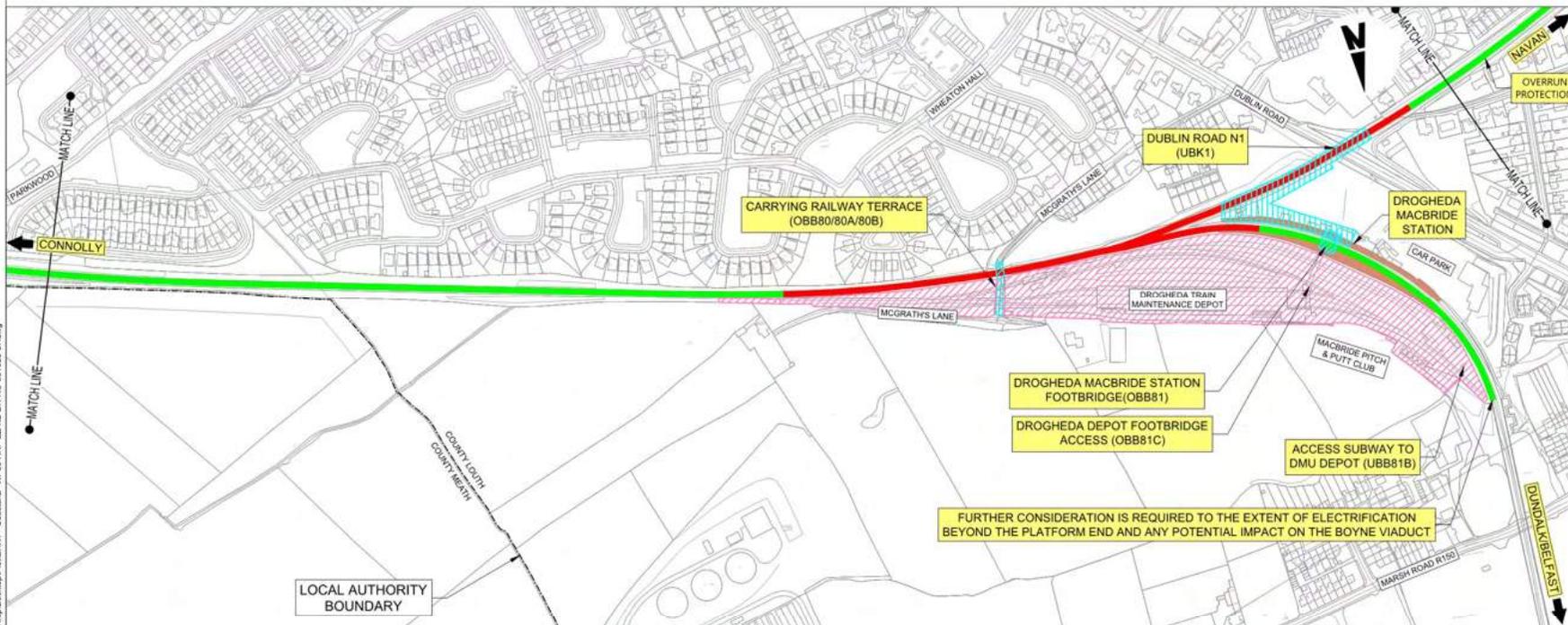
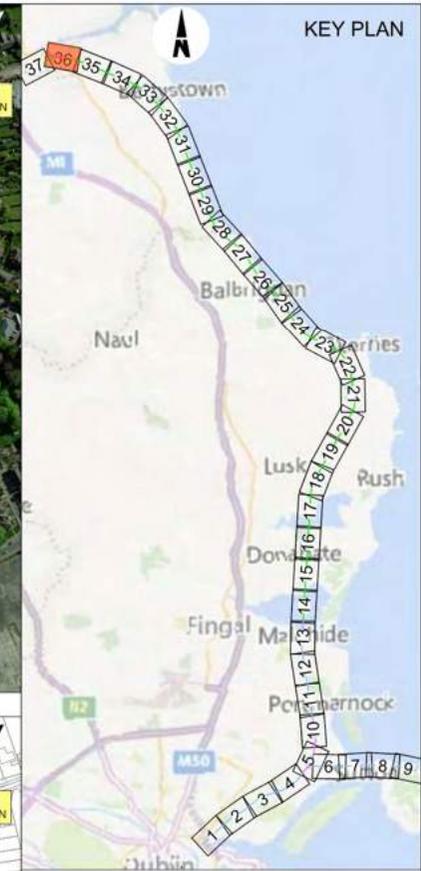
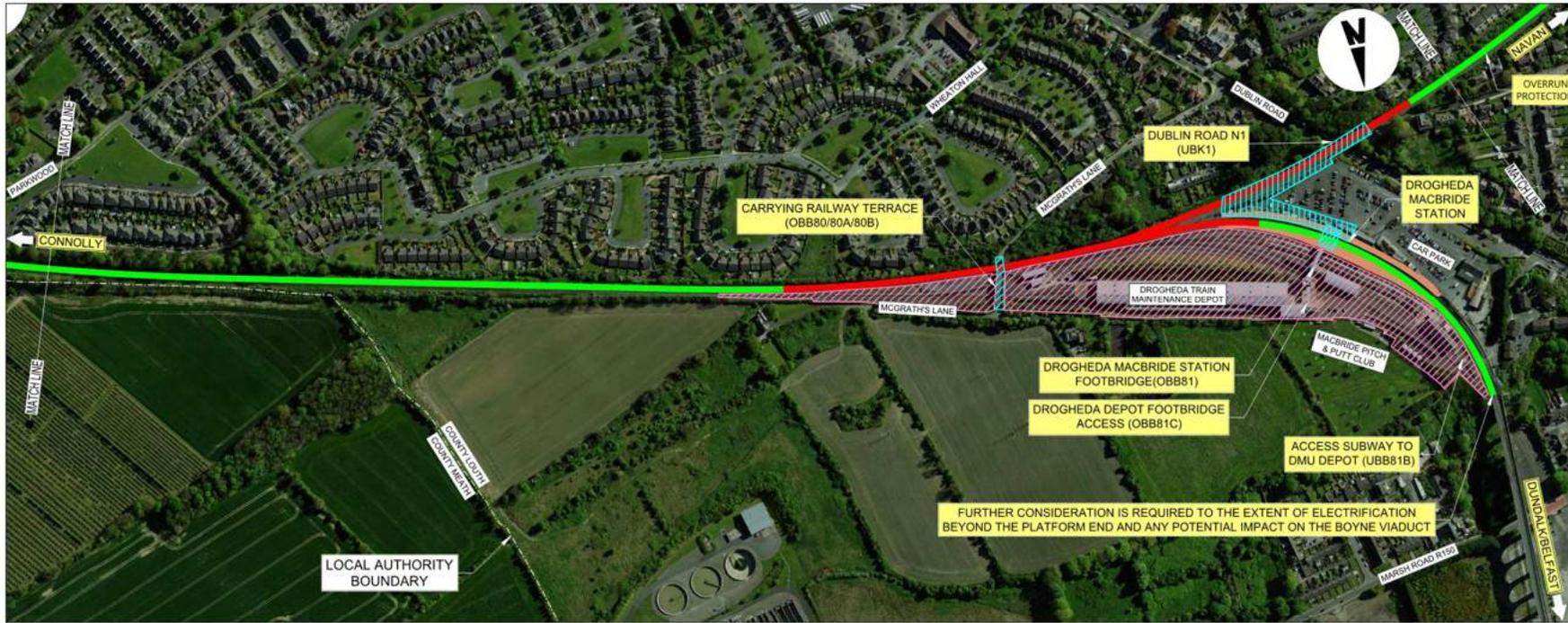


Rev	Date	Dr	Chkd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client larnród Éireann Irish Rail		Engineering Designer ARUP	
Date 04/01/2022	Scale 1:2500 @ A1 1:5000 @ A3	Drawn SR	Checked RS
Project Code D+WP56	Originator Code ARP	QMS Code 280275-00	Approved GS

Project Title DART+ COASTAL NORTH	Sheet Number 35 of 37	Status S3	Rev P01
Drawing Title EMERGING PREFERRED OPTION - MAP 35 OF 37 SOUTH DROGHEDA AND SURROUNDS	Drawing File Name D+WP56-ARP-ZZ-NL-DR-RO-001035		

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- MINOR WORK REQUIRED
- EXISTING STATION

BRIDGES:

- OBXX - EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
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OverheadMap contributions

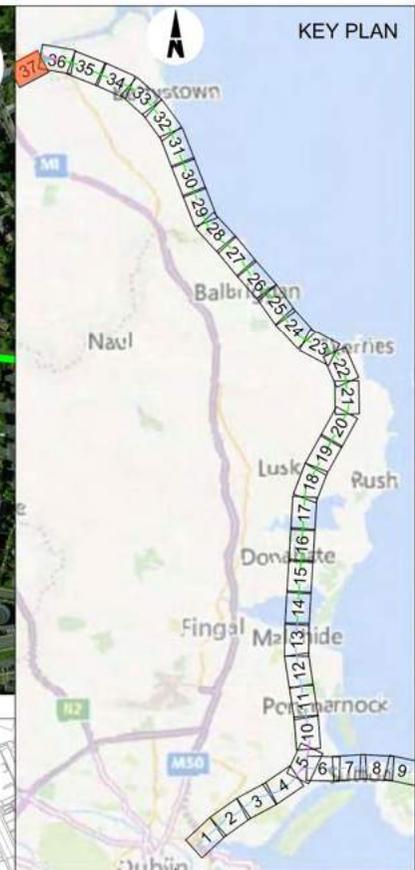
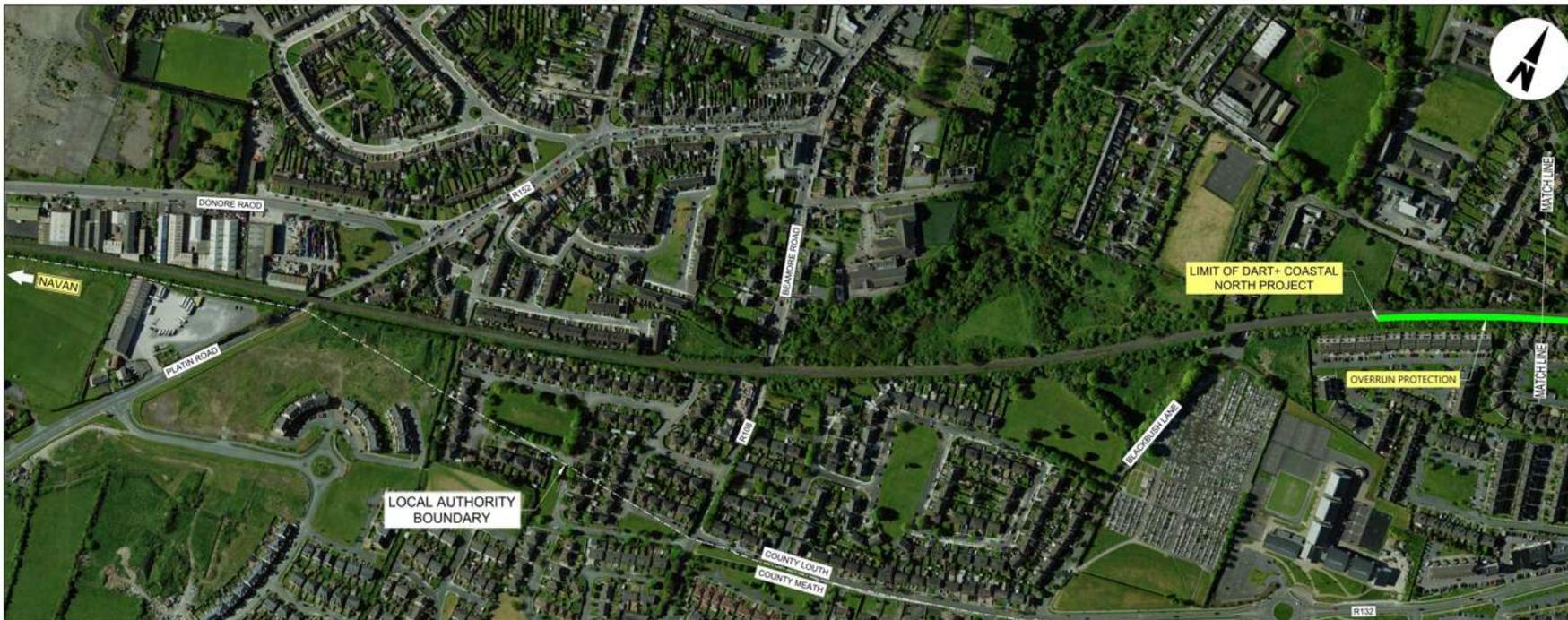
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Rev	Date	Dr	Chkd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client 		Engineering Designer 	
Date	Scale	Drawn	Checked
04/01/2022	1:2500 @ A1 1:5000 @ A3	SR	RS
Project Code	Originator Code	QMS Code	Approved
D+WP56	ARP	280275-00	GS

Project Title DART+ COASTAL NORTH	
Drawing Title EMERGING PREFERRED OPTION - MAP 36 OF 37 DROGHEDA MACBRIDE STATION AND SURROUNDS	
Drawing File Name D+WP56-ARP-ZZ-NL-DR-RO-001036	Sheet Number 36 of 37
Status S3	Rev P01

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BRIDGES:

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- UBXX EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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Rev	Date	Dr	Chkd	App'd	Description
P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client
Iarnród Éireann
Irish Rail

Engineering Designer
ARUP

Date: 04/01/2022 Scale: 1:2500 @ A1
1:5000 @ A3

Project Code: D+WP56 Originator Code: ARP QMS Code: 280275-00

Drawn: SR Checked: RS Approved: GS

Project Title
DART+ COASTAL NORTH

Drawing Title
EMERGING PREFERRED OPTION - MAP 37 OF 37
DROGHEDA MACBRIDE STATION TO PLATIN ROAD

Drawing File Name
D+WP56-ARP-ZZ-NL-DR-RO-001037

Sheet Number
37 of 37

Status
S3

Rev
P01

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DART+
Coastal North





Rialtas na hÉireann
Government of Ireland
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Project Ireland
2040



APPENDIX F

DART+ Coastal North Leaflet



Public Consultation No. 1 Leaflet

Emerging Preferred Option

Bileog um Chomhariliúchán Poiblí Uimh.1

An Rogha is Dealraithaí a Roghnófar



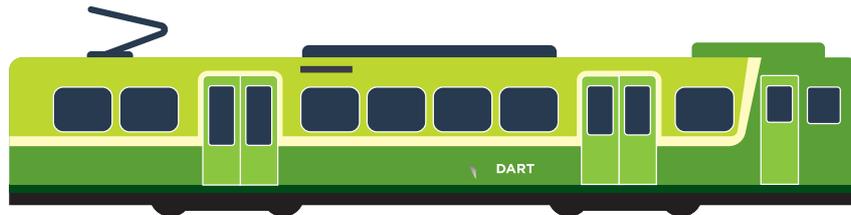
DART+ Programme

The DART+ Programme is a transformative railway investment programme that will modernise and improve the existing rail services in the Greater Dublin Area. It will provide a sustainable, electrified, reliable, and more frequent rail service, improving capacity on the rail corridors serving Dublin. The current electrified DART network is 50km long, extending from Malahide / Howth to Bray / Greystones and the DART+ Programme seeks to increase the electrified network to 150km.

The DART+ Programme will promote multi-modal transit, active transport, boost regional connectivity and make public transport the preferred option for a larger percentage of commuters.

The DART+ Programme will improve connectivity to regional towns and deliver frequent, modern, electrified services across the four main rail corridors within the Greater Dublin Area. The DART+ Programme comprises the following improvement projects:

- **DART+ West** - Maynooth and M3 Parkway to the City Centre.
- **DART+ South West** - Hazelhatch & Celbridge to the City Centre.
- **DART+ Coastal North** - Drogheda to the City Centre.
- **DART+ Coastal South** - Greystones to the City Centre.
- **DART+ Fleet** - New train fleet to support the infrastructural capacity increases delivered by DART+ Programme.



Clár DART+

Is clár bunathraitheach infheistíochta iarnróid é an Clár DART+, a bheidh mar bhonn le nuachóiriú agus feabhsú na seirbhísí iarnróid atá ar fáil i Mórcheantar Bhaile Átha Cliath faoi láthair. Soláthrófar seirbhís iarnróid atá inbhuanaithe, leictrithe, iontaofa, agus níos minice, feabhsófar acmhainn ar gach conair iarnróid atá ag freastal ar Bhaile Átha Cliath. Tá an líonra DART leictrithe atá ann faoi láthair 50km ar fad, agus tá sé ag síneadh ó Mhullach Íde / Binn Éadair go Bré / Na Clocha Liatha agus tá sé mar aidhm leis an gClár DART+ an líonra a mhéadú go dtí 150km.

Tacóidh an Clár DART+ le taisteal idir córacha iompair, iompar gníomhach, cuirfidh sé borradh faoi nascacht réigiúnach agus beidh sé mar bhonn lena chinntiú go mbeidh iompar poiblí á roghnú ar bhonn tosaíochta ag céatadán níos mó comaitéirí.

Beidh an Clár DART+ mar bhonn le nascacht le bailte réigiúnacha a fheabhsú agus seirbhísí minice, nua-aimseartha, leictrithe a chur ar fáil sna ceithre phríomhchonair iarnróid laistigh de Mhórcheantar Bhaile Átha Cliath. Tá na tionscadail feabhais seo a leanas le cur i gcrích mar chuid de Chlár DART+:

- **DART+ an Iarthair** - Maigh Nuad agus Bealach na Páirce M3 chuig Lár na Cathrach.
- **DART+ an Iardheiscirt** - Collchoill & Cill Droichid go Lár na Cathrach.
- **DART+ an Chósta Thuaidh** - Droichead Átha go Lár na Cathrach.
- **DART+ an Chósta Theas** - Na Clocha Liatha go Lár na Cathrach.
- **DART+ Flít** - Flít traenach nua chun tacú le méaduithe ar an acmhainn infreastruchtúir atá á sholáthar mar chuid de Chlár DART+.

DART+ Coastal North

The DART+ Coastal North project, as part of the DART+ Programme, will deliver an improved electrified network, with increased passenger capacity and enhanced train service between Dublin City Centre and Drogheda. The Howth Branch of the existing DART network is included as part of the DART+ Coastal North project.

The project will predominantly follow the existing railway corridor and will include the overhead electrification of the existing railway line between Malahide and Drogheda. It will also entail some reconfiguration of the existing track layout and infrastructure in the vicinity of Drogheda MacBride, Malahide, Clongriffin, and Howth Junction & Donaghmede Stations. The majority of proposed works and interventions are expected to be carried out within the extents of the existing railway corridor boundary. Some works relating to the provision of new electrical substations and bridge modification may be required outside of the existing boundary.

This is Public Consultation No. 1 for the DART+ Coastal North project, presenting the '**Emerging Preferred Option**' for the project design. This is the first of two non-statutory public consultations seeking your feedback to help shape the ongoing design development.

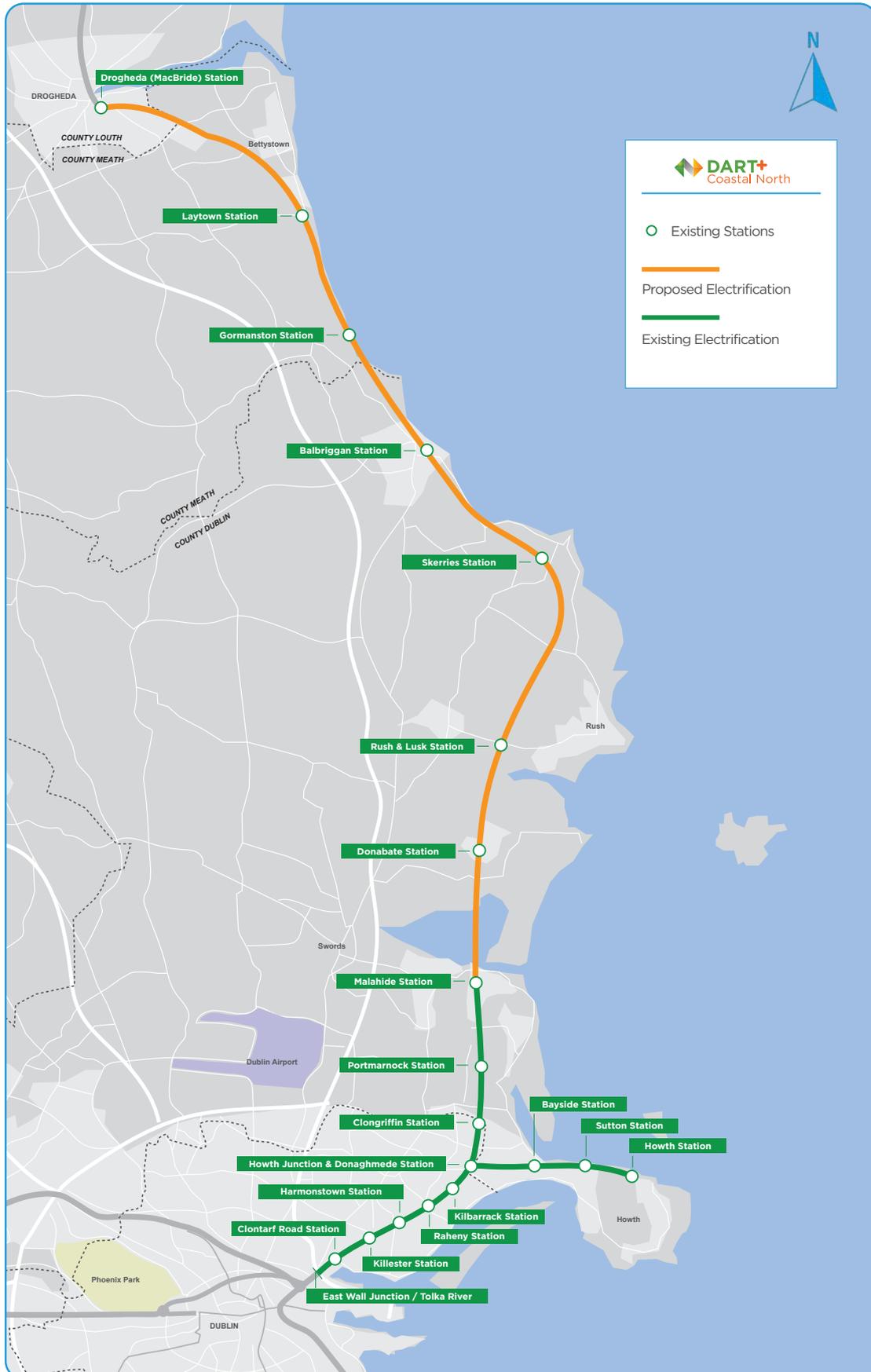


DART+ An Chósta Thuaidh

Soláthróidh tionscadal DART+ an Chósta Thuaidh, mar chuid de Chlár DART+, líonra leictirthe feabhsaithe, le breis acmhainne do phaisinéirí agus seirbhís traenach feabhsaithe idir Lár Chathair Bhaile Átha Cliath agus Droichead Átha. Tá Brainse Bhinn Éadair den líonra DART atá ann cheana féin curtha san áireamh i dtionscadal Dart+ an Chósta Thuaidh.

Leanfaidh an tionscadal seo an chonair iarnróid atá ann faoi láthair den chuid is mó agus cuimseofar ann leictriú lasnairde na líne iarnróid atá ann cheana féin idir Mullach Íde agus Droichead Átha. Chomh maith leis sin, déanfar cuid de leagan amach agus infreastruchtúr na ráillí traenach atá ann faoi láthair cóngarach do na Stáisiúin seo a leanas - Droichead Átha Mac Giolla Bhríde, Mullach Íde, Cluain Ghrífin, agus Gabhal Bhinn Éadair & Domhnach Míde - a atheagrú. Táthar ag súil formhór na n-oibreacha agus idirghabhálacha beartaithe a chur i gcrích laistigh de theorainn na conaire iarnróid atá ann cheana féin. B'fhéidir go mbeadh sé riachtanach roinnt oibreacha a bhaineann le fostáisiúin leictreacha nua agus mionathrú droichid a dhéanamh lasmuigh den teorainn atá ann cheana féin.

Is é seo Comhairliúchán Poiblí Uimh. 1 a bhaineann le tionscadal DART+ an Chósta Thuaidh, agus tá an '**Rogha is Dealraithe a Roghnófar**' do dhearadh an tionscadail á chur i láthair. Is é seo an chéad cheann de dhá chomhairliúchán poiblí neamhrechtúla a bhfuil aiseolas á lorg acu a chabhróidh le forbairt leanúnach an dearaidh.



Scope of DART+ Coastal North

The following is a high-level summary of the key elements of DART+ Coastal North:

- Expansion of electrification and re-signalling of the line from Malahide to Drogheda;
- Facilitating the future increase in frequency of trains through the construction of train stabling and other necessary rail infrastructure in the vicinity of Drogheda MacBride, Malahide, Clongriffin and Howth Junction & Donaghmede Stations;
- Undertake the necessary bridge modification works and track alterations as part of the installation of overhead line electrical equipment between Malahide and Drogheda;
- Provision of additional rolling stock stabling at Drogheda MacBride Station;
- Signalling and telecoms modifications and upgrades to support the increased frequency of train services;
- Reconfiguration of Howth Junction & Donaghmede Station to enable the use of a shuttle service on the Howth Branch. Final operational decisions will be made subject to demand requirements and assessment;
- Modification of existing depots at Drogheda and Fairview to support the new train fleet;
- Provision of substations, electrical buildings and all other civil engineering works required as part of the project.



Raon feidhme DART+ An Chósta Thuaidh

Tá achoimre ardleibhéil le fáil thíos ar phríomhghnéithe DART+ an Chósta Thuaidh:

- Leathnú leictriú agus athchomharthaíocht na líne idir Mullach Íde agus Droichead Átha;
- Méadú ar mhinicíocht na dtraenacha amach anseo a éascú trí bhonneagar cobhsaí traenach agus bonneagar iarnróid riachtanach eile a éascú cóngarach do na Stáisiúin seo a leanas - Droichead Átha Mac Giolla Bhríde, Mullach Íde, Cluain Ghrífin, agus Gabhal Bhinn Éadair & Domhnach Míde;
- Na hoibreacha riachtanacha a bhaineann le mionathrú droichid agus athruithe ar rian a dhéanamh mar chuid de shuiteáil an trealaimh leictreachais línte lasnairde idir Mullach Íde agus Droichead Átha;
- Cobhsú breise rothstoic a sholáthar ag stáisiún Dhroichead Átha Mac Giolla Bhríde;
- Mionathruithe agus uasghráduithe comharthaíochta agus teileachumarsáide chun tacú le minicíocht mhéadaithe na seirbhísí traenach;
- Atheagrú Ghabhal Bhinn Éadair & Stáisiún Dhomhnach Míde ionas gur féidir seirbhís tointeála a úsáid ar Bhrairse Bhinn Éadair. Déanfar cinntí críochnaitheacha oibríochtúla bunaithe ar riachtanais agus ar mheasúnú ar éileamh;
- Mionathruithe a dhéanamh ar na hiostaí atá ann cheana i nDroichead Átha agus i bhFionnradharc chun tacú leis an bhflít traenach nua.
- Fostáisiúin, foirgnimh leictreacha agus na hoibreacha innealtóireachta sibhialta riachtanacha eile mar chuid den tionscadal a sholáthar.

Benefits of DART+ Coastal North

Buntáistí DART+ An Chósta Thuaidh

Increase peak passenger capacity and increase train frequency between Dublin City Centre and Drogheda MacBride Station - inclusive of the Howth Branch - facilitating frequent and reliable transport to the surrounding communities.



Breis acmhainne do phaisinéirí ag buaicuaireanta agus minicíocht traenach mhéadaithe idir Lár Chathair Bhaile Átha Cliath agus Stáisiún Dhroichead Átha Mac Giolla Bhríde - Brainse Bhinn Éadair san áireamh - a éascóidh córais iompair atá iontaofa agus rialta chuig na pobail mórthimpeall.

Enhance public transport opportunities for work, education and leisure purposes.



Feabhas a chur ar dheiseanna iompair phoiblí chun críocha oibre, oideachais nó fóillíochta.

Facilitate the development and future growth of existing and new communities that will greatly benefit from the connectivity that the DART+ Coastal North project will deliver.



Forbairt agus fás amach anseo pobal atá bunaithe ann cheana féin agus a bhunófar amach anseo a éascú a rachaidh chun tairbhe go mór na nascachta a sholáthróidh DART+ an Chósta Thuaidh.

Alleviate road congestion.



Maolófar brú tráchta.

Build a sustainable and connected city region, supporting the transition to a low carbon and climate resilient society.



Réigiún Cathrach Inbhuanaithe agus nasctha a thógáil ag tacú leis an aistriú go sochaí ísealcharbóin atá seasmhach ó thaobh na haeráide de.

Facilitate people to make sustainable travel choices by encouraging a move away from private cars to a reliable, efficient and safer public transport network.



Daoine a éascú chun roghanna inbhuanaithe taistil a dhéanamh trí bhogadh ó ghluaisteáin phríobháideacha go líonra iompair phoiblí iontaofa, éifeachtúil, agus níos sábhailte a spreagadh

Improve multi-modal transport connectivity through the development of the wider DART+ Programme.



Nascacht idir córacha iompair a fheabhsú trí Chlár DART+ níos leithne a fhorbairt.

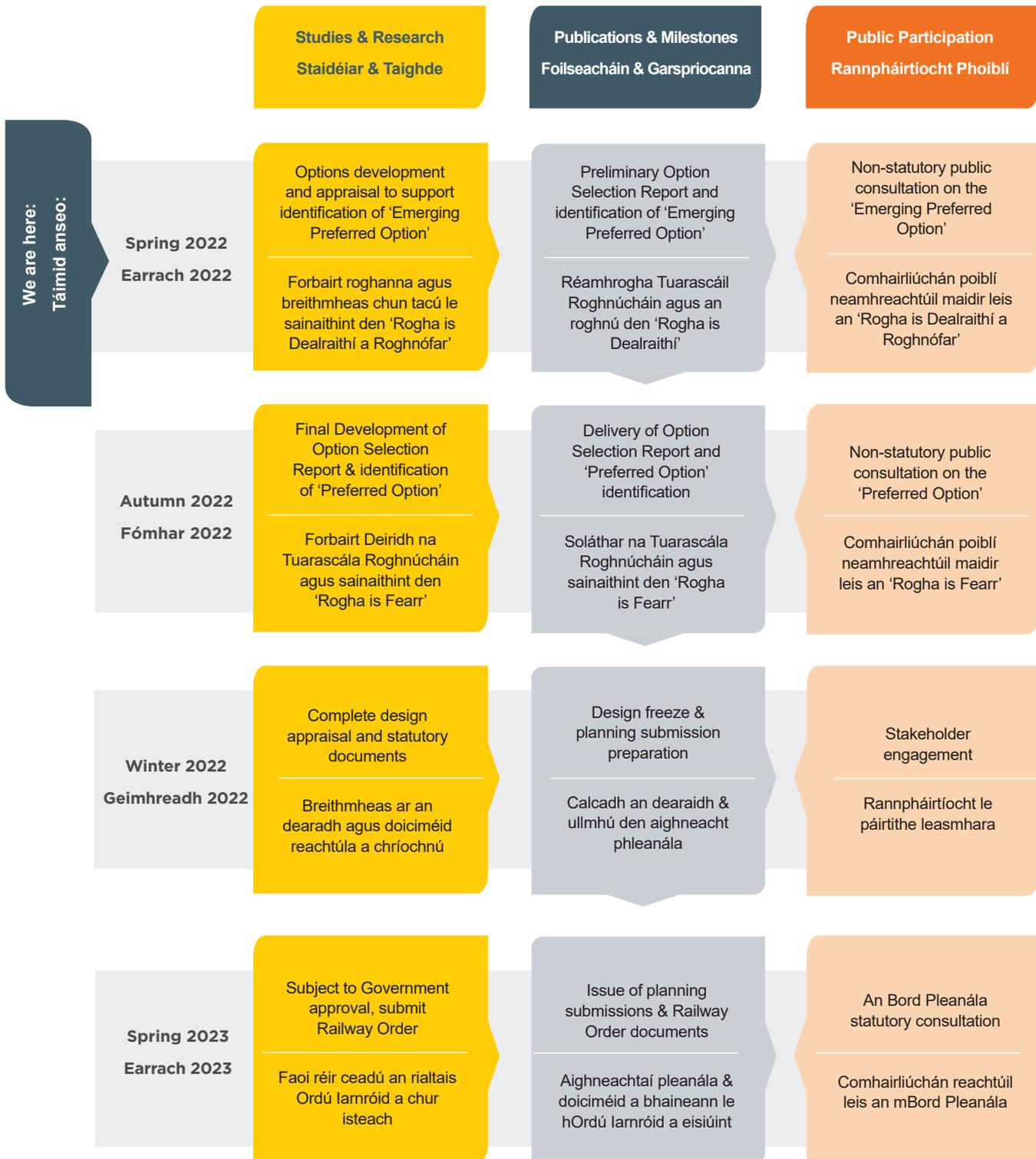
Improve journey time reliability.



Iontaofacht maidir le fad turais a fheabhsú.

Timeline

Amlíne



How to Engage

As users of the service, or those likely to be affected by its development, the public is invited to contribute to this consultation process to express opinions on the DART+ Coastal North project Emerging Preferred Option. The consultation period is now open and full details are available on the project website.

You can engage with us via the following means:

Website | www.dartplus.ie

Email | DARTCoastalNorth@irishrail.ie

Phone line | (01) 233 4515

Postal Address

If you would prefer to write to us, please send any correspondence to:

**Community Liaison Officer
DART+ Coastal North
Iarnród Éireann
Inchicore Works
Inchicore Parade
Dublin 8
D08K6Y3**

Conas Páirt a Ghlacadh

Mar úsáideoirí na seirbhíse, nó mar dhaoine a bhfuil sé dóchúil go mbeidh tionchar ag an bhforbairt orthu, tugtar cuireadh do dhaoine den phobal cur leis an bpróiseas comhairliúcháin seo agus a dtuairimí a nochtadh maidir leis an Rogha is Dealraithí a Roghnófar i leith DART+ an Chósta Thuaidh. Tá an tréimhse chomhairliúcháin oscailte anois, tá na sonraí go léir ar fáil ar shuíomh gréasáin an tionscadail.

Is féidir leat teagmháil a dhéanamh linn ar na bealaí seo a leanas:

Suíomh Gréasáin | www.dartplus.ie

Ríomhphost | DARTCoastalNorth@irishrail.ie

Líne Theileafóin | (01) 233 4515

Seoladh Poist

Más fearr leat nóta i scríbhinn a sheoladh seol an nóta sin nó aon chomhfhreagras eile chuig:

An tOifigeach Idirchaidrimh Pobail

DART+ An Chósta Thuaidh

Iarnród Éireann

Oibreacha Inse Chór

Paráid Inse Chór

Baile Átha Cliath 9

D08K6Y3





Rialtas
na hÉireann
Government
of Ireland

Tionscadal Éireann
Project Ireland
2040



Iarnród Éireann
Irish Rail

ARUP



DART+
Coastal North

APPENDIX G

Press, Social Media and Station Advertising Campaigns

1

Press

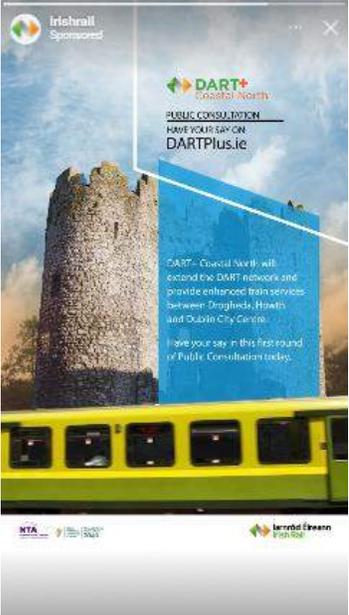


2

Social



Facebook and Instagram's audience numbers enabled specific targeting throughout North side Dart station locations



Our Facebook & Instagram activity targeted all adults in areas around Malahide, Clongriffin, Drogheda (extending to Navan), Donaghmede (Howth Junction), Sutton, Bayside & Howth Ashtown & Castleknock within a 3km radius, and played an integral part in driving awareness throughout this campaign.

Both Facebook & Instagram exceeded expected impressions throughout this campaign



738,266 Impressions

926 Engagements

0.12% Engagement Rate

306,943 Reach



1,114,843 Impressions

23,218 Engagements

2.08% Engagement Rate

329,791 Reach

Both platforms reached engaged audiences in our targeted locations with Instagram achieving a high engagement rate.

Twitter delivered 118% of planned impressions with 95 post reactions



455,420 Impressions

2,167 Engagements

0.13% Engagement Rate

115,402 Reach

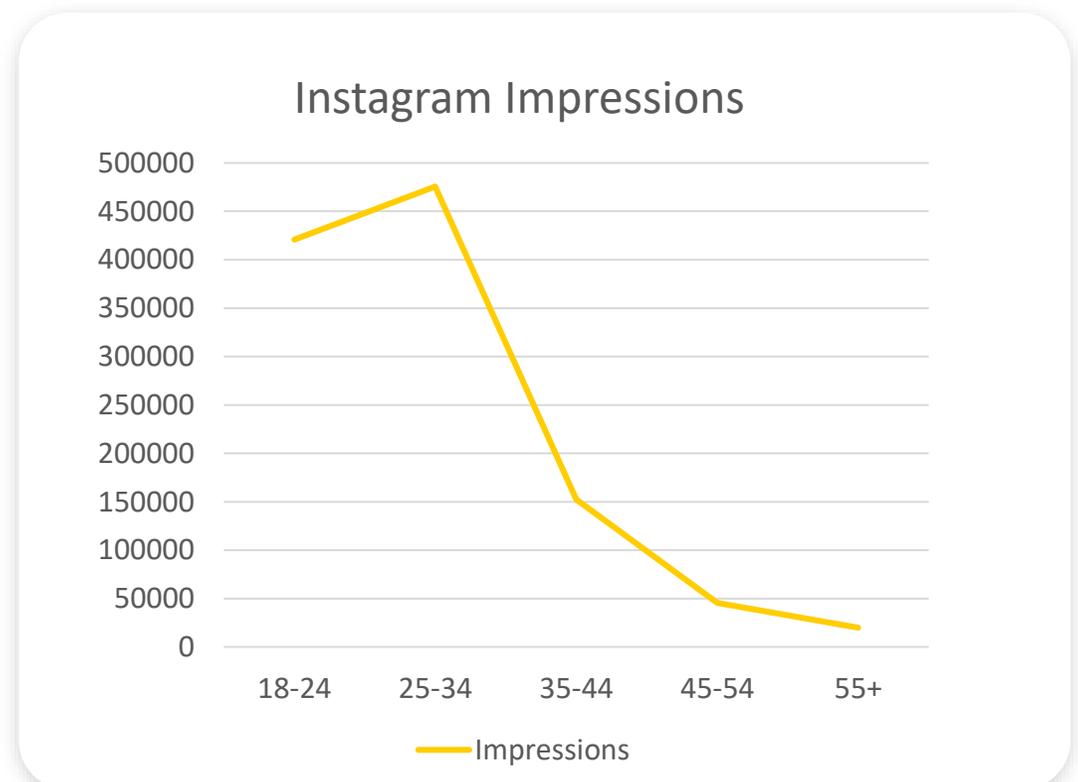
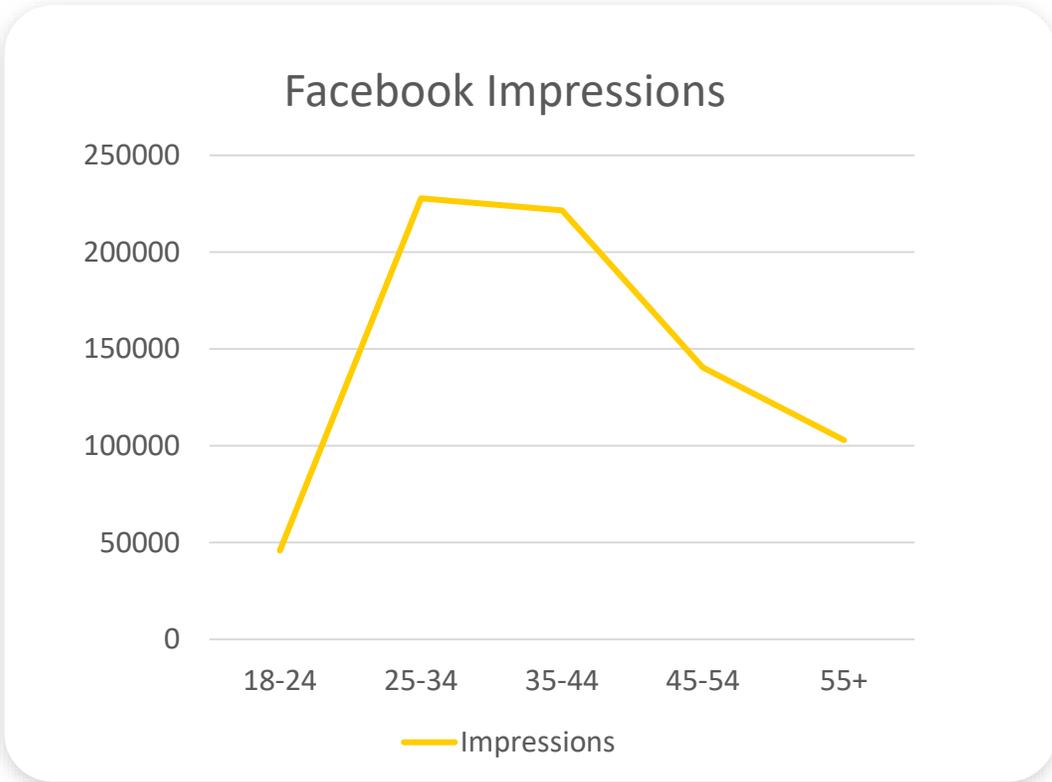
The Twitter activity received 95 post reactions with 4 comments and 6 shares. While engagement was above the benchmark we saw better results across Facebook and Instagram as well as reach being lower. Going forward, we would not recommend Twitter for niche targeted campaigns as reach is lower.

Similar to previous campaigns, our top performing placement across the platforms varied however both delivered over 60% of impressions

The Facebook newsfeed placement delivered 879,535 impressions throughout the campaign, accounting for 78% of all impressions delivered.

Stories on Instagram were the top performing placement delivering 68% of impressions. Stories also saw the highest reach and engagement of all Instagram placements.

We targeted all adults focussing on location, across both Facebook & Instagram audiences.



Facebook & Instagram engagement with 25-34 year olds was the widest available audience on both platforms. In terms of audience skews, Facebook aided in the older audiences with Instagram skewing much younger with higher drop offs as the audience got older.

3

Station Posters



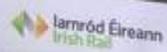


PUBLIC CONSULTATION
HAVE YOUR SAY ON
DARTPlus.ie



The first round of
Public Consultation
for the Emerging
Preferred Option
for DART+ Coastal
North is now live.

Details of the latest
design proposals
and how to give
your feedback can
now be viewed at
DARTPlus.ie



DART+
DART+ Group

PUBLIC CONSULTATION
HAVE YOUR SAY ON
DARTplus.ie

The first round of
Public Consultation
for the proposed
DART+ extension
has been held.

Details of the public
consultation
and how to give
your feedback can
now be viewed at
DARTplus.ie

MTA | 01 708 1234 | DART+ Group

global





PUBLIC CONSULTATION
HAVE YOUR SAY ON
DARTPlus.ie



The first round of Public Consultation for the Emerging Preferred Option for DART+ Coastal North is now live.

DART+ Coastal North will deliver an increased and improved electrified network, with increased passenger capacity and enhanced train services between Drogheda and Howth and Dublin City Centre.

Details of the latest design proposals and how to give your feedback can now be viewed at DARTPlus.ie



NTA
National Transport Authority

2040

Smile You're came

All our train services and stations are monitored by CCTV to protect customers against anti-social behaviour.

