DART+ Coastal North

PUBLIC CONSULTATION NO. 1 BROCHURE

EMERGING PREFERRED OPTION

NTA
Údarás Náisiúnta Iompair
National Transport Authority

Rialtas na hÉireann
Government of Ireland

Tionscadal Éireann
Project Ireland 2040

Iarnród Éireann
Irish Rail

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01

Introduction to DART+ Programme

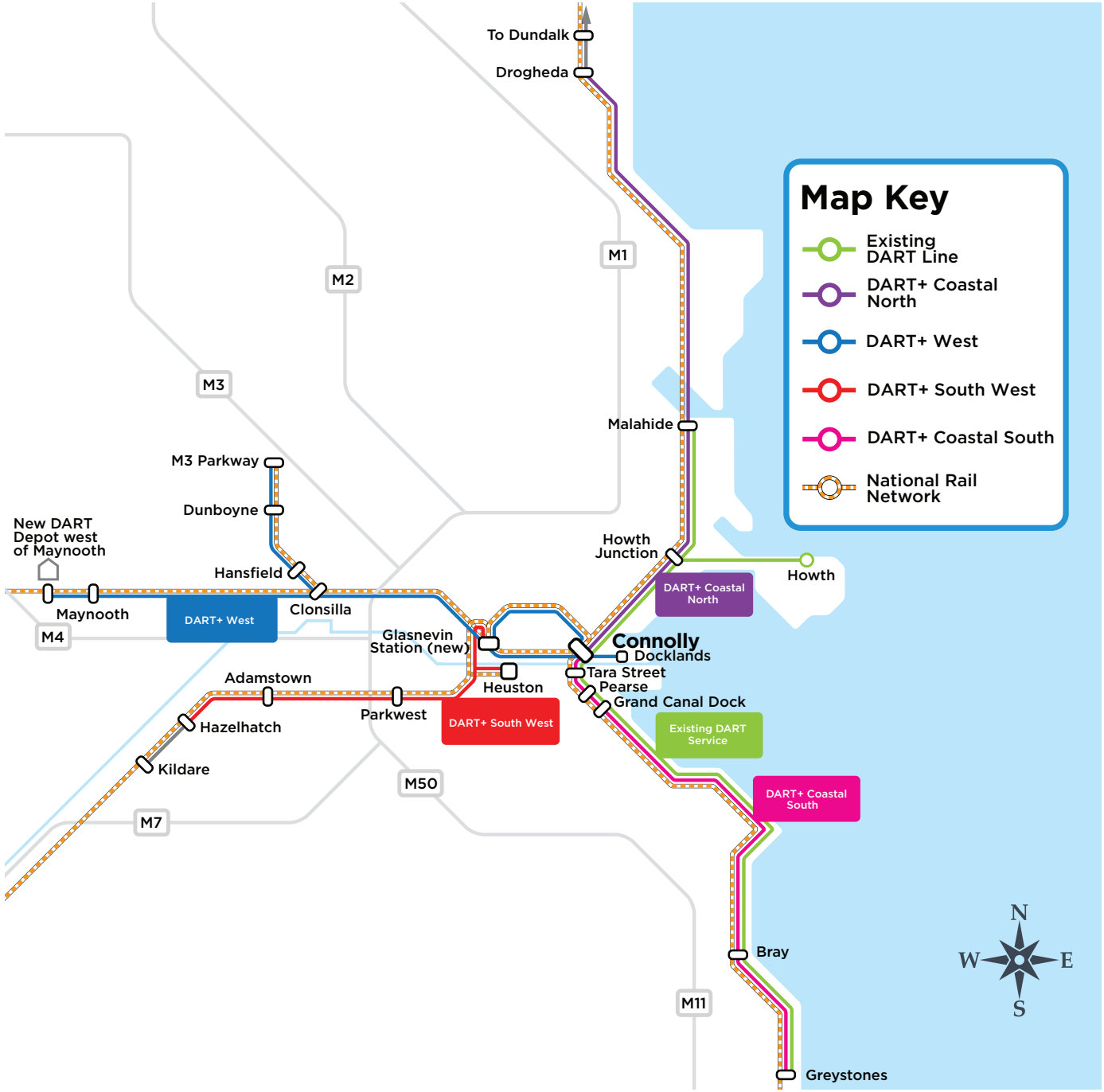
1. Introduction to DART+ Programme

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.

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.

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:

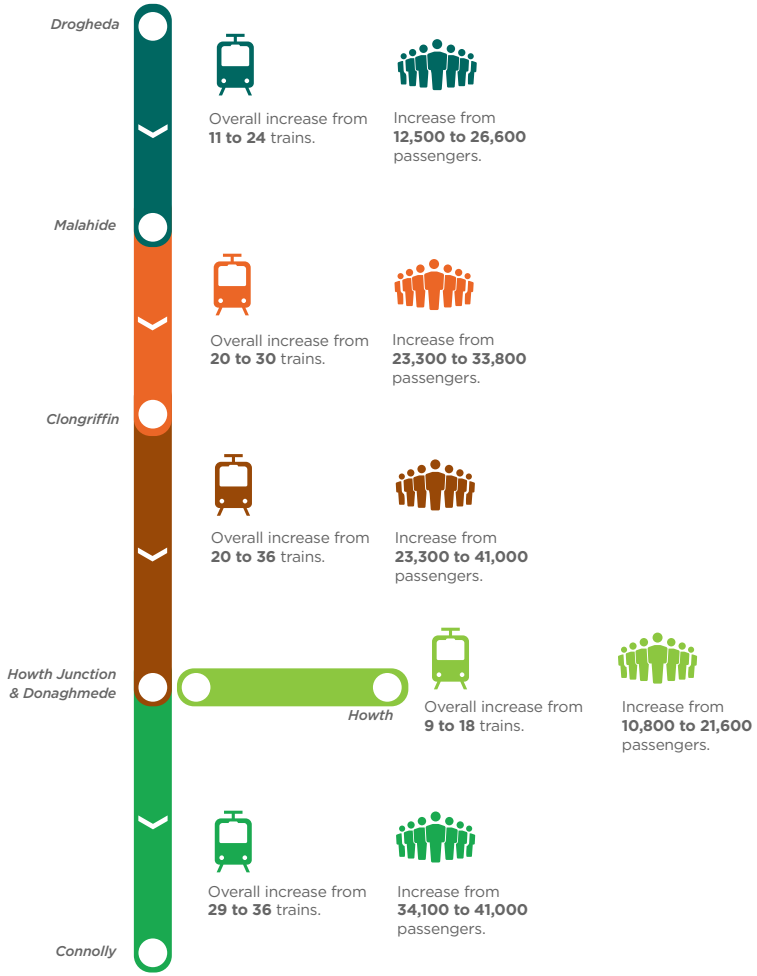
- Bridge modifications/improvements to facilitate extended electrification;
- Construction of substations (to facilitate the provision of power to the line); and
- Use of land for temporary construction/storage compounds.

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).

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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.

	Studies & Research	Publications & Milestones	Public Participation
We are here **Spring 2022**	Options development and appraisal to support identification of 'Emerging Preferred Option'	Preliminary Option Selection Report and identification of 'Emerging Preferred Option'	Non-statutory public consultation on the 'Emerging Preferred Option'
Autumn 2022	Final Development of Option Selection Report & identification of 'Preferred Option'	Delivery of Option Selection Report and 'Preferred Option' identification	Non-statutory public consultation on the 'Preferred Option'
Winter 2022	Complete design appraisal and statutory documents	Design freeze & planning submission preparation	Stakeholder engagement
Spring 2023*	Subject to Government approval, submit Railway Order	Issue of planning submissions & Railway Order documents	An Bord Pleanála statutory consultation

***Note:** Dates to be confirmed.

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

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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.

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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

DART+ Coastal North

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

Map Part B

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Benefits of DART+ Coastal North

6. Benefits of DART+ Coastal North

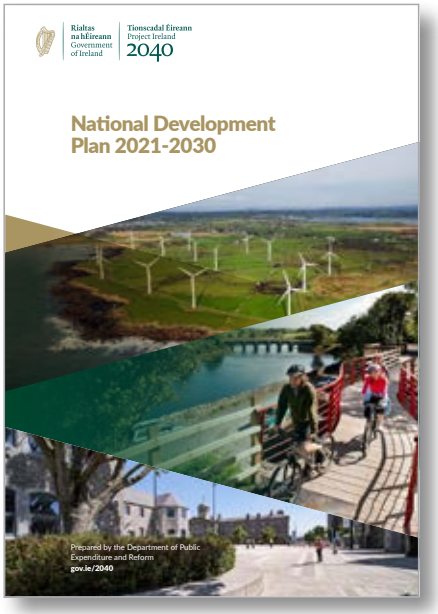
The DART+ Coastal North project will have far reaching, positive transportation effects for communities along the railway corridor. It will facilitate increased train and passenger capacity that is currently constrained on the network. It will transport passengers in high-quality trains that are designed 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.

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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 requirments), 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.

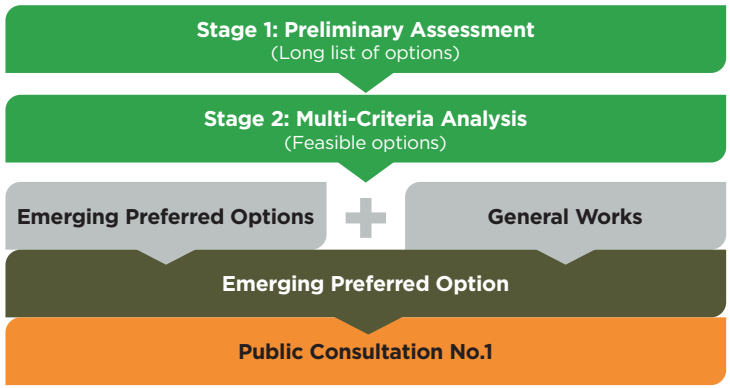
Assessment Methodology

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

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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

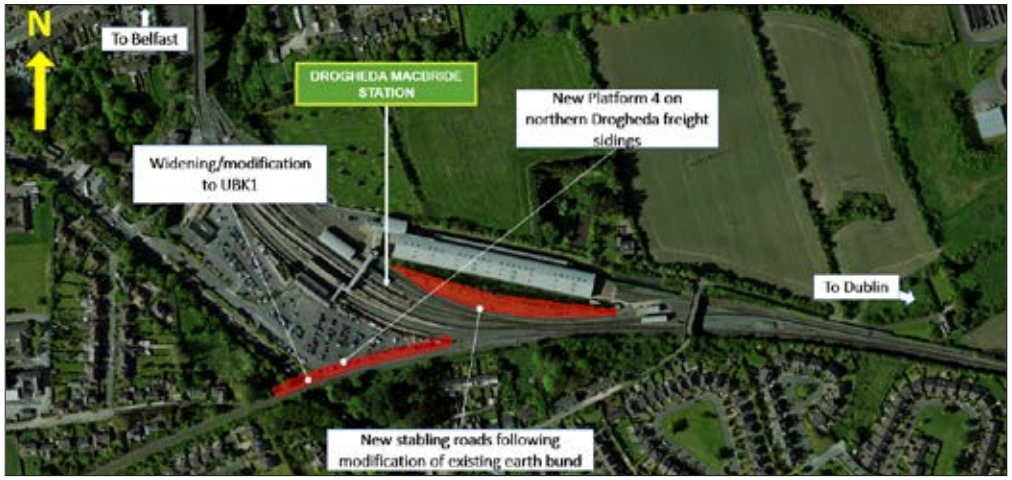
- An extension of the existing electrification equipment (OHLE) will be required as part of DART+ Coastal North. This will extend from the current limit of electrification at Malahide through to Drogheda. This will be similar to the OHLE currently used on the existing DART network;
- 8 new electrical 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.



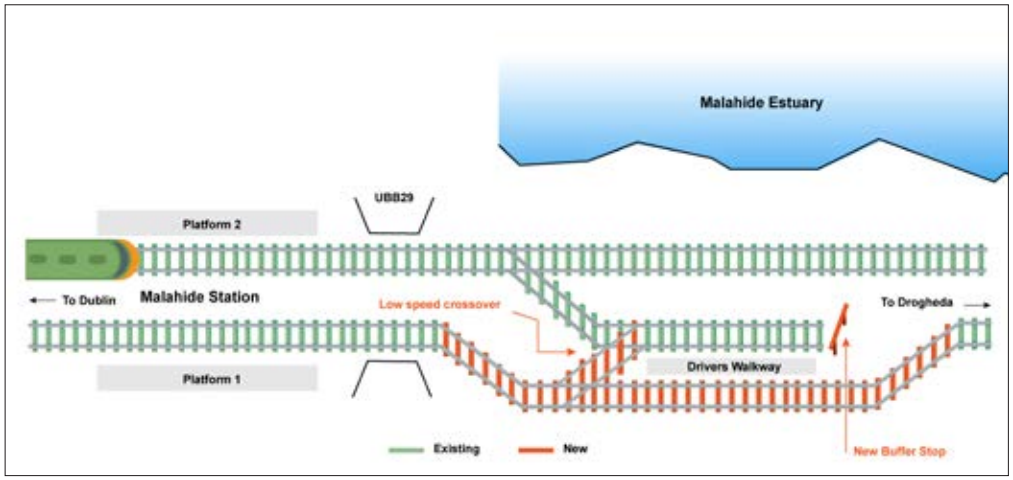
In terms of train stabling, the existing Drogheda freight siding and a new stabling track, located adjacent to the depot, will be utilised. The new stabling track will require works to the existing landscape bund. The extent of works to the bund will be developed in the next stage of the design process.

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.

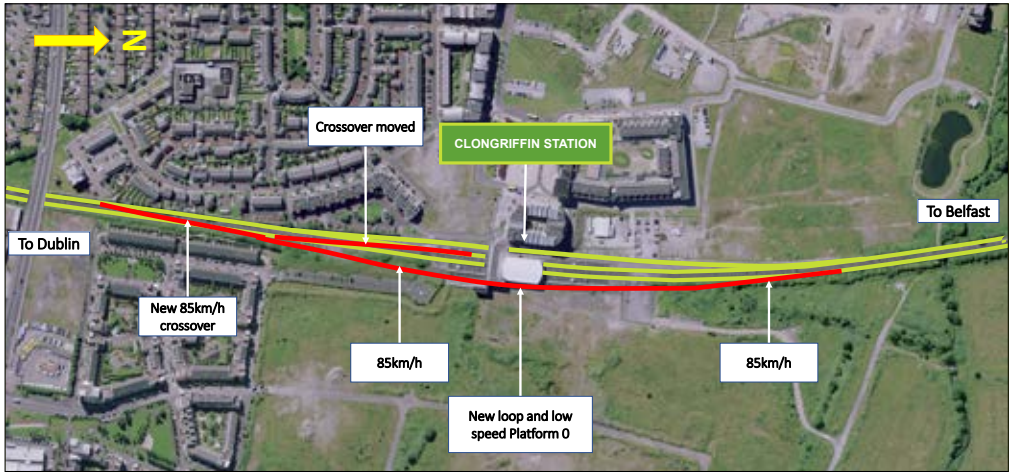
Modifications will be made to the track alignment to the south of the Station to allow trains to access the new platform. New OHLE and signalling installations, as well as modifications to the existing systems, will be required.

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.

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Transport Integration

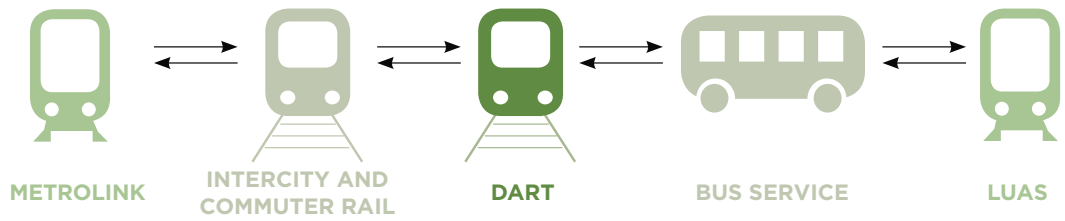
9. Transport Integration

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

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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.

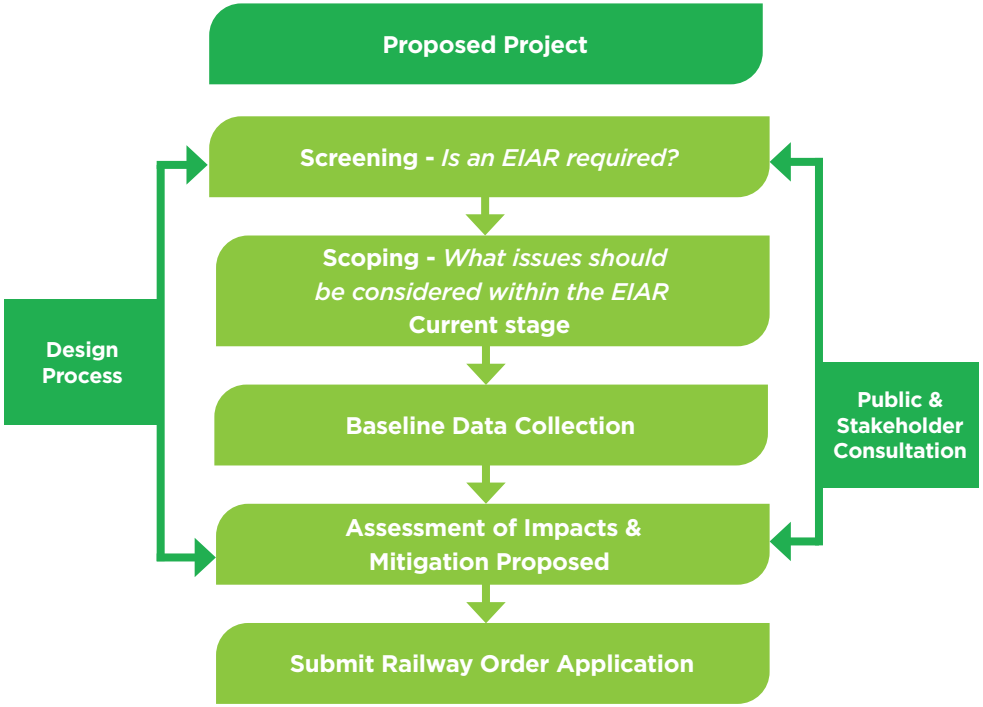
The Railway Order Process

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

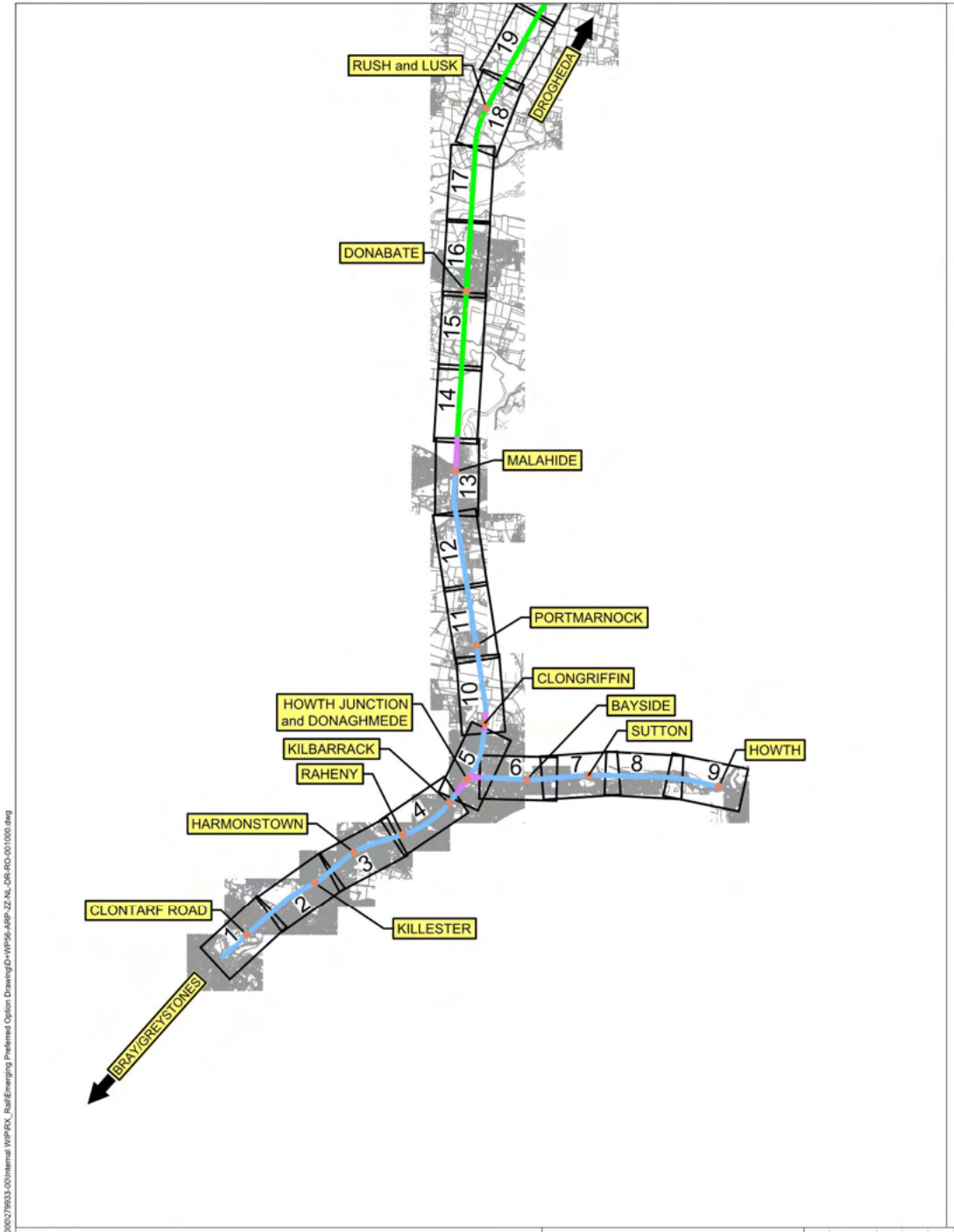
Postal Address

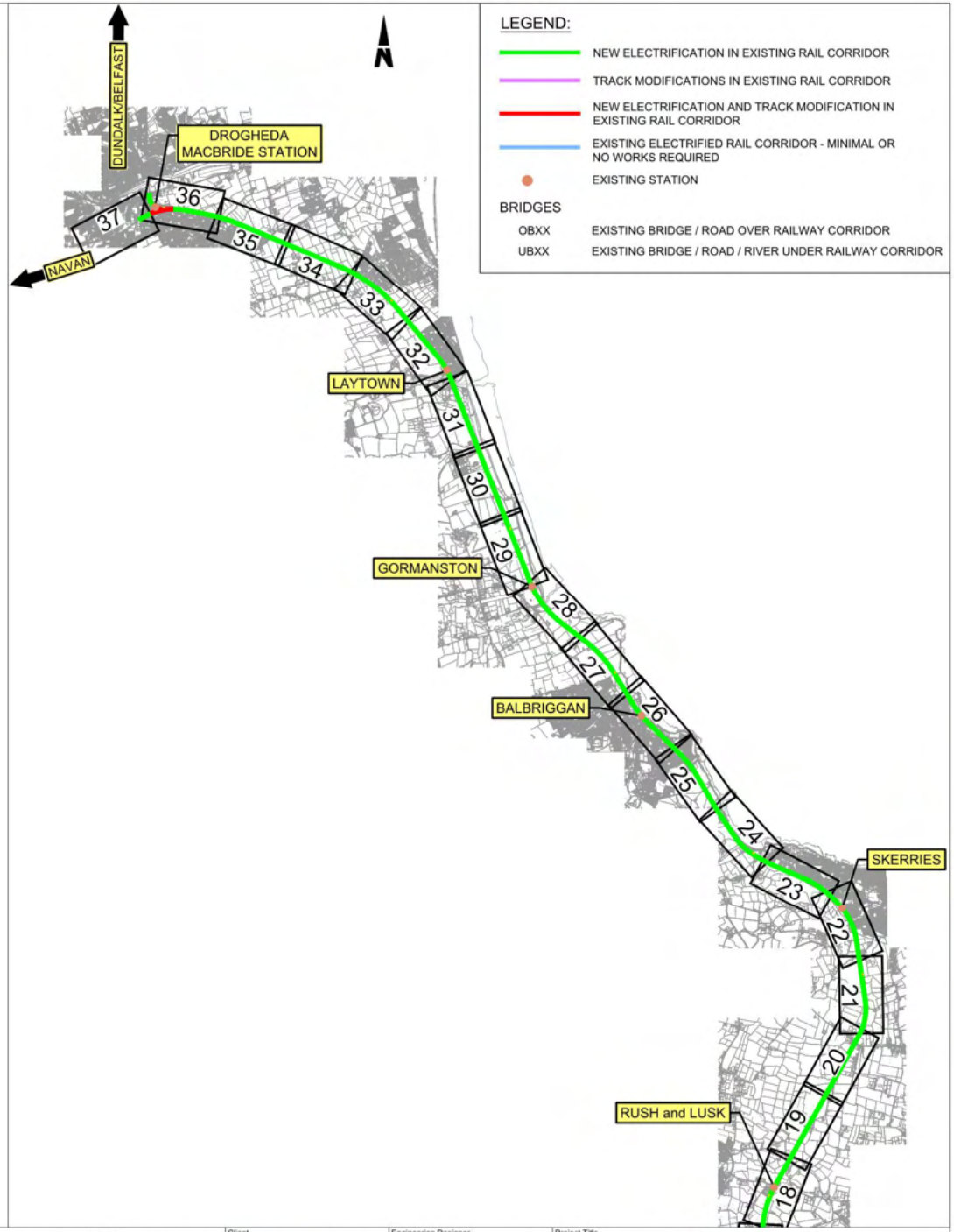
If you would prefer to write to us, please send any correspondence to:

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

13

Alignment Figures





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- 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 National Transport Authority

Tionscadal Éireann Project Ireland 2040

Rev	Date	Drn	Chk'd	App'd	Description
P01	07/12/2021	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION KEY PLAN MAP

Date	Scale	Drawn	Checked	Approved
07/12/2021	N.T.S	SR	RS	GS

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001000	01 of 01	S3	P01

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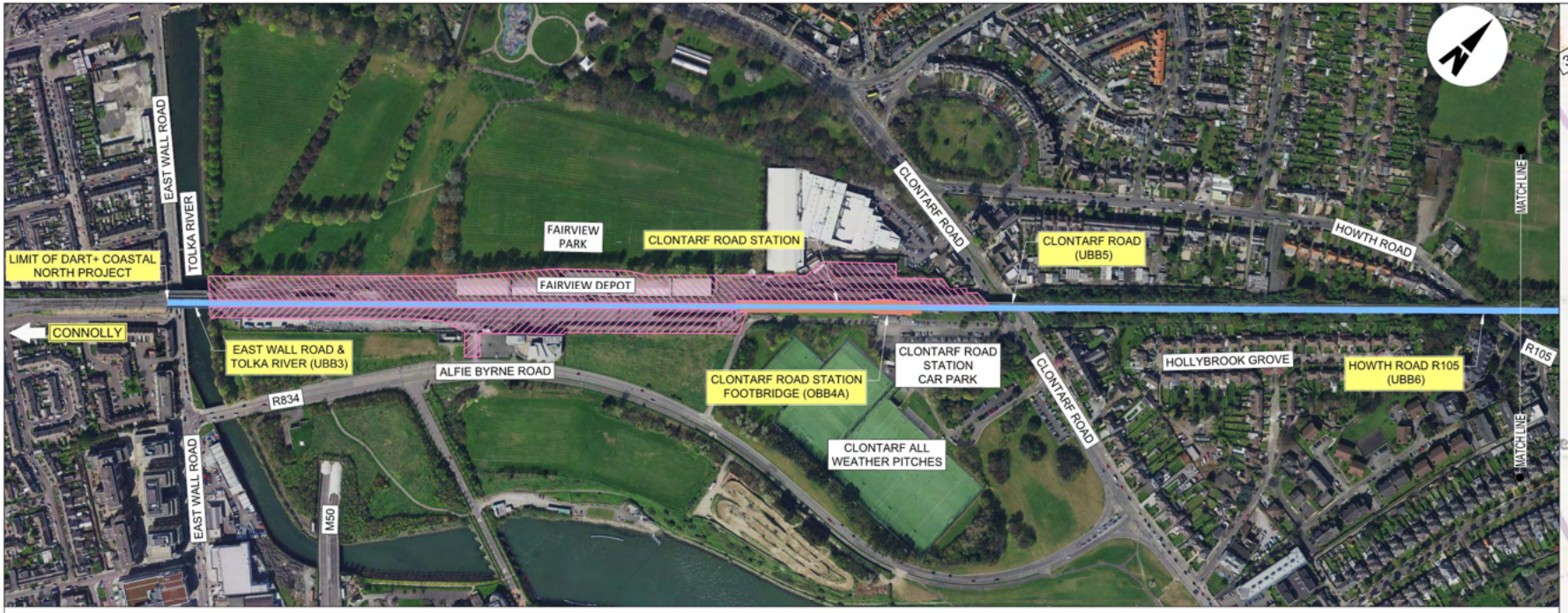

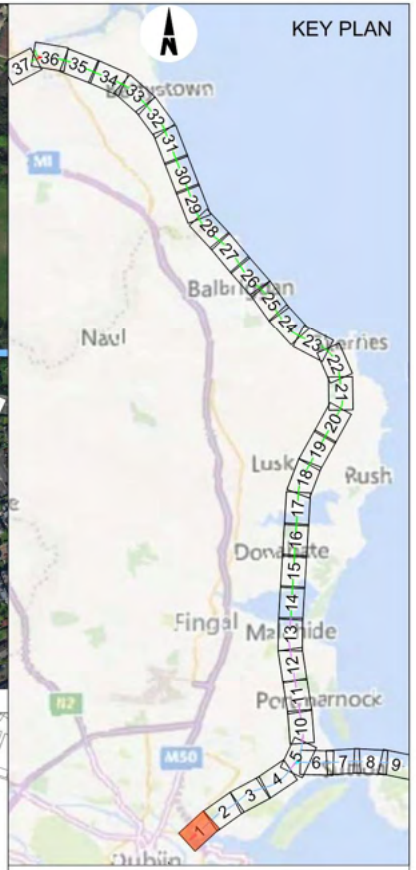

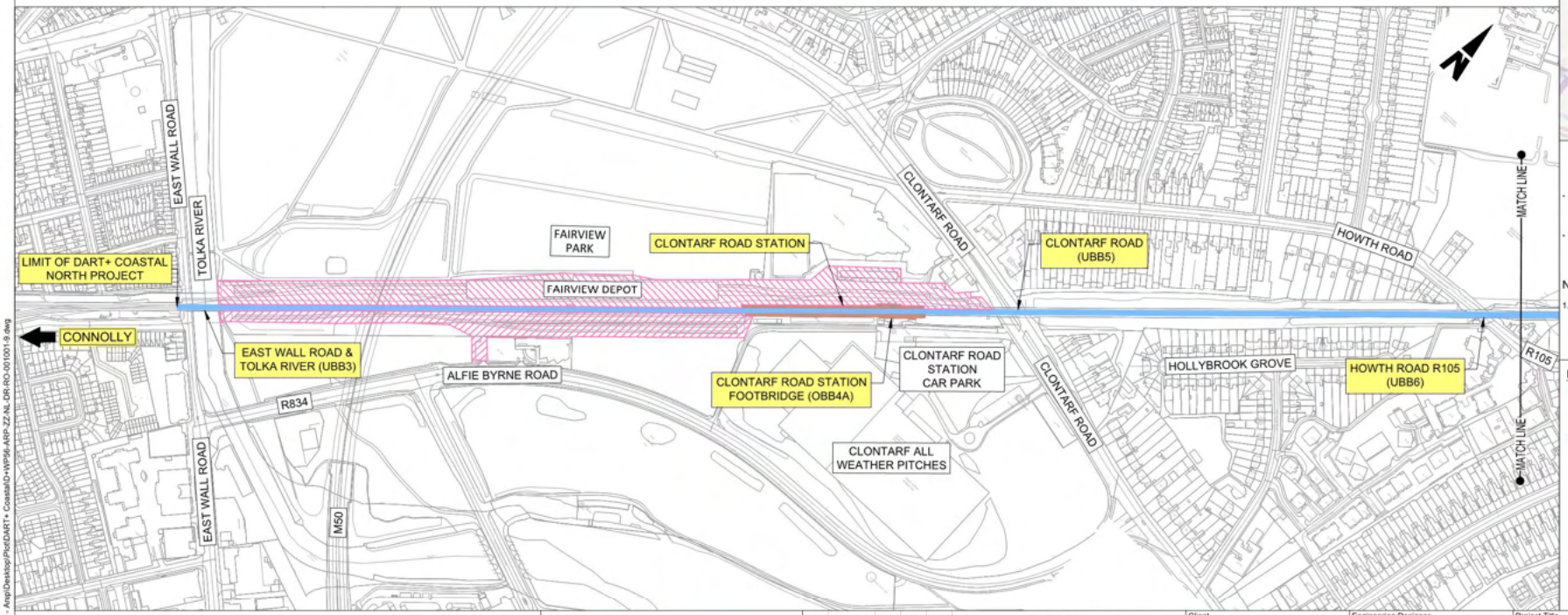

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NOTE:

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LEGEND:

- NEW ELECTRIFICATION IN EXISTING RAIL CORRIDOR
- TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
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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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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 1 OF 37 CLONTARF ROAD STATION AND SURROUNDS

Date	Scale	Drawn	Checked	Approved
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Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001001	1 of 37	S3	P01

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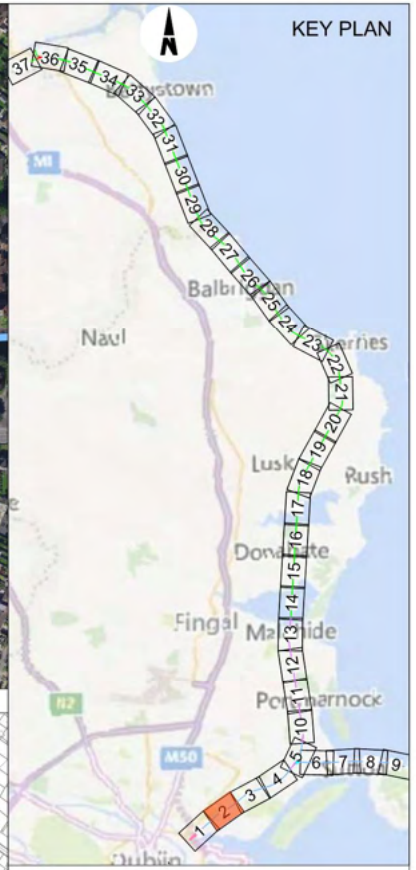

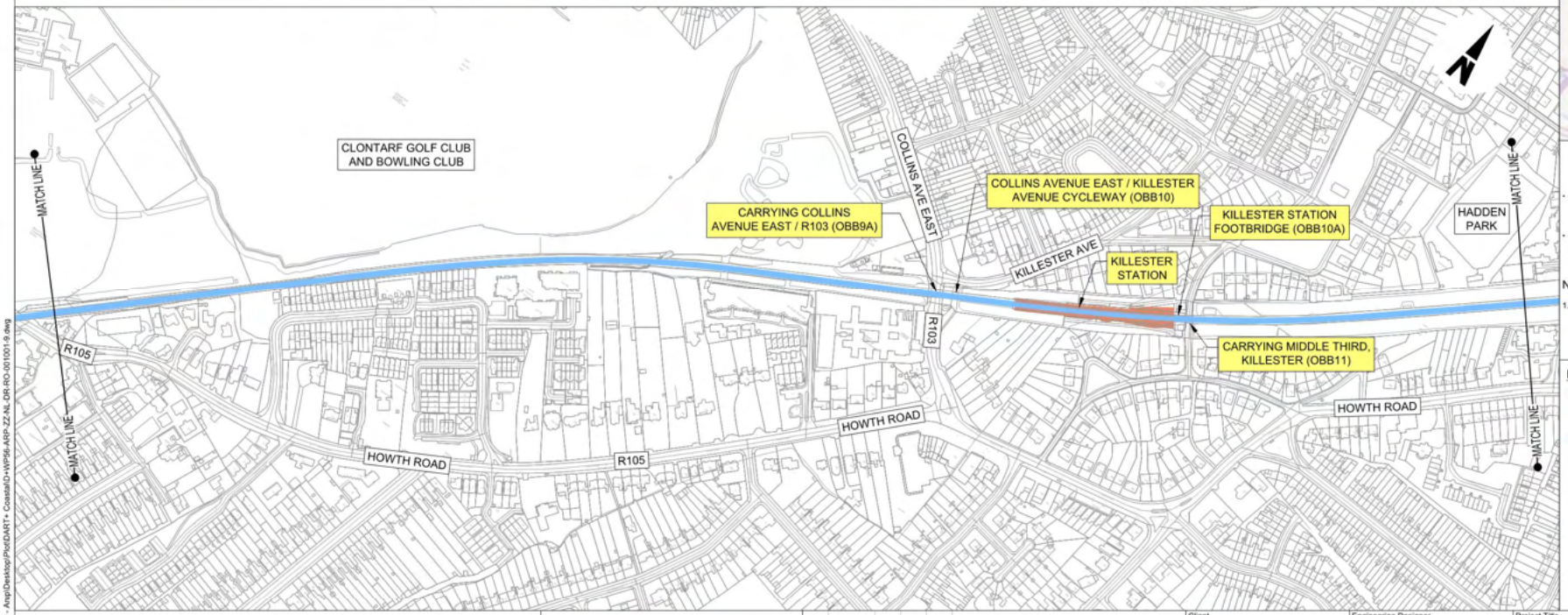

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P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 2 of 37 KILLESTER STATION AND SURROUNDS

Date	Scale	Drawn	Checked	Approved
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Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
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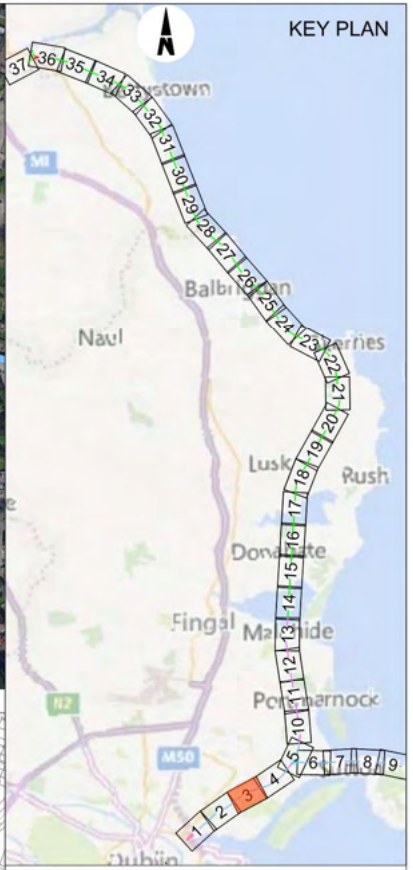

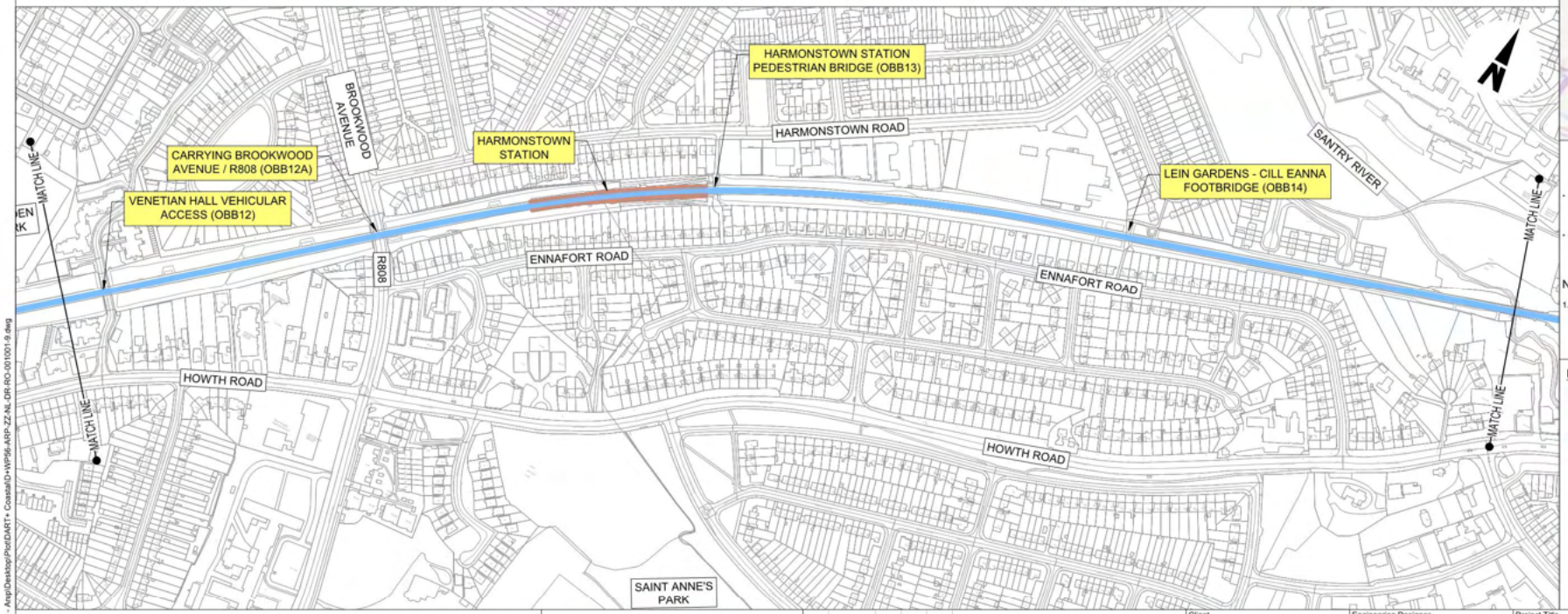

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Tionscadal Éireann Project Ireland 2040

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P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 3 OF 37 HARMONSTOWN STATION AND SURROUNDS

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001003	3 of 37	S3	P01

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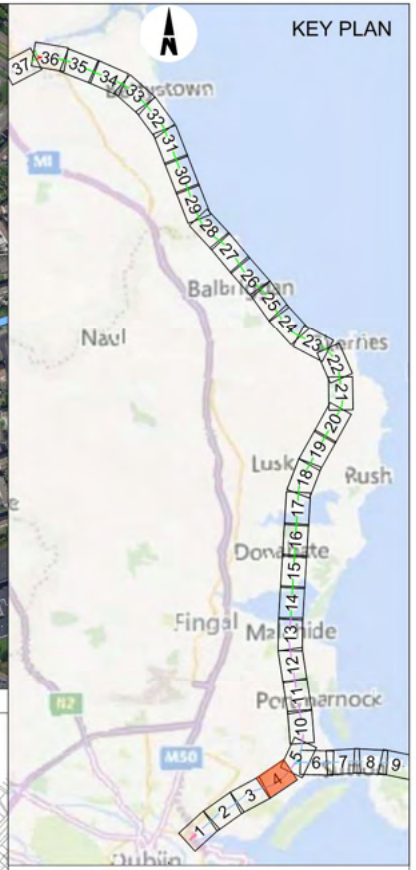

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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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P01	04/01/2022	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 4 OF 37
RAHENY STATION TO KILBARRACK STATION AND SURROUNDS

Date	Scale	Drawn	Checked	Approved
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Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001004	4 of 37	S3	P01

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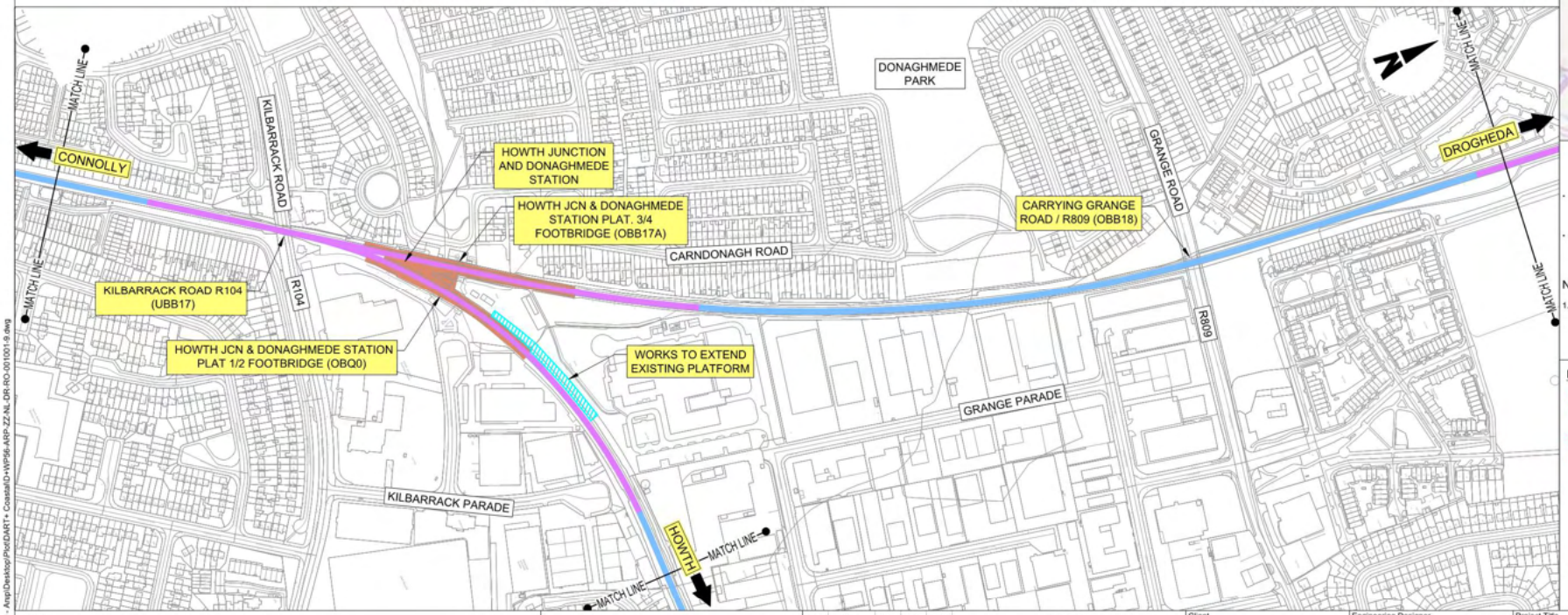

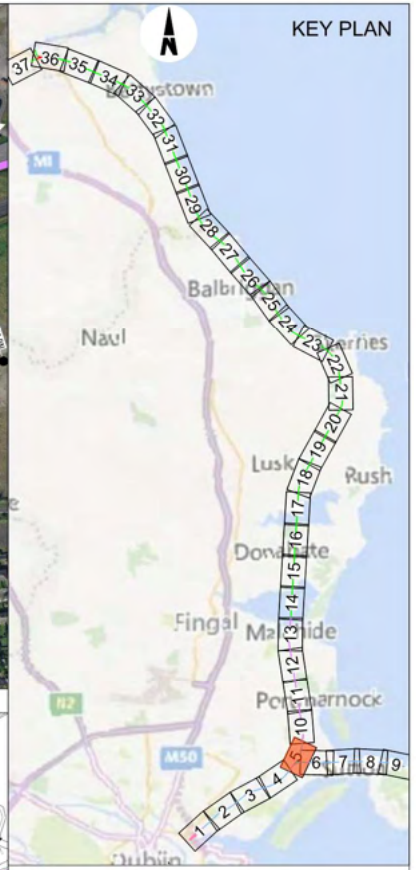

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LEGEND:

- 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 National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 5 OF 37
HOWTH JUNCTION AND DONAGHMEDE STATION AND SURROUNDS

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001005	5 of 37	S3	P01

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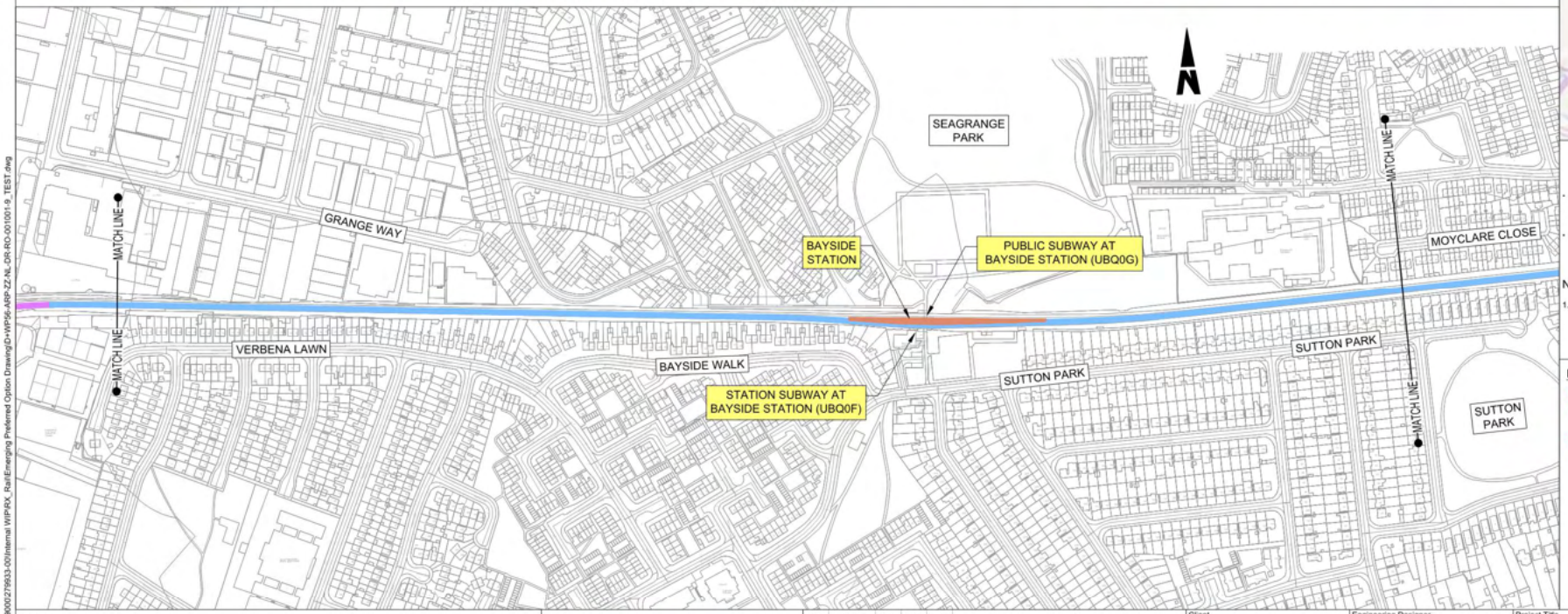

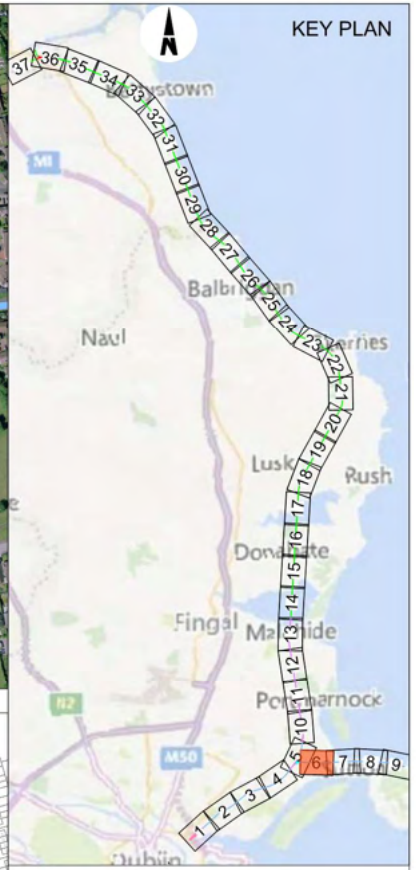

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- TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
- NEW ELECTRIFICATION AND TRACK MODIFICATION IN EXISTING RAIL CORRIDOR
- EXISTING ELECTRIFIED RAIL CORRIDOR - MINIMAL OR NO WORKS REQUIRED
- SIGNIFICANT WORK / INTERVENTION REQUIRED (INCLUDING BRIDGE RECONSTRUCTION)
- MINOR WORK / INTERVENTION REQUIRED
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- EXISTING STATION

BRIDGES

- OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 6 OF 37 BAYSIDE STATION AND SURROUNDS

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001006	6 of 37	S3	P01

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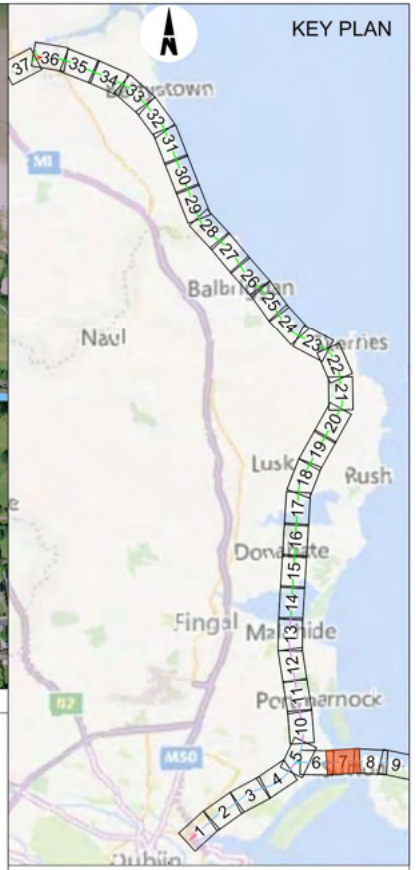

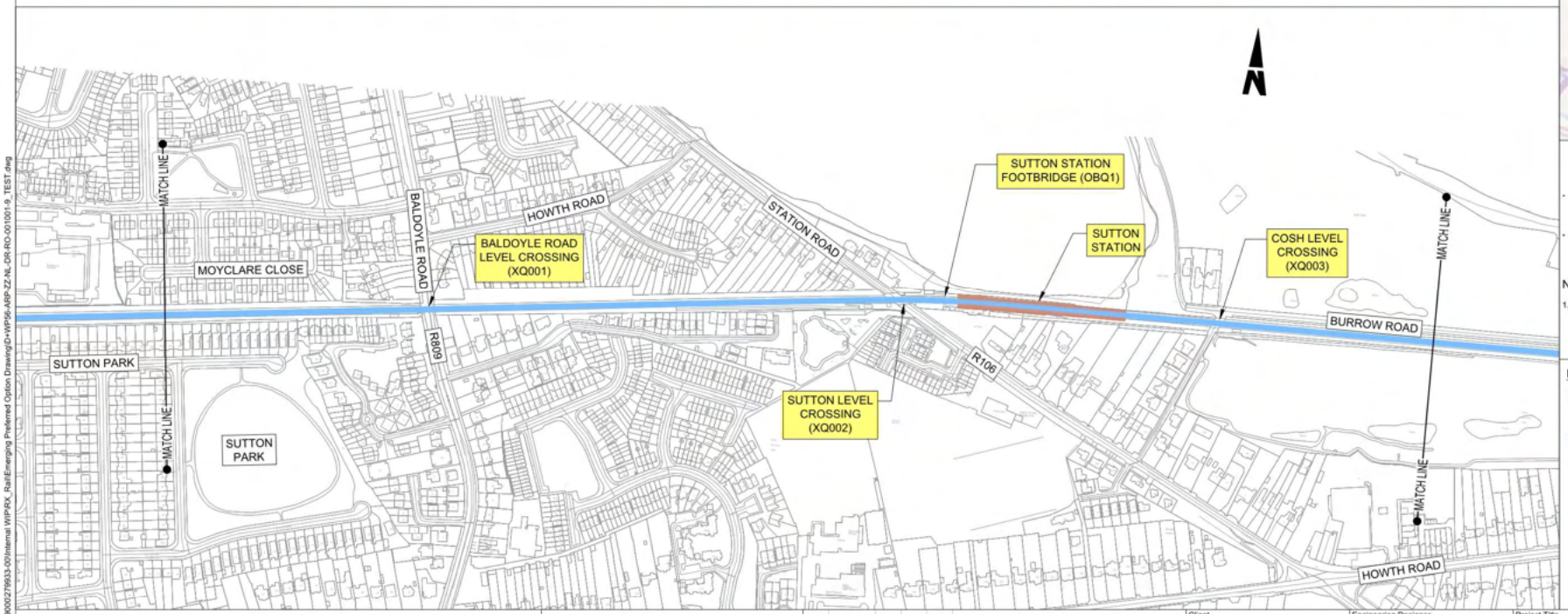

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LEGEND:

- NEW ELECTRIFICATION IN EXISTING RAIL CORRIDOR
- TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
- NEW ELECTRIFICATION AND TRACK MODIFICATION IN EXISTING RAIL CORRIDOR
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- 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 National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 7 OF 37 SUTTON STATION AND SURROUNDS

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001007	7 of 37	S3	P01

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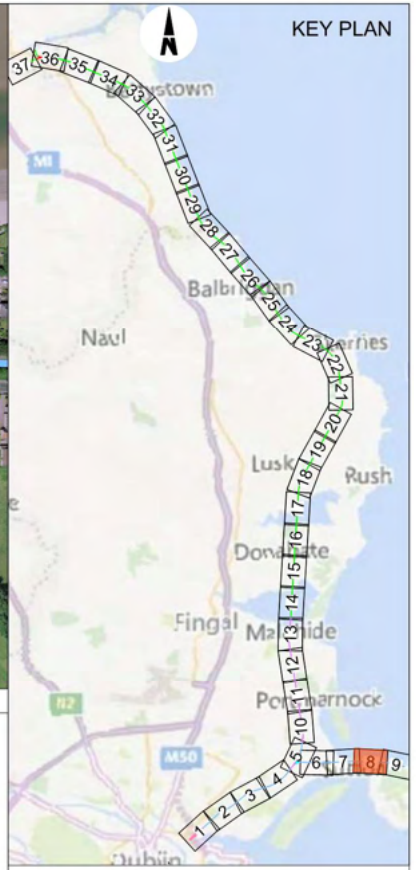

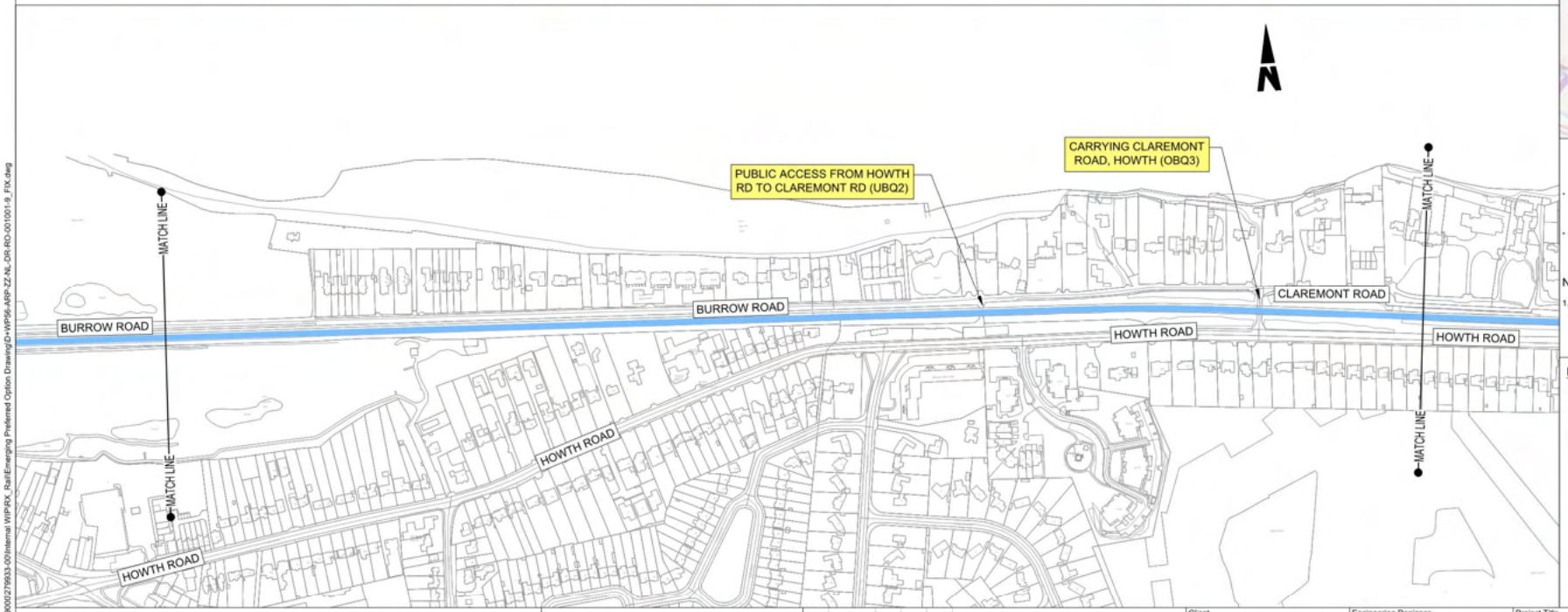

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- MINOR WORK REQUIRED
- EXISTING STATION

BRIDGES

- OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
- UBXX EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 8 OF 37 BURROW ROAD AND SURROUNDS

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001008	8 of 37	S3	P01

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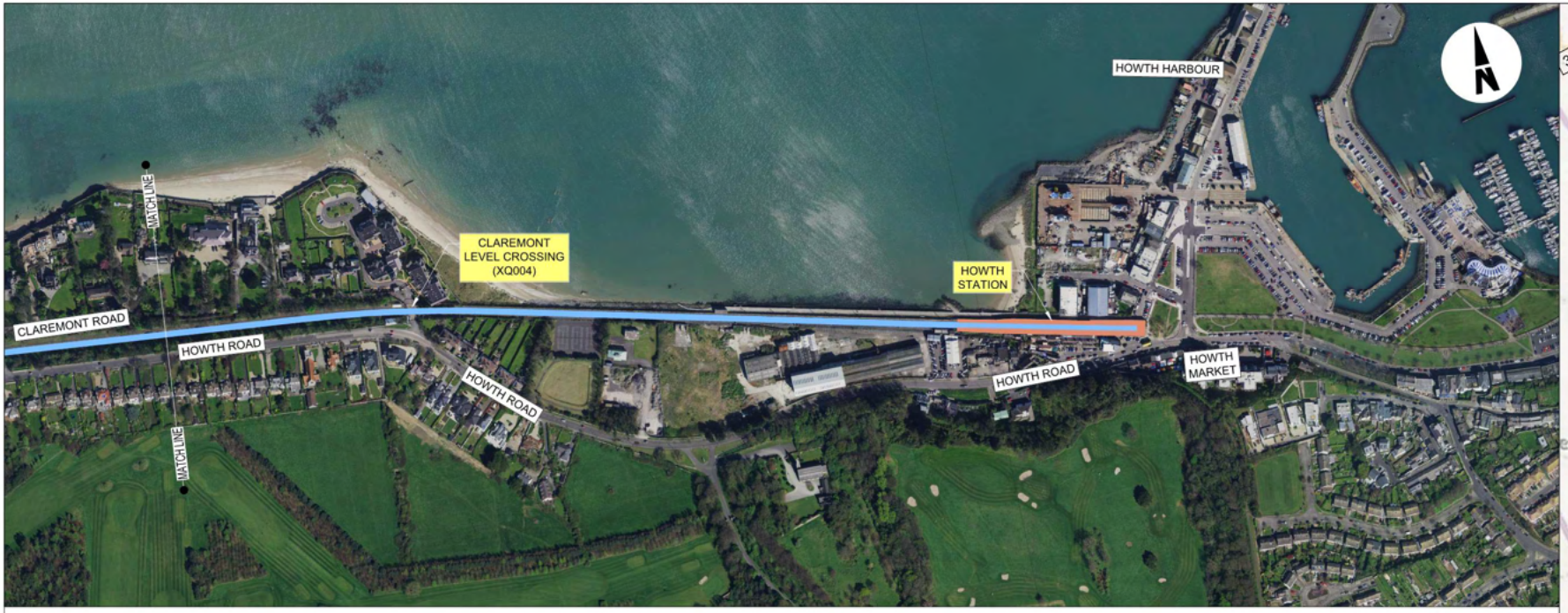

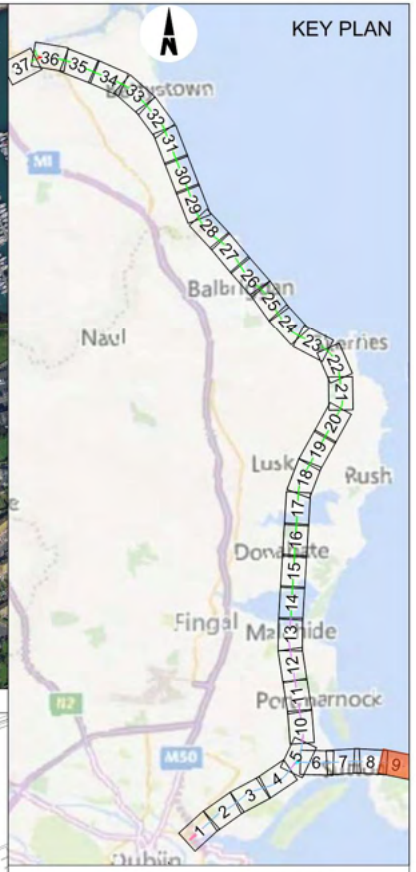

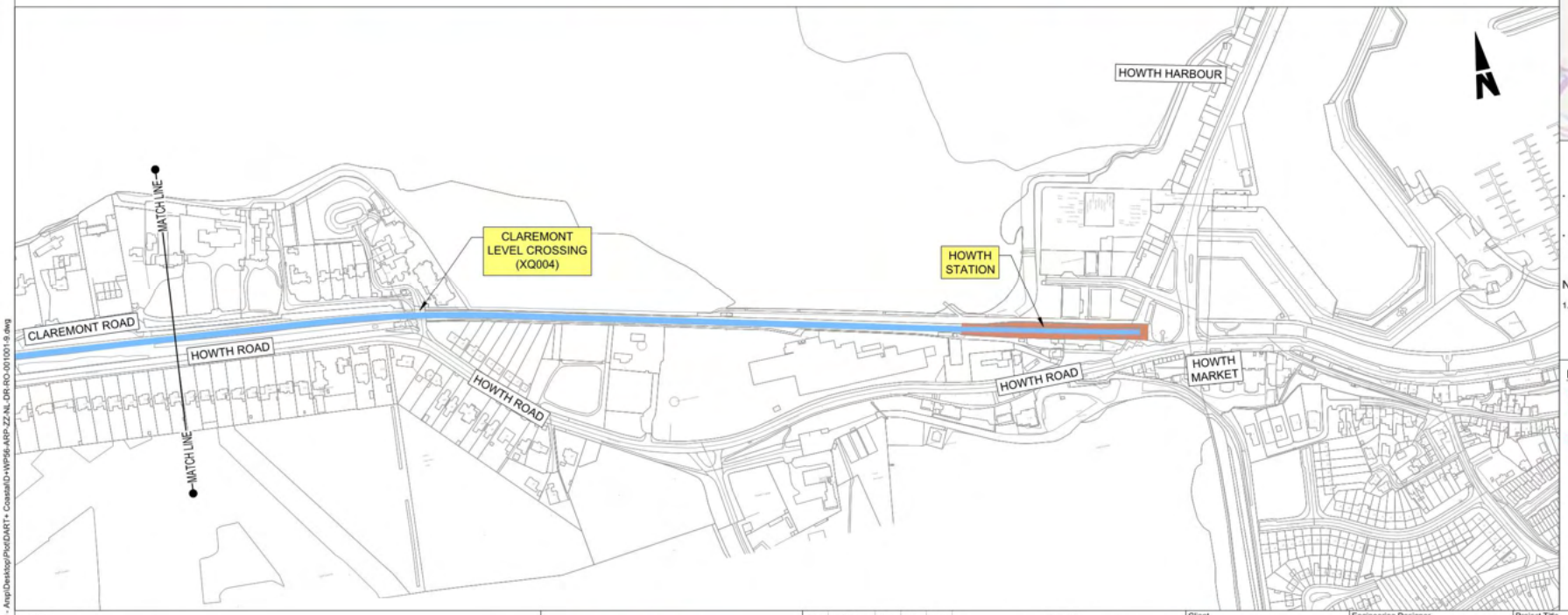

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NOTE:

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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
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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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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 9 OF 37
HOWTH STATION AND SURROUNDS

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001009	9 of 37	S3	P01

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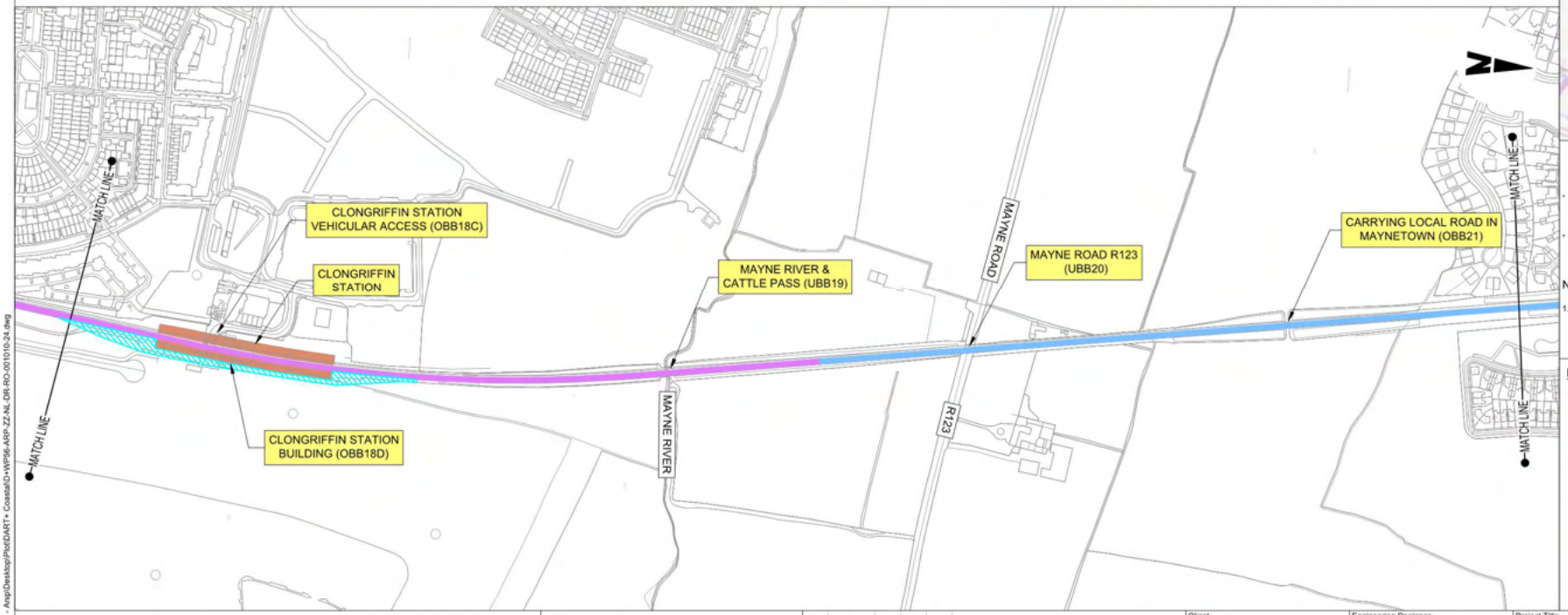

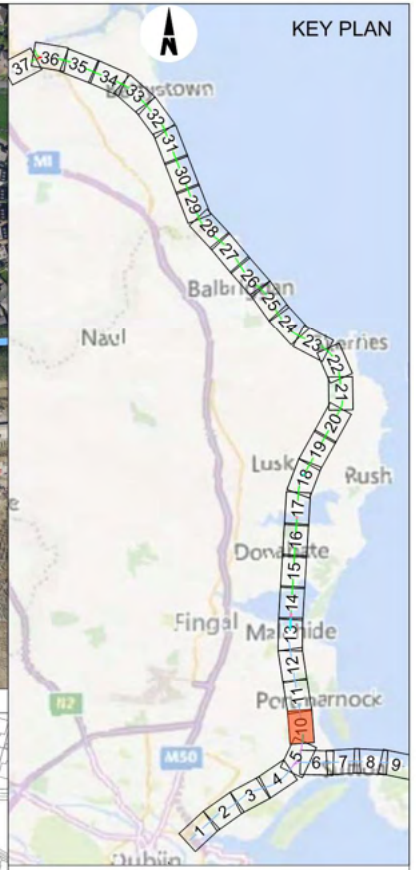

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BRIDGES

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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 10 OF 37 CLONGRIFFIN STATION AND SURROUNDS

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001010	10 of 37	S3	P01

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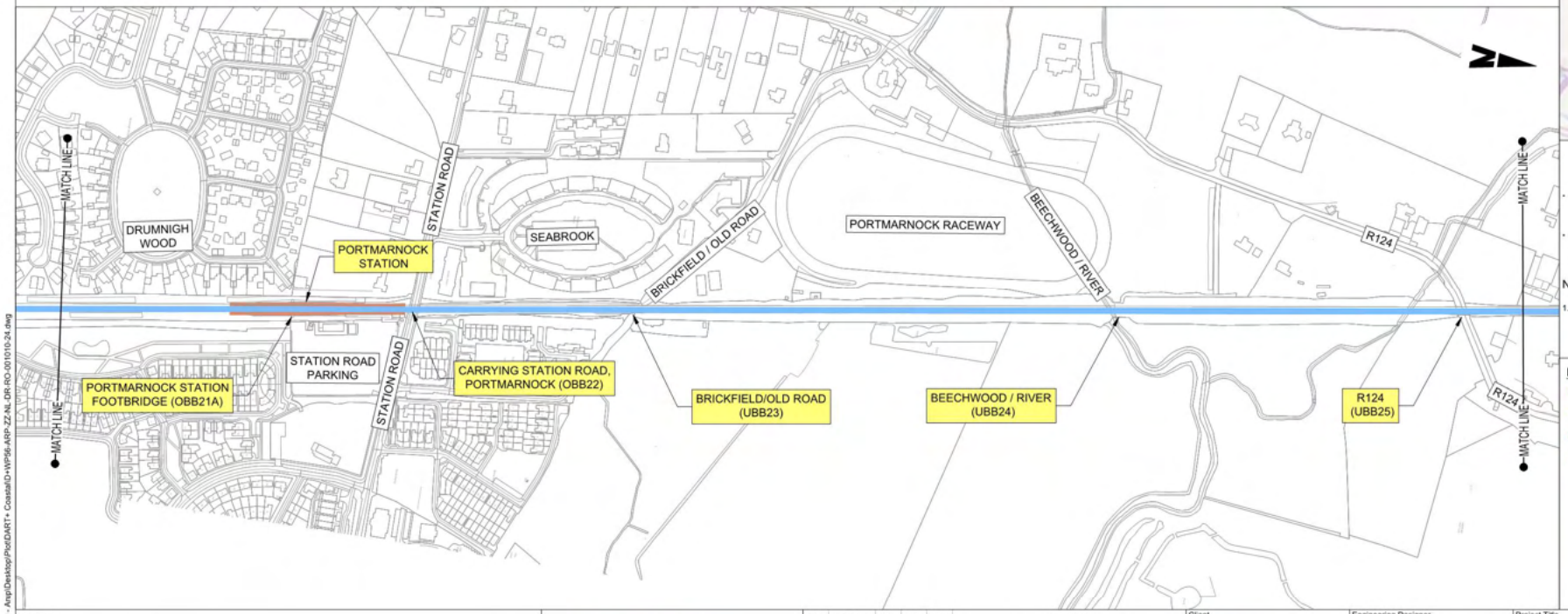

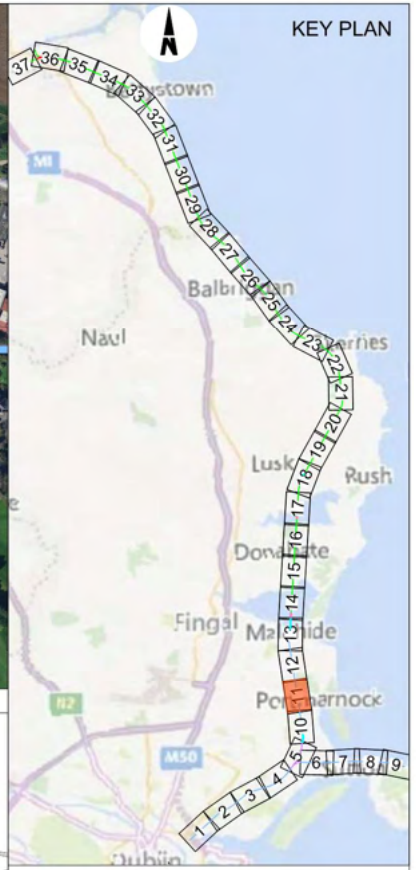

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BRIDGES

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DART+ Coastal North

NTA

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 11 OF 37 PORTMARNOCK STATION AND SURROUNDS

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001011	11 of 37	S3	P01

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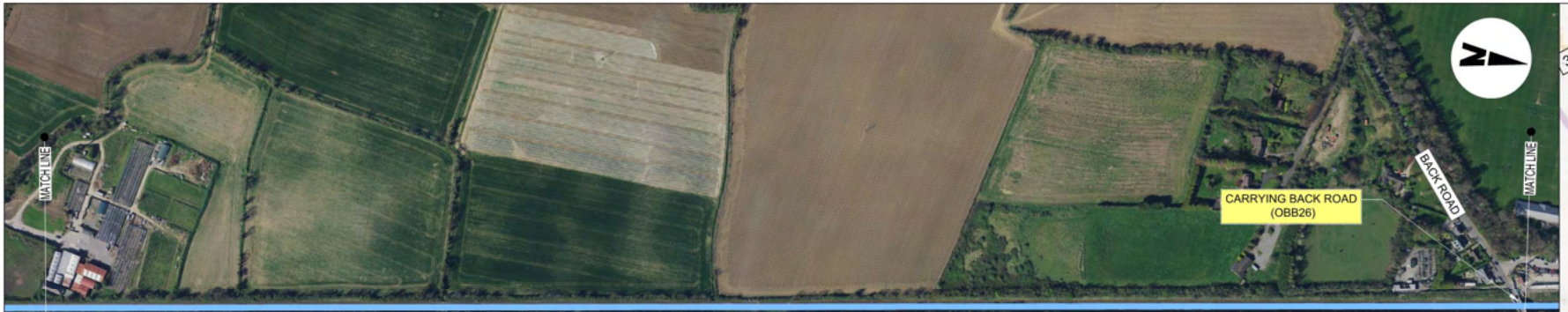

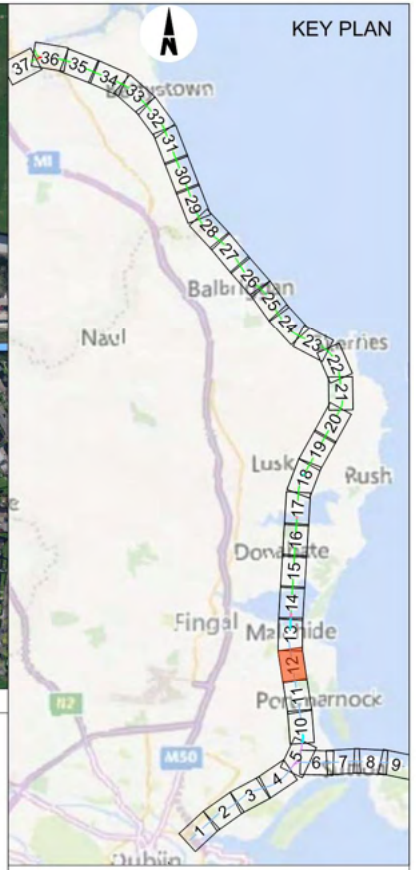

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NOTE:

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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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 12 OF 37
SOUTH MALAHIDE AND SURROUNDS

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001012	12 of 37	S3	P01

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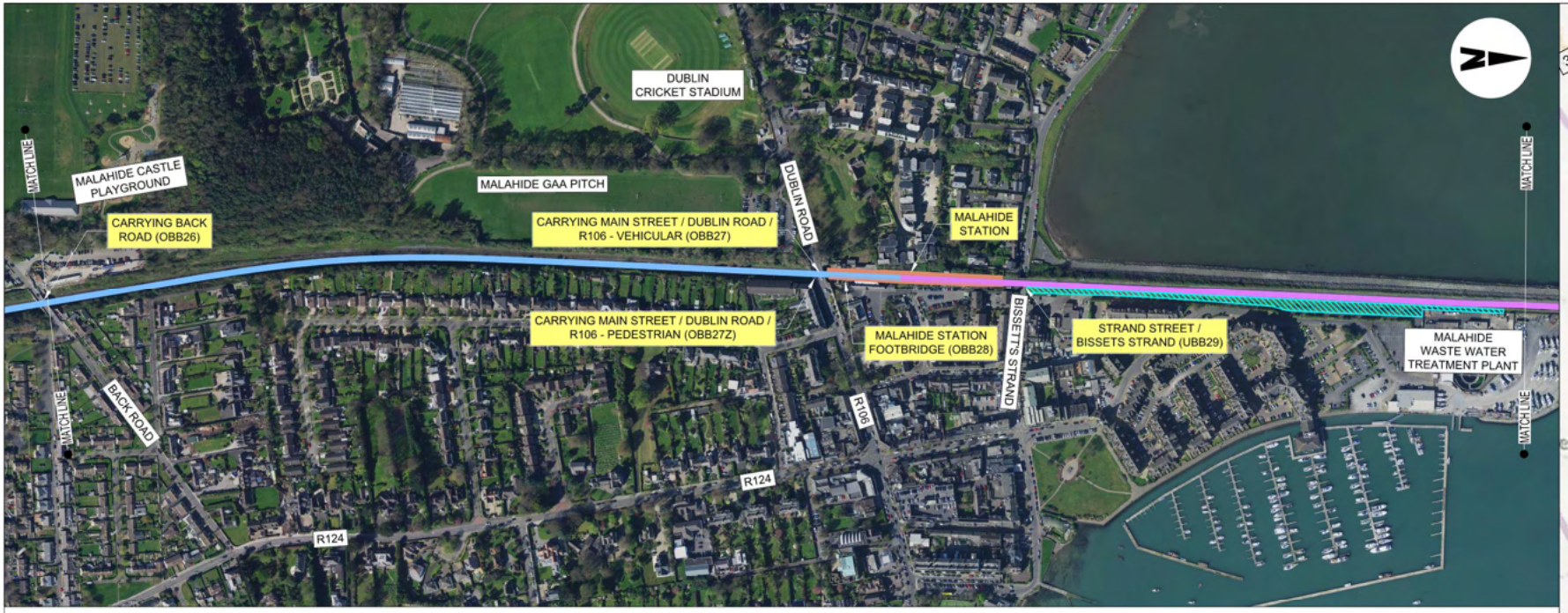

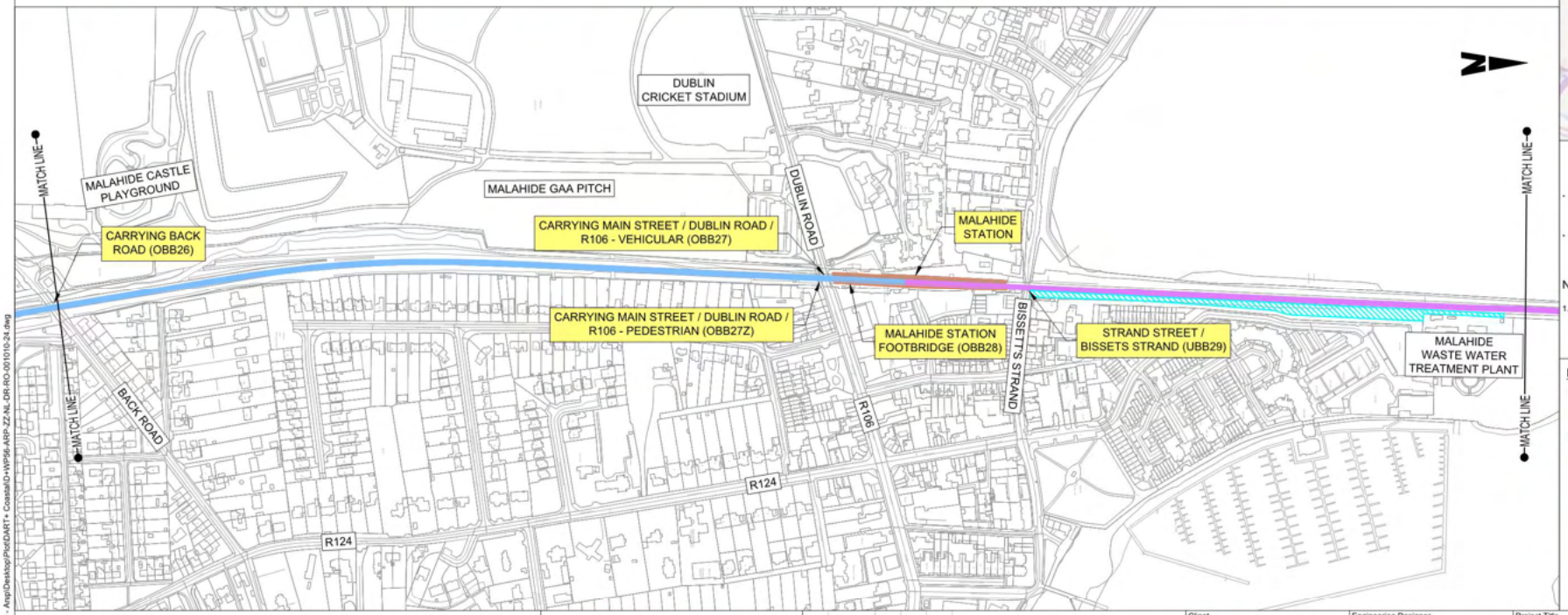

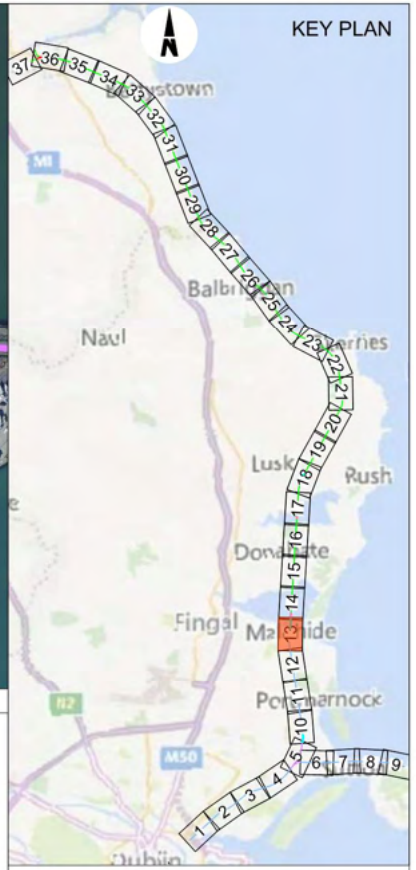

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NOTE:

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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
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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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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 13 OF 37 MALAHIDE STATION AND SURROUNDS

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001013	13 of 37	S3	P01

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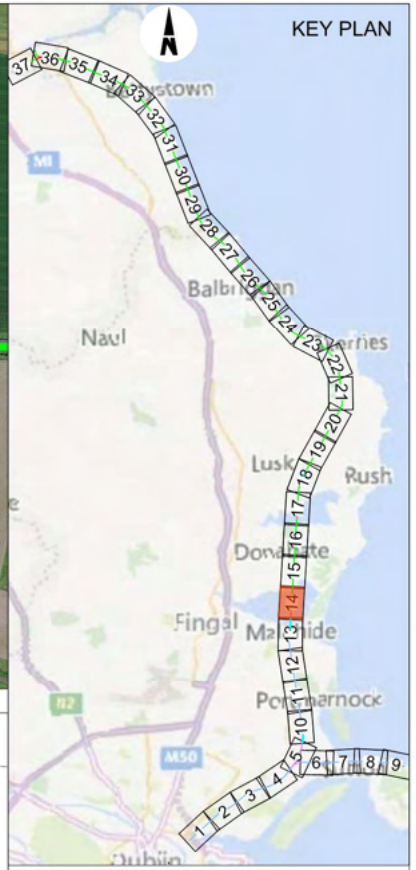

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NOTE:

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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
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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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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

Rev	Date	Drn	Chk'd	App'd	Description
P01	07/12/2021	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

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

Date	Scale	Drawn	Checked	Approved
07/12/2021	1:2500 @ A1 1:5000 @ A3	SR	RS	GS

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001014	14 of 37	S3	P01

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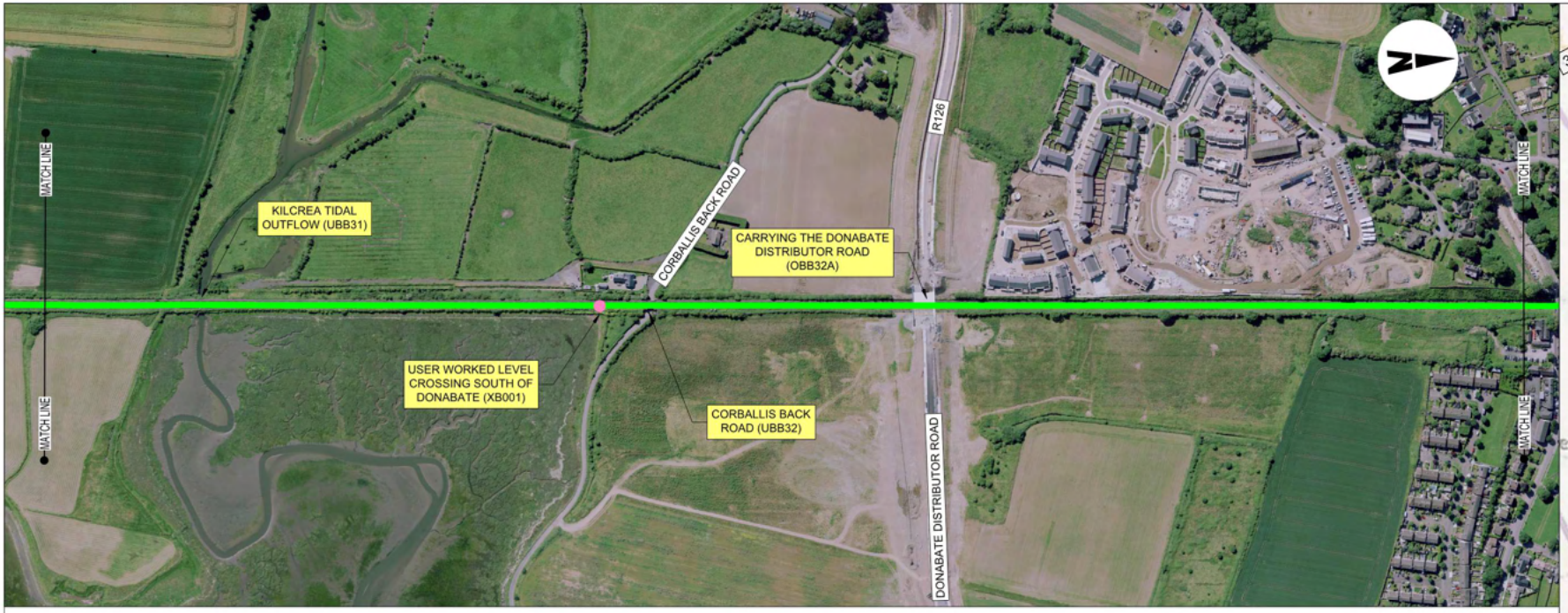

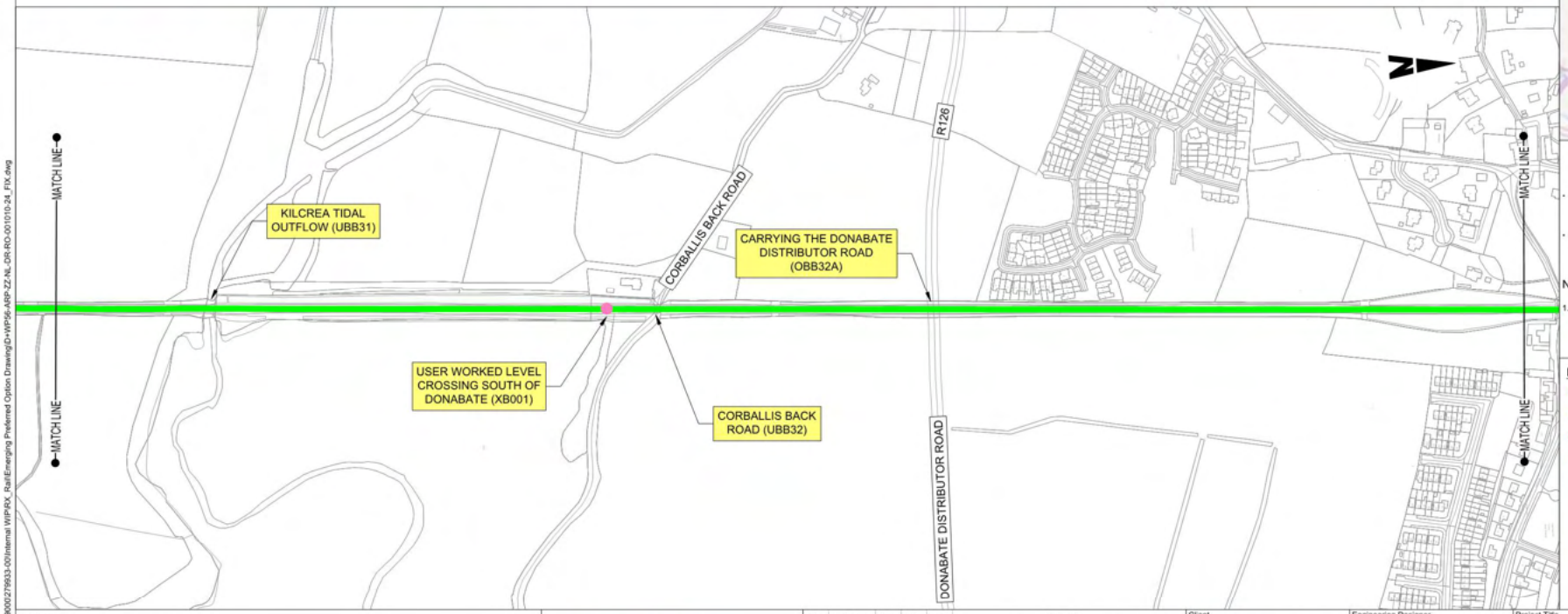

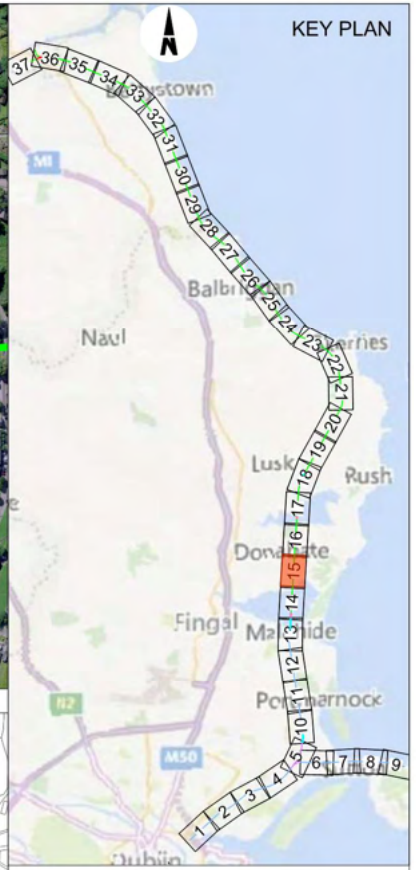

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LEGEND:

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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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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

Rev	Date	Drn	Chk'd	App'd	Description
P01	07/12/2021	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Date	Scale	Drawn	Checked	Approved
07/12/2021	1:2500 @ A1 1:5000 @ A3	SR	RS	GS

Project Code	Originator Code	QMS Code
D+WP56	ARP	280275-00

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 15 OF 37 SOUTH DONABATE AND SURROUNDS

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-RO-001015	15 of 37	S3	P01

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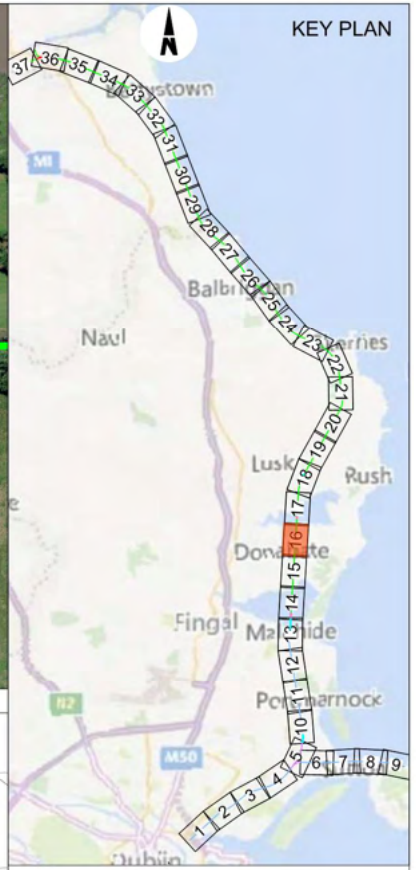

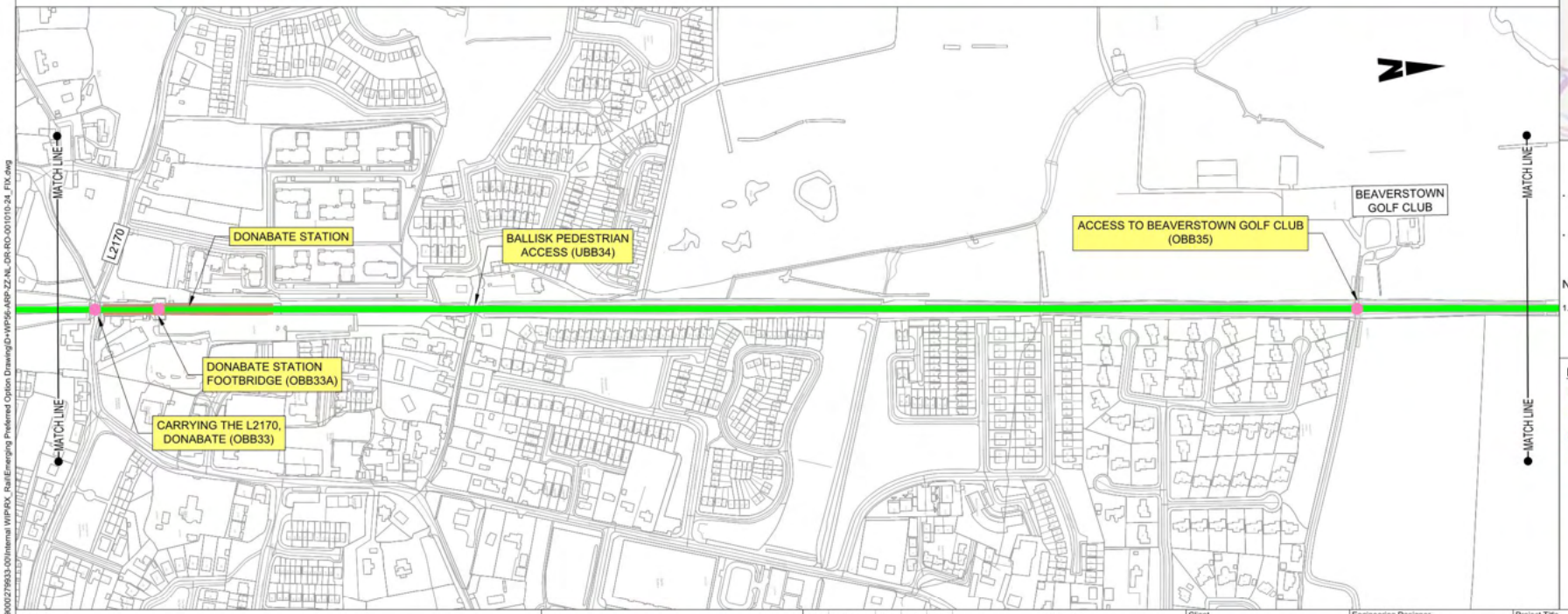

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LEGEND:

- NEW ELECTRIFICATION IN EXISTING RAIL CORRIDOR
- TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
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- MINOR WORK REQUIRED
- EXISTING STATION

BRIDGES

- OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
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DART+ Coastal North

NTA

Tionscadal Éireann Project Ireland 2040

Rev	Date	Drn	Chk'd	App'd	Description
P01	07/12/2021	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 16 OF 37 DONABATE STATION AND SURROUNDS

Date	Scale	Drawn	Checked	Approved
07/12/2021	1:2500 @ A1 1:5000 @ A3	SR	RS	GS

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001016	16 of 37	S3	P01

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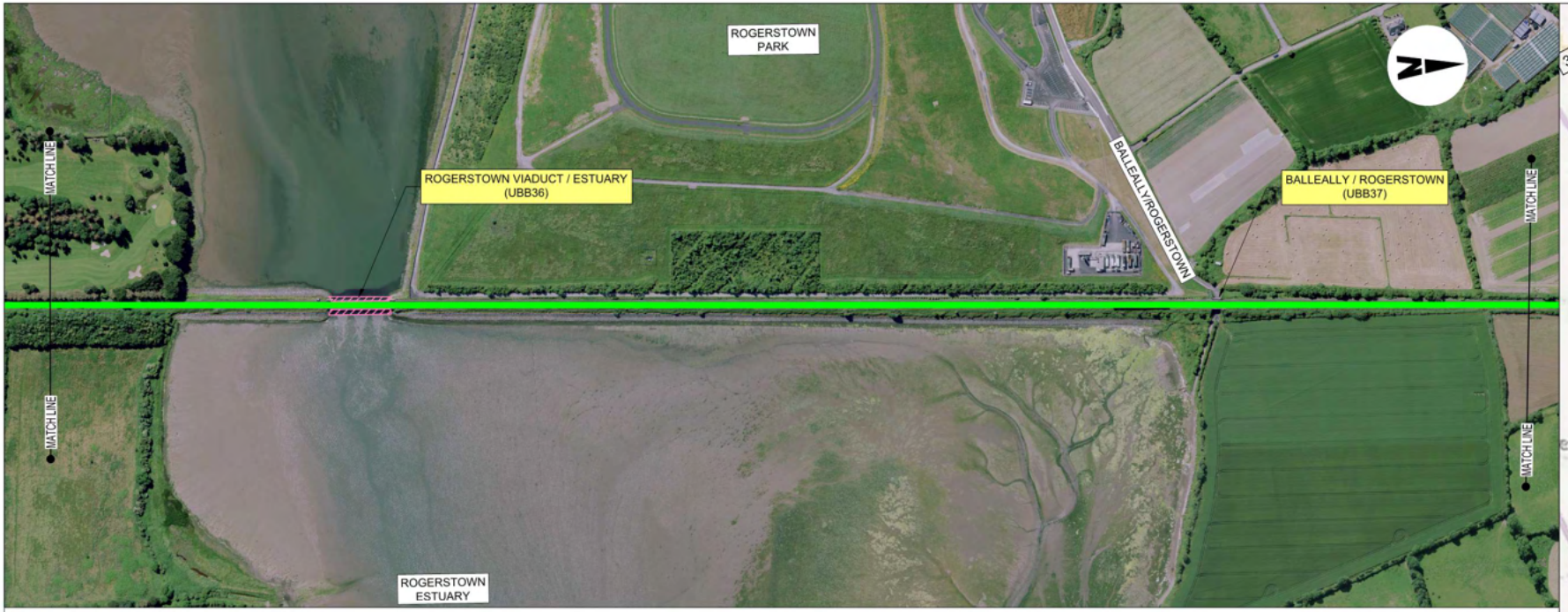

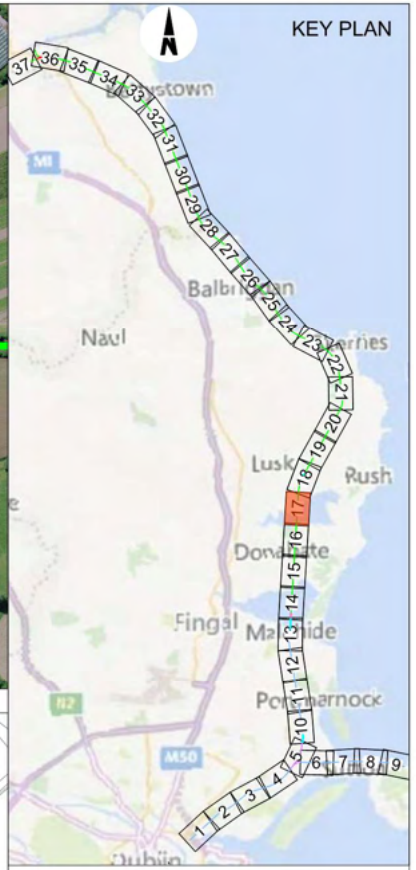

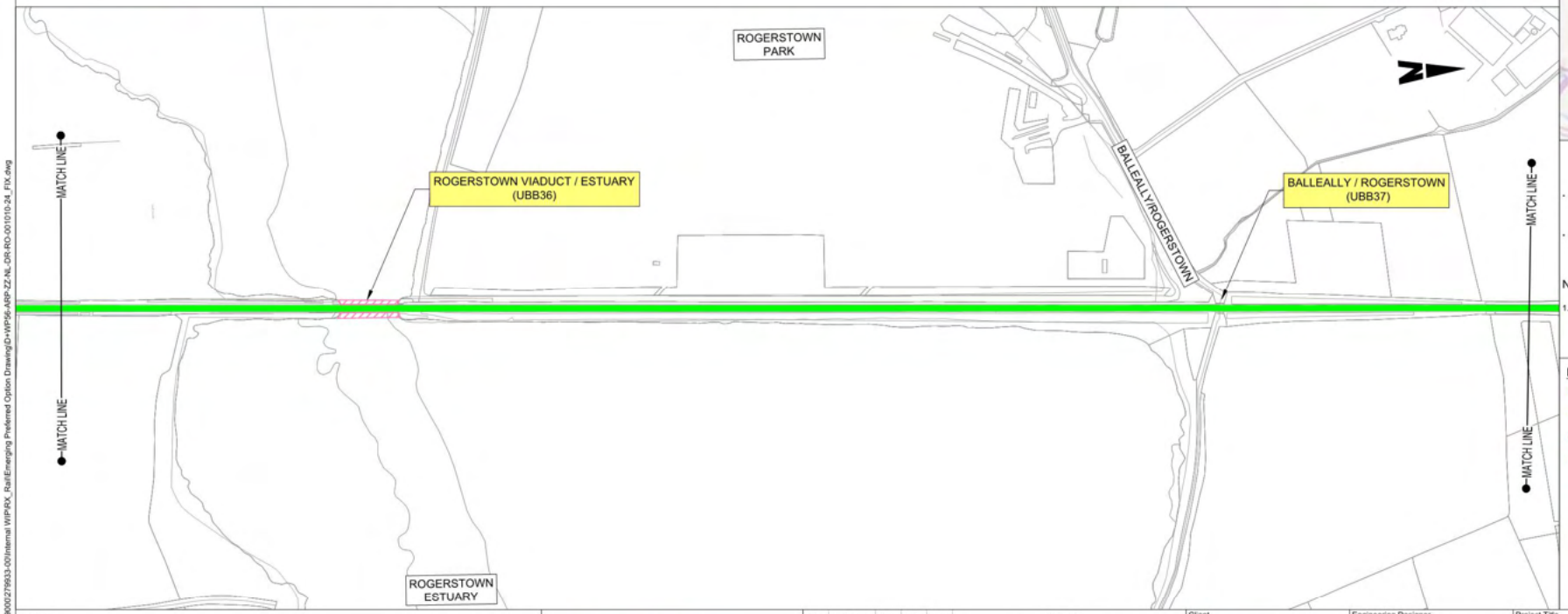

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LEGEND:

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- EXISTING STATION

BRIDGES

- OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

Rev	Date	Drn	Chk'd	App'd	Description
P01	07/12/2021	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 17 OF 37 ROGERSTOWN AND SURROUNDS

Date	Scale	Drawn	Checked	Approved
07/12/2021	1:2500 @ A1 1:5000 @ A3	SR	RS	GS

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001017	17 of 37	S3	P01

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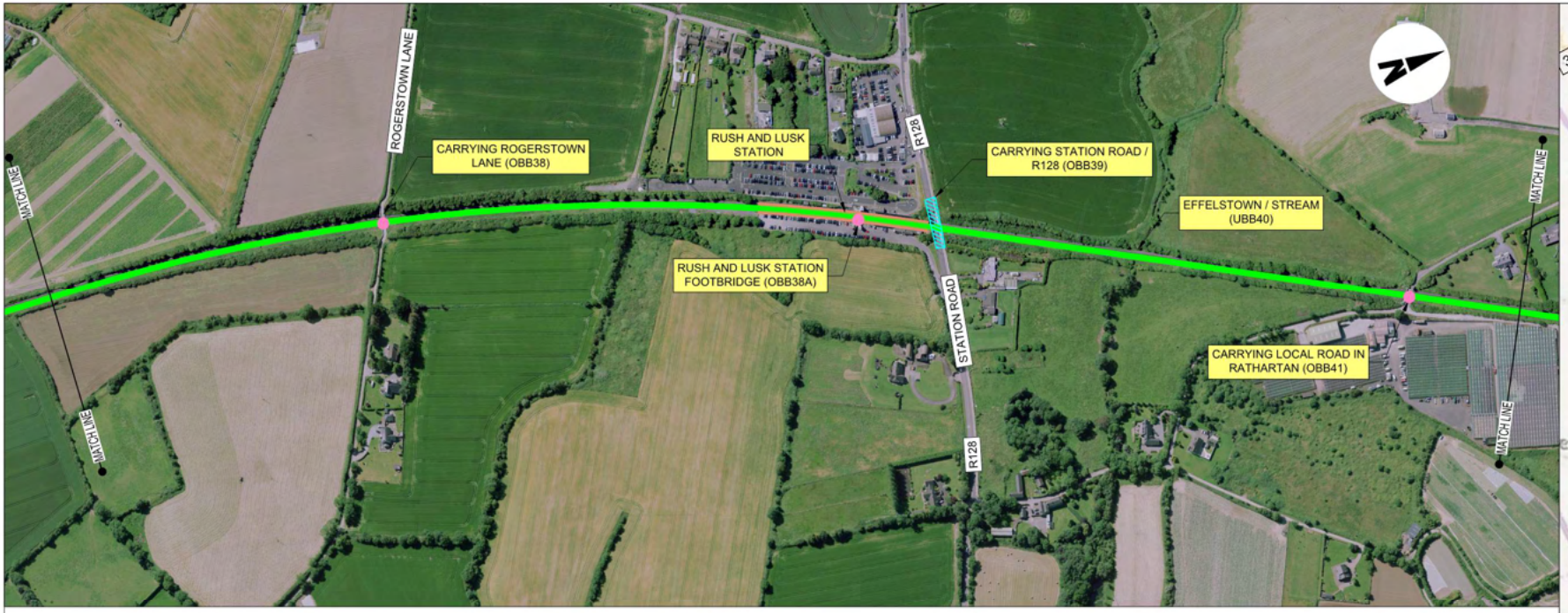

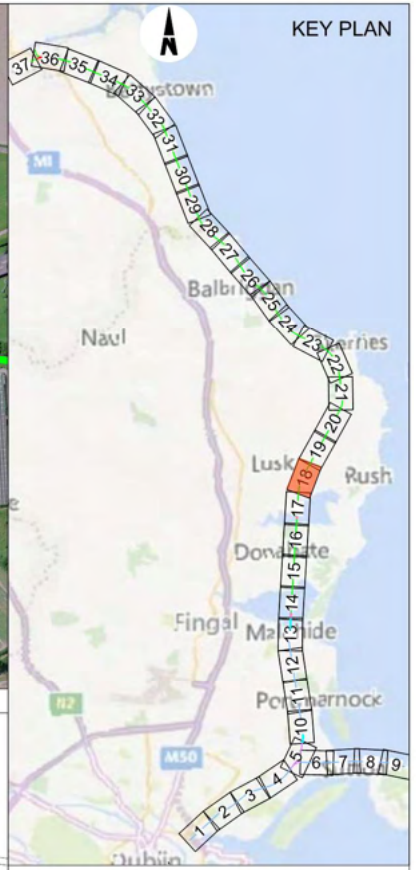

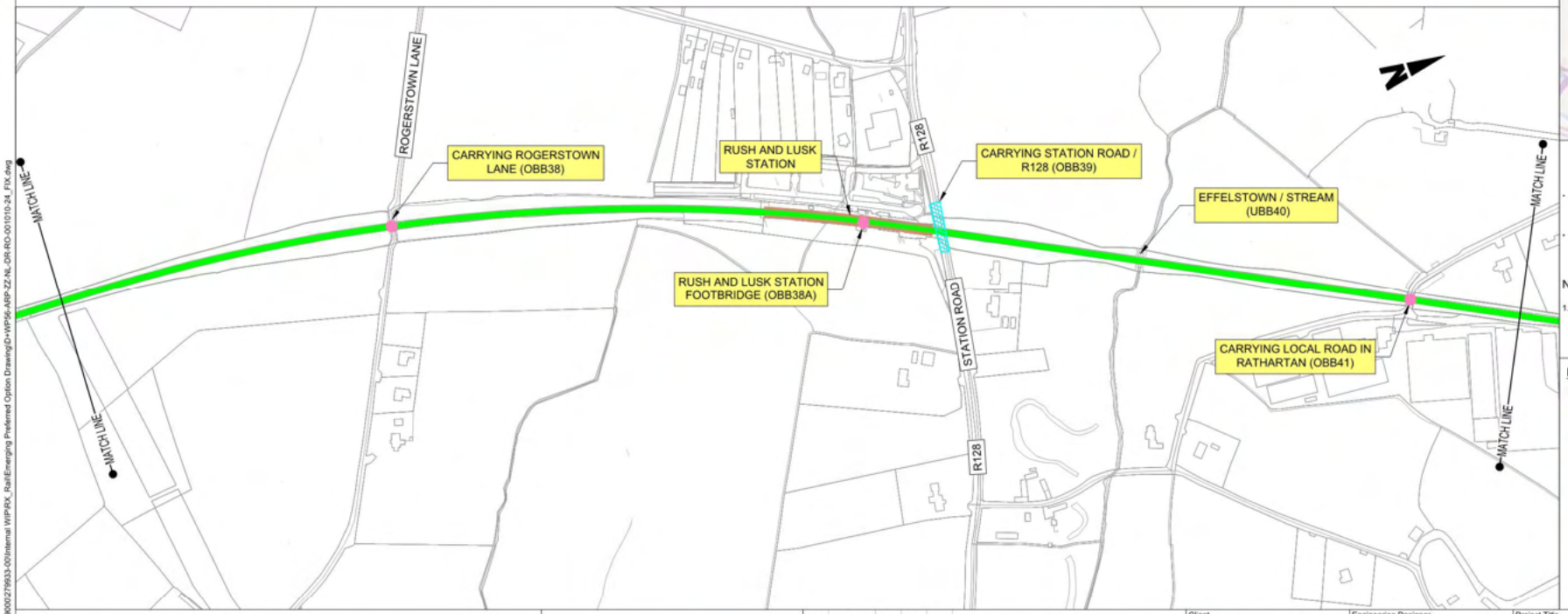

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NOTE:

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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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

Rev	Date	Drn	Chk'd	App'd	Description
P01	07/12/2021	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 18 OF 37 RUSH AND LUSK STATION AND SURROUNDS

Date	Scale	Drawn	Checked	Approved
07/12/2021	1:2500 @ A1 1:5000 @ A3	SR	RS	GS

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001018	18 of 37	S3	P01

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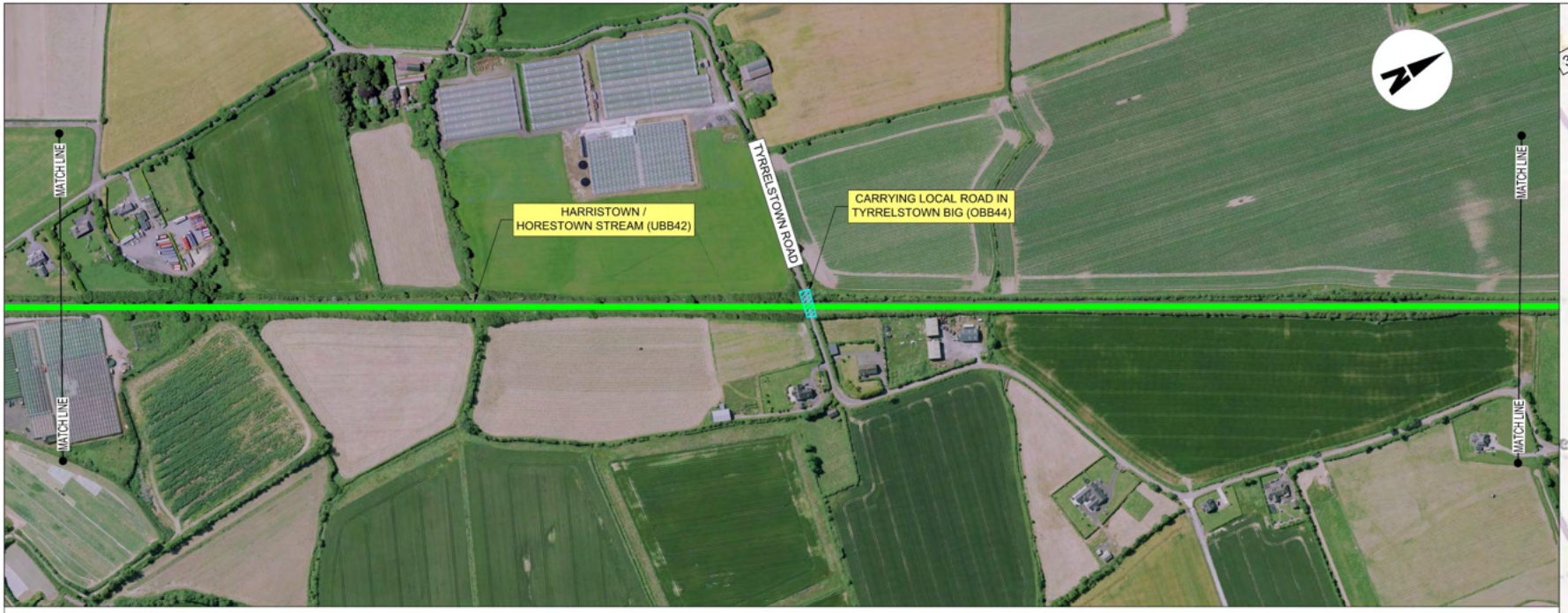

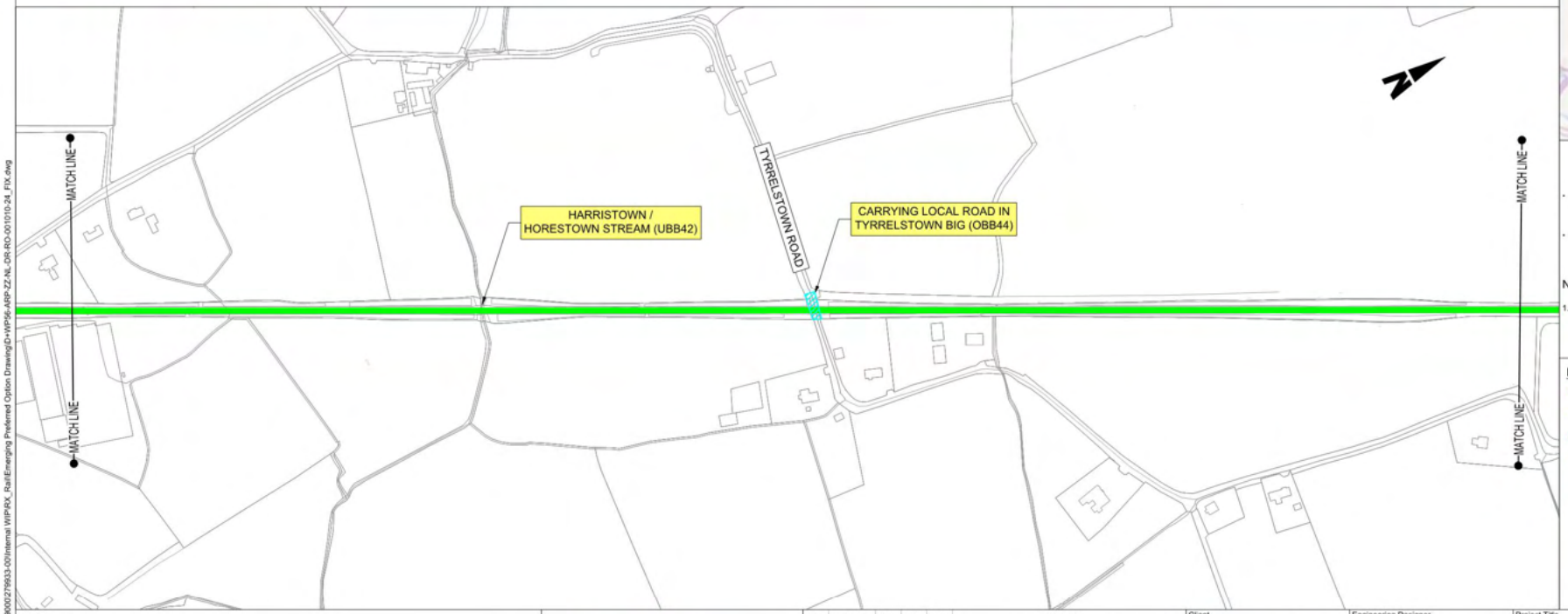

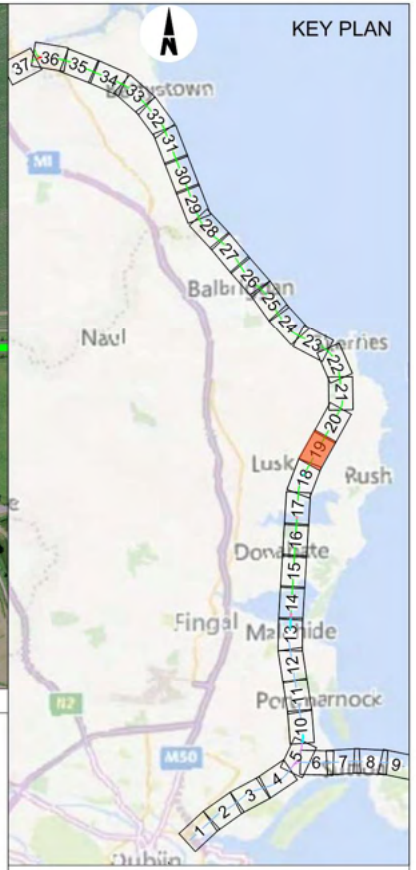

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NOTE:

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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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

Rev	Date	Drn	Chk'd	App'd	Description
P01	07/12/2021	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 19 OF 37 TYRRELSTOWN AND SURROUNDS

Date	Scale	Drawn	Checked	Approved
07/12/2021	1:2500 @ A1 1:5000 @ A3	SR	RS	GS

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001019	19 of 37	S3	P01

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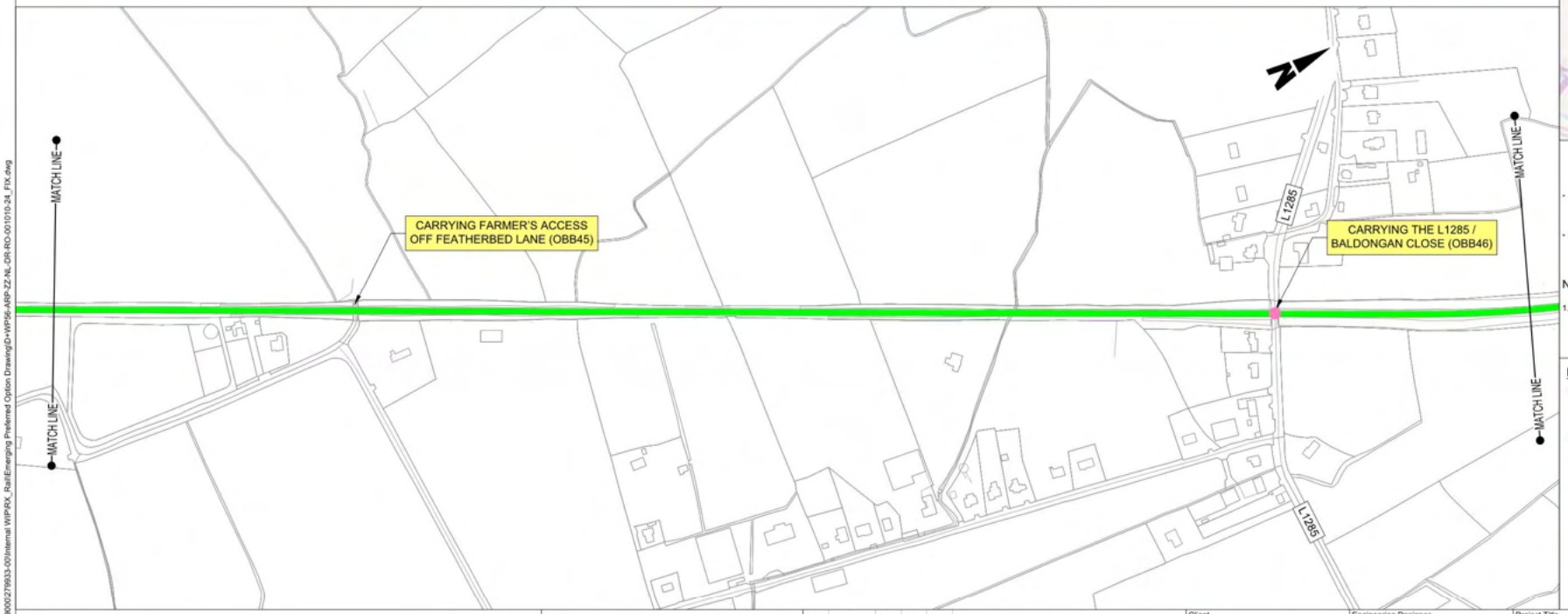

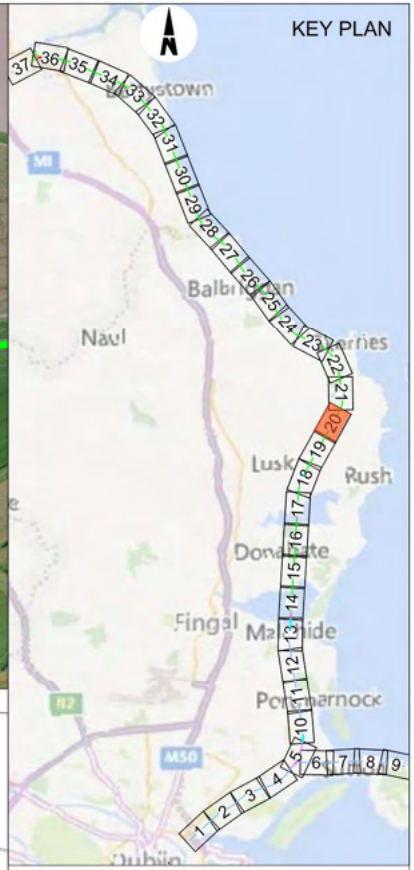

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NOTE:

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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
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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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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

Rev	Date	Drn	Chk'd	App'd	Description
P01	07/12/2021	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 20 OF 37 BALDONGAN AND SURROUNDS

Date	Scale	Drawn	Checked	Approved
07/12/2021	1:2500 @ A1 1:5000 @ A3	SR	RS	GS

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001020	20 of 37	S3	P01

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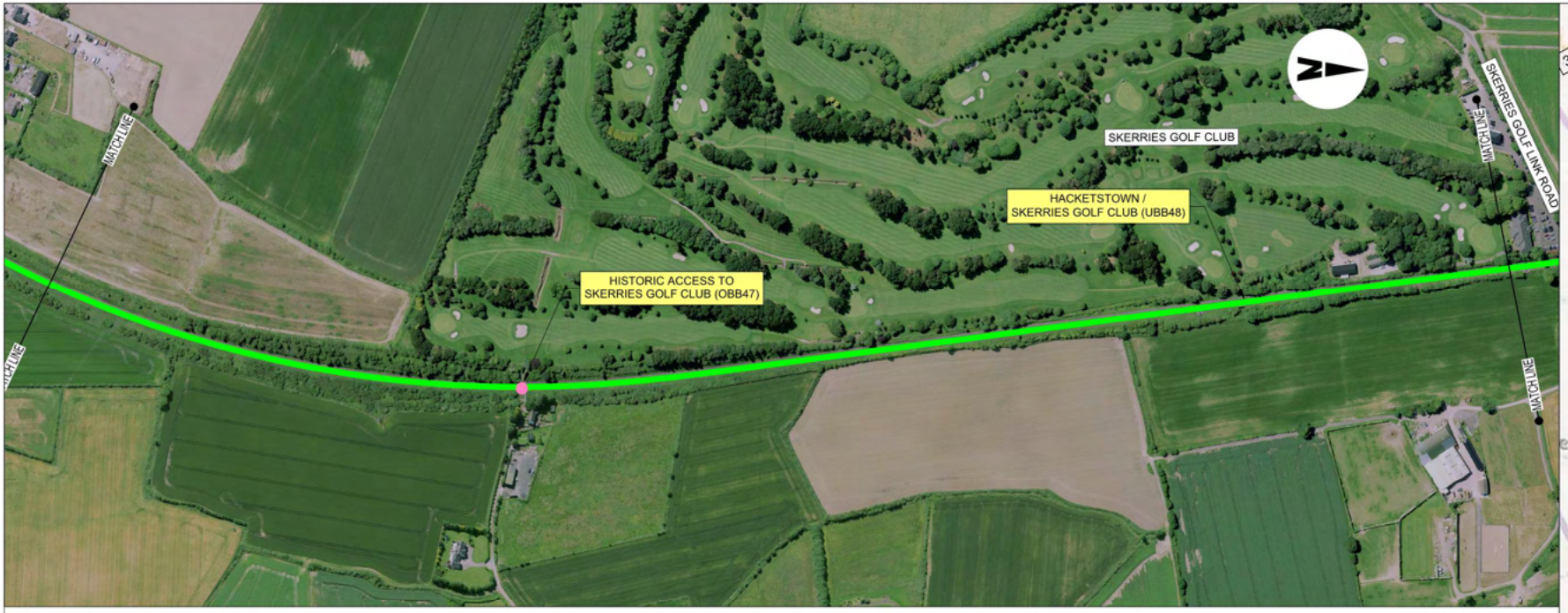

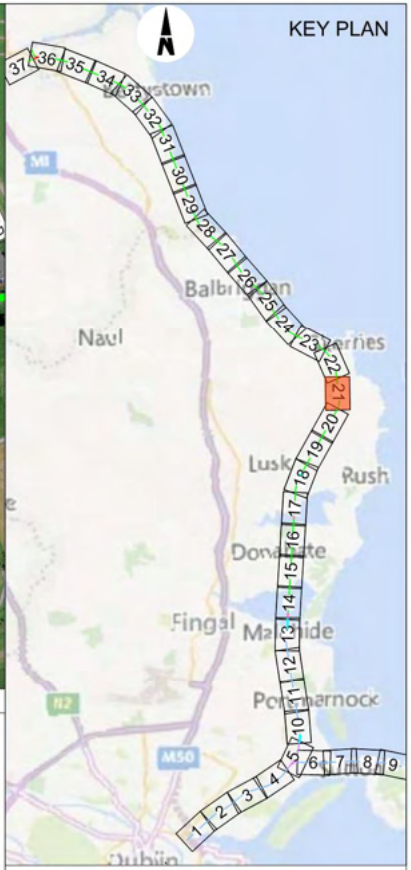

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NOTE:

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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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NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

Rev	Date	Drn	Chk'd	App'd	Description
P01	07/12/2021	SR	RS	GS	FOR PUBLIC CONSULTATION No 1

Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 21 OF 37 SKERRIES GOLF CLUB AND SURROUNDS

Date	Scale	Drawn	Checked	Approved
07/12/2021	1:2500 @ A1 1:5000 @ A3	SR	RS	GS

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001021	21 of 37	S3	P01

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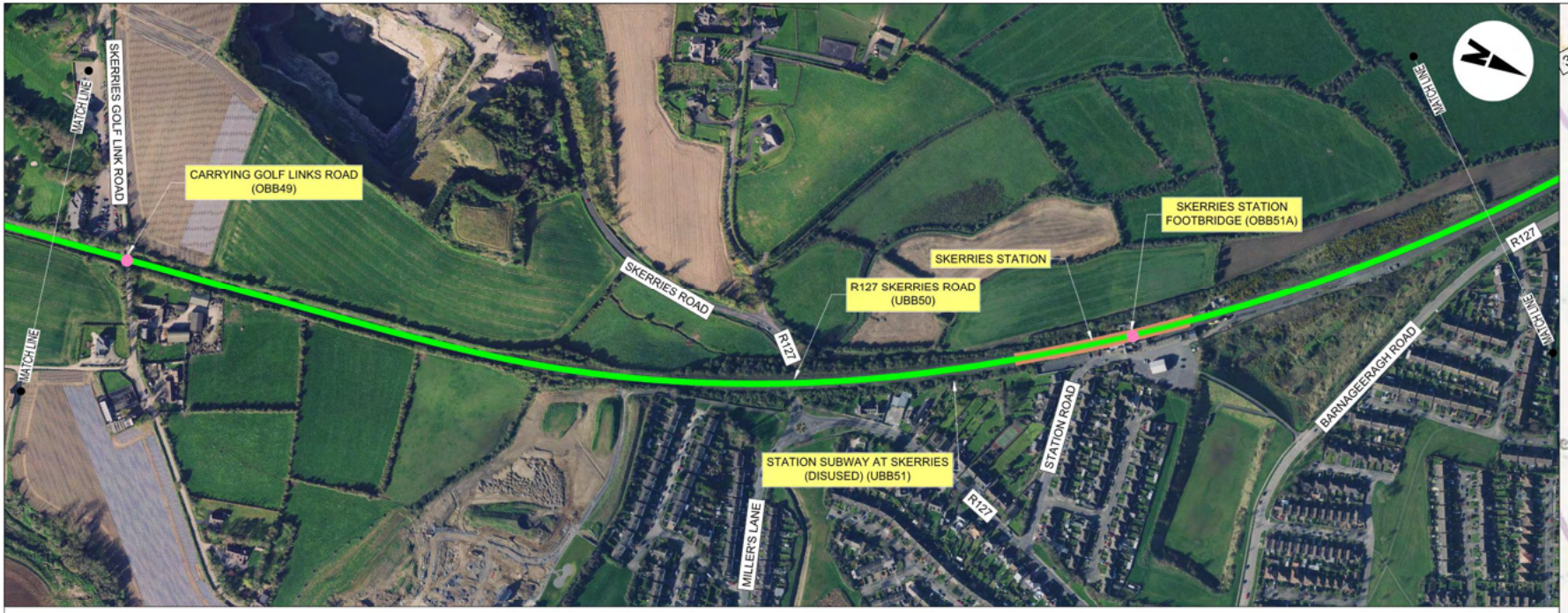

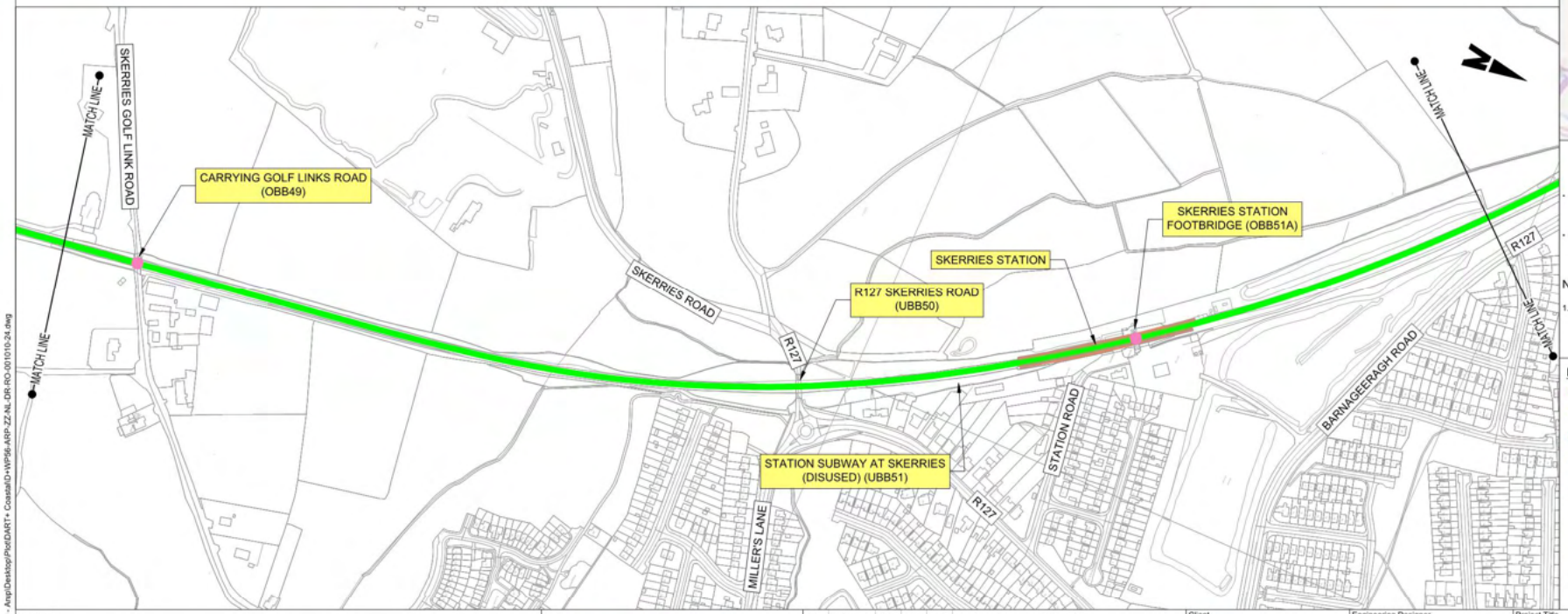

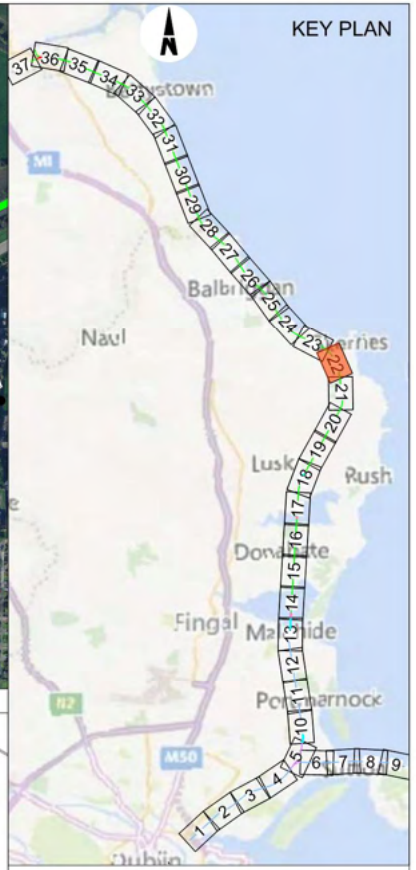

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NOTE:

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LEGEND:

- NEW ELECTRIFICATION IN EXISTING RAIL CORRIDOR
- TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
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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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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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	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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 22 OF 37 SKERRIES STATION AND SURROUNDS

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-RO-001022	22 of 37	S3	P01

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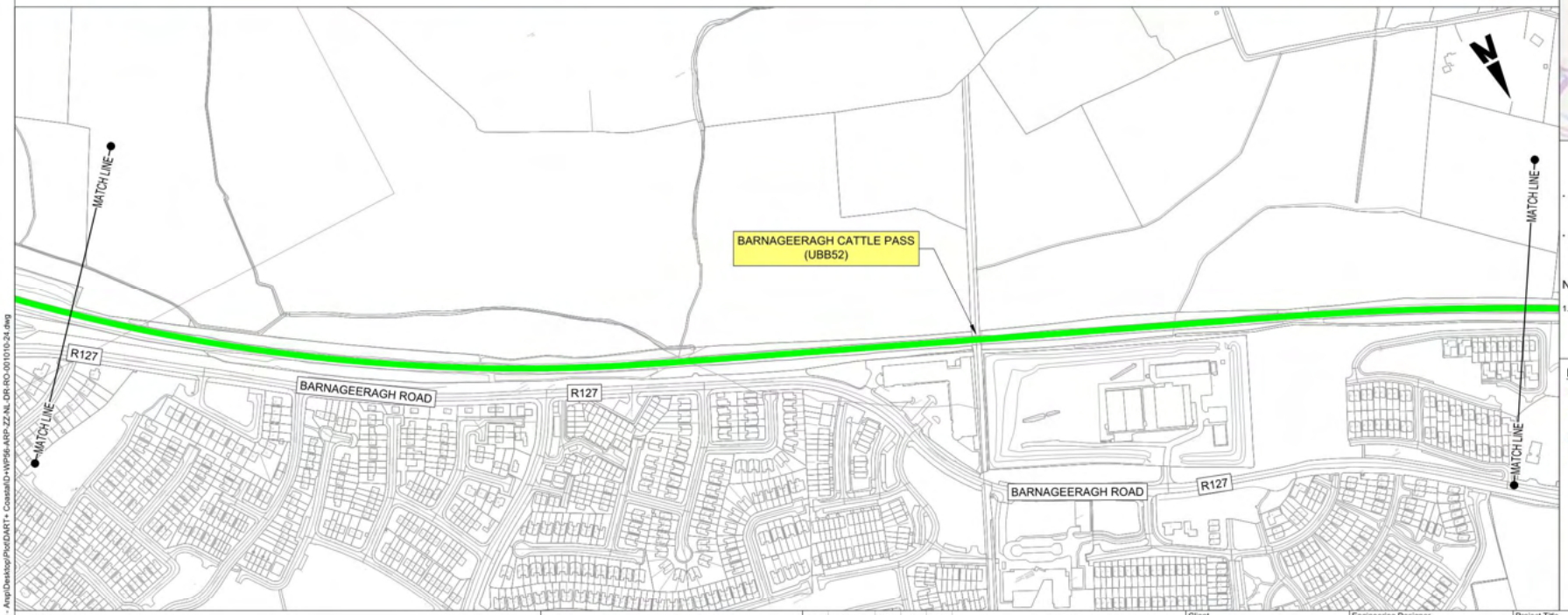

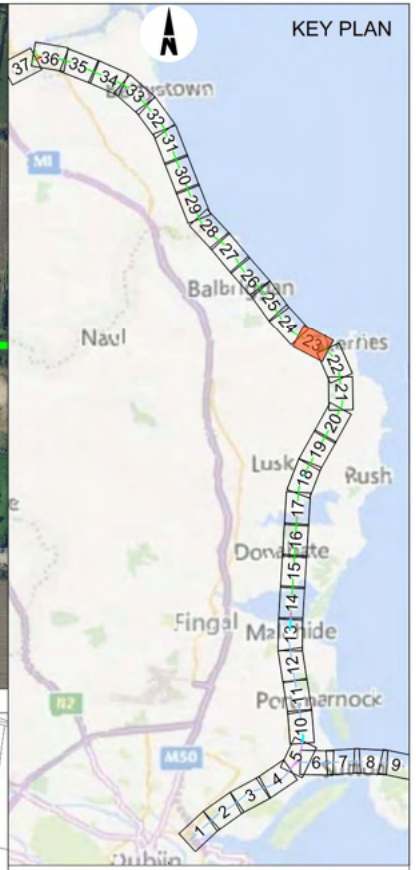

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LEGEND:

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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 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 National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 23 OF 37
BARNAGEERAGH AND SURROUNDS

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001023	23 of 37	S3	P01

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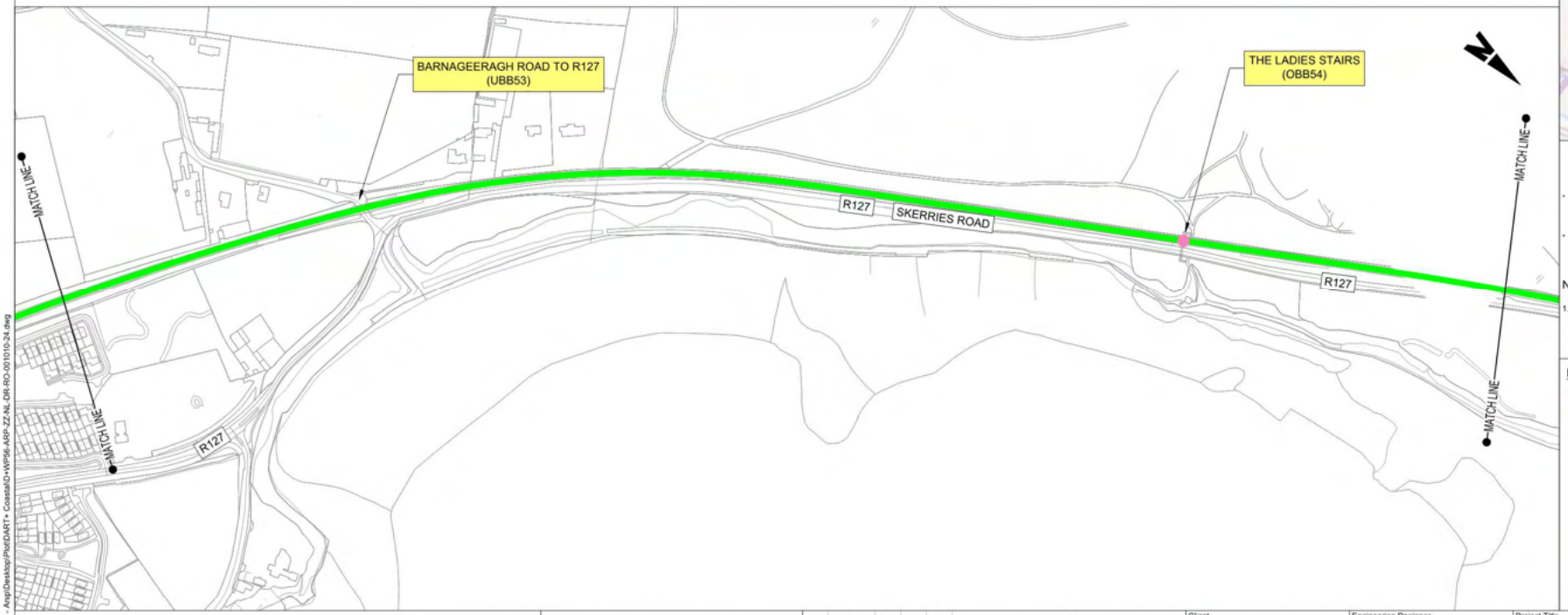

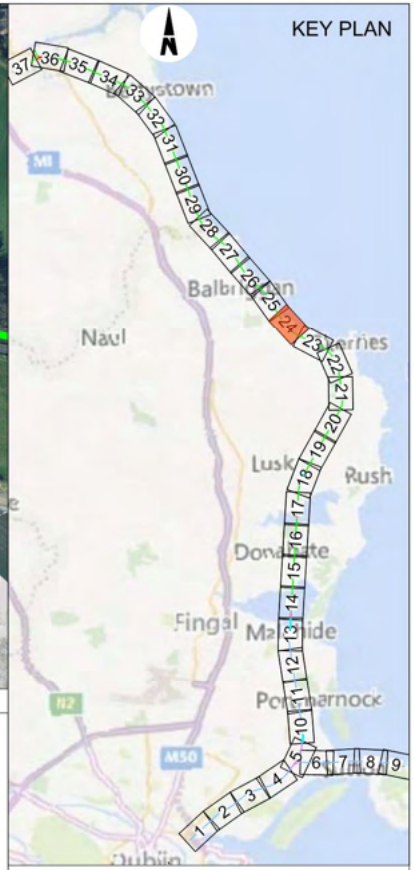

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NOTE:

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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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 24 OF 37
BARNAGEERAGH BAY AND SURROUNDS

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001024	24 of 37	S3	P01

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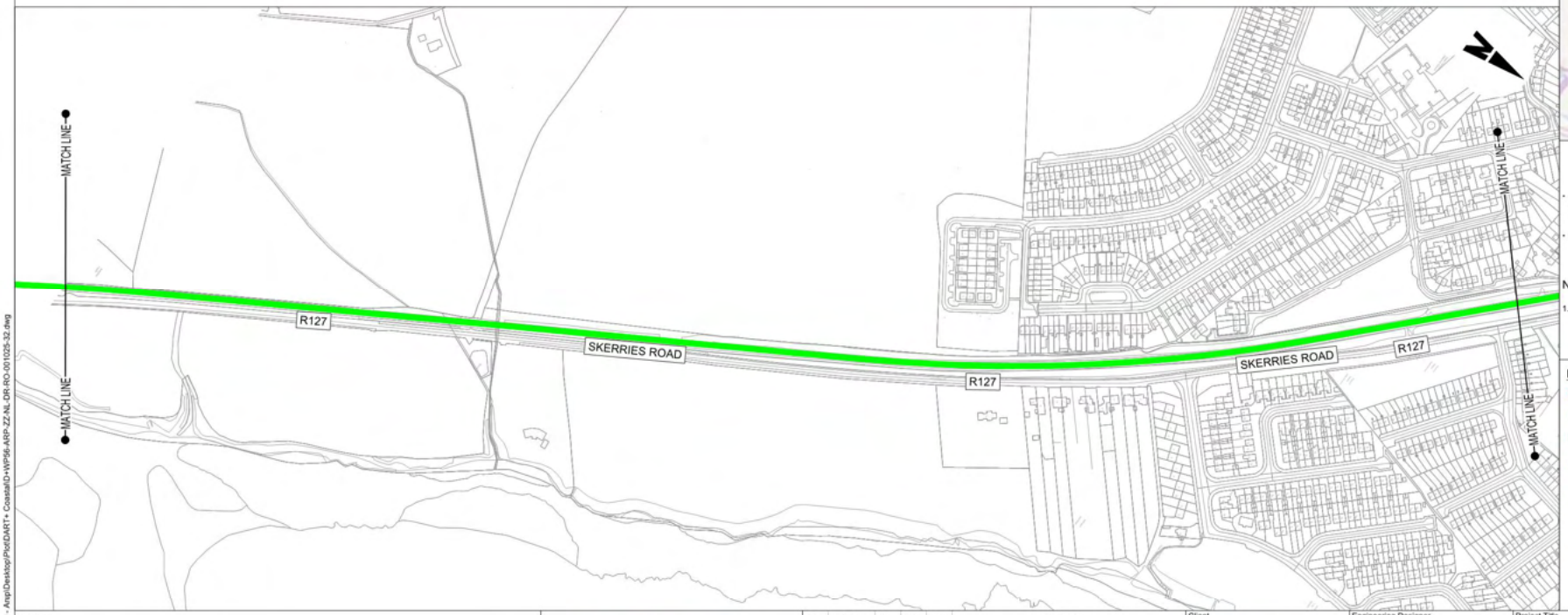

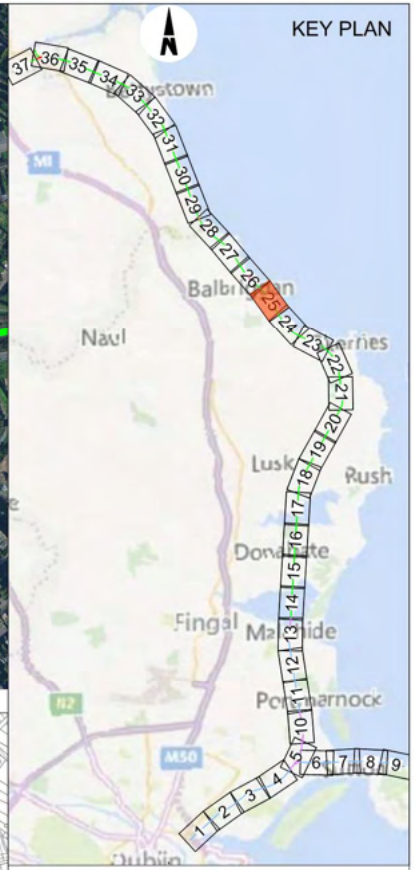

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- TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
- NEW ELECTRIFICATION AND TRACK MODIFICATION IN EXISTING RAIL CORRIDOR
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- MINOR WORK REQUIRED
- EXISTING STATION

BRIDGES

- OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
- UBXX EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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	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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 25 OF 37
HAMPTON COVE AND SURROUNDS

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-RO-001025	25 of 37	S3	P01

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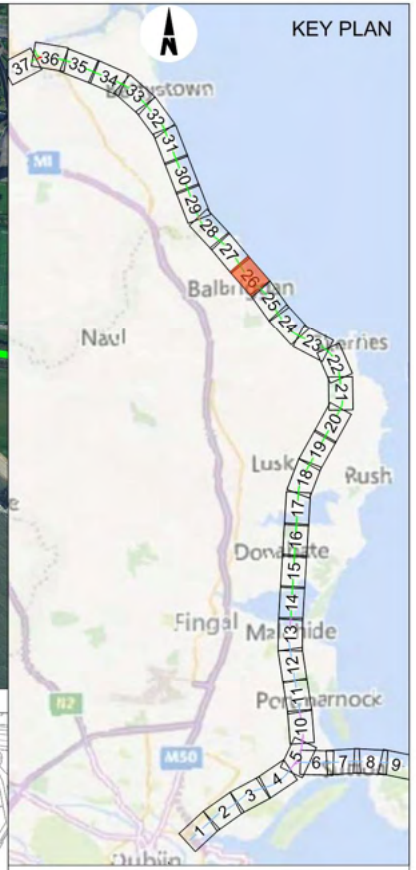

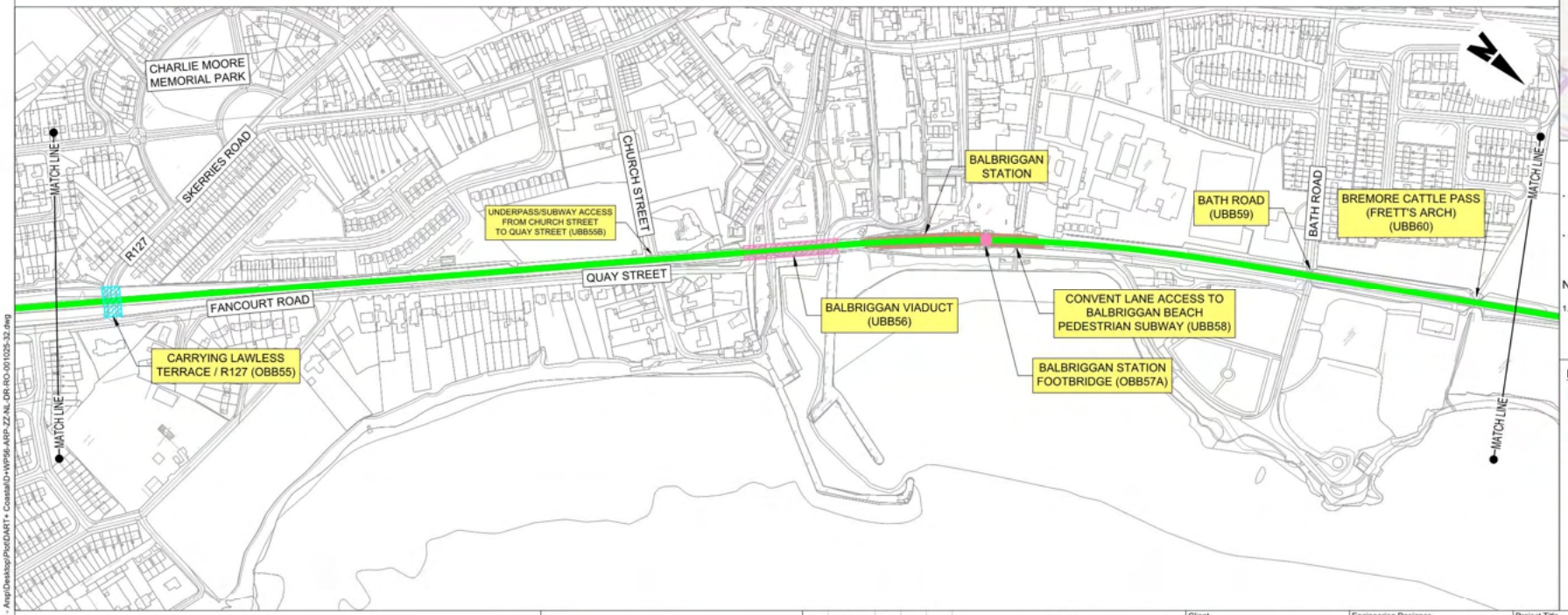

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LEGEND:

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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

- OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
- UBXX EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 26 OF 37 BALBRIGGAN STATION AND SURROUNDS

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001026	26 of 37	S3	P01

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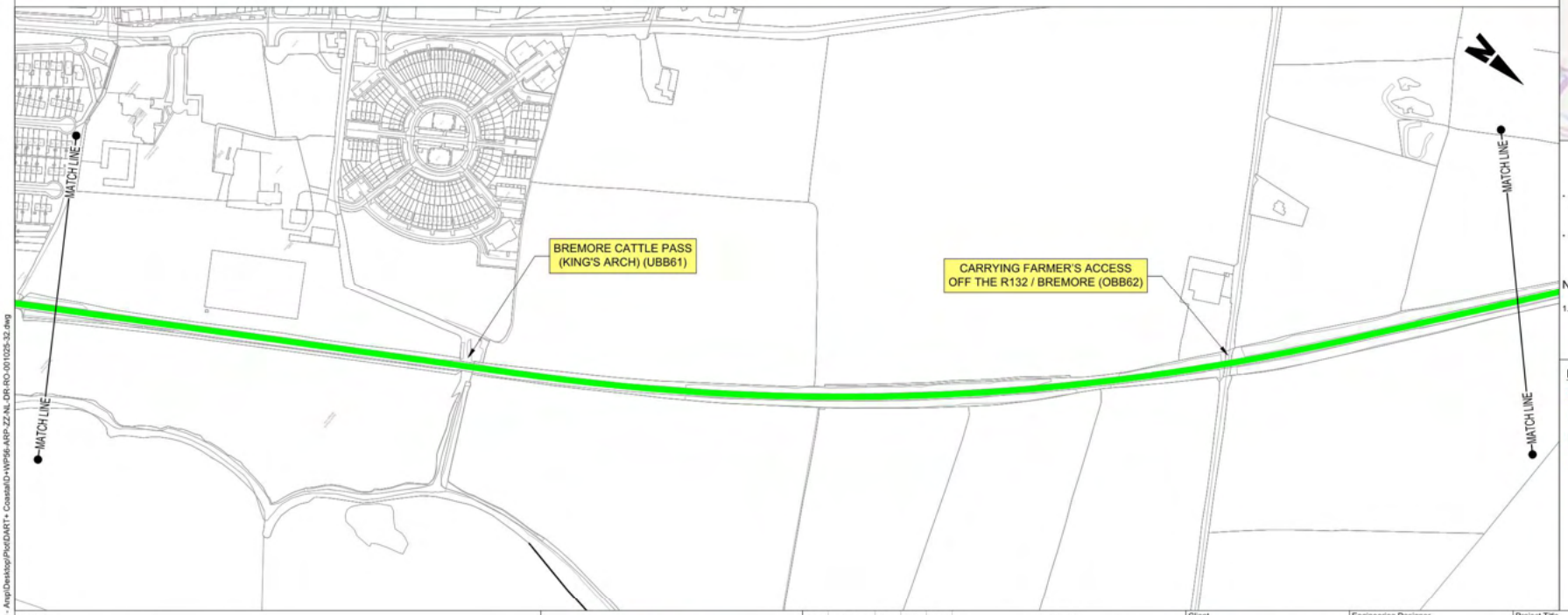

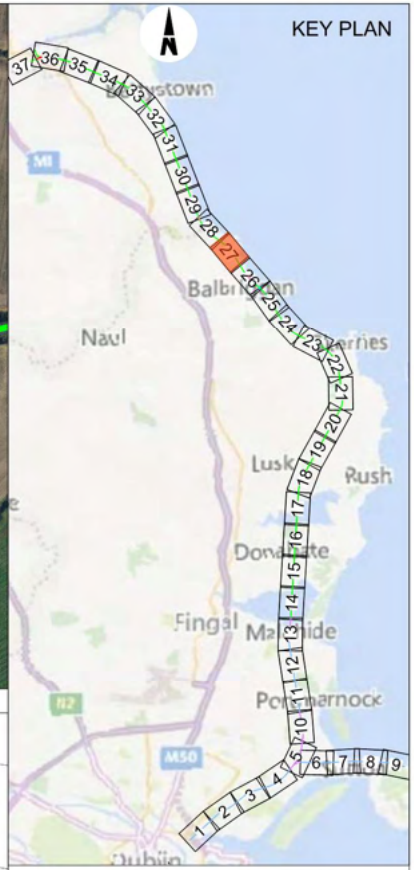

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- NEW ELECTRIFICATION IN EXISTING RAIL CORRIDOR
- TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
- NEW ELECTRIFICATION AND TRACK MODIFICATION IN EXISTING RAIL CORRIDOR
- EXISTING ELECTRIFIED RAIL CORRIDOR - MINIMAL OR NO WORKS REQUIRED
- SIGNIFICANT WORK / INTERVENTION REQUIRED (INCLUDING BRIDGE RECONSTRUCTION)
- MINOR WORK / INTERVENTION REQUIRED
- MINOR WORK REQUIRED
- EXISTING STATION

BRIDGES

- OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 27 OF 37
BREMORE BAY AND SURROUNDS

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001027	27 of 37	S3	P01

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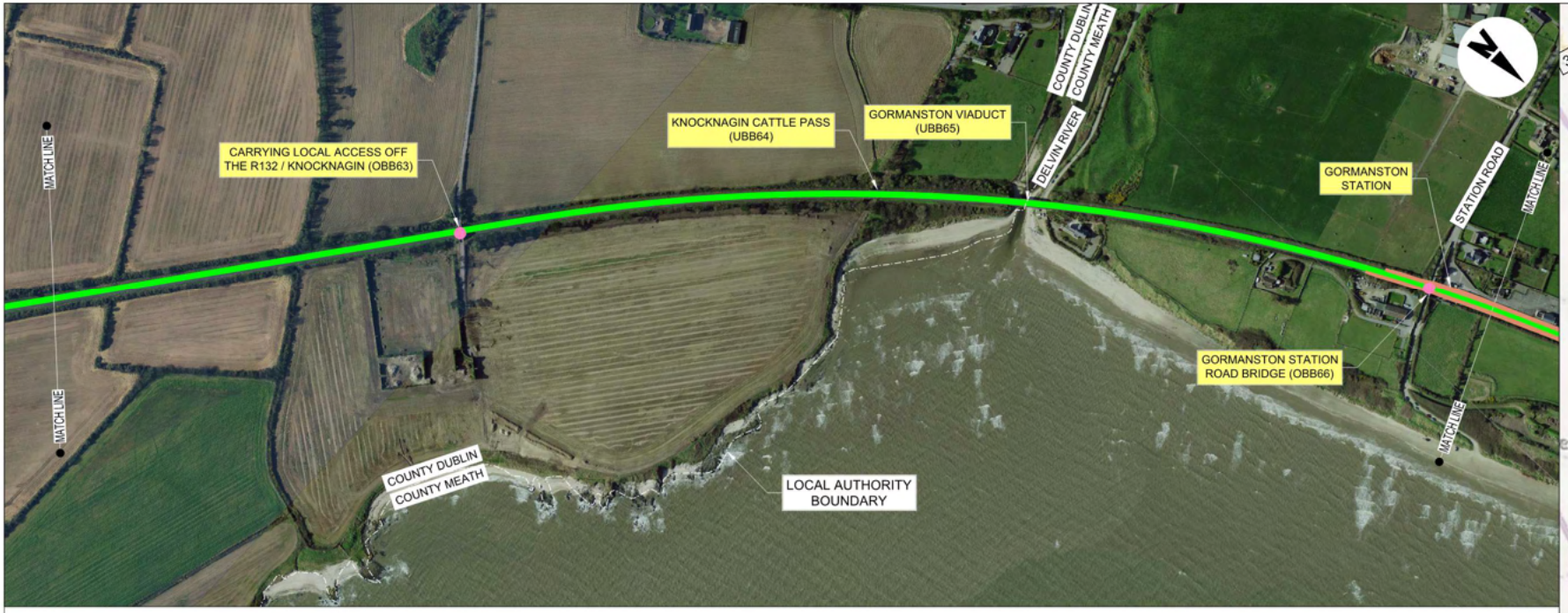

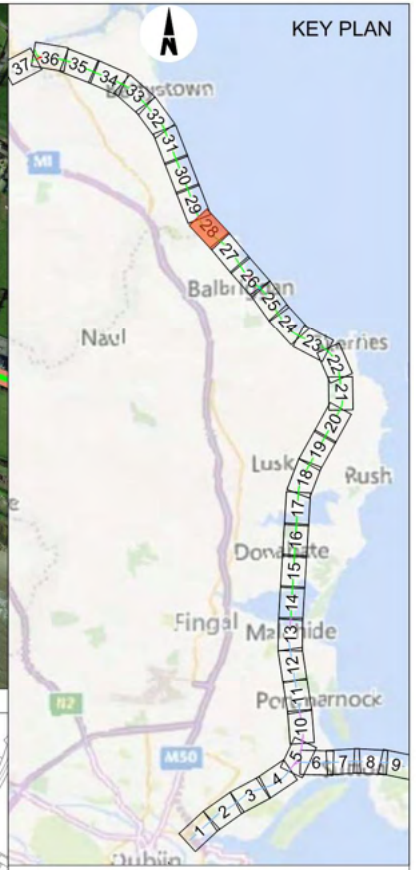

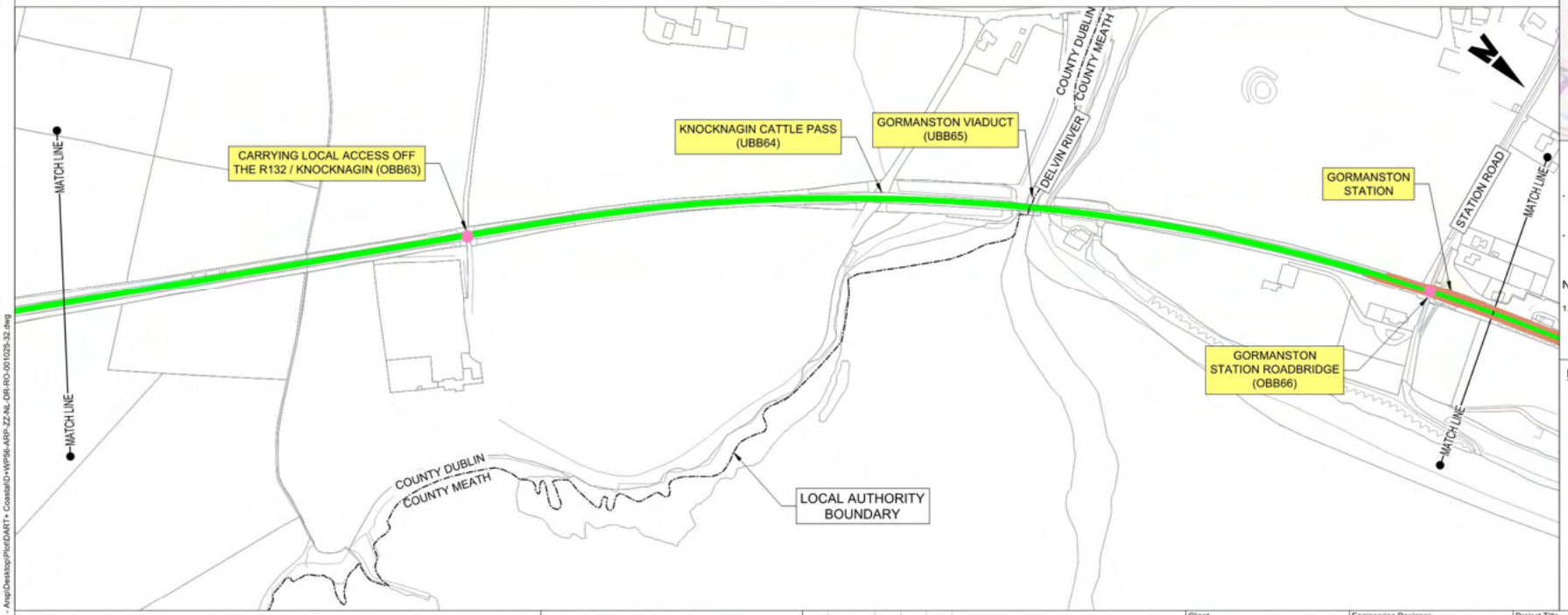

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LEGEND:

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- TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
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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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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 28 OF 37 GORMANSTON VIADUCT AND SURROUNDS

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001028	28 of 37	S3	P01

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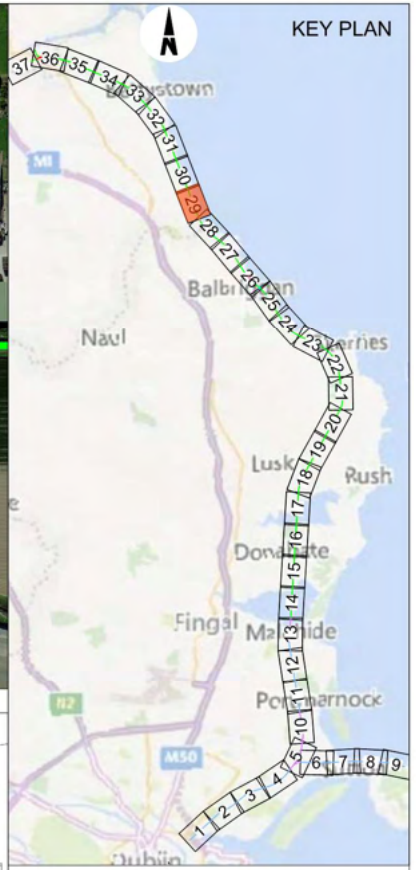

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- MINOR WORK REQUIRED
- EXISTING STATION

BRIDGES

- OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 29 OF 37 GORMANSTON STATION AND SURROUNDS

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001029	29 of 37	S3	P01

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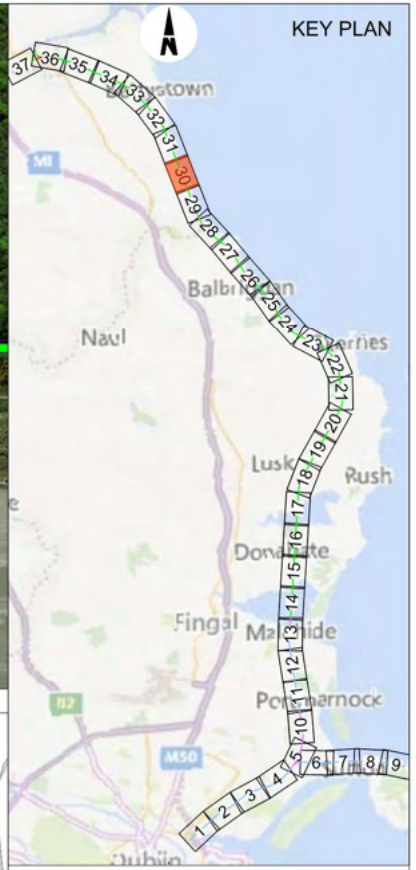

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- TRACK MODIFICATIONS IN EXISTING RAIL CORRIDOR
- NEW ELECTRIFICATION AND TRACK MODIFICATION IN EXISTING RAIL CORRIDOR
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- MINOR WORK / INTERVENTION REQUIRED
- MINOR WORK REQUIRED
- EXISTING STATION

BRIDGES

- OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
- UBXX EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 30 OF 37
MOSNEY AND SURROUNDS

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001030	30 of 37	S3	P01

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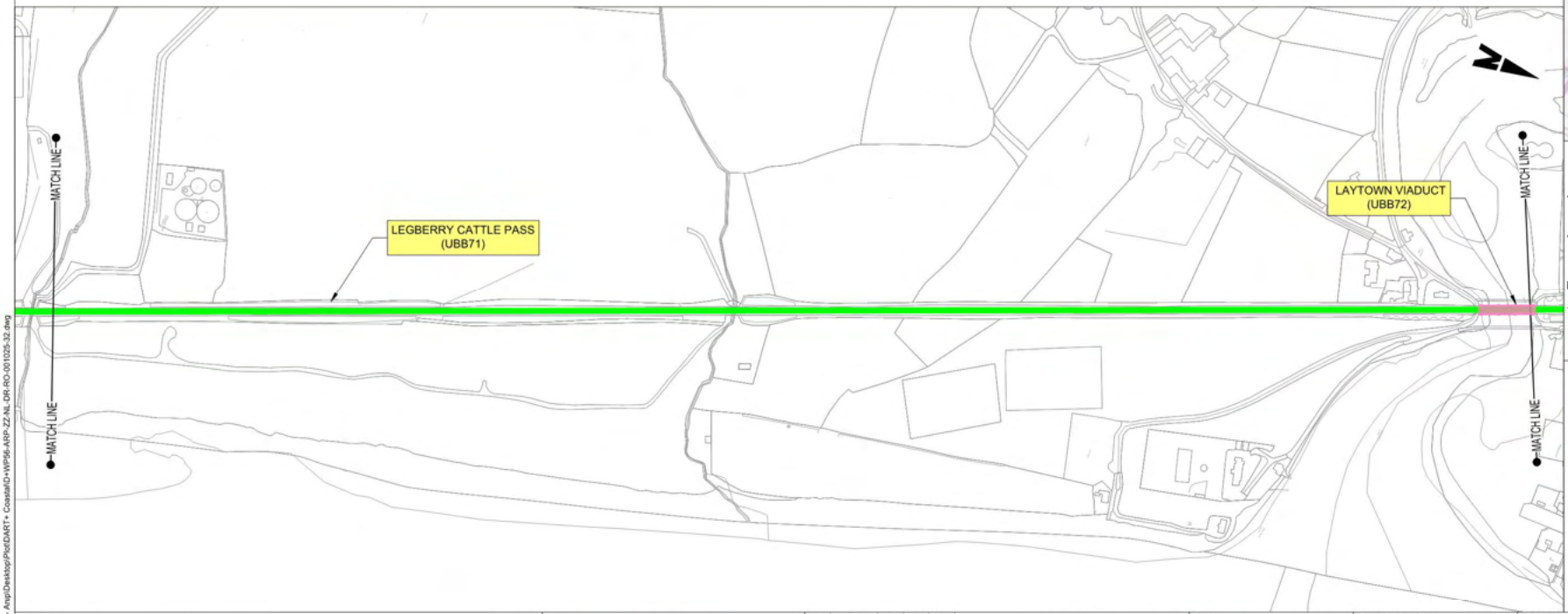

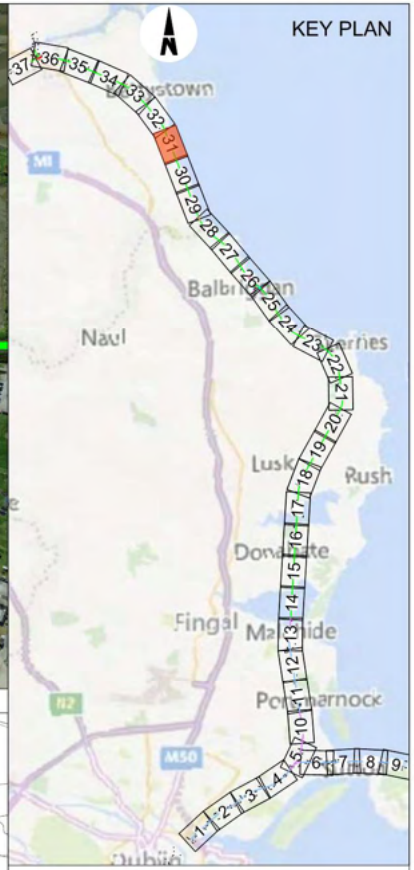

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NOTE:

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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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 31 OF 37 LAYTOWN VIADUCT AND SURROUNDS

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001031	31 of 37	S3	P01

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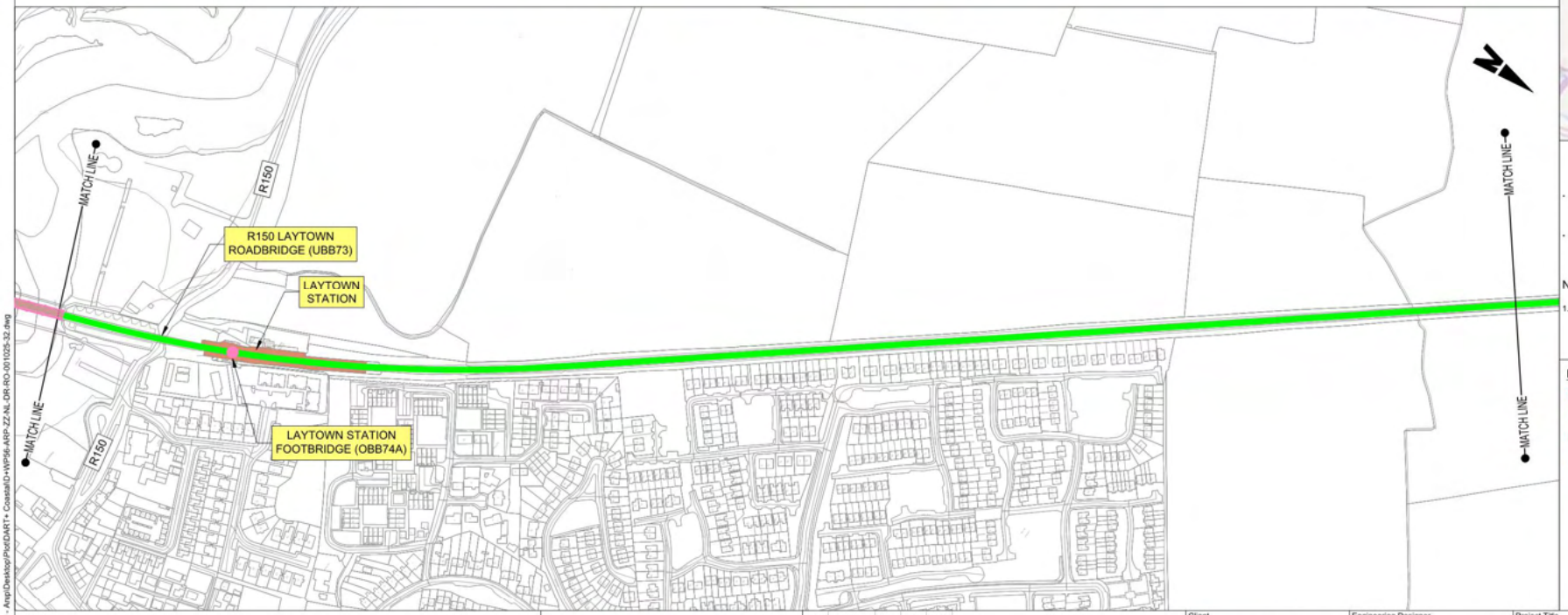

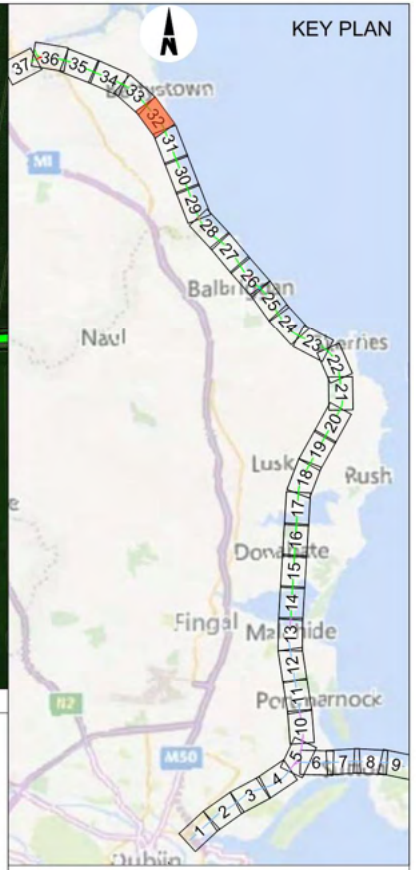

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NOTE:

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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
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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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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 32 OF 37 LAYTOWN STATION AND SURROUNDS

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001032	32 of 37	S3	P01

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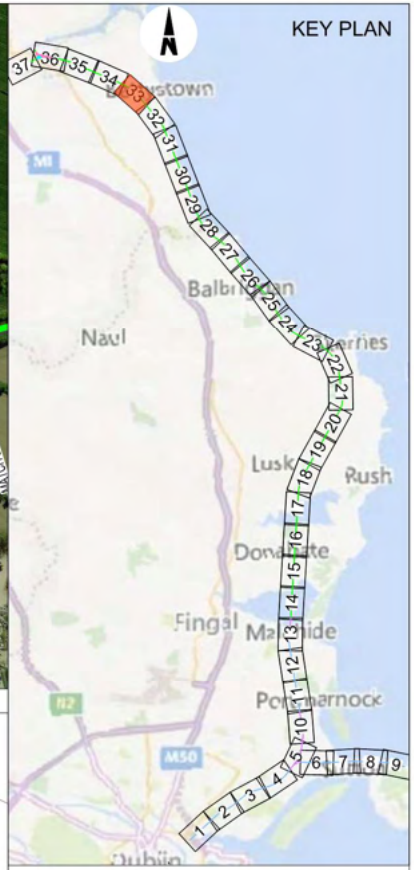

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NOTE:

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LEGEND:

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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

- OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
- UBXX EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 33 OF 37 PILLTOWN ROAD AND SURROUNDS

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001033	33 of 37	S3	P01

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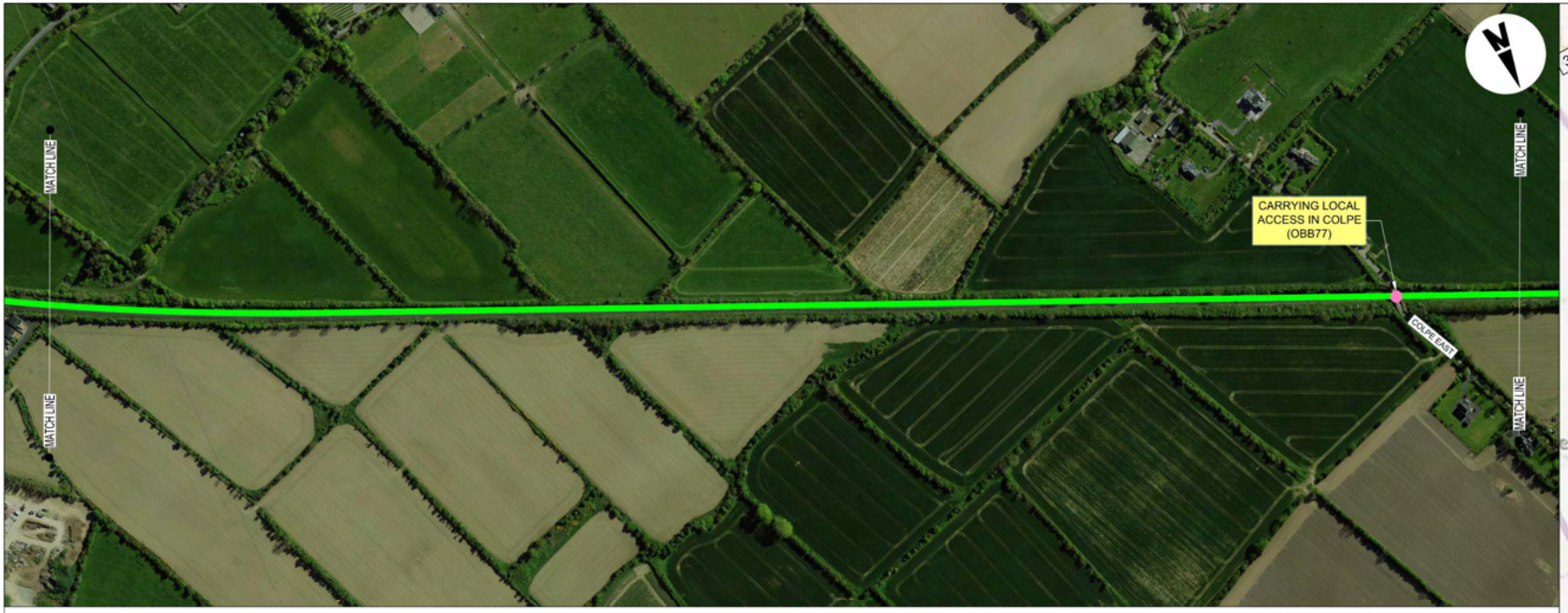

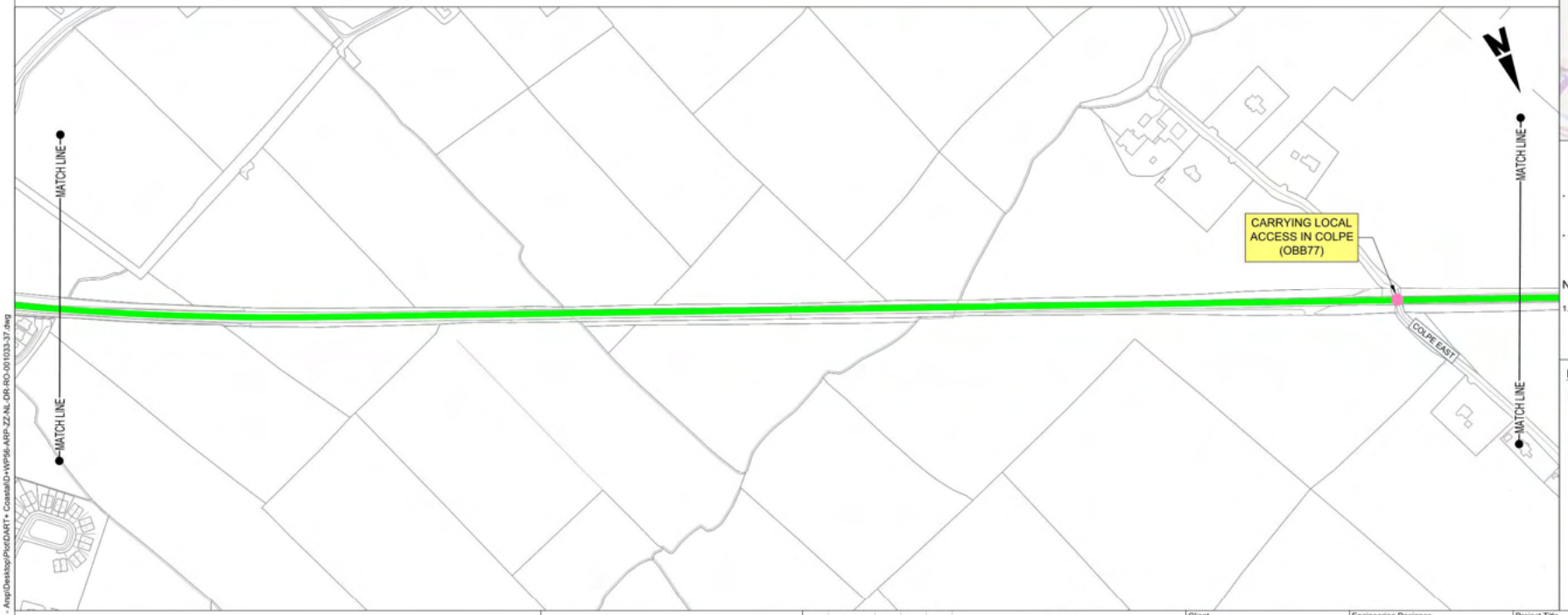

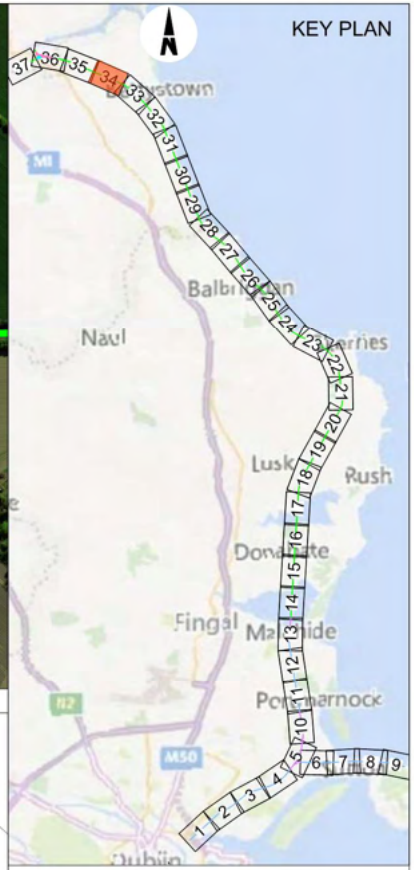

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NOTE:

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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
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- MINOR WORK / INTERVENTION REQUIRED
- MINOR WORK REQUIRED
- EXISTING STATION

BRIDGES

- OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 34 OF 37 PILLTOWN AND SURROUNDS

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001034	34 of 37	S3	P01

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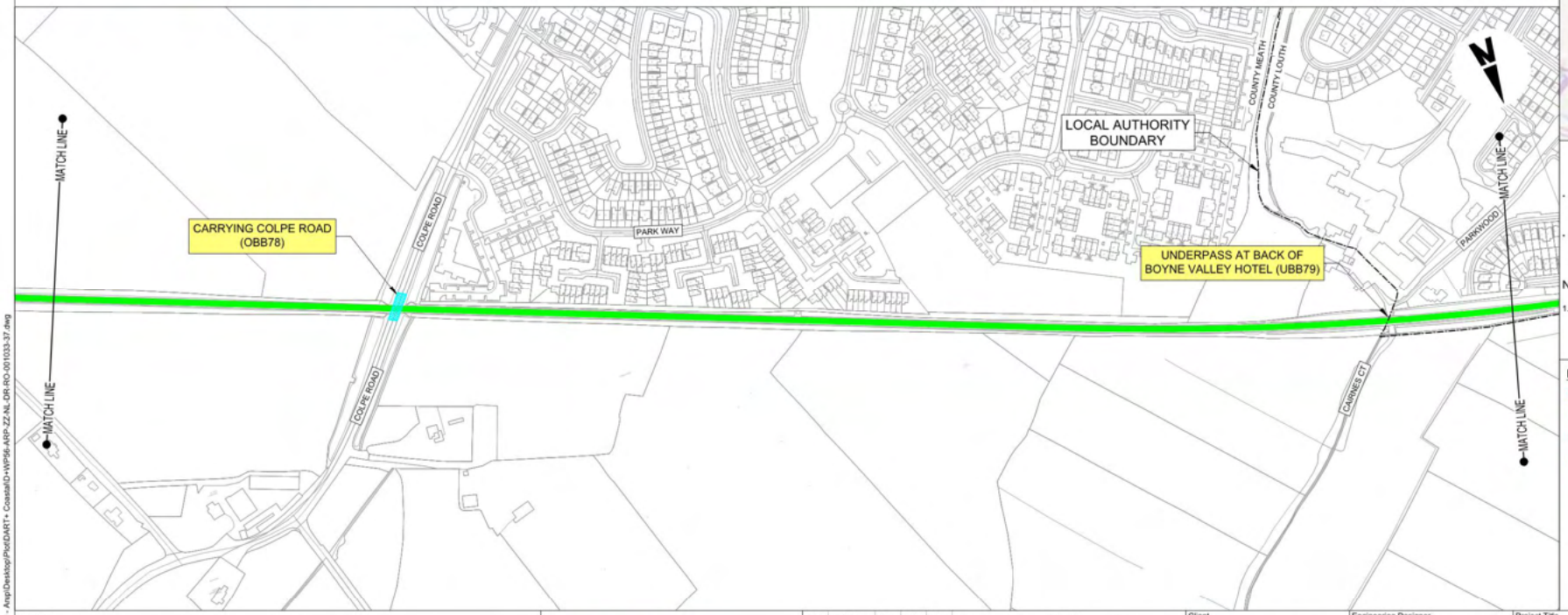

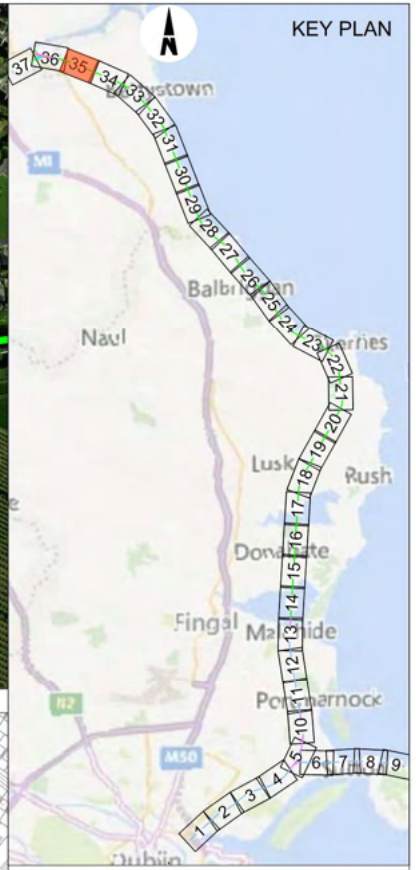

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LEGEND:

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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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NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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	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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 35 OF 37 SOUTH DROGHEDA AND SURROUNDS

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-RO-001035	35 of 37	S3	P01

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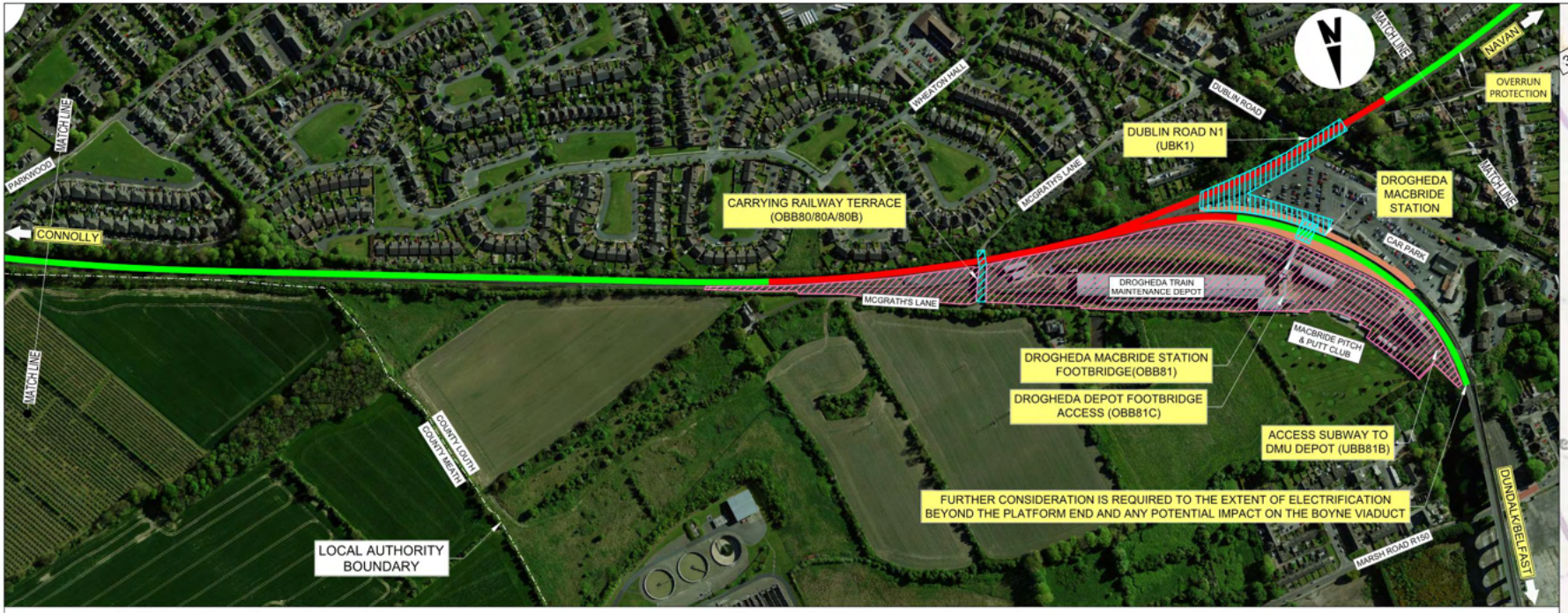

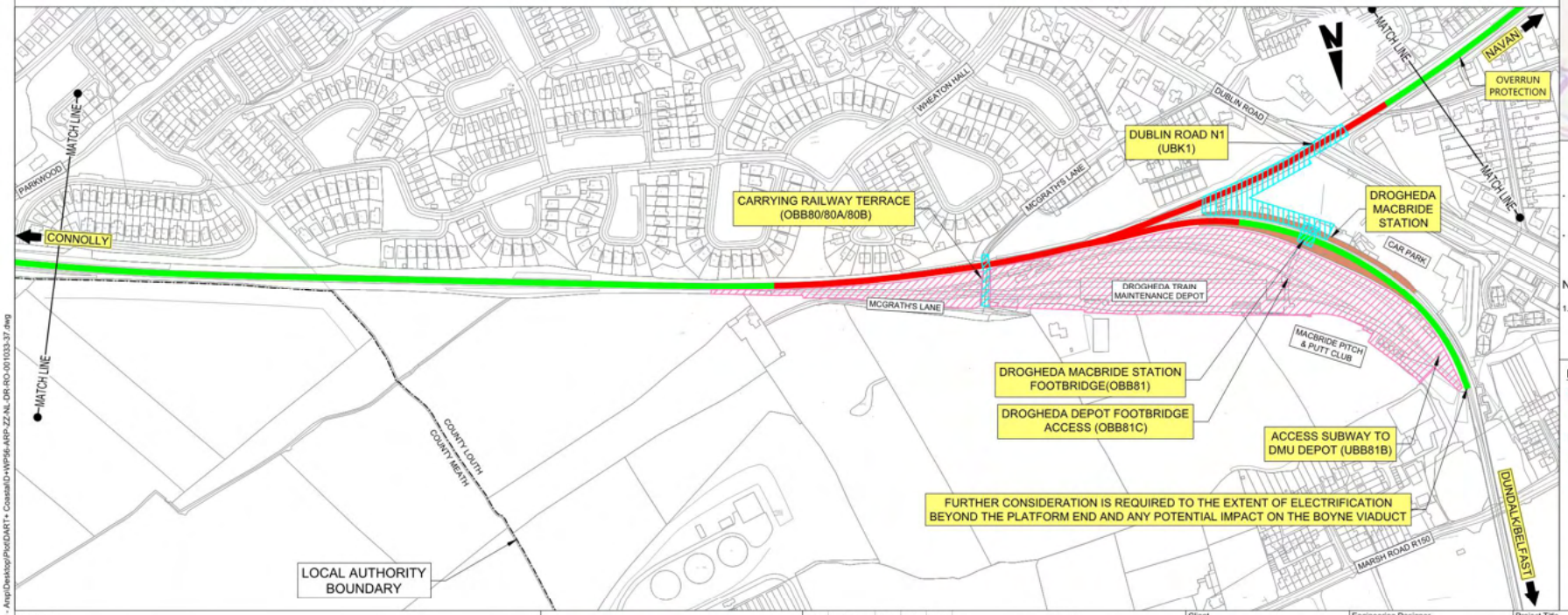

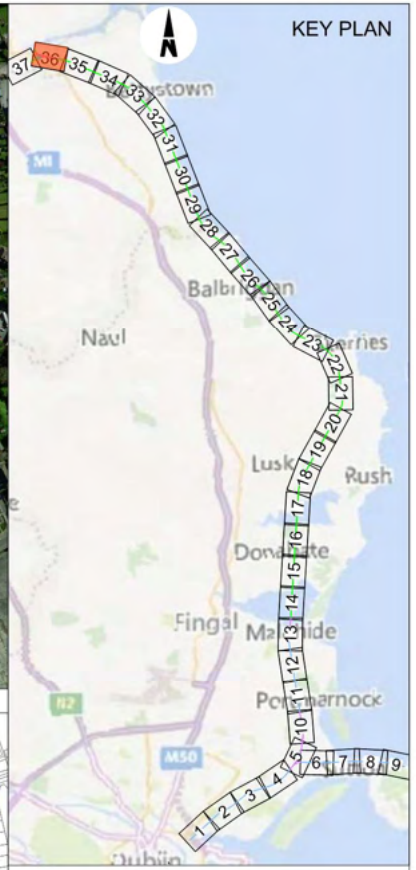

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- EXISTING STATION

BRIDGES

- OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 36 OF 37 DROGHEDA MACBRIDE STATION AND SURROUNDS

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001036	36 of 37	S3	P01

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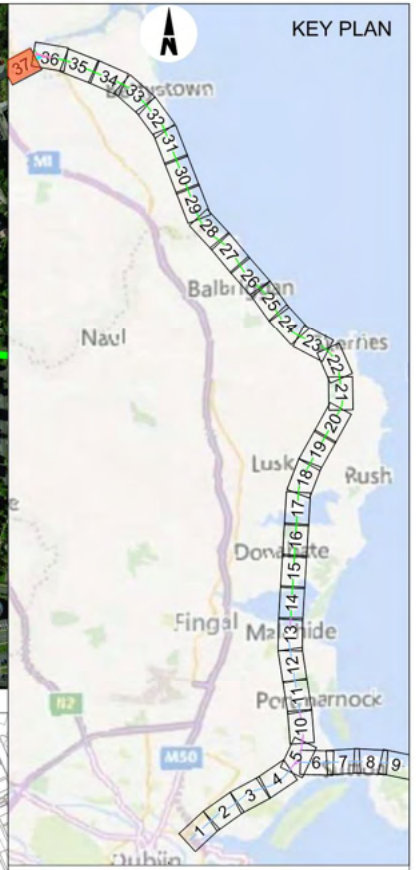

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- EXISTING STATION

BRIDGES

- OBXX EXISTING BRIDGE / ROAD OVER RAILWAY CORRIDOR
- UBXX EXISTING BRIDGE / ROAD/RIVER UNDER RAILWAY CORRIDOR

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DART+ Coastal North

NTA National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: EMERGING PREFERRED OPTION - MAP 37 OF 37
DROGHEDA MACBRIDE STATION TO PLATIN ROAD

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	Sheet Number	Status	Rev
D+WP56	ARP	280275-00	D+WP56-ARP-ZZ-NL-DR-RO-001037	37 of 37	S3	P01

DO NOT SCALE USE FIGURED DIMENSIONS ONLY

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DART+ Coastal North

NTA
Údarás Náisiúnta Iompair
National Transport Authority

Rialtas na hÉireann
Government of Ireland

Tionscadal Éireann
Project Ireland 2040

Iarnród Éireann
Irish Rail