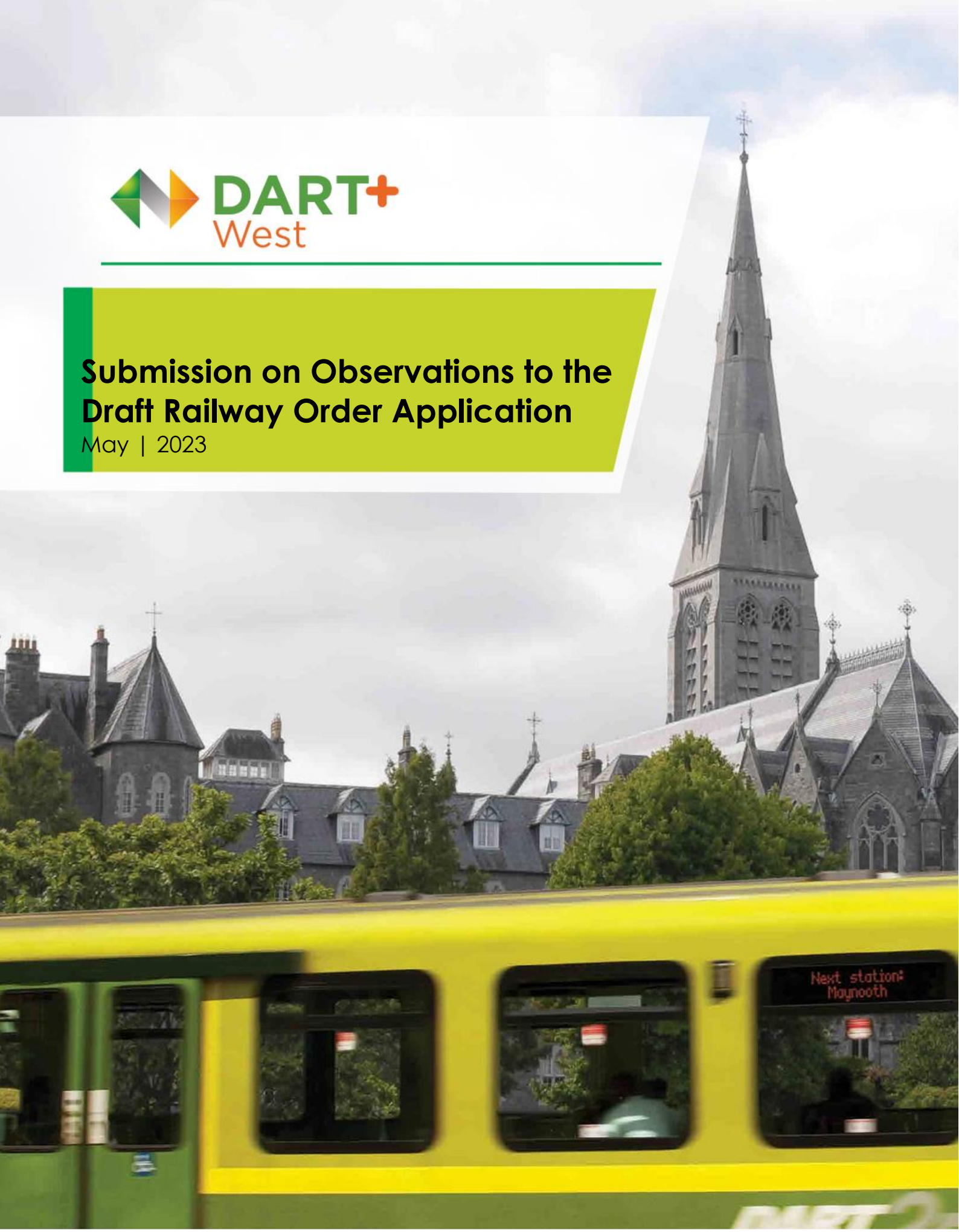
DART+ West

Submission on Observations to the Draft Railway Order Application

May | 2023



Tionscadal Éireann
Project Ireland
2040

NTA
Údarás Náisiúnta Iompair
National Transport Authority

CIE

Iarnród Éireann
Irish Rail

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1. INTRODUCTION

1.1 Introduction

This report provides a response to the submissions made to An Bord Pleanála ("the Board") for the DART+ West Railway Order application.

An overview of the submissions is provided in Section 1.3 below. The issues raised in the submissions on the proposed development, together with responses thereto are provided in Sections 2 to 5.

There is a significant degree of overlap between many of the issues raised in submissions. Where the same issue is raised in a number of submissions, this report identifies the individuals who raised those issues and provides a composite response to each issue raised.

1.2 Legal provisions under Transport (Railway Infrastructure) Act, 2001 (As Amended)

The proposed development is being progressed through the Railway Order process through an application for a Railway Order as required under the Transport (Railway Infrastructure) Act 2001 ("the 2001 Act"). The 2001 Act has been amended and substituted by a number of legislative provisions including by the Planning and Development (Strategic Infrastructure) Act 2006, the Dublin Transport Authority Act, 2008, the Public Transport Regulation Act, 2009 and was recently further amended by the European Union (Railway Orders) (Environmental Impact Assessment) (Amendment) Regulations 2021 (S.I. No. 743/2021) ("the 2021 Regulations").

Section 37(3) of the 2001 Act provides that the Railway Order application shall be accompanied by a draft of the proposed order, a plan of the proposed works and a book of reference. The draft order anticipates scheduled agreements (including agreements with local authorities), scheduled conditions, modifications, restrictions and requirements, which are provided for in Section 43(2) of the 2001 Act. The section provides that the Board may make a railway order in such manner and subject to such conditions, modifications, restrictions and requirements (and on such other terms) as the Board thinks proper and specifies in the order.

Section 42(1) of the 2001 Act provides that the Board may, at its absolute discretion, hold an oral hearing into an application for a railway order. The conditions, modifications, restrictions and requirements which the Board may ultimately choose to apply to a railway order often arise during an oral hearing before the Board, and the assessment of appropriate conditions may necessitate consideration of further reports or supplementary reports. CIÉ would include detailed responses in individual précis of evidence or statements by its personnel, its consultant team and advisers as part of its submission to the oral hearing.

Section 43(1) provides that the Board shall, before deciding whether to grant a railway order, consider the following:

(*a*) the application;
(*b*) the draft order and documents that accompanied the application;
(*c*) the report of an oral hearing held under section 42 and the recommendations (if any) contained therein;
(*d*) any submission duly made to it under section 40(3) or 41(4) and not withdrawn;
(*e*) any submission duly made to it by an authority referred to in section 40(1)(*c*) or (*e*);
(*f*) any additional information furnished to it under section 41;
(*g*) the likely consequences for proper planning and sustainable development in the area in which it is proposed to carry out the railway works and for the environment of such works; and
(*h*) the matters referred to in section 143 (inserted by the Planning and Development (Strategic Infrastructure) Act 2006) of the Planning and Development Act, 2000.

The matters referred to section 143 of the Planning and Development Act, 2000 are as follows:

(a) the policies and objectives for the time being of the Government, a State authority, the Minister, planning authorities and any other body which is a public authority whose functions have, or may have, a bearing on the proper planning and sustainable development of cities, towns or other areas, whether urban or rural,
(b) the national interest and any effect the performance of the Board's functions may have on issues of strategic economic or social importance to the State, and
(c) the National Planning Framework and any regional spatial and economic strategy for the time being in force.

1.2.1 The Railway Order Process

Land referencing and the compulsory acquisition process are incorporated into the railway order process. The Book of Reference and schedules thereto, for example, indicate the identity of the owners and of occupiers of the lands and those with interests in and over lands described in the plan of the proposed railway works. The 2001 Act also provides that the Railway Order is to have effect as if it were a compulsory purchase order referred to in section 10(1) of the Local Government (No. 2) Act, 1960 (inserted by section 86 of the Housing Act, 1966) and that section is to apply and have effect with certain prescribed modifications and with any other necessary modifications. In practice therefore, discussions with those persons who have interests in lands the subject of a draft railway order (as with any CPO) continue up to and including any oral hearing which may be directed by the Board. The draft Railway Order provides for the attachment of a Schedule of Agreements which includes inter alia agreements with those persons who have interests in lands the subject of the draft Railway Order process. This submission is made, therefore, without prejudice to any agreements and/or arrangements which may be reached in the period after this submission is made.

1.3 Overview of Submissions Received

A total of 156 submissions were received and accepted by the Board and subsequently provided to IÉ.

The submissions in response to the proposed development are broken down into groups either associated with a particular location along the proposed electrification of the existing line (hereinafter referred to as the proposed development) or of a more general nature (scheme wide). Figure 1.1 shows the Zones used to describe the proposed development in the EIAR and Tables 1.1 and 1.2 set out the key issues raised by the submissions in each zone.

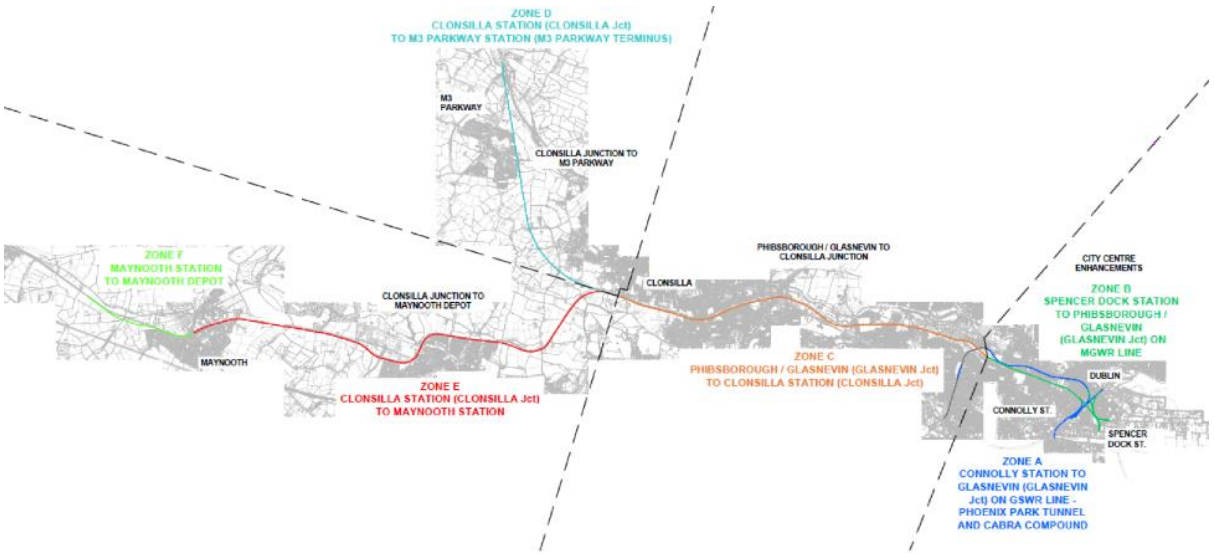


Figure 1.1 Geographical zones of the project

Table 1.1 Scheme Wide Summary of Submissions in Response to the Proposed Scheme

Scheme Wide Issues Raised	
• Footbridge design and aesthetics • Lack of consultation • Loss of trees/vegetation • Additional bicycle parking • Closure of level crossings not required (signalling upgrade) • Impact on Royal Canal pNHA and wildlife • Requests lifts at footbridges • Train demand figures • Further photomontages requested	• Electromagnetic effects • Property valuation • Noise, vibration & dust • Additional station at Croke Park • Extensions at Kilcock • Need for the Increase in Frequency and Capacity • Community infrastructure and severance • Antisocial behaviour and safety concerns at the proposed level crossing preplacement locations

Table 1.2 Summary of Submissions by Zone in Response to the Proposed Scheme

Zone	Location	Key issues raised
Zone A	Loop Line Bridge to Phibsborough/Glasnevin (on GSWR line) and East Wall Junction (on Northern line)	Property impacts Privacy Construction impacts
Zone B	Spencer Dock Station to Glasnevin Junction	
Zone C	Glasnevin junction/Phibsborough to Clonsilla Station/Junction	Impact on Ashtown Stables Biodiversity impacts at Ashtown Traffic and associated impacts at Coolmine/Castleknock Footbridge design Flood risk in vicinity of proposed underpass and Martin Savage Park
Zone D	Clonsilla Station/Junction to M3 Parkway Station	No major zone-specific issues raised
Zone E	Clonsilla Station/Junction to Maynooth Station	Closing of Blakestown level crossing Impacts of Cope Bridge reconstruction Impacts of Leixlip Confey substation Impacts on architectural heritage Impacts on Ashton House and demesne Footbridge design
Zone F	Maynooth Station to depot	Site selection Flood risk in vicinity of depot

2. RESPONSE TO SUBMISSIONS

2.1 Introduction

The issues raised in the submissions have been summarised so as to provide a more concise response document, as many of the submissions are quite lengthy in the detail provided.

Commonly raised issues are grouped in Section 2 with responses provided. These are broken down into scheme wide issues and location specific issues.

In Sections 3 to 5, where we set out the responses to specific issues raised by individual landowners, the general public or prescribed bodies, **we do not repeat** the responses to commonly raised issues.

If it is the case that we have not responded to an issue raised in a submission, this should not be taken as an acceptance on the part of IÉ of that issue, or anything set out in the submission, unless we have expressly stated such acceptance.

Section 3 deals with submissions from landowners.
Section 4 deals with submissions from the general public not included in the draft Railway Order.
Section 5 deals with submissions from Prescribed Bodies.

2.2 Scheme wide issues raised

2.2.1 Footbridge design & aesthetics

Submissions made about footbridge designs include:

- inconsistency in design approach (2 CORTEN steel and 2 concrete);
- accessibility due to length and design of ramps;
- need to include lifts;
- bridge parapets should be transparent.

Response to issue raised

Concrete bridges over the railway lines on the IÉ network are the preference of Iarnród Éireann. At the non statutory public consultations there was significant commentary on the aesthetics of the concrete bridges in built up areas. In response to this feedback the project team redesigned the footbridges at Ashtown and Coolmine as part of the works proposed at those station developments and proposed CORTEN steel bridges.

As noted in Appendix A3-2 Section 6.3.5.3 of the Public Consultation No.2 Consultation Findings Report, during the localised Ashtown Consultation event there were requests from the public to include lifts for those people that have mobility issues. The response provided sets out how lifts had previously been proposed but been removed following negative feedback from the public.

"At the previous round of public consultations [PC2] there was significant negative feedback from the Ashtown community in relation to the reliability and availability of lifts for a public thoroughfare. In the redesign of the overbridge at Ashtown it has been possible to incorporate a bridge with stairs and ramps, to ensure full accessibility for pedestrians, vulnerable users and cyclists. Where ramps are technically feasible it is the preference of Iarnród Éireann to provide those over provision of lifts. This ensures that the crossing remains open at all times (24/7) and is not subject to interference by mechanical faults (i.e. lift faults). Therefore, it is not proposed to incorporate lifts into the footbridge."

EIAR Chapter 7 Population includes mitigation that at detailed design stage the design team will ensure safety is integrated into the design and maintenance of public spaces with a focus on promoting a sense of safety

and comfort for all users particularly the young, old and people with disabilities. The perspectives from trained professionals relating to designs affecting these user groups shall be included as part of the design team.

The pedestrian bridge designs adhere to the following standards (EIAR Chapter 4 Description of the Proposed Development, Section 4.8.5.1):

- Building Regulation 2010 – Technical Guidance Documents;
- Design Criteria for Footbridges (DN-STR-03005-02);
- Requirements for Track and Structures Clearances, I-PWY-1101 (IÉ);
- National Cycle Manual (National Transport Authority);
- Network Rail-Station Capacity Planning Guidance 2016;
- Building for Everyone (ADA-The National Disability Authority).

Where ramps are technically feasible it is the preference of Iarnród Éireann to provide those over provision of lifts. This ensures that the crossing remains open at all times (24/7) and is not subject to interference by mechanical faults (i.e., lift faults). Therefore, the proposed development submitted as part of the Draft Railway Order application has not included lifts with the footbridges although it is technically feasible to include them.

The proposal for the parapet heightening on bridges is explained in the EIAR Chapter 4 Description of the proposed Development, section "4.5.15.5 Parapets heightening." The proposals were developed in collaboration with a Grade 1 Conservation Architect to find a solution that can be implemented on each different type of bridge with a consistency of approach across the full scheme. At Broombridge (OBG5) where transparent parapets have been queried, the proposal is to provide a steel mesh to the required protection height of 1.8m. The design approach for the parapet heightening was presented to each of the Local Authority Conservation Architects to ensure their feedback was considered. Further engagement will continue at detailed design stage.

2.2.2 Lack of consultation

Summary of issue raised

Concerns raised in relation to the public consultation events occurring during the pandemic and that the level of communication between IÉ and the public was unsatisfactory.

Response to issue raised

Due to the public health restrictions, it was not possible to hold in-person non statutory public consultations during public consultation No.1 and No. 2. Once restrictions were lifted, the localised Ashtown public consultation on the revised preferred option was held both in person and in virtual form to cater for as many people as possible.

The following communication strategy was undertaken to inform the public and to encourage engagement in the consultation process.

Public Consultation No.1:

- Iarnród Éireann Corporate Communications and Media team provided a press release to all major media outlets;
- A project webpage (www.irishrail.ie/DARTMaynooth) was established which presented all of the project information published as part of PC1 including the project brochures (English and Irish), the flyer (English and Irish), the feedback form, the Preliminary Options Selection Report and associated annexes and drawings;
- A 72-page non-technical public consultation brochure, presenting the key details of the DART+ West project, the benefits, the option selection process and the emerging preferred option was developed and published in both the Irish and English languages;

- A mail drop to c. 13,000 properties consisting of an information leaflet provided in both English and Irish highlighting the key elements of the project and notifying the local community of the commencement of the consultation was circulated in the project areas during the opening week of the consultation;
- A project email address (DartMaynooth@irishrail.ie) and a project postal address was provided on all project material;
- Multiple webinar meetings were held between IÉ and potentially affected residents, community groups and elected representatives.

Public Consultation No.2:

- Public consultation no.2 was launched on the 28th July 2021. Iarnród Éireann Corporate Communications and Media team provided a press release to all major media outlets;
- In order to inform rail users and local communities in vicinity to the stations, posters were put up at display boards at a number of stations to announce the preferred option consultation. In total, 31 posters were erected at 5 stations: Connolly, Ashtown, Castleknock, Coolmine and Clonsilla;
- A project webpage (www.irishrail.ie/DARTWest) presented all of the project information published as part of PC2 including the project brochure, the flyer the feedback form, the Options Selection Report and associated annexes and drawings;
- A non-technical public consultation brochure, presenting the key details of the DART+ West project, the benefits, the option selection process and the preferred option was developed and published. The brochure was made available on the dedicated project webpage and hard copies were issued to the elected representatives and to members of the public that requested a hard copy;
- Additionally, a mail drop to c. 19,225 properties consisting of an information leaflet provided in both English and Irish highlighting the key elements of the project and notifying the local community of the commencement of the consultation was circulated in the project areas during the opening week of the consultation;
- A project email address (Dartwest@irishrail.ie) and a project postal address was provided on all project material. An online feedback form was provided on the project webpage to allow the public make submissions on the project;
- Multiple webinar meetings were held between IÉ and potentially affected residents, community groups and elected representatives. This was as part of the efforts to inform the public as widely as possible whilst ensuring compliance with the government restrictions at that time.

Revised Ashtown Preferred Option Local Consultation:

- Iarnród Éireann Corporate Communications and Media team provided a press release to all major media outlets;
- A project webpage (www.irishrail.ie/DARTWest) presented all of the project information published as part of the local Ashtown public consultation including the Options Selection Report and associated annexes and drawings;
- A mail-drop to c. 8,000 properties consisting of an information leaflet provided in both English and Irish notifying the local community of the revised preferred option and the launch of the localised public consultation;
- A project email address (DARTwest@irishrail.ie) and a project postal address was provided on all project material. An online feedback form was provided on the project webpage to allow the public make submissions on the project;
- A public information webinar was held between IÉ and potentially affected residents, community groups and elected representatives;
- An in person public consultation event was held on the 31st March 2022 from 18:00pm-21:00pm at the St. Oliver Plunkett Eoghan Ruadh GAA clubhouse where members of the community had the opportunity to view display boards detailing the revised preferred option as well to ask questions and engage with the project team.

Statutory Consultation

During the statutory consultation period the draft Railway Order submission was on public display at the following venues for physical inspection by the public:

- An Bord Pleanála, 64 Marlborough Street, Dublin 1, D01V902;
- Planning Department, Dublin City Council, Civic Offices, Wood Quay, Dublin 8, D08 RF3F;
- Planning Department, Fingal County Council, County Hall, Main Street, Swords, County Dublin, K67 X8Y2;
- Fingal County Council, Grove Road, Blanchardstown, Dublin 15, D15 W638;
- Planning Department, Kildare County Council, Head Office, Devoy Road, Naas, County Kildare, W91 X77F;
- Planning Department, Meath County Council, Buvinda House, Dublin Road, Navan, County Meath, C15 Y291;
- Dunboyne Library, Meath County Council, Castle View, Rooske Road, Dunboyne, County Meath, A86 H393;
- Iarnród Éireann, Connolly Station, Amiens Street, Dublin 1, D01V6V6; and
- DART+ West project Office, CIÉ Inchicore Works, Inchicore Parade, Dublin 8, D08K6Y3.

The draft Railway Order and the documentation accompanying the application was also made available and is still available for viewing at: **www.dartwestrailwayorder.ie**.

Since the commencement of public consultation no.1 and continuing through the statutory consultation period the project helpline, project email and the Community Liaison Officer have been available options for the public to engage with the project team.

2.2.3 Loss of trees / vegetation

Summary of issue raised

Issues raised in terms of the loss of trees / vegetation as a result of the proposed development.

Response to issue raised

In terms of vegetation removal for OHLE, for safety and operational reasons, on electrified railway lines, trees, shrubs and climbers are not permitted within 4 m of the rail or within 1.5m from the catenary poles, depending on which is greater. This is in line with Vegetation Clearance Requirements for Electrified Lines. I-ETR-4006. Version 1.0 (Iarnród Éireann, 2021). Regarding the trees to be retained, these are shown on Volume 3A of the EIAR, Chapter 5, Site Clearance drawings: MAY-MDC-LMA-SC00-DR-Y-0001 to SC06-DR-Y-0001.

In terms of vegetation removal to accommodate new infrastructure (e.g. Substations, junction upgrades, access routes) vegetation will be retained where practicable. Chapter 15 Landscape and Visual Amenity of Volume 2 of the EIAR, has assessed the impacts of localised tree and vegetation removal and Section 15.6 provides the mitigation measures for the construction phase impacts (as described below):

- Prior to commencement of the works an Arboricultural Impact Assessment will be produced for the area of the proposed development, as well as for any adjoining areas where trees are likely to be impacted by the works, in accordance with British Standard Institution (BSI) British Standard (BS) 5837:2012 ‘Trees in relation to in relation to design, demolition and construction - Recommendations’ (BSI 2012);
- All trees and vegetation to be retained within and adjoining the works area will be protected in accordance with the British Standard Institution (BSI) British Standard (BS) 5837:2012 ‘Trees in relation to in relation to design, demolition and construction - Recommendations’ (BSI 2012). Works required within the root protection area (RPA) of trees to be retained will follow a project-specific arboricultural methodology for such works, which will be prepared by a professional qualified arborist;

- Wherever possible, trees and vegetation will be retained within the proposed development. Trees and vegetation identified for removal will be removed in accordance with 'BS 3998:2010 Tree Work – Recommendations' (BSI 2010) and best arboricultural practices as detailed and monitored by a professional qualified arborist. Details of trees and vegetation to be removed will be included in the Arboricultural Impact Assessment Report (and associated Tree Protection Plans) as set out above;
- The Arboricultural Assessment to be prepared as part of mitigation for the proposed development will be fully updated at the end of the construction phase and made available, with any recommendations for on-going monitoring of retained trees during the operational phase; Where properties are subject to permanent and / or temporary acquisition (as noted in Sections 15.5.1.2.8 and 15.5.2.2.8 of the EIAR), an inventory of existing boundary details and accesses, planting, paving, and other features that may be disturbed or removed will be prepared prior to commencement of construction works;
- Where properties are subject to permanent and / or temporary acquisition (as noted in Sections 15.1.1.10.8 and 15.1.1.12.8 of the EIAR), appropriate measures will be put in place to provide for protection of features, trees and vegetation to be retained, and for continued access during construction, for adequate security and screening of construction works. All temporary acquisition areas will be decommissioned and reinstated at the end of the construction phase.

Aside from the above measures a substantial programme of landscape planting will be provided. This will be most focussed where there are lands available for planting such as at the level crossing replacements at Ashtown and Barberstown, at the substations and most specifically at the proposed depot. This is set out in Section 15.6.3 of the EIAR Volume 2 and in the Landscape Mitigation plans MAY-MDC-LAN-ROUT-DR-U-15100-D to 15041- D in Volume 3A of this EIAR.

2.2.4 Additional bicycle parking

Summary of issue raised

Requests for additional bicycle parking at stations along the route.

Response to issue raised

DART+ West is an infrastructure capacity project to facilitate the expansion of the DART to Maynooth and M3 Parkway. Alterations to existing stations, except where required to facilitate the DART+ West project, are not within the scope of this project. Where alterations to stations are being implemented to facilitate the DART+ West, increased cycle parking has been included in the project. These locations include:

- Spencer Dock station,
- Connolly station,
- Ashtown station,
- Coolmine station.

Separate to the DART+ West project and outside this DART+ West draft Railway Order, Iarnród Éireann are progressing a number of projects including a Multimodal Interchange Project. The multimodal project will assess all stations throughout the network with a view of implementing these strategies at stations where there is need for modifications that will have an impact on multimodal travel and station access. This project will assess a variety of multimodal options at stations including but not limited to the provision of secure bicycle parking and shared mobility services. Iarnród Éireann are working to progress and finalise the Multimodal Interchange Strategy before the end of Q4 2023 with a view to developing an Implementation Plan subject to funding constraints.

2.2.5 Closure of level crossings not required (signalling upgrade)

Summary of issue raised

Submissions received in favour of keeping the level crossings open and that consideration to upgrading the signalling system was not considered by Iarnród Éireann.

Response to issue raised

There are a number of existing level crossings along the route where rail traffic and road traffic (cars, pedestrians and cyclists) interface. These are located at (east to west) Ashtown, Coolmine, Porterstown, Clonsilla, Barberstown and Blakestown. The level crossings constrain train frequency. For example, Coolmine level crossing is closed for approximately 40 minutes between 08.00-09.00 each weekday for 6 trains per hour per direction. In order to achieve the project objectives of significantly higher train frequencies it is not viable to retain the level crossings (i.e. increasing from 6 trains per hour per direction to 12 trains per hour per direction).

The removal of the level crossings will improve train efficiencies, will enhance safety, and will remove the delays caused by the road / rail interface. Their closure will also remove the periodic blockages on the road system, which are currently very pronounced, especially in the morning and evening peak commuter periods.

As outlined in Section 3.6.4 of Chapter 3 of the EIAR a number of options were developed and examined in respect of the treatment of each level crossing. The options broadly include the following:

- Keep the level crossing in place with future Train Service Specification in operation;
- Implement CCTV control on the level crossing with the full Train Service Specification in place;
- Close the level crossing without providing alternative infrastructure irrespective of the consequent severance and road traffic impact;
- Close the level crossing with provision of appropriate alternative bridge crossing infrastructure proximal to the level crossings to replace vehicular, pedestrian and cycle access;
- Close the level crossing and construct a pedestrian and cycle bridge local to the level crossing to replace access for non-motorised users and divert vehicular traffic onto the local road network with or without out corresponding capacity enhancement dependent on the scale of traffic diversion;
- Lower the railway in the vicinity of the level crossing sufficient to provide clearance for the electrified railway to pass under proposed bridge infrastructure at the level crossing.

The design team has examined the feasibility of meeting the project objectives while keeping the existing level crossings in place and it has concluded that the project objectives cannot be delivered on this basis.

The presence of road rail interfaces in the form of level crossings represents an inherent risk to road and rail users. Iarnród Éireann and the Local Authorities work together to ensure all existing level crossings on the railway network are operated safely. The removal of such interfaces between road and railway traffic has however had a strong mandate from government, the Commission for Railway Regulation and Iarnród Éireann for many years. Measures implemented to remove level crossings from the network have resulted in some of the strongest safety enhancements across the network over the last 20 years. The mandate to enhance safety by the removal of level crossings remains today.

The ‘automatic’ type of railway worked level crossing is used in other countries across Europe. This type of level crossing operates faster than attended or CCTV controlled alternatives, resulting in shorter closure times, as it removes the direct control from the signalman or gatekeeper. The train passes through the level crossing whether it is clear or not. This type of level crossing has poorer safety characteristics than alternatives and has consequently never been adopted by Iarnród Éireann for use in Ireland. Although it is considered that the level crossings need to be removed for operational and safety reasons, the option of retention of the level crossings was included in the MCA process so it can be assessed across the full spectrum of criteria in a similar way to other options considered. This is presented in Chapter 3 Alternatives of the EIAR.

Where existing usage patterns of the level crossings exhibit significant activity, alternative equivalent access is proposed in the form of bridges and roadworks. We are proposing the following interventions at each of the existing level crossings:

- Ashtown level crossing – Permanent closure with provision of a new vehicular underpass beneath the canal and railway together with a new universal accessible bridge for pedestrians, vulnerable users and cyclists at Ashtown Station;

- Coolmine level crossing – Permanent closure with diversion of vehicular traffic to existing bridge crossings of the railway and canal at Castleknock Road (east of Coolmine) and Diswellstown Road (west of Coolmine) with associated road junction improvements. A new pedestrian and cyclist footbridge will be provided at the existing level crossing;
- Porterstown level crossing - Permanent closure with diversion of vehicular traffic to existing crossing points at Diswellstown Road and the new road bridge at Barberstown with associated road junction improvements. A new pedestrian and cyclist footbridge will also be provided at the existing level crossing;
- Clonsilla level crossing - Permanent closure with diversion of vehicular traffic to existing crossing points at Diswellstown Road and the new road bridge at Barberstown with associated road junction improvements. A new pedestrian and cyclist footbridge will also be provided at the existing level crossing;
- Barberstown level crossing – Permanent closure with provision of a new vehicular bridge over the canal and railway linking the Barnhill – Ongar Link Road to the R121 Kellystown Road;
- Blakestown level crossing – Permanent closure. Levels of pedestrian and vehicular traffic do not justify provision of replacement infrastructure.

2.2.6 Impact on Royal Canal pNHA & wildlife

Summary of issue raised

Submissions were received in relation to the impact of lighting and shade on the Royal Canal as well as the disturbance to wildlife during the construction phase. Requests were also made for a more detailed environmental assessment on the impact of Clonsilla and Porterstown bridges on the ecology and biodiversity of the proposed greenway and proposed National Heritage Area along the canal.

Response to issue raised

Impact of lighting and darkening on the Royal Canal

The potential impact of lighting on wildlife across the scheme is described in the EIAR Biodiversity Chapter, Section 8.8 (Description of Potential Impacts (unmitigated)). The proposed lighting arrangements at the pedestrian and cycle bridges have been designed with this in mind. The bridge will have solid CORTEN steel parapets with lighting incorporated into the parapet, avoiding any lighting spill whatsoever onto the Royal Canal. This is described in the EIAR Biodiversity Chapter 8, Section 8.8, Table 8-24. Further mitigation measures relating to lighting are presented in Section 8.9, in particular Section 8.9.2.1.

New pedestrian bridges are proposed at Ashtown, Coolmine, Porterstown and Clonsilla. These bridges are c. 5m wide and will maintain a clearance of at least 5.3m above the railway line. As described in the EIAR Biodiversity Chapter, Section 8.8.2.1, the bridges at Ashtown and Coolmine will span the railway line but not the Royal Canal, while the bridges at Porterstown and Clonsilla will span the railway and the canal and are located in or adjacent to the existing stations / level crossings. At all four bridges, the ramps are adjacent to the canal on one side only, with the canal not being bridged at all in the cases of Ashtown and Coolmine, or one ramp set back from the canal beyond the railway line in the case of Porterstown and Clonsilla. Therefore, any increase in shading as a result of the 5m deck and the ramps on one side would not be significant in terms of the effect this could have on biodiversity/ the Royal Canal pNHA.

Disturbance to wildlife during construction

The EIAR Biodiversity Chapter presents the guidance (Section 8.2), survey and assessment methodologies (Section 8.3) used to inform the Ecological Impact Assessment (Section 8.2). The results of the desk study and field surveys are presented in Section 8.4. The potential impacts of the proposed development on biodiversity, if unmitigated, are presented in Section 8.8. The habitat loss at Clonsilla and Porterstown is described in Section 8.8.2.1. The EIAR acknowledges that the construction of these bridges will result in the loss of 75m and 90m of treeline respectively.

The potential for construction impacts (noise, vibration, lighting, visual disturbance, etc) is identified as a potential impact on biodiversity in the EIAR Biodiversity Chapter Section 8.8 (Description of Potential Impacts (unmitigated)). Table 8-25 presents the unmitigated construction and operational phase impact impacts on each Key Ecological Receptor. The Key Ecological Receptors include the Royal Canal pNHA, Badger, Otter, Bats and Birds. Mitigation measures are presented in Section 8.9. The residual impacts on the Key Ecological Receptors, following the application of the mitigation measures, are presented in Section 8.10. Although it has not been possible to eliminate all impact on biodiversity on an infrastructure project of this magnitude, the impacts on Key Ecological Receptors are not significant.

More detailed environmental assessment required on the impact of Clonsilla and Porterstown bridges on the ecology and biodiversity of the proposed greenway and National Heritage Area along the canal.

The habitat loss which will occur as a result of the construction of the bridges at Porterstown and Clonsilla is described in the EIAR Biodiversity Chapter, Section 8.8.2.1. The bridges at Porterstown and Clonsilla will result in the loss of 75m and 90m of treeline within the Royal Canal pNHA respectively. The mitigation measures presented in Section 8.9 will reduce the impact of the bridge during construction and operation. This includes a design which avoids light spill outside the bridge deck, and measures to avoid pollution to the Royal Canal.

An assessment of the potential cumulative impacts resulting from the DART+ West and the proposed Greenway is present in Chapter 26 Cumulative Impacts, Section 26.4.4, page 26/206.

2.2.7 Request lifts at footbridges

Summary of issue raised

Respondents requesting lifts to be provided at the proposed Ashtown, Coolmine and Clonsilla footbridges.

Response to issue raised

At the public consultations, there was significant negative feedback received in relation to the reliability and availability of lifts for a public thoroughfare. In the subsequent design development of the overbridges, it has been possible to incorporate a bridge with stairs and ramps, to ensure full accessibility for pedestrians, vulnerable users and cyclists. Where ramps are technically feasible it is the preference of Iarnród Éireann to provide those over provision of lifts. This ensures that the crossing remains open at all times (24/7) and is not subject to interference by mechanical faults (i.e. lift faults). Therefore, the proposed development submitted as part of the Draft Railway Order application has not included lifts with the footbridges.

2.2.8 Train demand figures

Summary of issue raised

Several submissions were received questioning the validity of the demand figures used in the project. In particular, the following aspects are mentioned:

- Passenger demand is cited as the reason to increase the capacity on the line. However, the most recent figures available from the NTA show a reduction in total daily demand on the Maynooth line from 2017 to 2019;
- The pre-pandemic demand figures could be no longer valid given that research indicates that attendance at the workplace has been reduced after COVID;
- Off-peak trains are rarely full so a requirement for any increase in service would need to be demonstrated.

Response to issue raised

While increase in passenger demand is one of the reasons that called for an increase of the capacity on the line, it is not the only one, as thoroughly explained in section 2.2.15 below.

A correct analysis of passenger demand trends requires observation over long periods of time. Annual or biannual fluctuations do not necessarily reflect actual changes in long-term trends. For this reason, future projections are adjusted based on regional demand models and not on specific values in a given year. Future changes in the usage trends of different modes of transport, new projects being planned (included in certain analysed scenarios in the model) and the implementation of Project Ireland 2040 mean that the use of the rail network will increase in the coming years.

By providing a more frequent and reliable system, the project aims to promote a change on transport tendencies. This is represented in the transport model used in the project.

The 12 trains per hour per direction used as the basis for the project will be implemented using a phased rollout and depending on demand figures, and represent the peak hour target number for design and environmental impact analysis. During off-peak hours, the timetable will be adjusted based on different aspects, rail census being one of them.

2.2.9 Further photomontages requested

Summary of issue raised

Submissions were received requesting further photomontages at the following locations:

- Ashton House: view centred on the proposed new gate entrance arrangement;
- The proposed pedestrian/cycle bridge from the perspective of Rathborne village / Martin Savage Park;
- Coolmine Road junction;
- Photomontage of pedestrian bridge from north of the Coolmine level crossing;
- Proposed Leixlip Confey substation: View without the green screening and of the substation railing on all sides of substation.

Response to issue raised

Forty-six photomontages were provided in the EIAR Volume 3B of the EIAR DART+ West Railway Order Application (dartplus.ie). These views were considered representative of the proposed development as it was not practical to provide a photomontage of every aspect of all scheme elements. These viewpoints were considered sufficient to inform the landscape and visual impact assessment.

2.2.10 Electromagnetic effects

Summary of issue raised

Health effects from electromagnetic radiation and concerns relating to the interference with electrical appliances.

Response to issue raised

In relation to the health effects from electromagnetic radiation, electromagnetic fields from the proposed development is classed as non-ionising. This term means that the fields do not have enough energy to cause damage to human or animal cells in the same way ionising radiation (such as ultraviolet or X-ray) does. Despite being non-ionising there exists the EU Council recommendation on the limitation of exposure of the general public to electromagnetic fields (0Hz – 300GHz) 1999/519/EC. The levels being emitted from the proposed development will be orders of magnitude below the guideline limits set out in this recommendation at the frequencies concerned and will therefore have no negative impacts on human health.

In relation to the interference with electrical appliances, this has been addressed within the Chapter 22 Electromagnetic Compatibility and Stray Current of the EIAR, but in summary standard electrical and electronic equipment that would be found in domestic, commercial and industrial environments are required by the European Communities (Electromagnetic Compatibility) Regulations 2016 and 2017 to be CE marked.

Appliances bearing a CE mark, indicate that they are in conformance with the relevant European Directives (the EMC Directive being one), and therefore should not experience interference from the proposed development. Also, the proposed development itself is required to meet the EMC Directive (2014/30/EU) for both immunity from, and emissions of, electromagnetic radiation.

2.2.11 Property Valuation

Summary of issue raised

Concerns and queries relating to the acquisition of land and valuation of property.

Response to issue raised

Subject to the confirmation of the Railway Order by An Bord Pleanála, compensation will be addressed in accordance with statute and Compulsory Purchase practice and procedure as and when statutory notices are served.

2.2.12 Noise, Vibration & Dust

Summary of issue raised

Concerned that railway works will result in significant noise, dust and vibration over a prolonged period which will interfere with their enjoyment of the property.

Response to issue raised

Chapter 14 Noise and Vibration of the EIAR assesses the noise and vibration impact of the proposed electrification project. The outcome of this assessment following the adoption of mitigation is that the project is not expected to change the noise or vibration climate significantly during operation. Increased frequency of trains are offset by the quieter operation of electric DART compared to diesel commuter units. Noise and vibration monitoring during construction is included within the EIAR as part of the mitigation measures. Vibration limits are specified to ensure that no damage, even cosmetic, occurs to properties. Lower vibration values are specified for any sensitive buildings. Prior to construction and subject to written agreement with the property owner, property condition surveys will be undertaken in relation to the property.

Chapter 14, Section 14.5.3.5.1 (Page 14/26) states that the noise impact of the catenary system installation will likely be significant at individual properties close to the tracks for periods of brief duration (i.e. up to 4 hours) while the works are occurring. Works that occur within 300 m of a property that is located along the track with a direct line of sight to the works, have the potential to cause a significant impact. However, as the works progress, the likely effects will become less significant at that property and the effects will follow the work progress linearly along the track. The specific noise level generated by the work will depend on the type of piling adopted. Mitigation measures are limited for these works due to the nature of the sites being temporary worksites for a 4-hour period each night and the plant involved is difficult to mitigate. A designated community liaison / noise liaison is to be appointed by the Contractor for the duration of the construction works to engage the occupants of neighbouring properties and notify them of any works forecast to generate appreciable levels of noise, explaining the nature and duration of the works. Night-works in particular have the potential to generate the most significant noise effects. All affected sensitive locations are to be notified of planned works in advance of the works progressing. The notification should include a description of the works, the expected duration and details of how to contact the Contractor to log complaints.

With respect to dust nuisance, a sensitivity assessment was completed in Section 12.4.3 of the EIAR and an assessment of the potential dust generation due to construction has been completed in Section 12.5.1.4 of the EIAR, this includes Connolly station and North Strand Works. Guidance for this assessment was taken from the Institute of Air Quality Management (IAQM). Guidance on the Assessment of Dust from Demolition and Construction V1.1. In addition to the sensitivity assessment and impact assessment in the main body of the EIAR, two appendices have been prepared with respect to dust, one to review activities which have the

potential to generate dust (Appendix 12.2. Potential Dust Generating Activities) and a second to document the mitigation measures that are to be applied across the project to minimise and suppress dust generation (Appendix 12.4. Dust Mitigation). This assessment concluded that when the dust minimisation measures detailed in the mitigation section of this chapter are implemented, fugitive emissions of dust from the site are not predicted to be significant and pose no nuisance, human health or ecological risk to nearby receptors. Thus, there will be no residual construction phase dust impacts.

The dust minimisation plan ensures that a stakeholder communications plan and monitoring is in place to ensure dust mitigation measures are working and if residents have any concerns about dust that a line of communication is available. Through this element, and others listed in the Dust Mitigation Plan (see Appendix A12.4 of the EIAR) to ensure residual dust is minimised, the proposed project will ensure local residents are not impacted by dust and if any dust impacts do occur, there is a line of communication to raise it with an appropriate person on site who can implement further mitigation immediately.

2.2.13 Additional station at Croke Park

Summary of issue raised

Requests for additional station at Croke Park.

Response to issue raised

A number of physical and operational constraints exist on the existing railway lines in the Ballybough area that would reduce the potential for an additional station, and these are presented below.

On the GSWR line (more northern line crossing the Ballybough Road)

The railway is in a restricted area heading east of Ballybough Road towards Connolly and is elevated on a series of bridges and arches and not suited for location of a station. West of Ballybough Road the current gradient and tight curvature of the existing track geometry is not in accordance with standards for the provision of a station. Siting stations and platforms on tight curves introduces large stepping gaps and creates accessibility issues. Furthermore, the elevated nature of the existing railway, which is on a 4-metre high embankment in this area, would raise issues regarding overlooking and visual impact on adjacent residential properties.

On the MGWR line (line closer to the city and adjacent to the Royal Canal)

The railway east of Ballybough Road is in a tight cutting parallel to the Royal Canal alongside Clonmore Terrace where there is limited space to the railway boundary and is not a suitable place to locate a station. West of Ballybough Road and towards Croke Park there is again a steep gradient issue identified. Impact on surrounding properties would also be an issue with limited space available.

Operational Constraints

This section of the railway is a highly congested area with services from the Sligo line, Maynooth line, M3 Parkway line and Phoenix Park tunnel lines all converging on the city centre and it would be particularly disruptive to place a suburban stop in this area on the approach to the city. While some trains currently get held here on approach to the station to stop all suburban services so close to Connolly, an area where we have capacity issues would cause operational disruption impacting on other movements around the Connolly area, for example on the northern line.

2.2.14 Extension to Kilcock

Summary of issue raised

Requests to extend the electrification to Kilcock station.

Response to issue raised

The Transport Strategy for the Greater Dublin Area (2016-2035) has concluded that DART+ will extend to Maynooth / M3 Parkway. The outer areas of the Greater Dublin Area and the outer Regions will continue to be served by diesel train services, albeit at increased frequency. These train services will be augmented by the M4 / N4 regional bus network.

At present, Kilcock Station is a single platform station. Continuation of the DART+ West to Kilcock would require construction of double track along a very narrow railway corridor, overbridge modifications (where appropriate), and the reconstruction of Kilcock Station to provide the necessary train infrastructure.

The NTA have recently published the Greater Dublin Area Transport Strategy 2022-2042. Measure RAIL3 – DART Extension included in the Strategy states:

> *"The NTA and Irish Rail will, over the lifetime of the Strategy, extend the DART to deliver electrified rail services to the following towns:*
>
> - *Sallins / Naas;*
> - *Kilcock; and*
> - *Wicklow."*

It is important to note that the works proposed along the Maynooth Line as part of DART+ West project will not preclude future electrification of the line to Kilcock and further west.

2.2.15 Need for the Increase in Frequency and Capacity

Summary of issue raised

Querying why the increase in frequency and / or capacity of the rail network was planned.

Response to issue raised

The rail network in Ireland and more particularly in the Dublin Metropolitan area is a 19th century legacy, which represent a significant national asset in that it provides high-capacity public transport corridors into and through the city centre. The expansion of the heavy rail network has been a key long-term objective of CIÉ, Iarnród Éireann and statutory transport plans for a significant period. The expansion of the heavy rail network has been stop-start in nature and influenced by available Exchequer funding. The commissioning of the DART in the 1980's is a huge public transport success. Subsequent funding has been provided in the 1990's and early 2000's to improve the rail network and increase capacity. However, due to the national economic downturn in 2008, capital investment was significantly constrained.

Project Ireland 2040 comprises the National Planning Framework 2040 (NPF) and the supporting investment package contained in the National Development Plan. The National Development Plan recommended that the DART+ Programme (previously termed DART Expansion) should proceed to deliver priority elements including investment in new train fleet, provision of new infrastructure and electrification of existing lines. The NPF and NDP state that the focus should be on non-underground tunnel elements of the programme using existing tracks (i.e., using the Phoenix Park Tunnel branch line). On the 4th October 2021, the National Development Plan 2021-2030 was published in which the DART+ Programme is considered as the "cornerstone of rail investment" within the lifetime of Project Ireland 2040. Advancement of priority elements of DART+ Programme is now approved in principle under the National Development Plan 2021-2030.

The requirement for increased capacity through the implementation of the DART+ Programme and specifically the DART+ West project, is multifaceted and will be transformative for the GDA transport landscape. The delivery of the proposed DART+ West project will enhance heavy rail infrastructure and will similarly contribute to the incremental transformation of the national heavy rail network. At an international level, the DART+ Programme supports Ireland's commitment to fulfil its obligation as an EU member state, regarding both the

greenhouse gas emission reduction targets and the improved functionality of heavy rail services and integrated land use planning with sustainable mobility. DART+ West is a cornerstone transport project and will assist with supporting both the European Green Deal, and the Sustainable and Smart Mobility Strategy and climate action commitments.

Notwithstanding the benefits of improving sustainable transport options, the project is fundamental to supporting the economic and social growth that has been highlighted by the National Planning Framework and county development plans. The DART + West project will facilitate multi-modal journeys through the improved integration with other modes including LUAS, the proposed MetroLink, proposed BusConnects, proposed LUAS Finglas, the Royal Canal Greenway and other sustainable mobility infrastructure. The DART+ West is aligned with the implementation of Project Ireland 2040 and the National Planning Framework.

All existing stations on the railway corridor between Connolly Station and Spencer Dock Station to Maynooth Station and M3 Parkway Station will be catered for by more sustainable electrical rail network allowing a shift towards a low carbon emission passenger service through the introduction of a modernised electrified fleet. The improved frequency and quality of service will provide a viable transport alternative to existing and future communities along the route and support a modal shift to help support a climate resilient low carbon economy.

The increase of capacity of the network (by both increasing the train frequency and enhancing the network functionality) is the primary objective of the DART+ West project. The accomplishment of this primary objective leads to the fulfilment of some of the sub-objectives like delivering a more reliable service; delivering a sustainable, low carbon and climate resilient design solution; making the maximum use of the existing railway infrastructure; removing capacity constraints; and improving the customer experience.

The project aims to cope with a maximum capacity of 12 trains per hour per direction, and this has been the basis of the model detailing the train movements during the peak hours. This target capacity is used to design all the elements of the project, from the signalling scheme to the stabling facilities. The increase of frequency will be implemented in subsequent phases until the maximum is reached. During off-peak hours, the timetable will be adjusted based on different aspects, rail census being one of them.

2.2.16 Community infrastructure and severance

Summary of issue raised

Community severance and impacts to accessing community facilities / infrastructure.

Response

Chapter 7 Population of the EIAR assesses community severance. Section 7.3.4.4 of EIAR Chapter 7 states that severance often occurs as an impact due to transport infrastructure development such as roads or bridges. Its effect is to discourage community interaction and it occurs where access to community facilities or between neighbourhoods is impeded by a lengthening of journey time or by physical barrier(s). On the other hand, relief from existing severance may be provided by a new road or bridge where traffic volumes or speed are moderated, by the inclusion of crossing facilities in the design or through the presence of over-bridges and/or underpasses.

Sensitive groups are identified specifically where they comprise a higher proportion of pedestrian journeys or where specific amenities are associated with these groups. Sensitive groups can include young and older population cohorts, the mobility impaired, and people at risk of social isolation. Relevant community facilities can include schools, recreational amenities, surgeries, hospitals, churches, post offices and shops.

Section 7.5.1 of EIAR Chapter 7 provides an assessment of the 'Do-Nothing' scenario which assumes the proposed development is not built. Combined with the existing poor journey characteristics and journey amenity the current conditions will continue and worsen resulting in increased delays to the population accessing community facilities/services. The ongoing conflict at the road rail interface at level crossings will worsen, increasing congestion levels for all modes (vehicles, walking and cycling) and will cause the greatest

level of perceived community severance which would have a negative impact on all populations, particularly vulnerable groups, including the young, old, and people with reduced mobility or disabilities.

Construction stage severance impacts are addressed in Section 7.5.3.1.2 of EIAR Chapter 7. The construction works will result in some temporary diversions across the study area, particularly during works associated with the level crossing replacement works and a number of the rail-overbridge modifications, resulting in temporary road closures. This will create temporary diversions for road users including pedestrians and cyclists during these localised construction phases which will consequently affect the ease of access to social, economic and community facilities including transport infrastructure. Alternative routes/diversions and access to properties will be made available throughout and therefore, there will be no severance.

Construction stage impacts to community infrastructure is addressed in Section 7.5.3.1.3 of the EIAR. The majority of the construction works will take place in an urban environment/developed area, with residential and community infrastructure needing to remain accessible across the scheme extents including, sports facilities, educational, religious, medical, etc. Construction traffic will be routed through the existing urban and/or the rural road network which will result in increased construction traffic travelling through the built environment during the day and night which will likely affect journey characteristics and journey amenity. However, access to community infrastructure and amenities will be maintained as far as practicable during these short-term construction periods. The potential effect on these areas from construction traffic and the operation of construction compounds on community infrastructure is likely to have a negative, slight to moderate, temporary to short-term effect, depending on the nature of the activities (day or night) and duration of the construction activities taking place within and/or near these sites.

A number of construction compounds will be erected within open spaces/grassed areas which will impact on the footprint and functionality of these areas available to the local communities for amenity purposes. The potential effects on these open spaces is negative, and ranges from slight to significant, temporary to short term depending on the duration and extent of the temporary works/land take required within each area.

Operational stage severance impacts are assessed in Chapter 7 of the EIAR. Section 7.5.4.1 states that, by removing the road and rail interface at the existing level crossings there will be *positive significant long-term* effects on journey characteristics, journey amenity, reduced perceived community severance and improvements in safety. In Section 7.5.1.4.4 of EIAR Chapter 7 it states, where alternative vehicular access is not provided and/or is changed at the existing at-grade level crossings there will be a perceived *negative, moderate- significant, permanent* residual community severance effects for the properties and communities either side of the level crossings.

Community infrastructure is assessed in Section 7.5.4.1.3 in EIAR Chapter 7, the proposed modernised electrified rail fleet and capacity enhancements will provide greater access by rail to existing community infrastructure including educational, community, medical, etc. by increasing the frequency of commuter services at train stations along the Maynooth and M3 Parkway rail lines. Rail users including commuters will be afforded with more options when choosing their time of departure to access facilities and vice versa, having an *indirect, positive, and long-term* effect.

The project will connect existing and new communities in the vicinity of the rail network and beyond to services, employment and amenities in conjunction with walking and cycling facilities ensuring integration between the rail network and other modes of transport is maintained and communities are supported to grow sustainably. DART+ West will deliver on aims identified in national and local planning policy for integrated sustainable development.

2.2.17 Anti-social behaviour and safety concerns at the proposed level crossing replacement locations

Summary of issue raised

Anti-social behaviour and safety concerns due to the level crossing closures and on the proposed replacement infrastructure.

Response

Section 23.3.4 in Chapter 23 Human Health categorises potential impacts including those relating to anti-social behaviour. It is notes that there is likely negative psychosocial hazards relating to the improvements to existing and/or new infrastructure developments including issues such as nuisance and anti-social behaviour. On the contrary, there could also be positive impacts on the community due to improved connectivity particularly for public transport users, pedestrians, and cyclists and also as a result of regeneration associated with land use changes and associated increased economic prosperity. Anti-social behaviour or safety concerns is subjective, and therefore it is not possible to use a standard based assessment approach.

Section 23.4.11 in EIAR Chapter 23 states that there are already incidents of anti-social behaviour occurring on the existing rail network. According to the Iarnród Eireann's 2020 Annual Report, from 2019 to 2020 there was a significant increase (18%) of anti-social behaviour report on the rail network. To combat the increase in anti-social behaviour, IÉ have devised a security strategy "which incorporates the proactive support of our security contractor and An Garda Síochána"[1]. This security strategy will be implemented across the DART network, including the DART+ West project once operational. The IÉ Text SMS Service[2] which is currently operational on the DART network will be maintained to allow all customers to discreetly report incidents of anti-social behaviour at any time including while on board a train while the incident is occurring therefore helping combat the negative effects associated with such incidents on all passengers.

Section 23.5.2.8 in EIAR Chapter 23 details the assessment of potential psychosocial effects during the Construction stage. It is recognised that there is likely to be short-term nuisance (which may also include anti-social behaviour) effects during all stages of construction particularly along the railway corridor. This will occur during the daytime and night-time which will impact the community particularly residential properties and commercial properties, and road/ rail users located in proximity to the respective construction works, construction compounds and along the haulage routes. Construction works outside of the existing railway corridor, namely at locations of the proposed Spencer Dock Station, the proposed depot and the six-level crossing closures and infrastructure replacements will likely generate the significant nuisance due to the scale of the significant infrastructure works required.

Section 23.5.3.8 in EIAR Chapter 23 details the assessment of potential effects during the operational stage. New public infrastructure such as transport corridors, public plazas and rail stations can provide locations for anti-social behaviour and/ or loitering to occur. While it is recognised that isolated incidents can occur, the proposed development is a generally located on an existing CIÉ land located in Dublin City and suburban locations, as a result it is unlikely that the proposed development would promote significant additional anti-social behaviour. CCTV is included as part of the design at the proposed Ashtown underpass and at existing Stations, the new Spencer Dock Station and plaza, these measures will help monitor and deter anti-social behaviour and potential anti-social loitering in these areas. The project is likely to result in a *slight, negative momentary to brief* effects where these incidents occur. However, with the combination of increases in frequency and capacity (from 6 to 12 trains per hour -subject to passenger demand) this will result in increased footfall and general activity at level crossings, on the proposed footbridges and at stations and due to passive surveillance will contribute to safer environmental conditions.

[1] Iarnród Eireann's 2020 Annual Report Available At: https://www.irishrail.ie/Admin/getmedia/df8a02dd-a5ad-411d-8591-c3cb485c9c42/Iarnrod-Eireann-Annual-Report-2020.pdf
[2] Irish Rail ONLINE Available at https://www.irishrail.ie/en-ie/faqs/how-do-i-use-the-anti-social-behaviour-text-servic

Section 23.4.3 in EIAR Chapter 23 identifies the collision statistics recorded by IÉ in the vicinity of the level crossings. The collisions demonstrate there are continued issues at all level crossings particularly with regards to road vehicle strikes of the level crossing barriers, cyclists/pedestrians incidents involving collisions, trespassing on the live railway and also people interfering with barriers while in operation. The complete closure of the level crossings and provision of replacement infrastructure is expected to improve safety and reduce these incidents and safety issues occurring.

Section 23.5.1 in EIAR Chapter 23 assess the 'Do-Nothing' Scenario. Should the proposed development not be constructed there will be continued pressure on the existing transport network which is likely to result in worsening traffic congestion on roads for all modes and a potential increase in safety incidents and/or collision particularly at the six level crossings.

The worsening conditions will be experienced particularly by passengers on trains due to capacity issues, and at train stations. Commuters in the GDA will have limited options due to the congested rail network and in turn this may increase the use of the private car for journeys with journey times likely to increase and become more extended across the day particularly at the morning and evening peak times, which could also have negative psychosocial effects (stress factors) on the wider population.

The Do Nothing Scenario is likely to affect all communities but particularly those who are passengers that rely on public transport for travel, those living at level crossings, and vulnerable groups including the young, old, the sick, and people with disabilities.

Construction stage impacts:

Section 23.5.2.8 in EIAR Chapter 23 states that there is potential for anti-social behaviour in the form of trespass and theft to arise on construction sites. All areas will be provided with suitable fencing/hoarding and appropriate security which will be monitored by the contractors. No significant effects are likely to arise.

Operational Stage impacts:

Section 23.5.3.7 in EIAR Chapter 23 states that the proposed development will permanently close the six existing level crossings at Ashtown, Coolmine, Porterstown, Clonsilla, Barberstown and Blakestown. The removal of the rail-road interface at these locations will eliminate collision risk for vehicular, cyclist and pedestrians at the level crossings barriers, which are shown to be locations where collisions and incidents have occurred. The proposed development will have a *significant positive, permanent effect* on human health due to improvements in road and rail safety.

The modernisation of the railway will support continued population growth and development and support the long-term economic prosperity and associated health outcomes. Furthermore, there is likely to be indirect secondary psychosocial effects by facilitating reliable and more opportunities for social connections and physical activity at stations, on trains and the upgrades to station facilities that include amenity/ public realm areas around stations and at the level crossing replacements. The proposed development will have a *significant positive long-term effect*.

Furthermore, the EIAR includes mitigation measures to be applied at detailed design stage:

<u>Relevant anti-social behaviour & safety mitigation measures:</u>

EIAR Chapter 7 Population, Section 7.6.2 includes mitigation for the operation phase to include:

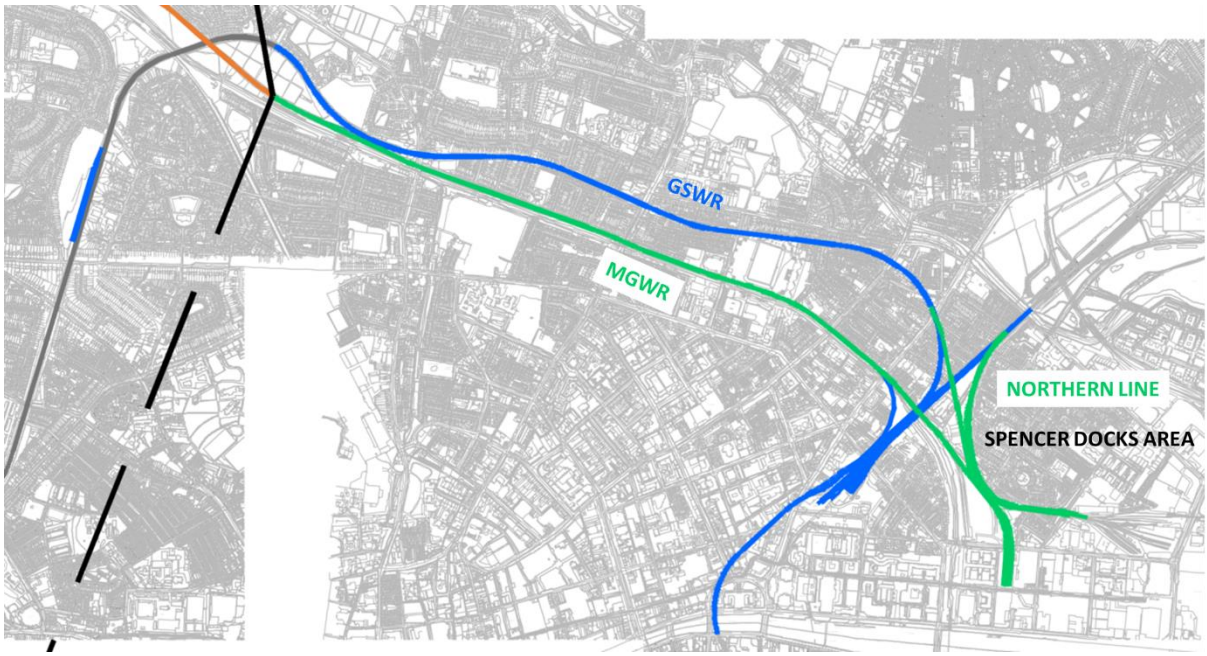
- The public realm designs shall encourage passive surveillance of public spaces and on transport infrastructure, e.g., through appropriate lighting, pleasant surroundings and design that discourages anti-social behaviour, graffiti, etc.

EIAR Chapter 23 Human Health, Section 23.6.2 includes:

- Detailed design will integrate public safety design measures to reduce opportunities of anti-social behaviour and loitering at Spencer Dock Station, Connolly/ Preston Street, existing stations, Ashtown underpass and will utilise attractive design measures, lighting and public realm enhancements particularly as part the level crossing replacements works. As far as practicable these measures shall include:
  a. The use of active and passive surveillance measures.
  b. CIÉ/the design team shall consult with An Garda Síochána and the respective local authority at the detailed design stage.
  c. Appropriate safety lighting on bridges and cul-de-sac at closed level crossings to ensure safety of all road users.

2.3 Zone A & Zone B Issues raised

This section of the submission relates issues raised in Zone A and B within the EIAR which covers the extent of the scheme from Dublin City Centre from Spencer Dock and Connolly Station through to Cabra.



2.3.1 Property impacts and valuation

Summary of issue raised

At properties where new or replacement overhead electrical poles attached to the existing viaduct are to be constructed, the property owners are concerned that the Railway Order may result in CIÉ seeking to acquire part of their property which will reduce the footprint of the property or otherwise negatively affect its value.

Response to issue raised

At these locations the acquisition of a Right of Way and lands for the construction of a pole are proposed. The permanent acquisition of property is limited to the acquisition required to allow for the construction of the overhead line electrification pole mounted to the existing rail viaduct and are referenced in the Second Schedule – Part 2 with a Right of Way refenced in Schedule 5 for construction and accessing the pole, for maintenance and inspection. Permanent land acquisition at ground level, is not proposed at these properties as part of the Railway Order.

The proposed poles will be similar to the existing poles on the current electrified DART line as shown below.

Existing Overhead Electrical Pole (Google Earth)

With regard to valuation, If the Railway Order is confirmed, compensation will be addressed in accordance with statute and Compulsory Purchase practice and procedure as and when statutory notices are served.

2.3.2 Disturbance of Vermin and Pests

Summary of issue raised

Concerned that the construction works and running of trains will dislocate vermin and other pests who may seek to relocate to their property.

Response to issue raised

The proposed DART+ West will not be creating any new railway lines in the city centre area and will only result in increased frequency. The contractor will be required to prepare a Construction Environmental Management Plan (CEMP) which will address the construction management on the site.

2.3.3 Privacy

Summary of issue raised

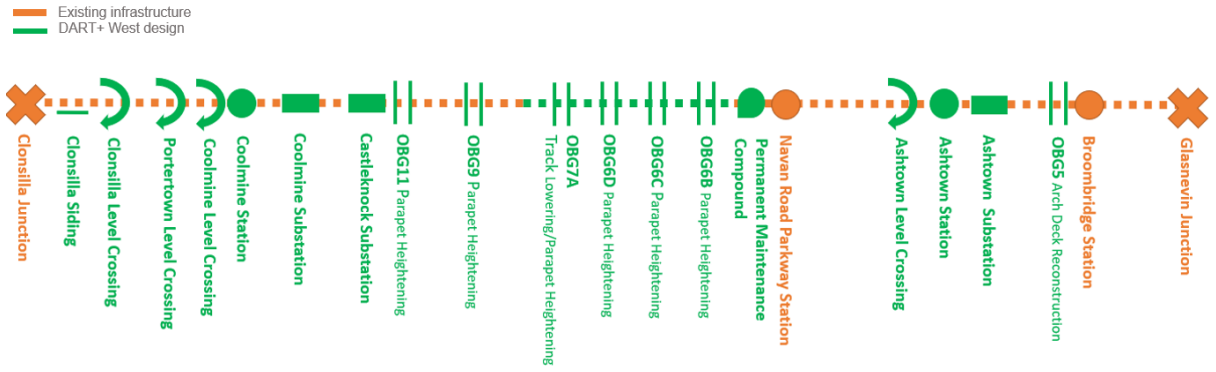
Concerned that once the works are complete, the increased frequency of passenger trains passing alongside their property will negatively affect their privacy.

Response to issue raised

The locations adjacent to the existing railway viaduct within the city centre currently experiences significant passenger train movements. These movements although more frequent will not have any greater height or increased visual access to the property.

2.4 Zone C Issues Raised

This section of the submission relates issues raised in the Zone C of the EIAR which covers the extent of the scheme from Cabra through to Westmanstown.



2.4.1 Impacts on Brent Geese

Summary of issues raised

Concerns raised in relation to the use of the paddocks at the Ashtown Stables by Light-Bellied Geese and the impact of the proposed development on these species (and habitat) resulting in direct mortality. Furthermore, it was queried as to why the inland feeding sites were contained in a confidential set of drawings.

Response to issues raised

The use of the paddocks at Ashtown Stables by Light-bellied Brent Goose

The use of inland feeding sites by Brent Goose is referenced in the EIAR Biodiversity Chapter in Section 8.3.1 (Establishing the Zone of Influence), Section 8.4.9.5 (Desk Study Results), Section 8.5.4.2 (Field Survey Results) and Section 8.9.3.7 (Mitigation). The inland feeding sites are presented in the Natura Impact Statement (Appendix F) which was publicly available.

The inland feeding sites were identified from the desk study, in particular the results of a Dublin wide Brent Goose Survey (Scott Cawley, 2016). The main source of the locations of inland feeding sites for the study was provided by the Irish Brent Goose Research Group, which included verified records received from members of the public. Since the lodgement of the draft Railway Order application, it should be noted that another Dublin wide Brent Goose Survey was published. This study was carried out over four seasons between 2018 and 2022 (Enviroguide, 2022). No additional inland feeding sites are identified in the vicinity of Ashtown Stables. Martin Savage Park (playing fields) is assessed as being of 'Major' Importance for brent geese, with a peak count of 835 birds recorded during the 2011/12 season, and more recently a peak count of 565 in the in the 2016/17 season. More recent surveys confirm the importance of the Martin Savage Park (playing pitches) as an inland feeding site for Brent Geese.

All suitable inland feeding sites within 550m of the proposed development were considered in the assessment. The use of the paddocks at the Ashtown Stables by Brent Geese was highlighted in submissions at public consultation no. 2 and investigated by Iarnród Éireann. A desk-based assessment was undertaken to assess the suitability of the grasslands at the Ashtown Stables for Brent Goose. The suitability of inland feeding sites by Brent Goose depends on a number of factors. Studies have shown geese to preferentially select grassland with sward heights of approximately 6 cm. Other factors determining the suitability of an inland feeding site include the size of grazing area, type of grassland management, visibility and disturbance. Brent Geese prefer large, open sites where they have clear sightlines. The need for safety is more important than food supply in influencing where geese feed, with birds feeding mostly in large, open areas and avoiding closed situations or sources of frequent disturbance such as at the Martin Savage Park playing fields.

Although it is not disputed that Brent Goose may use the grasslands at the Ashtown Stables from time to time, it is considered that the Ashtown Stable lands do not provide what is considered suitable inland feeding habitat for Brent Goose, as described in the literature. The site is approximately 50m x 150m, intersected by fences and surrounded by treelines on all but the north side thereby not providing the desired security and visibility.

Mitigation is provided for potential impacts on Brent Goose in Section 8.9.3.7 of the EIAR Biodiversity Chapter. This addresses potential disturbance during construction and the potential for collisions with OHLE during the operational phase.

In relation to habitat loss at the Ashtown Stables lands, the proposed development will result in minimal land take along the edge of the site, which will not change the overall character of the grassland and not diminish its suitability as a potential feeding site for Brent Goose. The land take at the Ashtown Stables is presented in the EIAR Volume 3A, Chapter 4: Roadwork Design- LC01: Ashtown General Arrangement Sheet 1 of 4 (Drawing No. MAY-MDC-HRW-LC01-DRC-L101-D).

Queries regarding the reasoning that the inland feeding sites were contained in a confidential set of drawings.

In the meeting held with the NPWS in April 2022, the NPWS requested IÉ that the locations of protected species be provided in a confidential appendix to the EIAR. This request is documented in Vol. 2 Chapter 8 Biodiversity, Section 8.3.8, Table 8-4. As the body with responsibility for nature conservation, this request was adhered to and the published EIAR therefore did not contain drawings of protected species including badger, otter, amphibians, and the locations of inland brent geese feeding sites.

The locations of the inland Brent Geese feeding sites used in the assessment, which is already in the public domain, and not considered sensitive data, were published in Appendix F to the Natura Impact Statement (NIS).

Direct mortality of certain species which goes against EU law in relation to Brent Geese.

Direct Mortality' is listed as a potential impact on protected species, including Brent Geese in the EIAR Vol. 2 Chapter 8 Biodiversity Section 8.8.2.2. Section 8.8.3, Table 8-25 presents the construction and operational phase impacts on each Key Ecological Receptor, including Key Ecological Receptor 8 'Birds'. Reference is made specifically to Geese and their vulnerability to collision with OHLE. Without mitigation measures, it is stated that this impact could lead to a permanent significant negative impact at the international level.

Vol. 2 Chapter 8 Biodiversity Section 8.9.3.7 of the EIAR presents the mitigation measures for Birds, including design level measures such as the avoidance of cables on structures, and the provision of deflectors in sensitive areas including adjacent to Brent Geese inland feeding sites.

The EIAR Vol. 2 Chapter 8 Biodiversity Section 8.10, Table 8-28 presents the impacts following the application of the mitigation measures. The impact of collision risk to birds including Geese is stated as a permanent imperceptible negative impact at the international level.

Research has demonstrated the efficacy of deflectors at significantly reducing bird strike, and as stated in the NPWS submission on the proposed development "*Line marking has become the preferred mitigation option in such situations worldwide*".

2.4.2 Impacts on Bats at Ashtown Stables

Summary of issues raised

Submissions noted the presence of bats, including Daubenton's bat roosts, at the Ashtown Stables.

Response to issues raised

There will be no direct impact on any buildings on the Ashtown Stables property. Scheme-wide mitigation measures in relation to bats, including Daubenton's Bat, are presented in Section 8.9.3. This includes mitigation measures relating to light pollution. Records of Daubenton's Bat are presented in the EIAR Biodiversity Chapter in Table 8-8 (Records of Rare and Protected Species), Section 8.4.9.3 (Desk Study Results) and Section 8.5.4 (Field Survey Results- Fauna).

A desk study and field surveys were undertaken by project ecologists to inform the assessment of bats in relation to the DART+ West. The sources used in the desk study are presented in Vol. 2 Chapter 8 Biodiversity, Section 8.3.4. The desk study included a review of data held by the National Parks and Wildlife Service (NPWS), the National Biodiversity Data Centre (NBDC) and Bat Conservation Ireland (BCI), as well as over 30 ecological reports. Field surveys included walked transects along the Royal Canal and emergence/ re-entry surveys at selected structures and trees. The methodology for the field surveys is presented in Vol. 2 Chapter 8 Biodiversity, Section 8.3.6.2, and the results of the surveys are presented in Vol. 2 Chapter 8 Biodiversity, Section 8.5.1. The field surveys identified the three common species found in Ireland (two pipistrelle species and Leisler's bat) and Daubenton's bat (or other Myotis species), as presented in Vol. 2 Chapter 8 Biodiversity, Table 8-19. Appendix 2 of the submission contains a spreadsheet listing the species recorded during a bat survey commissioned by the Ashtown Stables, which following a manual analysis, recorded the same species.

Mitigation measures are presented in Section 8.9, including measures' relating to bats. These include minimising lighting during construction and operation, which is particularly relevant to Daubenton's Bat, which is a light sensitive species that is restricted to feeding over waterbodies such as the Royal Canal. The submission also states that mitigation such as bat boxes have not been provided. The provision of 30 no. bat boxes is presented in Vol. 2 Chapter 8 Biodiversity, Section 8.9.3.5 and Volume 3A Mitigation and Enhancement Mapping, Drawing: MAY-MDC-ENV-ROUT-DR-V-81000-D to 81011-D. Other mitigation and enhancement measures include planting and the provision of ponds and wetlands along the scheme.

2.4.3 Impact on Horses and Stables

Summary of issue raised

1. Concerns about the reduction of footprint at Stables in relation to grazing land.
2. Construction works threaten the safety of their horses and people as well as affecting the enjoyment of this amenity.
3. Construction works around and within the Stables would render the Stables inoperable and force them to close.
4. Impact on Wildlife & Horses - states that IÉ have made no suggestions or proposals as to how the horses will live during the construction, which can leave the Stables inoperable.
5. Concerns in relation to the proposed planting schedule and oak toxicity to horses.

Response to issue raised

1. The Railway Order for the DART+ West project will involve total land take of 0.1686ha from this property of 1.2ha. Land take is comprised of 0.0426ha permanent agricultural lands, 0.0211ha temporary agricultural lands and 0.1049ha temporary public road. During certain construction activity, it may be prudent to restrict access to the horses and ponies to the paddocks but this is very manageable and no different than the management used when paddocks are sprayed, harrowed or even in inclement weather. When construction activity is complete, a 3.5% reduction in available paddock land is of slight significance.
2. The impact of the proposed development has been assessed in the EIAR and the significance of this impact is deemed to be 'Moderate'. This assessment has considered the impact of land take, the reduction in the area of agricultural lands and the temporary construction impacts on the operation of the equine enterprise. Mitigation measures are set out in Section 16.6 and include the reinstatement of temporarily acquired lands, boundary treatment and construction work mitigation. The significance of the residual impact, following the implementation of mitigation measures and the completion of construction works, is deemed to be 'Not Significant'.
3. Chapter 23 Human Health (Volume 2) of the EIAR, notes that construction works will likely generate significant nuisance due to the scale of the significant infrastructure works required during the associated construction durations. However, these effects will be temporary and short term in nature. Prior to any demolition, excavation or construction, a Construction Environmental Management Plan (CEMP) will be produced by the successful contractor. The CEMP will set out the Contractor's overall management and administration of the construction project. The key environmental aspects

associated with the construction of the DART+ West project, the appropriate mitigation and monitoring controls as provided by the respective competent experts, are identified in the CEMP.

4. Ashtown Stables is located in a busy urban setting. The sand arena is adjacent of the main Sligo - Dublin railway line with a variety of rail traffic and associated wide range of visual and auditory stimuli. Ashtown Road (L3101) passes in close proximity to the sand arena and when the level crossing is currently closed to traffic, there is significant traffic queueing with a variety of engine noises and exhaust fumes. The horses and ponies that are used to provide the trekking experience in the Phoenix Park have to travel a distance of approximately 550m involving a journey along the Ashtown Road, crossing the N3 and traversing the R806 to access the Phoenix Park.

   The horses and ponies resident in Ashtown stables have shown remarkable adaptability to date and would be expected to continue to adapt. These horses and ponies live and work in an urban landscape with continually changing visual and auditory stimuli. They have been bred over many generations to deal with the hustle and bustle of urban living. They have been excellently brought along by the experienced horsemen and women in Ashtown Stables and with the continuation of the skilled management of horses and ponies in a continually challenging environment, the current horses and ponies in Ashtown Stables will adjust to the new stimuli associated with the construction activity as they have done so many times before.

   In relation to the works *associated with the underpass there is significant anecdotal data that shows that it is the combination of noise and visual stimuli have the most profound impact on sudden unpredictable equine behaviour. The old mill, ancillary buildings and stable complex are very well located to minimise the construction activity at the northern end of the proposed construction works and the two areas that are exposed are the proposed roundabout at the southern end of Mill Lane and the proposed footbridge and Ashtown Road redevelopment at the north-eastern aspect of the sand arena. Appropriate screening has been shown in previous infrastructural construction projects to be effective at reducing or even minimising the visual and aural stimuli which could have the potential to have adverse impacts on equine activity and behaviour. Piling activities associated with the construction of the proposed footbridge at Ashtown Station can be scheduled in advance with Ashtown Stables to take place on certain days and times to mitigate the impact. These phases of work are not continuous and often will take place over weekends or by arrangement.*

5. Oak (Quercus species) toxicity in horses is uncommon but possible. Oak trees are a common sight in Ireland and often present in traditional equine thoroughbred farms. The parts of the tree that can cause trouble are the immature leaves that appear in the spring, and green unripe acorns, which have the highest level of toxins. The leaves and acorns that fall in the autumn are not as toxic and horses tend to stay away from them. Horses would have to eat these leaves and acorns steadily over days to weeks to experience toxicity. However, in an abundance of caution the planting schedule in immediate proximity to Ashtown Stables and other established equine holdings will avoid the use of English Oak [Quercus robur] and Pin Oak [Quercus palustris].

2.4.4 Loss of trees and vegetation at Ashtown

Summary of issue raised

1. Issues in relation to tree and hedgerow removal from the southern portion of Ashtown Stables and that mitigation for protected species is required
2. Issues pertaining to the landscape and visual impact caused by the removal of trees on Ashtown Stables, Ashtown Mill and Aston House

Response to issue raised

1. The loss of habitat to facilitate construction at Ashtown is described in Vol. 2 Chapter 8 Biodiversity, Section 8.8.2.1, which states that "*An underbridge is proposed at Ashtown which will result in the loss of one hectare of agricultural and built land and approximately 400 m of treelines/ hedgerows. To facilitate the construction of the underbridge and aqueduct, approximately 50 m of canal will be dewatered*". Mitigation measures are presented in Section 8.9 of the EIAR, which includes measures

to avoid or reduce the impacts on birds, bats, mammals and their habitats. The landscape mitigation drawings, Volume 3A Landscape and Visual Amenity, Drawing: MAY-MDC-ENV-ROUT-DR-U-15108-D show the landscape plans for this area which includes planting of trees to compensate for habitats to be removed.

2. The loss of trees and hedgerows is acknowledged in the EIAR. Section 15.5.1.1.3 States *"The sensitivity of the streetscape / townscape in this local area of Ashtown is 'high'. The magnitude of change will be 'very high' and the likely effects in the construction phase will be very significant, negative, short-term."* Replacement planting will be provided to mitigate the loss of this vegetation. Trees and hedgerows to be retained will be protected in accordance with "BS 5837 Trees in Relation to Design, Demolition and Construction to Construction – Recommendations". Drawing number MAY MDC LAN ROUT DR U 15108 D Sheet 9 of 42 in Volume 3A of the EIAR shows the proposed landscape mitigation at Ashtown. Prior to commencement of the works an Arboricultural Impact Assessment will be produced for the area of the proposed development.

2.4.5 Anti-social behaviour in the underpass

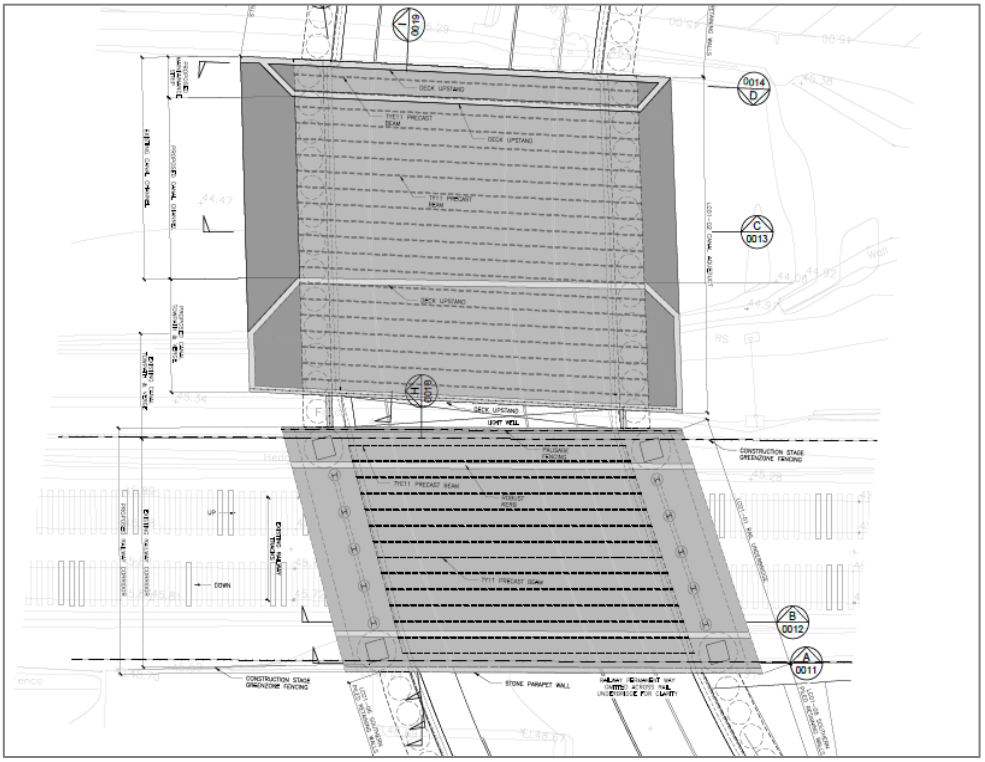
Summary of issue raised

Concerns relating to the risk of anti social behaviour in the proposed underpass at Ashtown

Response to issue raised

Chapter 4, Section 4.8.6 of the EIAR includes details relating to the Ashtown rail underbridge and canal underbridge. The rail underbridge spans approximately 19.0 m and 12.5 m wide with a skew angle of 19 degrees. The canal aqueduct spans approximately 17.0 m and 17 m wide with a skew angle of 13 degrees. The distance between the walls of the bridge at road level is approximately 12.5m. There is a narrow light well or natural gap in between the two underpass structures allowing natural light to pass through and ventilation. It varies in width from approximately 630mm to 1250mm.

The figures below illustrate the plan (showing the two structures with the break with natural ventilation) and a 3D model view from the north of the underpass.



EIAR Figure 2-1 Railway and canal underbridge – Plan

EIAR Figure 2-2 Ashtown canal and railway underbridge – 3D image

The safety concerns raised by the public during the public consultation stages have been considered as part of the design of the underpasses. The following design measures have been included as detailed in Chapter 4 Description of the Proposed Development.

Section 4.8.6.5 Aesthetic Considerations "*every opportunity has been taken to make the environment of the underpass visually open and sympathetic to the local environment. Specific measures include the following:*

- *Providing enhanced vertical clearance where practicable through the structure.*
- *Widening and opening the southern approach to the underpass to the maximum degree practicable with a 1 in 3 batter provided east of the road approach. The degree to which visual openness can be achieved is curtailed by the close proximity of the Mill, Ashton House Lodge and the newer commercial development on the northern approach to the underpass."*

Section 4.8.6.7 Lighting- under, over, supply, fittings and fixtures: Public lighting will be required on the road and this will be carried through the underpass. Light fittings are proposed to be supported from the soffit of the underpass. It is also proposed that CCTV cameras be installed at the underbridge with oversight by Iarnród Éireann personnel.

EIAR Chapter 23 Human Health states that CCTV is included as part of the design at the proposed Ashtown underpass..., these measures will help monitor and deter anti-social behaviour and potential anti-social loitering in these areas. Additionally, to address further address concerns regarding anti-social behaviour a number of mitigation measures have been included in EIAR Chapter 7 Population and Chapter 23 Human Health, namely:

Section 7.6.2 in EIAR Chapter 7 includes mitigation measures associated with the population assessment for the operation phase include:

- Design and maintain landscaping and public realm infrastructure to complement other environmental mitigation in this EIAR that promotes safety for all users and create a sense of place.
- At detailed design stage the design team will ensure safety is integrated into the design and maintenance of public spaces with a focus on promoting a sense of safety and comfort for all users particularly the young, old and people with disabilities. The perspectives from trained professionals relating to designs affecting these user groups shall be included as part of the design team.
- The public realm designs shall encourage passive surveillance of public spaces and on transport infrastructure, e.g., through appropriate lighting, pleasant surroundings and design that discourages anti-social behaviour, graffiti, etc.

Section 23.6.2 in EIAR Chapter 23 includes mitigation measures associated with the human health assessment for the operation phase include:

Detailed design will integrate public safety design measures to reduce opportunities of anti-social behaviour and loitering at Spencer Dock Station, Connolly/ Preston Street, existing stations, Ashtown underpass and will utilise attractive design measures, lighting and public realm enhancements particularly as part the level crossing replacements works. As far as practicable these measures shall include:

a. The use of active and passive surveillance measures.
b. CIÉ/the design team shall consult with An Garda Síochána and the respective local authority at the detailed design stage.
c. Appropriate safety lighting on bridges and cul-de-sac at closed level crossings to ensure safety of all road users.

2.4.6 Preferred option would be the lowering of the railway line

Summary of issue raised

Submissions requesting an alternative option of lowering the railway line at Ashtown level crossing.

Response to issue raised

The Multi-Criteria Analysis (MCA) technique used to inform the option selection process that has been applied to determine the end to end preferred option of the proposed development has been informed by the Common Appraisal Framework (CAF) for Transport Projects and Programmes (Department of Transport Tourism and Sport, March 2016 and updated October 2020). The CAF Guidelines require projects to undergo a MCA under a common set of six CAF criteria referred to as parameters. These include the following:

- Economy - relates to impacts of a transport investment on economic growth and competitiveness are assessed under the economic impact and economic efficiency criteria;
- Integration - considers the extent to which the project being evaluated promotes integration of transport networks and is compatible with Government policies, including national spatial and planning policy;
- Environment - embraces a range of impacts, such as emissions to air, noise, and ecological and architectural impacts;
- Accessibility and Social Inclusion - embraces the notion that some priority should be given to benefits that accrue to those suffering from social deprivation, geographic isolation and mobility and sensory deprivation.
- Safety - concerned with the impact of the investment on the number of transport related accidents;
- Physical Activity - This relates to the health benefits derived from using different transport modes.

The assessment undertaken is of a comparative nature (options compared against each other). This is based on the CAF criteria and based on professional judgement in respect of the items to be qualitatively evaluated, and comprehensively assessed against the key relevant criteria in accordance with CAF Guidelines and good industry practice.

The assessment compared the relevant options, identifying and summarising the comparative merits and disadvantages of each alternative under all the applicable criteria and sub-criteria leading to a Preferred Option.

A comparative assessment was undertaken for each option developed, where in general, for each positively scored option there must be an opposing negatively scored option. Table 3-4 provides an overview of the comparative colour coded scale for assessing the criteria and sub-criterion. For illustrative purposes, this scale is colour coded with advantageous options graded to ‘dark green’ and disadvantaged options graded to ‘dark brown’. The table below illustrates the comparative colour coded scale used for assessing options.

Colour	Description
	Significant comparative advantage over all other options
	Some comparative advantage over all other options
	Comparable to all other options
	Some comparative disadvantage over all other options
	Significant comparative disadvantage over all other options

Comparative colour coded scale for assessing the CAF criteria and sub-criteria

Stakeholder engagement and consultation during the design process and development of alternatives was a key element to the delivery of DART+ West. The purpose of the consultations was to engage the public in the scheme delivery process, inform the public of the statutory process and likely timescales, seek public cooperation and understanding of the project and to capture local knowledge to inform the design, Environmental Impact Assessment (EIA) and Railway Order (RO) process. The main public participation stages in the project development are illustrated below:

- Non-statutory public consultation no.1 emerging preferred option (Autumn 2020).
- Non-statutory public consultation no.2 preferred option (Summer 2021).
- Local Ashtown public consultation on the revised preferred option (Spring, 2022).

After each stage of public consultation all options were re-evaluated in light of submissions received the public and stakeholders. In many instances the review lead to alternative options emerging as preferred from the selection process.

The Do Nothing scenario for level crossings considers leaving the current level crossings in place. The statistics associated with the Ashtown level crossing closures are presented below:

Table 3-8 AM Railway Stats for the Level Crossings – CSEA Systra Aug 2019

Level Crossing	No. Trains Passing	No. Closures	Total Closure Time	Average Time per Closure
Ashtown	13	6	00:36:42	00:06:07

Table 3-9 PM Railway Stats for the Level Crossings – CSEA Systra Aug 2019

Level Crossing	No. Trains Passing	No. Closures	Total Closure Time	Average Time per Closure
Ashtown	11	6	00:36:32	00:06:05

The Do Minimum scenario for level crossings considered the closure of the level crossing with no alternative access provided.

An extensive list of options was considered as part of the multi-criteria analysis for option selection at Ashtown. Additional options were added as feedback was received from the non-statutory public consultation process. The final list of options amounted to 13 in number in addition to the Do Nothing and the Do Minimum options. The analysis was carried out in two stages with less likely options pruned away as part of multi-criteria analysis stage 1 (MCA1) and a more refined comparison carried out for multi-criteria analysis stage 2 (MCA2).

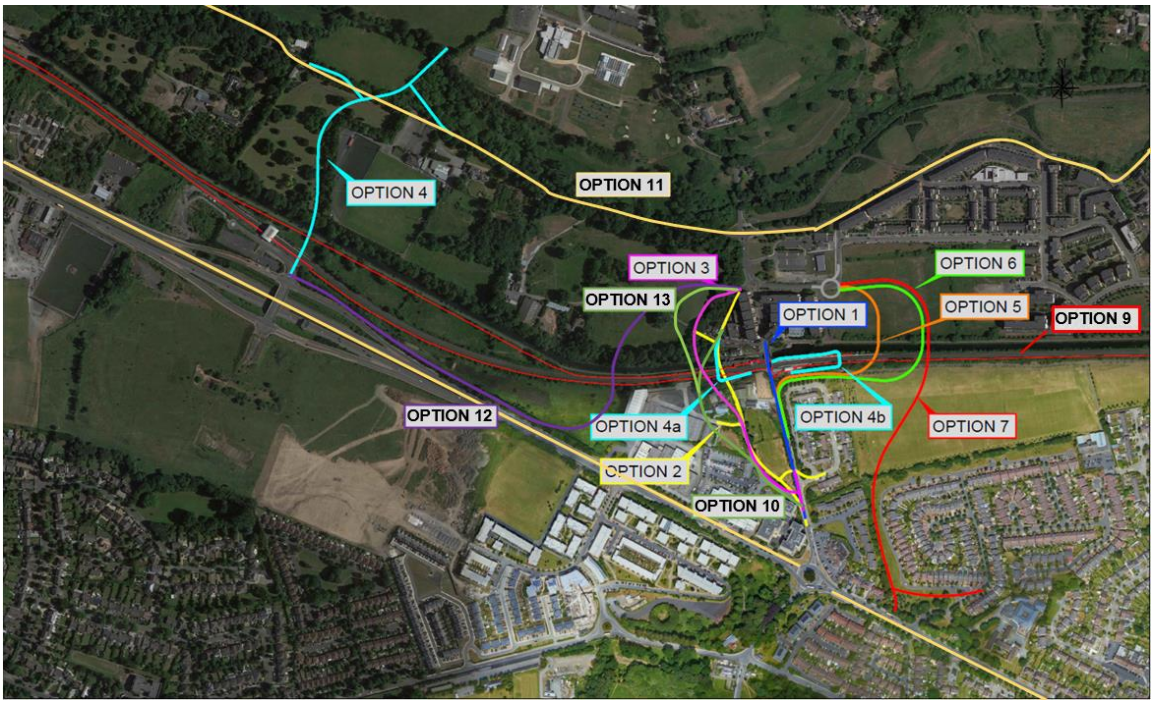
A full list of the 13 do Something Options is presented below:

Options
1 – Online Overbridge / Underbridge along Ashtown Road
2 – Underbridge on Mill Lane west of the level crossing with local road diversion

Options
3 – Overbridge on Mill Lane west of the level crossing with local road diversion
4 – Navan Parkway Station Link Road with Widening of River Road,
4a – Pedestrian Cycle underbridge west of level crossing
4b – Pedestrian Cycle overbridge east of level crossing
5 – Low Clearance Canal & Railway Underbridge east of the level crossing with local road diversion
6 – Overbridge east of the level crossing with local road diversion
7 – Overbridge east of level crossing with diversion along route to N3
8 – Pedestrian / Cycle Bridge only east of the level crossing
9 – Railway lowered between Pelletstown and Navan Parkway stations, canal channelised over associated length, train station lowered and new bridge at the location of the level crossing to support Ashtown Road.
10 – Underbridge West of Mill and the level crossing with local road diversion
11 – R102 River Road, R105 Ratoath Road and Nephin Road upgrades and Station Pedestrian Cycle Bridge construction.
12 – New roadway from Navan Parkway interchange with Overbridge crossing the railway and canal west of the level crossing.
13 – Overbridge West of Mill and the level crossing with local road diversion

Ashtown Level Crossing Options

The options are illustrated graphically below:



Ashtown Level Crossing Options considered

The outcome of the first stage of analysis MCA1 is presented in tabular form below (as presented in Chapter 3 Alternatives of the EIAR):

Table 3-15 Stage 1 MCA Matrix

Criteria	Do-Nothing	Do Min	Options													
			1	2	3	4+4a	4+4b	5	6	7	8	9	10	11	12	13
Economy																
Integration																
Environment																
Social Inclusion																
Safety																
Physical Activity																
Shortlisted for Stage 2 MCA	No	No	No	No	No	No	Yes	No	No	No	No	No	Yes	Yes	Yes	Yes

The option of lowering of the railway vertical alignment (Option 9) was analysed during the Ashtown level crossing replacement option selection process. As indicated in Chapter 3 Alternatives, Section 3.6.4.4.1 Ashtown Level Crossing, during the Option Assessment Stage 1, Option 9 had a significant disadvantage over other options due to its construction related impacts on sensitive noise and air receptors, and the potential impact to water quality of the Royal Canal pNHA. Works within the Royal Canal have the potential to impact fish and crayfish which will have to be taken from the canal prior to works. Demolition works could also disturb and displace fauna. Option 9 also had a significant disadvantage over other options in terms of economy due to the cost and difficulties associated with constructing the rail line below the level of the canal in such close proximity.

2.4.7 Cultural heritage not adequately mitigated

Summary of issue raised

Issues raised in relation to the impact on architectural heritage.

Response to issue raised

Every effort has been made to avoid direct impacts on architectural heritage, though it is not possible to avoid all impacts while achieving the objectives of the proposed development to electrify the railway line and to mitigate the impacts of closing the level crossings. Safety requirements necessitate the raising of parapets on bridges and clearance for the OHLE beneath bridges is also necessary to achieve this goal. In the latter case, it has proven possible to achieve the necessary clearance without any significant impact on many of the railway bridges, but this has not been possible in every case. Chapter 21 Architectural Heritage of the EIAR provides the measures adopted in order to avoid direct impacts (ensuring that best conservation practice has been adopted) and indicates those instances where this is not possible.

The principal impacts on architectural heritage at Ashtown relate to the demesne of Ashton House, the gate lodge at Ashton House, Ashtown Mill and the Royal Canal. There is also a positive impact on Longford Bridge through the removal of traffic from the bridge. There will be a profound effect on the gateway to Ashton House and part of the demesne wall due to the alignment of the proposed new road and a construction compound is to be located within the grounds. This will also have an impact on the setting of the gate lodge. This impact will be mitigated as far as is possible through the careful dismantling of the wall and gateway and their reconstruction in accordance with best conservation practice. The residual impact will, however, be very significant.

The cutting for the proposed underpass beneath the canal at Ashtown will pass close to the disused oil mill at Ashtown and will cut through the site of the former millpond, now backfilled and in use as a car park. This will have a very significant effect on the site of the millpond and the new road will also have a moderate effect on the setting of the rear of the mill.

The construction of the proposed road will necessitate the closure of a section of the Royal Canal at Ashtown with a very significant impact on the canal during construction. The canal will be fully reinstated resulting in a moderate negative impact.

In relation to the Ashtown Stables, the buildings on the property are not included in the Record of Protected Structures (RPS) nor in the National Inventory of Architectural Heritage (NIAH). The proposed development would take a sliver of land from the stables but would have no direct impact on the buildings. In relation to the wider Ashtown area, EIAR Chapter 21 Architectural Heritage recognises that there would be some significant negative impacts on architectural heritage in the Ashtown area and proposes mitigation as far as is practicable.

2.4.8 Increased traffic congestion

Summary of issue raised

- Concerns over the impact of the level crossing closures on traffic congestion in the Dublin 15 area.
- Concerns over the impact of the level crossing closures on the ability of emergency services to respond.

Response to issue raised

Traffic analysis has been undertaken using Blanchardstown Local Area Model. The Base year analysis was undertaken using 2019 traffic information, which is comparable with 2022 as traffic levels have recovered since the travel restrictions caused by pandemic.

Future year growth and traffic generation in Blanchardstown area are coming from National Transport Authority's (NTA) East Regional Model, for two future years 2028 and 2043. NTA's ERM is a multi-modal model which projects trip generation from areas that are currently undeveloped but for which plans exist to develop them in the future, therefore the approach to future traffic levels in the Blanchardstown area is holistic and futureproof and not limited to land that is currently developed.

As in all urban areas, congestion and bottlenecks in Blanchardstown arise from junctions. The majority of junctions around the rail line are inadequate for the volume of traffic using them and do not have adequate provision for vulnerable road users. From a level crossings perspective long closures of barriers cause long delays for vehicular traffic and queuing vehicles grid lock all junctions around them, which in turn also have an impact on emissions, noise and air quality in the local environment.

By eliminating level crossings, the congestion at adjoining junctions due to level crossing barrier closures is removed, significantly improving air quality around those areas. Furthermore, by eliminating level crossings, vehicular traffic is removed or significantly reduced from those roads, thereby creating safer routes for vulnerable road users.

The new designs for junctions impacted provide for increased capacity to cater for the re-distribution of traffic and improved facilities for pedestrians and cyclists, in particular around schools and train stations, which will significantly improve the quality of local journeys for local communities getting around for education, medical, employment and other purposes by all modes.

It is proposed that the existing level crossings will not be closed until capacity improvements on other routes is completed. Much of the capacity enhancement works can be constructed off-road while maintaining traffic on the roadway. This will facilitate phased capacity enhancement prior to the implementation of road closures. The Contractor will be required to design traffic management plans to meet the provisions of the Traffic Signs Manual. They will require the approval of the Road Authority and An Garda Siochána.

The Contractor will be required to ensure access for emergency vehicles at all times during construction. During the operational phase access by emergency services to the north and south of the rail will be maintained. Ambulance services from Connolly Hospital Blanchardstown will continue to be able to access emergencies to the area north of the rail via the N3 and R843 / Ongar Distributor Road and to the south of the rail via the N3 and Navan Road. Access for fire services from Blanchardstown Fire Station to the south of the rail line will be via the Diswellstown Road or the Castleknock Road. Capacity enhancements are proposed on the local network to facilitate diverted traffic and to ensure access.

2.4.9 Anti-social behaviour at level crossing replacements

Summary of issue raised

Anti-social behaviour at new level crossing replacement works at Ashtown, Coolmine, Porterstown and Clonsilla. A number of submissions have referred to these locations as cul-de-sacs, however the level crossing closures will continue to provide access and connectivity for pedestrian and cyclists.

Response to issue raised

Refer to Section 2.2.17 and 2.4.5 of this report.

2.4.10 Community severance due to level crossing closures

Summary of issue raised

The introduction of footbridges/the level crossing replacements will cause community severance.

Response to issue raised

Refer to Section 2.2.16 of this report. Furthermore, due to the 24/7 access that will be permitted by the replacement infrastructure across the level crossing locations there will be improved access for the community travelling by foot and bicycle which will not be restricted by the level crossing closures. Routes and journeys by vehicles will be changed which may result in lengthening of journeys resulting in perceived severance however access to all properties and communities will be maintained.

2.4.11 Impact on Royal Canal pNHA and Deep Sinking

Summary of issue raised

Concerns were raised in relation to the impact on the Royal Canal pNHA and in particular the Deep Sinking in Coolmine.

Response to issue raised

Refer to Section 2.2.6

2.4.12 Road Safety at Junctions

Summary of issue raised

Concerns were raised in relation to the road safety at the proposed junctions.

Response to issue raised

As set out in Chapter 4 Description of the Proposed Development of the EIAR, the proposed junctions will be designed as signalised protected junctions. The protected junction design is based on the recommendations included in the NTA Preliminary Design Guidance Booklet, September 2020. This guidance booklet was

developed for the BusConnects Programme and is being implemented across the proposed BusConnects Core Bus Corridors. This promotes the hierarchy of movement through the junctions with pedestrian and cyclist safety at the forefront.

A Road Safety Audit Stage 1 was undertaken on all major interactions with the existing road network. Only minor amendments were required to address any minor observations raised.

2.4.13 Cycle and Pedestrian facilities at Castleknock Bridge

Summary of issue raised

Requests for the provision of cycle and pedestrian facilities at Castleknock Bridge

Response to issue raised

As discussed with Fingal County Council the provision of cycle and pedestrian facilities on the bridge is outside the scope of works of the DART+ West project. The pedestrian and cyclist facilities on approach to the bridge have been designed to future proof any future Phoenix Park Cycle Route without prejudice its possible location and design.

The proposed structure is designed with the same current width, 9.15 m between parapets, like the protected Granard Bridge crossing the Royal Canal.

2.4.14 Flood risk in vicinity of proposed underpass and Martin Savage Park

Summary of issue raised

Concerns about how flood risk will be managed in the vicinity of the proposed Ashtown underpass. Concerns from residents in Martin Savage Park as to the likely effects of the proposed development on existing flood risk.

Response to issue raised

Flood risk at Ashtown was considered as part of the Scheme Flood Risk Assessment and Hydrology Chapter of the EIAR. As noted in table 10-4 of the EIAR Hydrology chapter, the proposed tunnel at Ashtown is outside the floodplain of the river Tolka. It should be noted that subsequent to the Tolka flooding of 1954 significant modifications have been made to the main channel floodplain and estuary to reduce flood risk throughout the catchment. Studies undertaken of the River Tolka as it is today, indicates that flooding (in a 1 in 1000 year event) from the Tolka is ~80m away from any works proposed for the DART+ West project. As such, fluvial flood risk is estimated to be low at this location.

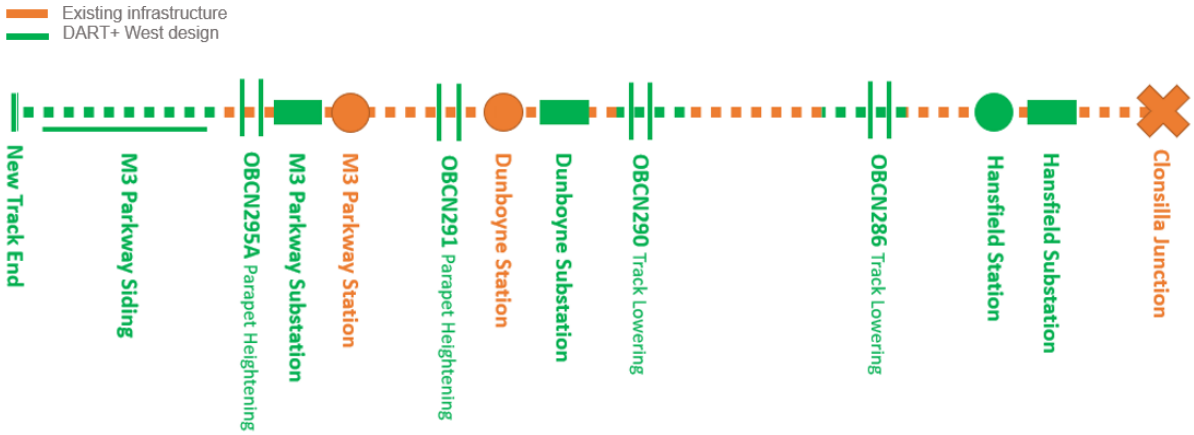
A new carriageway drainage network is to be provided and connected to the existing surface water drainage network. The preliminary design assessment of the existing and proposed surface water drainage networks has found that the proposed drainage will be able to discharge by gravity to the existing surface water drainage network to the north. The carriageway drainage network has been designed in accordance with the appropriate standards to remove excess water from the carriageway for a specified storm duration and prevent ponding or additional rainwater collecting at the bottom of Mill Lane. Following completion of the works, the carriageway and associated infrastructure will be handed over to the Local Authority for operation and maintenance.

Regarding the existing flooding at Martin Savage Park, information contained within the SSFRA was collated from various sources including the OPW's record of historic flood events and consultations with Dublin City Council drainage division. No indication of flooding at Martin Savage Park was presented in the consulted sources.

The flooding appears to be derived from deficiencies in the surface water drainage network within Martin Savage Park. Irish Rail will liaise with Dublin City Council during the detailed design stage to confirm cause of flooding and facilitate remedial measures by Dublin City Council.

2.5 Zone D Issues Raised

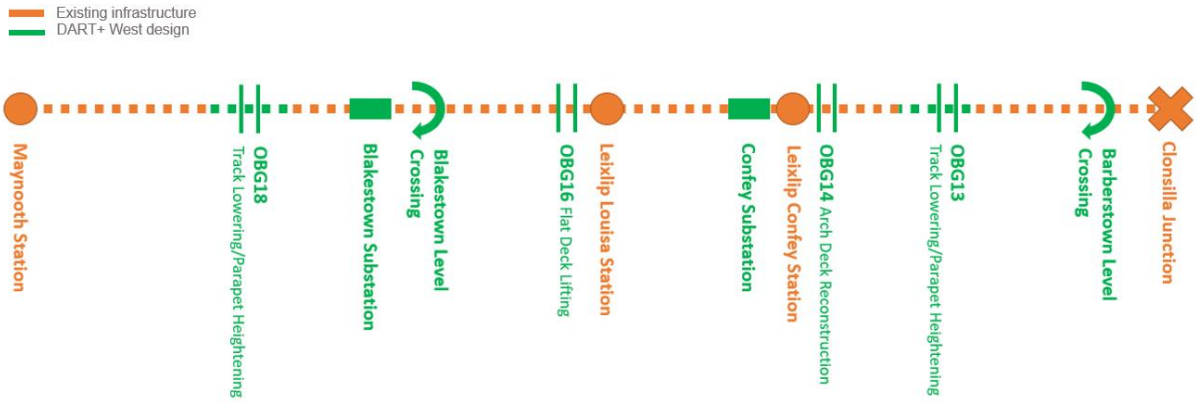
This section of the submission relates to issues raised in the part of Zone D in the EIAR which covers the extent of the scheme from Clonsilla through to North of Dunboyne.



No common issues raised along this zone of the scheme.

2.6 Zone E Issues Raised

This section of the submission relates to issues raised in the part of Zone E in the EIAR which covers the extent of the scheme from Westmanstown through to Maynooth Station.



2.6.1 Location and scale of substation at Leixlip Confey

Summary of issue raised

Issues pertaining to the location and scale of the proposed Leixlip Confey substation (including the loss of the greenspace and visual impact).

Response to issue raised

Two alternative locations were assessed using the Multi-Criteria Analysis (MCA) technique informed by the Common Appraisal Framework (CAF) for Transport Projects and Programmes (Department of Transport

Tourism and Sport, March 2016 and updated October 2020). The locations assessed are described in Chapter 3 of the EIAR (Section 3.6.1.5.9).

The preferred option for the location of the proposed substation at Public Consultation 2 was southwest of existing canal bridge (Leixlip Confey Bridge). However, as described in Section 3.6.1.5.9.1 of Chapter 3 of the EIAR, following further design development and discussions with ESB, the preferred option location had to change to accommodate ESB design requirements. Due to the unsuitability of this site, the preferred option was then identified as being south of the railway, to the East of the existing Leixlip Confey Station and OBG14 (Cope Bridge) on the amenity lands within the Glendale area. The size of all substations has been optimised to suit all electrical equipment needed to electrify the line. This includes e.g. transformers, a generator, UPS and batteries, staff facilities, etc. The design of the layout and access along with the landscaping proposals have been cognisant of the value of all green space to the residents of Glendale. Furthermore, following discussions with ESB a pathway around the substation building perimeter is required for substation access and maintenance. In other proposed substation locations, exceptions to reduce this pathway have been sought due to the limited area around the building.

Specific mitigation measures to reduce the visual impact of the substation have been included in EIAR Chapter 15 Landscape and Visual Amenity, Section 15.6.3, as described below:

16. At Leixlip Confey substation there will be establishment of new tree, shrub and hedgerow planting to the boundaries with the surrounding open space to aid in integrating the structures into the landscape, and compensate for trees removed during construction. A green roof will be provided to the substation building to reduce visual impacts on overlooking receptors on Cope Bridge.

In relation to the type of planting, Section 15.6.3 also states:

"1. Where existing trees, hedges, and/or plantings are removed, new planting will be provided in replacement of those removed. In general, unless not feasible or practicable, new plant species will match those removed. Replacement plant sizes will be those that are readily available and therefore, are unlikely to match the maturity of plants removed (especially in the case of trees or larger plants). However, being of the same or similar species, maturity similar to that of the existing can be achieved in time.

2. The proposed development will provide for the planting of new trees and shrubs both for mitigation of tree removal and for overall enhancement of the environment. Where proposals intrude on public space there shall be ample provision of bands of screening trees and other vegetation. Species selected shall be appropriate to the characteristics of the specific location."

Photomontage, View 32 in Volume 3B of the EIAR provides a graphically illustration of the proposed landscape planting proposed at this location.

2.6.2 Excessive bridge design at Cope Bridge and impacts on traffic and biodiversity

Summary of issue raised

Issues raised in relation to the proposed Cope Bridge design include:

1. Excessive bridge design (including cycle lane design)
2. Impact on traffic congestion as a result of the two-way traffic
3. Loss of biodiversity

Response to issues raised

1. Excessive bridge design (including cycle lane design):

   Deck reconstruction of OBG14 (Cope Bridge) is proposed, as well as parapet heightening. Two new pedestrian and cycle bridges are proposed alongside the existing historic bridge to allow two lane traffic to flow over the bridge. The addition of the new pedestrian and cycle bridges has been proposed

to meet requirements of Kildare County Council (KCC), to accommodate future development plans for the area, and to take the opportunity to benefit the wider community by removing the existing traffic restrictions on the bridge whilst also limiting the impacts on the heritage structure itself. Due to the heritage value of Cope Bridge, the structural design work has been carried out working closely with the design architects and conservation architects to ensure that there is an agreed approach from both a structural and heritage perspective.

The requirement for cycle/pedestrian pathways on either side of Captain's Hill Road (R148) and Cope Bridge was requested by Kildare County Council. The proposed footway and cycle bridges will be constructed to limit the impact on the existing hedgerows in the surrounding area.

The footway/cycle lane has been designed adjacent to the road to minimise impacts on the greenspace. To separate the footway/cycle lane from the road would entail the need to occupy a greater area of the green, leaving a space between the road and the pathway/cycle lane that would be a 'dead space'. Provisions for a cycleway have been provided, however the extension of these beyond what is set out in this Draft Railway Order application are not currently within the scope of the DART+ West project.

2. Impact of two-way traffic on the bridge and contradiction of Leixlip LAP future plans and objectives:

   In relation to the proposed design at Cope bridge, it is proposed to widen the road to accommodate two lanes of traffic without the need to provide a shuttle system (re-instating the two-way system on the bridge). The proposal will not increase traffic at this location. The design is not considered to undermine the Leixlip LAP and the design for two way traffic was requested by and developed in consultation with Kildare County Council (KCC). The preliminary design guide for the future development of lands at Confey – Confey Urban Design Framework includes for an upgraded bridge crossing, which would be provided through the LAP even if the DART+ West would not go ahead. Including the widening of this bridge within the DART+ West proposal will limit the disruptions and inconveniences for all local residents. The Government's intention to reduce car usage is being realised by providing the improvements to public transport, which DART+ West is part of. Leixlip LAP, section 2.1.6.4 (same as quoted in the submissions) states the following in relation to the R149: "*The proposed new street will be designed in a manner which appears narrow through the use of surface materials, islands, landscaping and street furniture. In this regard, the streets within the framework lands area will have adequate vehicular capacity but should have a pedestrian friendly urban character.*"

3. Loss of biodiversity:

   The impact of the bridge deck reconstruction at Leixlip Confey will result in the loss of 2 no. semi mature trees, several immature trees and a small area of scrub along the railway line. This is not considered to be significant in terms of biodiversity. The proposed development includes widespread planting in suitable areas, as well as habitat enhancements. Details are presented in the EIAR Biodiversity Chapter 8, Section 8.9.

2.6.3 Construction Stage access across Cope Bridge

Summary of issue raised

Concerns raised in relation to access across Cope Bridge during the construction phase.

Response to issue raised

Chapter 7 Population of the EIAR has assessed the impact of the bridge modification works on journey characteristics and journey amenity. As described under section 7.5.3.6.2:

Modification works for OBG14 Cope Bridge will require the complete closure of the bridge to vehicular and non-vehicular users for 15 weeks and a partial road closure (one lane open) for 19 weeks. Significant diversions for vehicular traffic will be in place for those travelling from the north wishing to enter Leixlip and

they will be redirected to the Collins Bridge along L3005, connecting to Leixlip Road through Lucan. The potential impact on journey characteristics and journey amenity for vehicular users is negative, significant, and temporary. Pedestrian and cyclist access over the bridge will be completely closed for 13 weeks having negative, profound and temporary effects on pedestrians and cyclists.

During the construction phase, the following mitigation measures have been included under Section 7.6.1: A Construction Traffic Management Plan (CTMP) will be required to be developed and implemented *by the Contractor(s) to address all modes of transport during the construction stage and will be agreed with Iarnród Éireann and the respective local authority prior to the commencement of the construction phase.*

a) The CTMP will be required to maximise the safety of the workforce and the public and to minimise traffic delays, disruption and maintain access to properties

b) The CTMP will also address temporary disruption to traffic signals, footpath access and the management of pedestrian crossing points, temporary disruption to rail traffic. It will also address the provision of appropriate temporary signage to direct road users to alternative car parking arrangements.

c) The CTMP will be required to minimise disruption to economic amenities, Royal Canal/marine users, and residential properties and will ensure access is maintained along haulage routes and in vicinity of the construction site(s) for vehicles, pedestrians, cyclists, and economic operators at all times.

d) A Mobility Management Plan will be developed by the Contractor(s) as part of the CTMP and will address all modes of transport and travel required to deliver the project during the construction phase. This will include details regarding construction workers travelling to site, car-parking, haulage routes and construction compounds.

Additionally, "*10. Pedestrian access will be maintained during the construction works associated with OBG14 Cope Bridge (including the bridge deck modification works).*"

2.6.4 Impact of the construction compound location on greenspace at Glendale

Summary of issue raised

Issues raised in relation to the impact of the construction compound on the greenspace at Glendale (including traffic management).

Response to issue raised

Leixlip Confey construction compound integrates a structures compound (comprising two spaces), which will support the OBG14 (Cope bridge) reconstruction works; and a substation compound, to serve the building of the proposed Leixlip Confey substation. Refer to Drawing MAY-MDC-GEN-ROUT-DRZ-0001-D in Volume 3A of the EIAR for more details on the proposal. The compound will be temporary and will be in place for the duration of the bridge and substation works.

EIAR Chapter 15 Landscape and Visual Amenity, has assessed the likely townscape/streetscape and visual effects of the construction phase on the open space at Glendale as being very significant, negative and short term. Section 15.6.2 provides the mitigation measures proposed during the construction phase. All construction works will be managed by the implementation of a Construction Environmental Management Plan (CEMP) as provided in Appendix A5.1 in Volume 4 of the EIAR.

In terms of the impact on biodiversity, the habitats recorded at the greenspace in Glendale is detailed in Table 8-13 of Chapter 8 Biodiversity in the EIAR. The area of the compound is recorded as follows: "*This is an area of amenity grassland with some scattered trees located in a residential estate*". These habitats are not significant for biodiversity and the loss of habitat will be limited to the footprint of the compound. Furthermore, Section 11.2 of the Leixlip LAP lists the Local Biodiversity Areas in the LAP area. These include designated sites including the Royal Canal pNHA, and the agricultural grassland and grasslands surround various

industrial sites in Leixlip. The habitat present at the location of the substation and compound in Glendale is amenity grassland, with a small number of trees on the northern boundary (not significant for biodiversity).

In terms of the noise impacts, Section 14.5.3.5.1 of Chapter 14 Noise and Vibration of the EIAR addresses the noise impact of temporary construction compounds and also the impact of construction traffic. Section 14.6.1 in EIAR Chapter 14 details the noise mitigation measures that will be implemented to minimise the impact of temporary compounds to stay within the noise thresholds.

A designated community liaison / noise liaison is to be appointed by the Contractor for the duration of the construction works to engage the occupants of neighbouring properties and notify them of any works forecast to generate appreciable levels of noise, explaining the nature and duration of the works. All affected sensitive locations are to be notified of planned works in advance of the works progressing. The notification should include a description of the works, the expected duration and details of how to contact the Contractor to log complaints.

Iarnród Éireann acknowledges that the compound will be in close proximity to existing residential development, therefore it is proposed to take mitigation measures to minimise the impact on local communities, such as timing of the delivery of construction materials to the site to be outside of commute/school rush hours. The appointed Contractor's Construction Traffic Management Plan (CTMP) will include measures for manging traffic accessing and egressing the construction compound. The Contractor's CTMP will include measures for appropriate signage and communication to direct construction traffic to appropriate routes. The appointed contractor will monitor the haulage routes for dirt and debris generated by the construction traffic and take appropriate action, such as road sweeping.

2.6.5 Objections to closing of the level crossing at Blakestown

Summary of issue raised

Respondents raised concerns over the closure of the level crossing at Blakestown with no alternative access being provided at the level crossing.

Response to issue raised

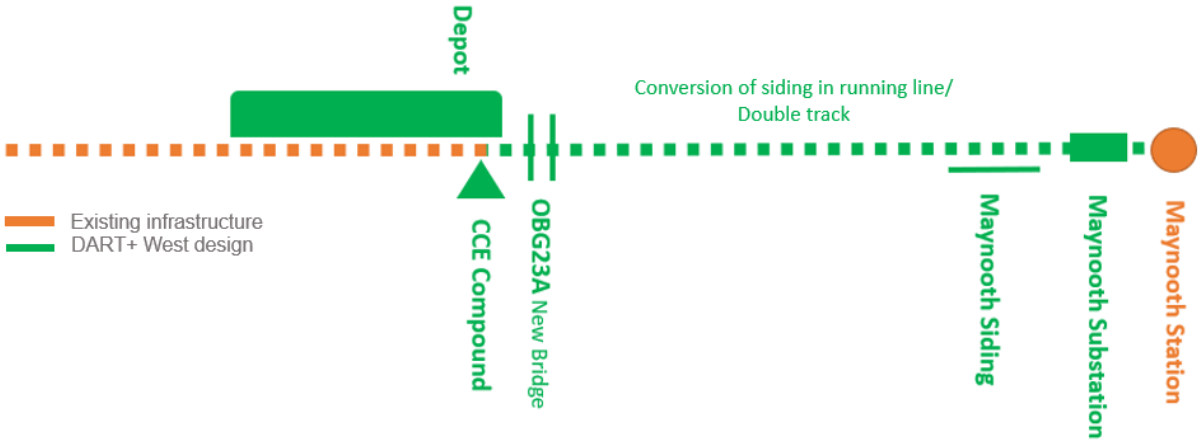
As outlined in Section 2.2.5 of this report, a number of options were developed and examined in respect of the treatment of each level crossing.

Due to the existing low levels of use by both vehicles and active modes the proposed development will permanently close the existing Blakestown level crossing. The project has determined that it does not require the provision of alternative infrastructure at this location. There is existing vehicular access available to properties that will be severed via the R449 and R418 Regional Roads. Access will be maintained to the future Collinstown employment lands via the R449 Regional Road which will provide direct access. Further access improvements are likely to be proposed as part of the Masterplan (once it is prepared).

Chapter 23 of the EIAR states that Chapter 6 Traffic and Transportation assessment found that the level crossing does not indicate sufficient demand for replacement infrastructure. However, the loss of the access will result in severance and loss of access to those who walk or cycle and particularly those who access the Royal Canal towpath at this location. These effects are likely to result in a negative, moderate, long-term impact for those users.

2.7 Zone F issues raised

This section of the submission relates to issues raised in the part of Zone F in the EIAR which covers the extent of the scheme from Maynooth Station through to east of Kilcock.



2.7.1 Site selection process

Summary of issue raised

Submissions raised concerns about the transparency and robustness of the site selection process for the depot. They were not convinced that Maynooth West should be ranked ahead of Hazelhatch West in the selection process, suggesting there were only two reasons Maynooth West was placed ahead of Hazelhatch West and that those reasons were weighted too heavily. They suggested that the environment and accessibility & social Inclusion criteria did not feature in the assessment. Observers questioned the viability of timely and synchronous construction of the depot while routing construction traffic through either Kilcock or Maynooth while referring to the current HGV ban through the centre of Maynooth.

An objector noted that the options assessment did not address the issue of storm water drainage. The objector also suggested that an option involving supporting the whole of the depot on a suspended platform was feasible and economical and had not been considered in the options assessment.

Response to issue raised

The site selection process is described in EIAR Volume 2 Chapter 3 Alternatives and in Volume 4 Appendix A3.4 which provides more detailed consideration of the selection process. It also includes detailed consideration on why the location at Maynooth West was selected over other options. A proposal to support the whole of the depot on an elevated structure is not considered economical or practicable.

The decision to choose one option over others is based on a balanced assessment across the full spectrum of the Common Appraisal Framework (CAF) criteria. It is not the case that access or project delivery were deciding factors. When comparing Maynooth West and Hazelhatch West, the following observations are made:

- *Maynooth West: The delivery of DART+ West exhibits the strongest EMU passenger growth characteristics of projects on the DART+ Programme and consequently the best modal shift in support of project objectives. There is advantage to delivery of the DART+ West project first. A depot on the Maynooth line, consequently, best suits the effective delivery of the proposed train service specification.*
- *Hazelhatch West: The Kildare Line exhibits weaker EMU passenger growth characteristics than the Maynooth Line.*
- Maynooth West: Based on the current train service specification, electrification of the Maynooth Line would displace 9 ICR/DMU trains which will be cascaded to other non-electrified lines.
- Hazelhatch West: Based on the current train service specification, electrification of the Kildare Line would displace 4 ICR/DMU trains which will be cascaded to other non-electrified lines.
- Maynooth West: The railway fronting the site is straight on plan for a length of 2.5km. The site configuration is better suited to installation of the depot with associated stabling than is Option 4 Hazelhatch West.

- Hazelhatch West: The railway fronting the site is approximately 1.7km long. The site configuration is less well suited to installation of the depot with associated stabling than is Option 2 Maynooth West.
- Maynooth West: The R148 runs parallel to the railway, north of the proposed site and the M4 is located to the south of the site. The site is well located for staff access from Maynooth or Kilcock;
- Hazelhatch West: Access to the site is more constrained than for the Maynooth West site, being located remote from both the M4 and the M7 motorways;
- Maynooth West: There are no houses within the site of the proposed depot.
- Hazelhatch West: There are three houses within the site of the proposed depot. These will constrain the layout of a proposed facility, or some may need to be acquired.

Environmental concerns were given appropriate consideration in each of the supporting studies. The 2021 study included a review of the earlier studies and further comparative examination of the environmental characteristics of each option to account for the project application of the CAF criteria in the multi-criteria analysis (MCA). They received equal rating to Economy, Integration, Physical Activity, Safety and Accessibility & Social Inclusion. This is set out in EIAR Volume 4 Appendix A3.4 – Depot Site Selection Supplementary Report.

Accessibility and Social Inclusion characteristics of the options were considered equivalent. While the 2019 study discounted them from the MCA, the subsequent review reinstated them in the assessment. Refer to EIAR Volume 4 Appendix A3.4 – Depot Site Selection Supplementary Report.

The traffic impact assessment produced for the scheme assessed the impact of traffic associated with the construction of the proposed depot. It reports that *"significant changes in traffic flows during construction are expected to occur on the links in the immediate vicinity of the new depot west of Maynooth. These are however short-term changes and represent the greatest change which would occur over the construction of the proposed development, as peak construction numbers for each location was assumed to occur simultaneously. It is unlikely that the peak construction at each site would occur at the same time and therefore the impact across the network would, in reality be less than that set out in Table A-3 in Appendix A6.1 in Volume 4 of this EIAR. The impact of construction vehicles on the network does represent likely short term, negative and moderate effects which would be mitigated and for the duration of construction before returning to normal levels once the construction is complete."* HGV access for construction of the depot and associated infrastructure will not be through the centre of Maynooth.

Mitigation measures including traffic management, a CTMP available in Appendix A6.3 Construction Traffic Management Plan in Volume 4 of this EIAR, and a Mobility Management Plan, including detail on how construction workers will be managed, will be implemented to reduce the impact of the construction phase on road users over the course of the construction period. We are satisfied that the routing of construction traffic associated with the depot is viable for the timely and synchronous construction of the depot.

Surface water drainage characteristics are not considered pertinent to the site selection process as the works would implement SuDS principles in design and consequently the impacts on adjacent lands would be equally mitigated. All sites would be equivalent in this regard.

We are satisfied that the site selection process for the EMU depot is robust and transparent.

2.7.2 Impacts on Flood risk in Vicinity of depot

Summary of issue raised

Submissions raised concerns about the potential impacts to existing flood risk, the appropriateness of the proposed flood risk management measures and the effects the proposed measures would have on groundwater.

Response to issue raised

The site-specific flood risk assessment (SSFRA) for the scheme has considered flood risk within the subject area including the lands between Jackson's Bridge and Kilcock. The assessment has concluded that flooding can be appropriately managed at these locations.

Furthermore, the level for level compensatory storage areas have been designed to control flood waters in extreme weather events up to the 1 in 1000 year event (+ climate change). It should be noted that the depth of excavation required varies and that the excavation of higher areas will not result in a higher flood level at that location. The compensatory storage shall ensure that there is no increased risk of flooding upstream or downstream outside of the lands acquired, in all events up to and including the 1 in 1000 year (+ climate change).

Groundwater levels are being continuously logged. Groundwater monitoring to continue to construction. The design currently assumes that there will be some groundwater ingress into the compensation area and will incorporate measures to shed this water across the ground surface into the watercourse. Groundwater ingress will therefore be dealt with in a similar way to rainfall falling within the flood compensation area.

2.7.3 Impacts on Ballycurraghan Right of Way

Summary of issue raised

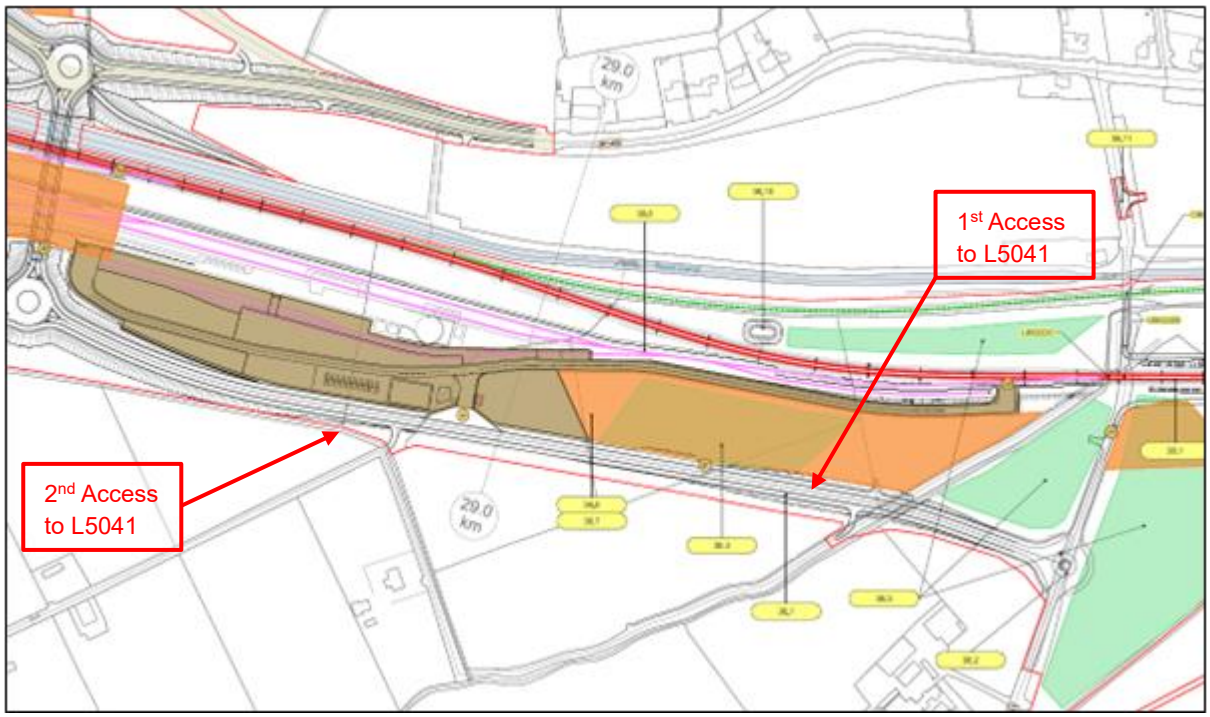
Submissions question that CIÉ are ignoring their rights of way that have been in existence for years and to alter private road layouts without consultation or agreement is unacceptable, while the introduction of an additional entrance onto a private lane from the new link L5041 will have on the security of their farms and properties.

Response to issue raised

No Right of Way is proposed to be acquired at this location while access to the L5041 is to be maintained, albeit through modifications to the local road network. The existing registered Right of Way does not currently extend to the L5041 based on information from the PRAI obtained in advance of the publication of the Railway Order or the post publication (29/03/2023) as shown in the figure below.

Extent of Right of Way at Ballycurraghan (Source: PRAI Website)

Two accesses are proposed connecting the lane to the proposed realigned L5041. The first and primary access replacing the current access to the L5041 is to the East with a second access on to the lane, as shown in the figure below, to the West.



Access to Lane at Ballycurraghan

This access is being provided in addition to the access onto the L5041 east of here to reduce the journey length for users wishing to access the R148 once Jackson's Bridge is closed to vehicular traffic. The newly constructed accesses and realigned L5041 will be maintained by the Kildare County Council.

2.7.4 Surplus Land Acquisition

Summary of issue raised

The landowners object to the acquisition of lands which appear to be surplus to the scheme requirements.

Response to issue raised

The land is required for the construction of the depot and elements forming it including associated emergency access and access roads, internal access roads, test track, flood compensation area, substation, parking, earthworks, drainage, utility diversions and screen planting and landscaping. All of these works are necessary components for the proposed depot and project.

2.7.5 Drainage Details

Summary of issue raised

Inadequate drainage details have been provided. There is a risk of the retained lands being negatively impacted by the development. A large attenuation area is being constructed on the land to be acquired. While some Sustainable Drainage Systems (SuDS) are shown in the drawing, the SuDS design details are omitted. The impermeable surfaces of the stabling, platforms, maintenance and other buildings, will reduce infiltration over these areas to zero, so increasing stormwater runoff rates and volumes. None of the available SuDS techniques to allow percolation to the ground and to attenuate the runoff from the impervious surfaces have been employed.

Response to issue raised

This detail can be seen in in Section 4.11.12.7 Depot drainage of EIAR Chapter 4 Description of the Proposed Development.

This section assesses the use of the following SuDS elements proposed for the depot: filter strips, pervious pavements and attenuation ponds. More information about these systems can be seen in the standards mentioned: Building Regulations, BS EN 752 and EN 12056, and the CIRIA SuDS Manual. The specific detail of these systems will be finalized during Detail Design stage. Drainage calculations according to the standards consider the permeability and infiltration rates of each of the surfaces (ballast, green areas and impermeable areas such as buildings) at the depot. Most of the time the ground will be saturated and the groundwater levels will be high so the entire drainage system cannot rely on percolation. The attenuation ponds will retain the runoff rate to equate the current one and abate the runoff to the stream during flood events.

The Site-Specific-Flood-Risk-Assessment considered the potential effects on flooding and has proposed mitigation measures including compensatory storage areas. In the proposed development, the drainage flows towards the stream and the depot embankment will be intercepted by the southern perimeter ditch without increasing the flooding impact to the adjacent properties.

Depot Drainage Attenuation

The proposed attenuation features have been sized to maintain existing discharge conditions from the site up to the 1 in 100 year (plus climate change factor) storm event. The proposed surface water drainage network has also incorporated measures in the form of SuDS (Sustainable Drainages Systems) and pollutant interceptors to restrict any potential pollutants from leaving the site during operation. Attenuation ponds have been arranged to meet the flow rate requirements and to attenuate the peak flows

2.7.6 Noise

Summary of issue raised

Inadequate information has been provided regarding the mitigation measures that are being proposed to control noise pollution. This is an important matter as a train depot is being constructed.

Response to issue raised

The EIAR Chapter 14 Noise and Vibration, section “14.5.3 Potential Construction Impacts” assesses the construction phase impact of the project. The majority of the construction work associated with the depot is remote from sensitive locations such as dwellings, and therefore noise impacts are minimised. However, some activity is identified as having a potentially significant impact for short periods of time. Mitigation measures are outlined in Section 14.6.1 to reduce these impacts.

The EIAR Chapter 14 Noise and Vibration, section “14.5.4.6.8 Depot Operation Noise Impacts” assesses the noise impact as a result of the depot operation. This assessment includes maintenance, cleaning and stabling activities as well as fixed plant serving the depot and movement of EMU’s within the depot area. The assessment has concluded that the noise levels beyond the boundary of the depot are not significant and therefore do not require mitigation.

2.7.7 Screening and Planting

Summary of issue raised

Lack of / inadequate screening and planting being proposed.

Response to issue raised

The boundary treatment will be a combination of palisade fencing and timber post and rail fencing along the boundary. In addition, the EIAR Volume 2 Chapter 15 Landscape and Visual Amenity identifies a number of general and specific mitigation measures in relation to planting and screening within Zone F, which includes the following:

- *Where existing trees, hedges, and/or plantings are removed, new planting will be provided in replacement of those removed. In general, unless not feasible or practicable, new plant species will match those removed. Replacement plant sizes will be those that are readily available and therefore, are unlikely to match the maturity of plants removed (especially in the case of trees or larger plants). However, being of the same or similar species, maturity similar to that of the existing can be achieved in time.*
- *The proposed development will provide for the planting of new trees and shrubs both for mitigation of tree removal and for overall enhancement of the environment. Where proposals intrude on public space there shall be ample provision of bands of screening trees and other vegetation. Species selected shall be appropriate to the characteristics of the specific location.*
- *There will be establishment of new native tree, shrub and hedgerow planting to the boundaries of the proposed double track connecting to the depot to aid in screening of the tracks, aid in integration into the surrounding landscape, reconnect severed hedgerows and replace hedgerows removed during construction.*
- *There will be establishment of new native tree, shrub and hedgerow planting to the boundaries of the proposed depot / CCE Compound to aid in screening of the operational areas, buildings and fencing, as well as aiding integration into the surrounding landscape, reconnect severed hedgerows and compensate for loss of hedgerows during construction. A 4m band of tree / shrub planting is proposed as standard to all the boundaries, with the exception of overhead powerline wayleaves and access points. Wider bands of planting will be provided to the northern boundary of the depot where possible to provide maximum screening from the adjacent canal. Tree planting, including fastigiate trees with a narrow habit, are proposed within the compound area to further screen the proposals.*
- *There will be hedgerows proposed to the perimeters of the attenuation ponds, adjacent to the depot, to aid in integration into the surrounding landscape, reconnect severed hedgerows and replace hedgerows removed during construction.*

2.7.8 Boundary Treatment

Summary of issue raised

Inadequate detail has been provided regarding the type of boundary to be provided.

Response to issue raised

The boundary treatment will be a combination of palisade fencing and timber post and rail fencing along the boundary.

In addition, the EIAR Volume 2 Chapter 15 Landscape and Visual Amenity proposes a 4m band of tree/shrub planting to the boundaries of the proposed depot/ CCE compound to aid screening of the operational areas, buildings and fencing.

The boundary treatment will be a combination of palisade fencing and timber post and rail fencing along the boundary. In addition, the EIAR Volume 2 Chapter 15 Landscape and Visual Amenity proposes a 4m band of tree/shrub planting to the boundaries of the proposed depot and CCE compound to aid screening of the operational areas, buildings and fencing.

2.7.9 Lighting

Summary of issue raised

Insufficient detail has been provided regarding the artificial lighting proposals of the project.

Response to issue raised.

Information given in Section 4.11.12.10 External lighting of the EIAR, this section highlights all the technical information related to external lighting of the depot (control measures, illuminance, uniformity, etc.). In addition, Volume 3B Photomontages, Part 5 View Locations 35 to 46, sheet 90 of 104 is created for night-time at the depot area.

Moreover, IÉ will liaise with the relevant KCC Departments during detailed design and preparation of construction documents in terms of the lighting design. A lighting monitoring report shall be provided to the planning authority after 6 months of operation.

2.7.10 Impacts of noise and light from the proposed depot on horses

Summary of issue raised

Concerns raised that the environmental noise and lights associated with construction and operational phases of the depot will create serious noise and disruption to their horses and have a huge impact on breeding mares and foals. Lights from construction equipment and flashing lights from cars will have beams directed at the paddocks, and during operation, trains stopping and starting will give rise to flashes which is directly opposite the paddocks.

Response to issue raised

The building of the proposed rail development has the potential to create a significant amount of abnormal noise and visual stimuli that may be quite intrusive to horses in the immediate vicinity. The horses currently resident in Ballycurraghan are currently exposed to rail traffic, approximately 200 metres from their northern boundaries and constant motorway traffic, day and night from the M4 motorway, in some instances, no more than 100 metres from their southern boundaries.

Horses are normally very adaptive to environmental changes and very quickly become receptive to the aural and visual stimuli associated with normal rail and traffic flow. Given the amount of pre-existing natural screening through mature treeline and hedgerows on these lands and the proposed additional screening proposed on the southern boundaries of the depot, there should be adequate screening to reduce the stimuli, both auditory and visual, associated with the proposed development.

2.7.11 Noise, light and security concerns about proposed depot

Summary of issue raised

Landowner states that construction phase will create serious noise and disruption to their animals, family and property. In relation to operational noise, states that the depot will cause noise and disruption to their breeding farm on a daily basis and that tuition and teaching lessons will not be possible due to continuous noise and heavy plant operating.

Landowner is concerned about the introduction of an additional entrance onto a private lane from the new link L5041 and the impact it will have on the security of their property. It also states that privacy and security of Ballycurraghan will be compromised while DART+ West will have 24-hour security and CCTV cameras.

Response to issue raised

Lighting is dealt in section 2.7.9.

Several submissions raise concern of construction noise impacts during the construction of the depot to the west of Maynooth. Section 14.5.3.5.6 of the EIAR assesses the construction phase impact of the project where the depot is situated. The work site associated with the depot is located a significant distance from nearby residential buildings and as a result the noise and vibration impacts are not expected to be significant. Table 14 30 describes the potential noise and vibration impact for each stage of work without any mitigation in place. The majority of the construction work associated with the depot is not expected to generate sudden loud noises and will instead be characterised by engine noise from construction machinery. However, some activity is identified as having a potentially significant impact for short periods of time. Mitigation measures are outlined in Section 14.6.1 to reduce these impacts. Depot construction hours will be during daytime hours for all works not adjacent to the existing rail track.

Any security cameras will focus on the depot facilities which will be separated from private lands by palisade fencing and a dense regime of landscape planting around the site perimeter.

2.7.12 Impacts on Habitat and Biodiversity

Section 8.5.1 of the EIAR Biodiversity Chapter describes the habitats present. Within the description of 'Treelines' the section states: "*The most significant treelines within the proposed development are at the proposed depot and consist of 400 m of mature Oak and Ash trees that are more than 15 m tall".*

A detailed description of the habitats in the area of the proposed depot at Ballycurraghan are described in detail in the EIAR Biodiversity Chapter, Section 8.8.2.1: *"The depot will result in the loss of 32.6 hectares of mainly mixed agricultural land including approximately 800 m of hedgerows and 1000 m of mature treelines. A 400 m section of the Ballycaghan Stream will also be diverted*".

Negative impacts of the proposed development are presented in the EIAR Biodiversity Chapter, Section 8.8. Mitigation measures are presented in Section 8.9 and the residual impacts of the proposed development are presented in Section 8.10. The residual effects are the effects of the proposed development after mitigation. In some cases, such as the loss of mature trees such as the oaks at the depot lands, the negative impact cannot be mitigated. The residual impacts on the habitats along the 'Railway Ecological Corridor' is described as follows: "*The loss of habitat along the railway corridor is considered to constitute a short-term and permanent moderate negative impact at the local level*". The reflects the temporary habitat loss for site compounds and permanent habitat loss for the project itself, including the depot. Residual Impacts on the other Key Ecological Receptors including Otter, Badger, Birds and Bats is presented in Section 8.10.

2.7.13 Construction Impacts Dust and Water Pollution

Summary of issue raised

Concerned that the construction of the depot adjacent to their paddock will give rise to pollution of their lands and air from air borne dust.

Response to issue raised

Iarnród Éireann have a specification for track ballast document, CCE-TRK-SPN-007 and all ballast must also meet the governing standard I.S. EN 13450: 2003 Aggregates for Railway Ballast. Due to the grading of the ballast required in these standards, the risk of dust is extremely low during installation and operation. Rail ballast aggregate is typically 30-50mm aggregate, it is not in direct contact with trains using the rail line (as this would be a potential safety risk) but provides support the rail track load and water drainage.

Dust is characterised as encompassing particulate matter with a particle size of between 1 and 75 microns (1-75µm) or 0.001 to 0.075mm, which is a fraction of the ballast size range. Two tests must be performed on

ballast to meet the standards set by Iarnród Éireann which ensure the ballast is resistant to breakdown, a potential source of dust, during installation and operation. The first test is the Micro-Deval Attrition Test, used to determine the resistance to wear of the ballast and the second test is the Los Angeles Test which is used to determine the resistance to fragmentation of the ballast.

With respect to dust nuisance during installation, a sensitivity assessment was completed in Section 12.4.3 of the EIAR and an assessment of the potential dust generation due to construction has been completed in Section 12.5.1.4 of the EIAR. Guidance for this assessment was taken from the Institute of Air Quality Management (IAQM). Guidance on the Assessment of Dust from Demolition and Construction V1.1. In addition to the sensitivity assessment and impact assessment in the main body of the EIAR, two appendices have been prepared with respect to dust, one to review activities which have the potential to generate dust (Appendix 12.2. Potential Dust Generating Activities) and a second to document the mitigation measures that are to be applied across the project to minimise and suppress dust generation (Appendix 12.4. Dust Mitigation). This assessment concluded that when the dust minimisation measures detailed in the mitigation section of this chapter are implemented, fugitive emissions of dust from the site are not predicted to be significant and pose no nuisance, human health or ecological risk to nearby receptors. Thus, there will be no residual construction phase dust impacts.

Irish Rail use ballast on all rail lines and therefore have experience in ensuring nuisance dust is suppressed during its installation. In addition, dust emissions are naturally reduced where rainfall has occurred due to the cohesion created between dust particles and water and the removal of suspended dust from the air. It is typical to assume no dust is generated under “wet day” conditions where rainfall greater than 0.2mm has fallen. Casement Aerodrome had on average 211 days annual over a 30-year averaging period (1981-2010).

Summary of issue raised

Concerned that the construction of the depot adjacent to their paddock will give rise to pollution of their lands and air from air borne dust.

Response to issue raised

Wastewater from the construction site will have to be treated and it’s not clear from the drawings how this will be achieved.

Erosion control and sediment management measures have been incorporated within the Construction Environmental Management Plan for the scheme. The measures proposed for the scheme were subsequently assessed as part for the Environmental Impact Assessment which included impacts to Water and Air quality. When the proposed measures were considered the resultant impacts to water and air quality during construction were seen to be minor.

2.7.14 The provision of a second train station at Maynooth

Summary of issue raised

Requests for the DART+ West to provide a second train station for Maynooth and for the project not to impact it’s future delivery.

Response to issue raised

The Pre-draft Public Consultation Issues Paper to inform the preparation of the Maynooth and Environs Joint Local Area Plan (LAP) 2024-2030 was issued for public consultation by Kildare and Meath County Councils in September 2022, after the Railway Order application was submitted to An Bord Pleanála in July 2022. The Joint LAP will incorporate a framework for guiding the future development of transportation, housing, retail, heritage, employment, and social and community infrastructure in Maynooth.

The issues paper states that the Transport Strategy for the Greater Dublin Area 2022-2042 provides for a second train station to be constructed to the west of the town. Both stations in the town are intended to be served by DART+ West once constructed.

The Issues Paper presents a conceptual drawing of 'proposed train station indicative location' and also the Maynooth Outer Orbital Road (MOOR) both of which are indicative locations and subject to further studies including public road access at this area. The location of all infrastructure including a second train station will be considered as part of the forward planning and development management process. The DART+ West project does not preclude the development of said infrastructure and it is outside of the scope of this project to consider such proposals at this time. IÉ will continue to work with all local authorities as appropriate.

3. RESPONSE TO LANDOWNERS ON THE PROPOSED SCHEME

3.1 Ref. No.1 – LO008 – Spencer Place Development Company

Representative - John Spain Associates

3.1.1 Submission Location – City Centre (Spencer Docks)

Issues raised in submission are addressed with their responses below.

3.1.2 Response to submission

1. Summary of issue raised - Requests more info on purpose and nature of temporary and permanent land acquisitions.

   Response to issue raised

   DW.002.P.08(A) - 839m² : Permanent acquisition for construction of station

   DW.002.T.08(A) - 924m² : Temporary acquisition for construction area to construct station

   DW.002.S.08(A) - 924 m² : Permanent acquisition of substratum, required for installation of ground anchors for construction of walls for new station wall. Although the ground anchors are not needed permanently for the stability of the walls and will be de-stressed post construction, the cables and anchors will be left in situ. These ground anchors can be removed during any future development works of the property following the completion of the DART+ West project. These anchors won't compromise any excavation nor construction of structures.

   DW.002.T.08(B) - 1262m² : Temporary acquisition for construction of drainage and water connections. Duration of the construction will be limited to the time required to construct the drainage and water connections. Access to Spencer Place for council, utility providers, emergency services and residents will be maintained while these works are being undertaken.

2. Summary of issue raised - Seeks clarification on whether funding is in place for both land acquisition and construction.

   Response to issue raised

   The need for the scheme is provided within Chapter 2 of the EIAR which outlines the key policies for the delivery of the project, in particular the National Development Plan (2021-2030) in which the DART+ Programme is considered as the cornerstone of rail investment within the lifetime of Project Ireland 2040.

   DART+ West is a key element for the implementation of the overall DART+ Programme and therefore this project is a major investment to comply with Project Ireland 2040 and a priority for delivery by Irish Rail. The current National Development Plan (NDP) funding profile provides for the full delivery of DART+ West.

3. Summary of issue raised - Submission notes there is clear provision in the North Lotts and Grand Canal Dock Planning Scheme 2014 for a 6-Storey commercial / 7-storey residential development on the location of the client's land, permissible on confirmation of location of station. Could the over-station development progress in advance of the rail works? What extent of over-station development is currently envisaged? Over track developments and air rights.

Response to issue raised

The EIAR, Chapter 5, Section 5.2 Construction Programme sets out the construction duration for Spencer Dock at 39 months from the start of the construction contract, which will be dependent on the time required for the planning approval.

Over station development does not form part of the Railway Order and would be subject to its own separate planning application in the future.

4. Summary of issue raised - Seeks further information on the nature of the subterranean acquisition to the east of the station building, and the restrictions on subterranean works which would facilitate over-station development or development adjacent the station.

Response to issue raised

DW.002.S.08(A) - 924m²: Permanent acquisition of substratum, required for installation of ground anchors for construction of walls for new station wall. Although the ground anchors are not needed permanently for the stability of the walls and will be de-stressed post construction, the cables and anchors will be left in situ. These ground anchors can be removed during any future development works of the property following the completion of the DART+ West project. These anchors won't compromise any excavation nor construction of structures.

5. Summary of issue raised - New road along the west of Spencer Place is an important servicing route and was delivered to comply with provisions of the Planning Scheme and requirements of Dublin City Council. Closing/restricting access for the Spencer Place development would have severe impacts on operation of development.

Response to issue raised

Noted, access to Spencer Place for council, utility providers, emergency services and residents will be maintained while these works are being undertaken

6. Summary of issue raised - How is it proposed to protect the existing properties from damage?

Response to issue raised

Condition surveys of the surrounding properties will be carried out prior to any construction works. Any specific risks or hazards will be outlined in the contractor's site-specific CEMP, with construction works carried out in accordance with the industry best practices. The CEMP will also outline the monitoring plan that considers the construction works and nearby structures.

Furthermore, during the construction phase vibration and diaphragm wall monitoring will be undertaken. The specific locations will be determined by the contractor. Post construction a condition survey will be carried out on the surrounding properties.

7. Summary of issue raised - How is it proposed to protect the existing properties from environmental nuisance (dust, noise, vibrations, etc) during the works?

Response to issue raised

Section 14.5.3 of the EIAR assesses the construction phase impact of the project. The construction work at Spencer Dock is assessed and some phases of the work are predicted to result in significant noise impacts during the works. Mitigation measures are presented to control the impacts and these are typical of the measures that would be adopted by other large construction sites in Dublin City. The phases of construction predicted to result in the potential significant noise impacts are temporary in nature and are related to the initial demolition, excavation and piling stages. Specific mitigation for piling work in terms of noise and vibration is provided in Section 14.6.1 of the EIAR. Furthermore noise and vibration monitoring is specified during the construction phase. While specific locations will be determined by the contractor it is expected that Spencer Dock will be a monitoring location. Finally construction of the Spencer Dock station is proposed for normal daytime construction hours as there

is no interface with live rail tracks and this will mitigate impacts on surrounding residential areas during the more sensitive night time period.

Furthermore, the Construction Environmental Management Plan (Appendix A5.1 of the EIAR) presents the approach and application of environmental management and mitigation for the construction of the proposed Project. It aims to ensure that adverse effects from the construction phase of the proposed Project, on the environment and the local communities, are avoided or minimised. The implementation of the requirements of the CEMP will ensure that the construction phase of the project is carried out in accordance with the commitments made by CIE/IÉ in the Railway Order application process for the proposed development, and as required under the railway order.

A liaison officer will be available to allow for member of the pubic or interested parties to make complaints about the construction works. The CEMP will contain details of the complaints procedures and a monitoring system will be implemented to ensure that any complaints are addressed, and satisfactory outcome is achieved for all parties.

8. Summary of issue raised - How are light spill/light pollution effects on existing properties during works and in operation mitigated?

   Response to issue raised

   Spencer Dock is located within the existing illuminated environment of the city centre, where both construction is on-going and road lighting is already in place.

   The proposed development has been designed to use the minimum lighting required and to the codes and standards set out in the Spencer Dock Station Design Report (Appendix A4.2 of the EIAR). This includes for limitation of obtrusive light from outdoor installations (CIÉ 150-2003).

   Measures for the control of site lighting during construction are also detailed in the Construction Environmental Management Plan (Appendix A5.1 of the EIAR).

9. Summary of issue raised - How are noise/nuisance factors mitigated in operational times for the rail?

   Response to issue raised

   Section 14.5.4.6.11 details the operational phase noise assessment of the Spencer Dock station. This assessment has included rail movements, PA announcements on platforms and plant noise. With respect to rail noise the noise levels predicted are of a similar order of magnitude to the pre-existing ambient noise from road traffic which would indicate low probability of noise nuisance. Electric DART movements will be at low speed and on straight track minimising the noise emission.

   PA systems will be designed during the detailed design to ensure that volume levels are set to provide intelligible announcements within the station and not cause a nuisance to offsite locations.

   Finally plant selections for the station will be made such that the noise output of the plant is in compliance with the limit values specified in the EIAR. These values have been selected to control noise emission from plant to be less than the prevailing background noise levels and therefore will have a low probability of adverse impact or nuisance.

3.2 Ref. No.2 – LO119 – Pairc an Chrocaigh Teoranta of Croke Park Stadium

Representative - Shane Santry of SSA Architects

3.2.1 Submission Location – City Centre (Croke Park)

1. Visual impact of mini pylons located within the CIÉ curtilage on stadium environs.
2. One description of the works, - a temporary acquisition of the Love Lane area is proposed. However, a further drawing (LAN15102) illustrates a permanent boundary extended beyond the Love Lane area. This needs to be clarified.

3. Queries regarding the timing of the construction in that the occupation of Love Lane may pose difficulties for event days within the stadium. Likewise, any closure of Russell Street Bridge or Ballybough Bridge may involve disruption to match days and other events occurring in and around the stadium.
4. Suggests engagement between CIÉ and Croke Park Stadium to ensure that there is minimal disruption to both the proposed railway works and to the stadium.
5. As part of our construction strategy the appointed contractor will employ a dedicated community liaison officer and will engage with Croke Park Stadium to ensure that disruption will be kept to a minimum, particularly around the time of major events at the stadium.

3.2.2 Response to submission

1. Given the context of the stadium and the nature of the proposed development, the presence of proposed mini pylons located within the CIÉ curtilage will not give rise to any significant visual impact.
2. The red line boundary on the drawing referenced as LAN15102 relates to the extent of the proposed development which includes both permanent and temporary land acquisition. The majority of the land proposed to be acquired is temporary (DW.003.T.119(A)) for the construction of a noise barrier along the boundary of Croke Park. The Railway Order also includes a smaller section of permanent land acquisition (DW.003.P.119(A)) for the construction of a noise barrier.
3. CIÉ Rail have met Croke Park and discussed their land concern over the permanent land acquisition leading to CIÉ agreeing to develop a technical solution that would allow the noise barrier to be constructed along the current boundary. If a suitable design can be developed that Croke Park can agree to, the permanent land acquisition could be removed and the lands in turn would then only need to be acquired on a temporary basis.
4. As outlined in Chapter 5 of EIAR, trackwork's are anticipated to take 2 years. Detailed phasing of the works in specific locations are ongoing with consideration being given to events such as match days or times of the year when footfall is higher. Co-ordination with Croke Park stadium will take place during detailed construction planning to ensure minimal impact to their operations.
5. As part of our construction strategy the appointed contractor will employ a dedicated community liaison officer and will engage with Croke Park Stadium to ensure that disruption will be kept to a minimum, particularly around the time of major events at the stadium.

3.3 Ref. No.3 – LO201 – Bodycraft Repairs Limited

Representative – Not Applicable

3.3.1 Submission Location – City Centre

1. Impacts of works – loss of land, right of way and valuation of property
2. Works reduce the area that they can use exclusively for the storage of and movement of cars which is essential for business.

3.3.2 Response to submission

1. Detailed responses to point 1 of this submission is provided in the Section 2 – 2.3.1
2. The lands affected by the railway order relate to the installation of poles on the outside of the existing rail viaduct. The proposed poles in the landowner's property are proposed at or near the existing electrical poles already within the property. As a result of the works, no loss of area at ground level is proposed. Access to the poles post construction will be limited to maintenance and repairs. During the construction stage of the project CIÉ and / or agents acting on their behalf will liaise with the owner to request that any vehicles below the proposed construction areas be moved temporarily so as to avoid the impacts of dust and other debris from affecting any vehicles parked below.

3.4 Ref. No.4 – LO202 – Colette Maguire & David Conroy

Representative – Not Applicable

3.4.1 Submission Location – City Centre

1. Object to pole over house and health and safety risks.
2. Propose to deviate the pole by 10 metres onto disused waste ground owned by CIÉ at the rear of the property.
3. Object to Right of way and devaluation of property and lack of construction detail.
4. Increased noise and vibration concerns
5. Concerned with the flood risk and objects to the application on the basis of CIE/Irish Rail's long-standing failure to adequately maintain the railway and its surrounding areas.

3.4.2 Response to submission

1. Detailed responses to point 1 of this submission is provided in Section 2.2.10.
2. Currently there is an existing pole within these lands. It is at this location due to the allowable technical requirements of lengths between spans. The proposal is to replace this existing pole in the same or similar location which will still comply with technical requirements of allowable lengths between spans.
3. Detailed responses to point 3 of this submission is provided in Section 2.3.1.
4. Detailed responses to point 4 of this submission is provided in Section 2.2.12.
5. The scope of the DART+ West project does not involve any alterations to the trackworks or drainage in this area thus will have no impact on existing drainage. Prior to construction works commencing condition surveys of the surrounding properties will be undertaken to ensure no adverse impact. Concerns over maintenance issues have been notified to the relevant asset maintenance team with CIÉ.

3.5 Ref. No.5 – LO203 – Eoin Healy

Representative – Dermot P. Healy

3.5.1 Submission Location – City Centre

1. Structural Stability - essential that CIÉ construct a proper supporting wall which will be capable of tolerating the vibrations from the increased railway traffic. Any permission should include conditions that safeguard the residents of 16 Bessborough Avenue against the danger of a non-compliant enclosure of the railway line overlooking the garden. Previously collapsed into the garden due to vibrations from trains.
2. Access to the works to rail line adjoining 16 Bessborough - states that access to the back garden to carry out works may be possible via the flat roof structure at the side of the property. If access through the house is required, states that house will need to be cleaned and made habitable and adequate compensation paid by CIÉ
3. Noise and Pollution.
4. Loss of rental income Decreased Market Value of the property, Compensation for the property becoming uninhabitable.

3.5.2 Response to submission

1. The DART+ West will increase the frequency of trains but will not increase the load on the existing railway supporting structures. Chapter 14 of the EIAR outlines vibration levels to be achieved during both construction and operation of the project. Noise and vibration monitoring during construction is included within the EIAR as part of the mitigation measures.
2. Response to use of right of way is provided in Section 2. Any debris resulting from the construction or maintenance is to be cleaned and cleared by CIÉ and / or agents acting on their behalf.

3. Detailed responses to point 1 of this submission is provided in Section 2.2.12.
4. Detailed responses to point 1 of this submission is provided in Section 2.3.1.

3.6 Ref. No.5 – LO204 – Tracey Carabini

Representative – Ian Smyth Architect

3.6.1 Submission Location – City Centre

1. Did not received proper time, detail or sufficient information to make a decision of the intended railway order and what effect it will have on their property.
2. Not clear how work on the property will be carried out or what effect it will have to the current usability of the property and its outbuildings which are occupied at present.

3.6.2 Response to submission

1. The Railway Order documentation was sent to the owner in July 2022 along with revised notices dated the 14th and 19th of September 2022 informing the owners of an extension to the deadline for the statutory consultation period. Correspondence from the owner's solicitor, received during the statutory consultation period was responded to by letter dated the 30th of September 2022. The response to the solicitor's requests included the provision of a dimensioned sketch showing the extent of the proposed Right of Way and location of the proposed pole. An extract of the sketch is shown below.

2. The proposed right of way is to allow for the construction of the proposed overhead poles and associated cables for the DART + West Project and does not intend to interfere with the structure of the owners house or any other associated buildings.

   The works involve the construction of a replacement pole located to the rear of the property ideally at the location of the existing pole, or close to it, that carries the overhead electrification of the rail line. Any disturbance over the property during construction will be limited in time and will relate to the installation of the pole and associated infrastructure.

   The construction is proposed to be undertaken from the track side, involving reaching over into the property from the rail to undertake the construction of the replacement pole. No impacts on any buildings are proposed from the proposed construction. In advance of any planned works or

maintenance over your property Irish CIÉ and / or agents acting on their behalf will be required to notify you.

The permanent acquisition of property is limited to the acquisition required to allow for the construction of the overhead line electrification pole. Permanent land acquisition at ground level, that would diminish the footprint of the property, is not proposed as part of the Railway Order.

No change to the current usability of the property and its outbuilding will result from the proposed works.

3.7 Ref. No.7 – LO206a, LO206b, LO206c, LO206d, LO206e – Alan Costello

Representative – Not Applicable

3.7.1 Submission Location – City Centre

Submission relates to five properties as listed below:

- LO206a - Land Refence 206, 42-44 Strandville Avenue, North Strand, Dublin 3
- LO206b - Land Refence 209, 31A Xavier Avenue, North Strand, Dublin 3
- LO206c - Land Refence 205 & 212, 39 Strandville Avenue, North Strand, Dublin 3
- LO206d - Land Refence 211, 41 Strandville Avenue, North Strand, Dublin 3
- LO206e - Land Refence 207, 14 the Arches Strandville Avenue, North Strand, Dublin 3

Issues raised include:

1. Property Impacts and valuation
2. Noise, Vibration & Dust
3. Electromagnetic Effects
4. Vermin and other pests
5. Privacy

3.7.2 Response to submission

1. Direct impacts on these on properties relate to the construction of OHLE Poles. For all of the proposed poles within the owner's properties, except for the pole refenced as DW.002.PG.212 on Railway Order Property Plan No. DW.002 the permanent acquisition of property is limited to the acquisition required to allow for the construction of the overhead line electrification pole mounted to the existing rail viaduct and referenced in the Second Schedule - Part 2. Permanent land acquisition at ground level, that would diminish the footprint of the property, is not proposed as part of the Railway Order.

   At the pole referenced DW.002.PG.212 on Railway Order Property Plan No. DW.002 there will be an acquisition of a permanent area for the construction of an electrical pole adjacent to the rail line viaduct referenced in the Second Schedule – Part 3, a temporary acquisition for the construction of the pole in Schedule 4, and a Right of Way refenced in Schedule 5, for accessing the pole for maintenance and inspection. The temporary acquisition is required for the construction of the pole foundations and installation of the pole.

   Issues relating to valuation are covered under Section 2.3.1 of this report.

2. Detailed responses to points 2 to 5 of this submission are provided in Sections 2.2.12, 2.2.10, 2.3.2, and 2.3.3 of this report.

3.8 Ref. No.8 – LO213 – Torrelles Trading Company Limited

Representative – Not Applicable

3.8.1 Submission Location – City Centre, 15A The Beeches, Strand Road

All concerns raised are common issues dealt with in Section 2.

3.9 Ref. No.9 – LO214 – Patrick Lawlor

Representative – Not Applicable

3.9.1 Submission Location – City Centre

All concerns raised are common issues dealt with in Section 2.

3.10 Ref. No.10 – LO215 – Laura MacDarby

Representative – Not Applicable

3.10.1 Submission Location – City Centre

All concerns raised are common issues dealt with in Section 2.

3.11 Ref. No.11 – LO218 – Eileen Reilly

Representative – Not Applicable

3.11.1 Submission Location – City Centre

1. Privacy & Pedestrians
2. Right of way for the construction, operation, inspection and maintenance of the railway. This is of concern as there is no indication as to the scope of such works, the times and dates such access will be required, the length of time that these works will continue for and the corresponding length of time the access will be required.
3. Property Impacts and Valuation
4. Noise, Vibration & Dust
5. Vermin and other pests

3.11.2 Response to submission

1. With regard to privacy the location currently experiences significant passenger trains movements. These movements although more frequent will not have any greater height or increased visual access to the property. The proposed development will not provide access for pedestrians either along the live railway line or along Xavier Avenue which is a cul-de-sac.
2. The proposed right of way is to facilitate the fixing, inspection and maintenance of an overhead line electrical pole to the outside of the elevated viaduct wall. The scope of the construction work includes:
    - Inspection and surveys of the wall to determine suitable location for attaching the overhead line electrical pole
    - Drilling of holes into the wall for anchors

- Installation of bolts in to the wall and bonding and filling where necessary, installation of plates and wall fixing
- Installation of the poles and fixing of the poles to the walls. Fixing of wires and lines to the pole.
- Inspection of the completed work

It is anticipated that access to the pole during the construction stage will be of a short duration.

3. Detailed responses to points 3 to 5 of this submission are provided in Sections 2.3.1, 2.2.12 and 2.3.2 of this report.

3.12 Ref. No.12 – LO219 – Davina Fitzpatrick

Representative – Not Applicable

3.12.1 Submission Location – City Centre

1. Privacy
2. Property Impacts and Valuation
3. Noise, Vibration & Dust
4. Electromagnetic Effects

3.12.2 Response to submission

Detailed responses to points 1 to 4 of this submission are provided in Sections 2.3.3, 2.3.1, 2.2.12 and 2.2.10 of this report.

3.13 Ref. No.13 – LO234 – Propmaster Ventures Limited

Representative – Stephen Little & Associates, Chartered Town Planners and Development Consultants

3.13.1 Submission Location – City Centre

Subject Lands - Propmaster Ventures limited owns a property at the rear of No. 31 Lower Drumcondra Road - Nos. 1-6 Fitzroy Avenue, Drumcondra, Dublin 9. The site in question is subject of an extant planning permission (Dublin City Council Reg. Ref. 4513/17 refers), granted on 28 March 2018.

1. Property Impacts and Valuation
2. Asks ABP that due consideration is given to the potential impact of these works on the accessibility of the lane to the site at time of construction or operation. The design of any pole must not prejudice the ability of Propmaster Ventures limited to implement the extant permission or impact the future accessibility of potential owners of the 2no. properties to be developed.
3. Seeks clarity on whether it is necessary for the right of way to extend for the full depth of the site at any stage of the construction or whether it will be limited to the 33 sq. m section of the property which borders the railway shown highlighted in yellow on Figure 4 above.
4. Seeks clarity as to whether the right of way consisting of the 33 sq. m section of the property would include vehicles in any way or just be for people/workers.

3.13.2 Response to submission

1. Detailed responses to point 1 of this submission is provided in Section 2.3.1 of this report.
2. The proposed pole and fixings and proposed right of way will not disrupt the planning permission nor impact the future accessibility of the owners of the two proposed properties. Although access along the right of way is proposed from the track itself for the construction, access at ground level may be

required for construction, surveys, inspections and future maintenance. In advance of any planned works or maintenance over/at this property CIÉ and / or agents acting on their behalf will be required to notify the owners and occupiers to arrange access.
Dublin City Council Planning Reference 4513/17, planning condition No.14 of this planning prohibits any construction within 2m of the lands within CIÉ ownership, so there will be no impact on compliance with the extant permission and future accessibility.

3. Only the Right of Way shown on the Railway Order Plan and referenced in Schedule 5, highlighted in yellow is required for the construction of the works, which is proposed be undertaken from the track side. Access to the remainder of the property is not required.
4. No service road or access road is proposed along the right of way. Although access along the right of way is proposed from the track itself for the construction of the pole, access at ground level may be required for construction, surveys, inspections and future maintenance. In advance of any planned works or maintenance over/at your property CIÉ and / or agents acting on their behalf will be required to notify you to arrange access.

3.14 Ref. No.14 – LO013a – Christopher Reid

Representative – Not Applicable

3.14.1 Submission Location – Ashtown Stables

Issues raised in submission are addressed with their responses below.

3.14.2 Response to submission

1. Summary of issue raised - Impact on the community - the proposed structures at Ashtown level crossing will create community severance and reduce access to the canal and Tolka valley

   Response to issue raised

   Detailed responses provided in Sections 2.2.16 and 2.4.10. Pedestrian and cycle bridge infrastructure will be provided in proximity to the level crossing at Ashtown which will also facilitate unimpeded 24/7 access to the Royal Canal connecting to the Tolka Valley. The population impact assessment therefore determines that there is no severance to pedestrians and cyclists.

2. Summary of issue raised - Cycle Lane & Roundabout - State that one of the proposed roundabouts at Ashtown is located in an area visited by Brent Geese, and where the respondent's mares nurture their foals.

   Response to issue raised

   Detailed responses to brent geese is addressed in Section 2.4.1.

   In relation to the area being used for mares and foals, while CIÉ's expert has not met directly with this landowner,his opinions are based on observations from a visit and inspection immediately outside the property, his knowledge and experience of normal stable and pasture management and a further examination of the property and environs via Google Earth. Ashtown Stables is a single unit, roughly triangular in shape, extending to approximately 3 acres. The stables are bordered by the main Dublin-Sligo and Commuter belt twin track railway line to the North, to the east by the L3101 and to the west by Mill Lane. Ashtown Stables consist of approximately 2.2 acres of paddocks to the south, one containing an old trailer and numerous muck heaps. In the northernmost end of the premises the stable yard has been developed.

   Teagasc advise that 0.6 hectares (1.5 acres) is the optimal requirement per adult horse and generally, a minimum of 2.5 acres is advised for a mare and foal. In the absence of any land use information provided in conjunction with landowner engagement, it is considered unlikely that the grassland area

is suitable in terms of size and location for mares with foals. A mare and foal could be grazed on the land intermittently but to properly nurture a foal, the foal should be turned out into a large paddock to allow the foal to exercise freely, away from traffic, noise and the possible pollution from the L3101.

The extent of land acquisition is not considered to significantly alter the ability of these lands to function as they currently do.

3. Summary of issue raised – The submission states that the National Development Plan does not make any provision for any new tunnelling.

   Response to issue raised

   It is assumed the submission means to make reference to the underpass at Ashtown. In this regard the DART+ West project is consistent with the National Development Plan 2021-2030 ("the NDP"). The NDP identifies the DART+ Programme as the "*cornerstone of rail investment*" within the lifetime of Project Ireland 2040. The DART+ Programme comprises a number of infrastructural projects, comprising of DART+ West, DART+ South West, DART+ Coastal North to Drogheda via Balbriggan and DART+ Coastal South.

   Furthermore, the NDP is a high-level investment plan. It sets out Departmental allocations to 2025 and does not detail project specific or design details. For example, MetroLink will involve significant tunnelling across Dublin City, but this is not mentioned in the NDP. For the first time in Ireland climate and environmental assessment of the NDP measures was undertaken, along with an assessment of the alignment of the plan as a whole with the ideals of a green recovery plan of which the DART+ West project supports.

4. Summary of issue raised –Concerned regarding the underpass causing additional rainwater to build up at the bottom of Mill Lane.

   Response to issue raised

   A new carriageway drainage network is to be provided and connected to the existing surface water drainage network. The carriageway drainage network has been designed in accordance with the relevant standards to remove excess water from the carriageway for a specified storm duration and prevent ponding or additional rainwater collecting at the bottom of Mill Lane. Following completion of the works, the carriageway and associated infrastructure will be handed over to the Local Authority for operation and maintenance.

5. Summary of issue raised –Concerned that the underpass will flood due to flooding from the Tolka Flood Plain.

   Response to issue raised

   Flood Risk at Ashtown was considered as part of the Site Specific Flood Risk Assessment (SSFRA) and Chapter 10 (Water) of the Environmental Impact Assessment Report (EIAR). As noted in Table 10-4 of the hydrology chapter, the proposed tunnel underpass at Ashtown is outside the floodplain of the River Tolka. It should be noted that subsequent to the Tolka flooding of 1954, significant modifications have been made to the main channel floodplain estuary to reduce flood risk throughout the catchment. Studies undertaken of the River Tolka as it is today indicates that flooding (in a 1 in 1000 year event) from the Tolka is ~80m away from any works proposed for the DART+ West Scheme. As such, fluvial flood risk is estimated to be low at this location.

6. Summary of issue raised –Concerned that the project will eliminate a green corridor that links the Phoenix Park with the Tolka Valley.

   Response to issue raised

   The Royal Canal and adjacent habitats form an ecological corridor linking not only the Phoenix Park and Tolka Valley but also numerous other parks and areas with biodiversity value, including wetlands. This is reflected in the EIAR, which lists both the 'Royal Canal pNHA' and the 'Railway line Ecological Corridor' as Key Ecological Receptors.

The levels of protection afforded to the species and species groups listed in the submission are stated in the EIAR Biodiversity Chapter Section 8.2 (Legislation, Policy and Guidance). The protections afforded to individual species are described in Sections 8.4 (Desk Study Results) and 8.5 (Field Survey Results). Mitigation is presented in Section 8.9. The residual impacts on the Key Ecological Receptors, following the application of the mitigation measures, are presented in Section 8.10. Although it has not been possible to eliminate all impacts on biodiversity on an infrastructure project of this magnitude, the impacts on Key Ecological Receptors have been reduced to sub-significant levels.

7. Summary of issue raised – States disturbances on biodiversity during the proposed works at Ashtown have not been addressed.

   Response to issue raised

   The potential for construction (noise, vibration, lighting, visual disturbance etc) is identified as a potential impact on biodiversity in the EIAR Biodiversity Chapter Section 8.8 (Description of Potential Impacts (unmitigated)). Table 8-25 presents the unmitigated construction and operational phase impact impacts on each Key Ecological Receptor. The Key Ecological Receptors include Badger, Otter, Bats and Birds. Mitigation is presented in Section 8.9. The residual impacts on the Key Ecological Receptors, following the application of the mitigation measures, are presented in Section 8.10. Although it has not been possible to eliminate all impact on biodiversity on an infrastructure project of this magnitude, the impacts on Key Ecological Receptors have been reduced to sub-significant levels.

   Equine impacts are dealt with in Section 2.4.3.

8. Summary of issue raised – Concerned regarding impacts from noise and lighting that can cause serious ill-health.

   Response to issue raised

   Detailed responses to the impacts of noise and lighting are provided in Section 2.2.12 and in Section 2.4.3 in relation to horses.

   The potential for construction (noise, vibration, lighting, visual disturbance, etc) is identified as a potential impact on biodiversity in the EIAR Biodiversity Chapter Section 8.8 (Description of Potential Impacts (unmitigated)). Table 8-25 presents the unmitigated construction and operational phase impact impacts on each Key Ecological Receptor. The Key Ecological Receptors include Badger, Otter, Bats and Birds. Mitigation is presented in Section 8.9. The residual impacts on the Key Ecological Receptors, following the application of the mitigation measures, are presented in Section 8.10. Although it has not been possible to eliminate all impact on biodiversity on an infrastructure project of this magnitude, the impacts on Key Ecological Receptors have been reduced to sub-significant levels.

9. Summary of issue raised – CIÉ IÉ have made no suggestions or proposals as to how the horses will live during the construction, which can leave the Stables inoperable.

   Response to issue raised

   Refer to Section 2.4.3.

10. Summary of issue raised – The submission questions the need to provide a cycle track and a roundabout at Ashtown and states it's an unnecessary expense and does not align with the aim of the project which is to increase capacity and frequency of trains.

    Response to issue raised

    A suitable passenger drop-off facility is required at Ashtown Station to reduce the risk of vehicles using Martin Savage Park as a drop off area. To manage vehicles dropping passengers at Ashtown Station, a roundabout has been provided to allow vehicles to safely turn back south.

    In addition, access to both the Ashtown Stables, CIÉ maintenance yard and level crossing must be maintained. Any vehicular access provided would ultimately be used for drop off unless physically

restricted by gates or similar. It was considered that this arrangement would not be manageable for the likes of Ashtown Stables that would have customers arriving as part of its normal operation.

In developing a public transport project there is an onus on the developer to take account of published local authority, regional and national plans and objectives. It is also appropriate for the developer to take account of how the users of the development may access the associated services. Appropriate provision has been incorporated into the scheme to address local needs.

The DART+ Programme has a stated objective to "improve accessibility to jobs, education and other social and economic opportunities through the provision of improved inter-rail and inter-modal connectivity and integration with other public transport services". The DART+ West project also has the following sub-objective "Take cognisance of the planned sustainable transport programmes and projects". Proposals to incorporate pedestrian, cycle and vehicular access facilities at the train stations is wholly consistent with the stated objectives.

In the National Planning Framework 2040 the delivery of the DART+ programme is identified as a 'key future growth enabler of Dublin' along with the other rail projects set out in the Transport Strategy for the GDA including Metrolink, and Luas green link to Metro Link. Delivery of the metropolitan cycle network and BusConnects project are also identified there as enablers that will interact positively with DART+ West project.

As part of the future network analysis completed to support investment priorities, the National Investment Framework for Transport in Ireland, 2021 (NIFTI) identifies consistent congestion as an issue in the five major cities in the country: Dublin, Cork, Galway, Limerick, and Waterford. It supports the development of new urban infrastructure supply across the five cities including the development of BusConnects and comprehensive cycle networks, while Dublin will also see heavy rail improvements in the form of DART+ and MetroLink among other things. The continued support of the DART+ Programme demonstrates the substantial investment in sustainable mobility being delivered under the National Development Plan 2021-2030.

The provision of a cycle track and a roundabout at Ashtown is considered wholly aligned with the objectives and aims of the project.

11. Summary of issue raised – The submission opposes the CPO of their lands at Ashtown Stables for the construction of a new cycle path.

    Response to issue raised

    The Railway Order for the DART+ West project will involve total land take of 0.1686ha from this property of 1.2ha. Land take is comprised of 0.0426ha permanent agricultural lands, 0.0211ha temporary agricultural lands and 0.1049ha temporary public road. The permanent land take is required for the construction, operation and maintenance of the realigned Ashtown Road, mini roundabout and segregated cycleway. Not all of the land proposed to be acquired both temporarily and permanently is land for the construction of the cycle path. If the cycle path was removed a footpath or shared space of similar width would still need to be provided to meet pedestrian and cycle requirements.

12. Summary of issue raised – The submission states they conducted an independent Bat Survey of the Ashtown Area which identified more protected bat species. It states that IÉ failed to identify these species and to undertake a robust bat impact assessment and to identify mitigation measures.

    Response to issue raised

    A desk study and field surveys were undertaken to inform the assessment of bats. The sources used in the desk study are presented in Vol. 2 Chapter 8 Biodiversity, Section 8.3.4. The desk study included a review of data held by:

    - the National Parks and Wildlife Service (NPWS),
    - the National Biodiversity Data Centre (NBDC) and
    - Bat Conservation Ireland (BCI),
    - as well as over 30 ecological reports.

Field surveys included walked transects along the Royal Canal and emergence / re-entry surveys at selected structures and trees. The methodology for the field surveys is presented in Vol. 2 Chapter 8 Biodiversity, Section 8.3.6.2, and the results of the surveys are presented in Vol. 2 Chapter 8 Biodiversity, Section 8.5.1. The field surveys identified the three common species found in Ireland (two pipistrelle species and Leisler's bat) and Daubenton's bat (or other Myotis species), as presented in Vol. 2 Chapter 8 Biodiversity, Table 8-19. Appendix 2 of the submission contains a spreadsheet listing the species recorded during a bat survey commissioned by the Ashtown Stables, which following a manual analysis, recorded the same species.

Mitigation measures are presented in Section 8.9 of the EIAR, including measures' relating to bats. These include minimising lighting during construction and operation, which is particularly relevant to Daubenton's Bat, which is a light sensitive species that is restricted to feeding over waterbodies such as the Royal Canal. The submission also states that mitigation such as bat boxes have not been provided. The provision of 30 no. bat boxes is presented in Vol. 2 Chapter 8 Biodiversity, Section 8.9.3.5 and Volume 3A Mitigation and Enhancement Mapping, Drawing: MAY-MDC-ENV-ROUT-DR-V-81000-D to 81011-D. Other mitigation and enhancement measures include planting and the provision of ponds and wetlands along the scheme.

13. Summary of issue raised – The submission queries the reasoning that the EIAR drawings did not provide the locations of Brent Geese feeding sites to the public, whilst they were provided as part of the NIS.

    Response to issue raised

    Detailed responses are provided in Section 2.4.1.

14. Summary of issue raised – The submission states that Irish Rail changed their assessment of Option 2 (their previously preferred option for Ashtown) in terms of the impact this option would have on Brent Geese from Public Consultation 2 to the Public Consultation 3 (Ashtown). What was the rationale behind this change? (Note, this option was revised in the additional Ashtown Local Consultation but not in terms that would potentially affect the Brent Geese). What supporting information did Irish Rail use that lead to this change?

    Response to issue raised

    The assessment ratings of Option 2 in the PC2 Options Selection Report (July,2021) and Option 2 the Ashtown Revised Preferred Option Report (March, 2022) (referred to as PC3 in the submission) were 'significant comparative disadvantage'. The assessment rating of Option 2 at PC2 and the Ashtown Revised Preferred Option Report did not change.

    It should be noted that these were comparative assessments, and the ratings are reflective of the alternatives, rather than a single option in isolation. The Ashtown Revised Preferred Option Report included a revised Option 2 and four additional options which were not considered in the PC2 Options Selection Report. To summarise, the assessment ratings for Option 2 in the two reports are not directly comparable.

    A submission was received at PC2 in relation to the use of the paddocks at the Ashtown Stables by Brent Geese, and this is referenced in Section 5.2.3 of the Ashtown Revised Preferred Option Report. In both reports, Option 2 was given the least preferable rating with regards to biodiversity.

15. Summary of issue raised – The submission states that IÉ have incorrectly concluded to ABP that the preferred option will "primarily remove impacts on Ashtown Stables".

    Response to issue raised

    The preferred option which is to construct the underpass to the West of the old mill, ancillary buildings and stable complex will clearly reduce land acquisition and the construction impacts on the stable yard, buildings and property.

    The Railway Order for the DART+ West project will involve total land take of 0.1686ha from this property of 1.2ha. Land take is comprised of 0.0426ha permanent agricultural lands, 0.0211ha

temporary agricultural lands and 0.1049ha temporary public road. During certain construction activity, it may be prudent to restrict access to the horses and ponies to the paddocks but this is very manageable and no different than the management used when paddocks are sprayed, harrowed or even in inclement weather. When construction activity is complete, a 3.5% reduction in available paddock land is of slight significance.

3.15 Ref. No.15 – LO013b – Grainne Reid

Representative – Not Applicable

3.15.1 Submission Location – Ashtown Stables

Issues raised in submission are addressed with their responses below.

3.15.2 Response to submission

1. Summary of issue raised – The submission states that the proposals disregard the legally required protection of Brent Geese and bats.

   Response to issue raised

   Detailed responses are provided in Section 2.4.1 and 2.4.2.

2. Summary of issue raised – The submission states that IÉ proposals will destroy protected whitethorn hedges.

   Response to issue raised

   Detailed responses are provided in Section 2.4.4.

3. Summary of issue raised – The submission states the landowner is concerned that construction works on Stables lands will destroy the agri. land beyond repair rendering it unusable by the wildlife and the horses.

   Response to issue raised

   The potential for construction related impacts (noise, vibration, lighting, visual disturbance etc) is identified as a potential impact on biodiversity in the EIAR Biodiversity Chapter Section 8.8 (Description of Potential Impacts (unmitigated)). Table 8-25 presents the unmitigated construction and operational phase impacts on each Key Ecological Receptor. The Key Ecological Receptors include Badger, Otter, Bats and Birds. Mitigation is presented in Section 8.9. The residual impacts on the Key Ecological Receptors, following the application of the mitigation measures, are presented in Section 8.10. Although it has not been possible to eliminate all impact on biodiversity on an infrastructure project of this magnitude, the impacts on Key Ecological Receptors have been reduced to sub-significant levels.

   In relation to habitat loss at the Ashtown Stables lands, the proposed development will result in some land take along the edge of the site, which will not change the overall character of the grassland and not diminish its potential suitability as a feeding site for Brent Goose. The Railway Order for the DART+ West project will involve total land take of 0.1686ha from this property of 1.2ha. Land take is comprised of 0.0426ha permanent agricultural lands, 0.0211ha temporary agricultural lands and 0.1049ha temporary public road. When construction activity is complete, a 3.5% reduction in available paddock land is of slight significance.

4. Summary of issue raised – The submission states the landowner is concerned about the reduction of footprint at Stables in relation to grazing land.

Response to issue raised

The Railway Order for the DART+ West project will involve total land take of 0.1686ha from this property of 1.2ha. Land take is comprised of 0.0426ha permanent agricultural lands, 0.0211ha temporary agricultural lands and 0.1049ha temporary public road.

The impact of the proposed development has been assessed in the EIAR and the significance of this impact is deemed to be 'Moderate'. This assessment has considered the impact of land take, the reduction in the area of agricultural lands and the temporary construction impacts on the operation of the equine enterprise.

Mitigation measures are set out in Section 16.6 and include the reinstatement of temporarily acquired lands, boundary treatment and construction work mitigation. The significance of the residual impact, following the implementation of mitigation measures and the completion of construction works, is deemed to be 'Not Significant'.

5. Summary of issue raised – The submission states the landowner is concerned about the waterworks and groundworks damaging the foundations of buildings which can lead to health risks for both people and the animals.

Response to issue raised

Detailed Ground Investigations were undertaken as part of the design process and informed the proposed design. The works have been designed to avoid, reduce and mitigate significant effects on adjacent properties.

A construction management plan will be developed by the contractor prior to works commencing. It is envisaged that a condition survey will be carried out on structures and buildings adjacent to the works, prior to construction commencing, to determine the current condition. In addition to condition surveys, vibration limits will be set for vibration emitted from the construction works. Vibration emitted from the construction works will be monitored at various locations around the works.

6. Summary of issue raised – The submission claims that construction works threaten the safety of their horses and people as well as affecting the enjoyment of this amenity. (Including nuisance caused by persistent noise, flooding, lighting etc.)

Response to issue raised

Detailed responses to this point is addressed in Section 2.4.3 as it relates to horses. Chapter 23 Human Health of the EIAR, states that construction works will generate significant nuisance during the associated construction phase. However, these effects will be temporary and short term in nature. Prior to any demolition, excavation or construction, a Construction Environmental Management Plan (CEMP) will be produced by the successful contractor. The CEMP will set out the Contractor's overall management and administration of the construction project. The key environmental aspects associated with the construction of the DART+ West project, the appropriate mitigation and monitoring controls as provided by the respective competent experts, are identified in the CEMP. Chapter 14 Noise and Vibration, and Chapter 15 Landscape and Visual detail the assessment of impacts which identifies there will be negative impacts during the construction phase, however these impacts will be short-term and temporary in nature. Mitigation measures are detailed in the respective chapters of the to reduce these impacts.

7. Summary of issue raised – The submission claims that IÉ is 'greenwashing' the project by unnecessarily obliterating the 'unique ecosystem' remaining in the city.

Response to issue raised

Detailed responses to this point is addressed in Section 2.4.4.

8. Summary of issue raised – The submission claims that inaccurate information was provided at the public consultation stage, further requests of information were not provided when asked. Also states

that IÉ have been processing personal data in breach of national and EU law by taking pictures of the Stables.

Response to issue raised

Every effort was made to ensure that all information that was published as part of the non-statutory public consultations that were held into DART+ West, as well as the information that was contained within the railway order application was accurate. Contributors and creators of the content are competent experts and have the requisite experience to provide the best possible information. Throughout the periods of public consultation and at all other times every effort was made from the initial launch of this project, right through the non-statutory consultations and the statutory consultation to engage proactively with this landowner The Reid family attended a number of public webinars that were held by the DART+ West project team and voiced their concerns to the team. The DART+ West project team was made available to meet in person, when public health restrictions allowed or virtually when they did not, to discuss any concerns that this landowner may have. During the local Ashtown Public Consultation, members of the project team were at the in-person consultation and were available to engage with any members of the public including the Reid family. The Landowner agreed to two meetings, both of which the CEO attended. All other offers to engage were declined. Separate to this, there was prolific email communication from this landowner both to the Community Liaison Team, the CEO's office and the FOI office. All emails and FOI requests were responded to.

9. Summary of issue raised – The submission claims that the proposed underpass is not safe for women due to potential attacks and that project will affect the operation of the Stables, a sporting amenity area mainly enjoyed by women and girls.

Response to issue raised

The underpass is proposed for vehicular traffic and cyclists, with pedestrians accommodated via the new pedestrian and cyclist bridge located at the station. The underpass will be well lit, heavily used and relatively short. It will also have CCTV supervision to ensure public safety concerns can be monitored. Section 23.6.2 of Chapter 23 Human Health provides operational stage mitigation. Detailed design will integrate public safety design measures to reduce opportunities of anti-social behaviour and loitering including at Ashtown underpass and will utilise attractive design measures, lighting and public realm enhancements particularly as part the level crossing replacements works.These measures shall include:

- the use of active and passive surveillance measures.
- consultation with An Garda Siochana and respective local authority at detailed design stage.
- appropriate lighting on bridges and cul-de-sac at closed level crossings to ensure safety for all road users.

10. Summary of issue raised – The submission claims that the proposed structures at Ashtown are not in keeping with Dublin's look and feel.

Response to issue raised

The general "look and feel" of the Ashtown Area is of limestone structures and trees (Canal bridge and lock, The Millhouse, Ashton Demesne Boundary Wall). The design of the underpass provides for landscaped areas on embankments on the southern approach and stone facing to the underpass walls. On the northern approach, the Ashton Demesne boundary wall will be finished in a similar stone to the existing. The provision of the above is in keeping with the general surroundings and endeavours to maintain the "look and feel" of the area.

The proposed pedestrian CORTEN steel bridge was agreed upon as opposed to concrete solutions to tie in with the "look and feel" of the area. Additionally, a counterpoint between the bridge and the landscape of the canal was created that will emphasize the vegetation.

3.16 Ref. No.16 – LO013c – Kevin Reid

Representative – Not Applicable

3.16.1 Submission Location – Ashtown Stables

Issues raised in submission are addressed with their responses below.

3.16.2 Response to submission

1. Summary of issue raised – The submission claims that construction works around and within the Stables would render the Stables inoperable and force them to close.

   Response to issue raised

   Detailed responses to this point is addressed in Section 2.4.3.

2. Summary of issue raised – The submission claims that the Stables are a valuable local amenity which would be affected by the project.

   Response to issue raised

   The revised preferred option was selected largely in recognition of this amenity value. There will be some impact at the southern extremity of the Ashtown Stables site at Mill Lane to accommodate road widening and there will be temporary impacts due to construction activity.

3. Summary of issue raised – The submission claims that at public consultation events, IÉ informed the public that objections lodged would be sent to ABP as part of the RO application.

   Response to issue raised

   This was never stated at any public consultation. What was stated during Public Consultation No. 1, Public Consultation No. 2 and the local Ashtown Public Consultation was that receiving feedback during these periods of non-statutory public consultation was very important to us as it would help inform ongoing design of the project that would ultimately be submitted to An Bord Pleanála, which it did. A summary of the submissions that Iarnród Éireann received during these public consultations were published as part of the public consultation findings reports, which formed part of the statutory Railway Order application (Appendix A3.1 and Appendix A3.2). IÉ always stated clearly that the statutory consultation phase would be undertaken by An Bord Pleanála and any landowner or any member of the public was welcome to make a submission to An Bord Pleanála during their period of statutory public consultation.

4. Summary of issue raised – The submission claims that IÉ has many other options that would not affect the Stables, a valued local amenity area..

   Response to issue raised

   An extensive list of options was considered as part of the multi-criteria analysis for option selection at Ashtown. Additional options were added as feedback was received from the non-statutory public consultation process. The final list of options amounted to 13 in number in addition to the Do Nothing and the Do Minimum options. The analysis was carried out in two stages with less likely options pruned away as part of multi-criteria analysis stage 1 (MCA1) and a more refined comparison carried out for multi-criteria analysis stage 2 (MCA2).

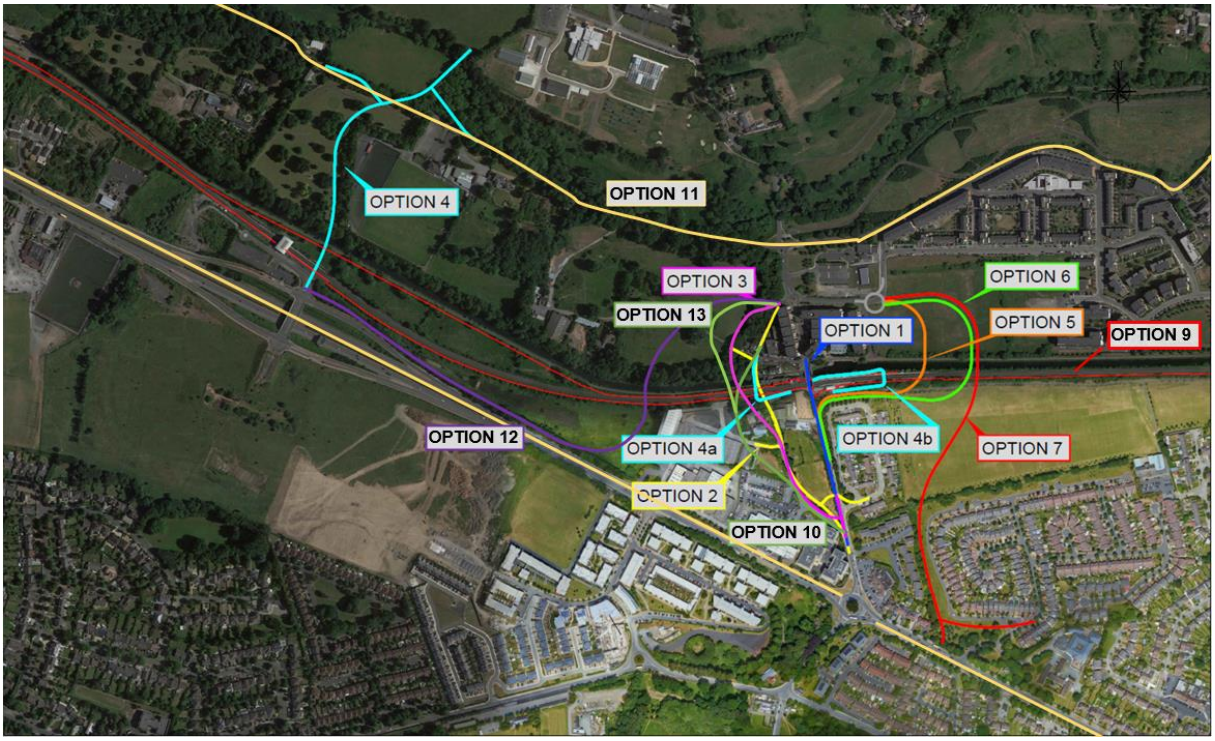
   A full list of the 13 do Something Options is presented below:

Options
1 – Online Overbridge / Underbridge along Ashtown Road
2 – Underbridge on Mill Lane west of the level crossing with local road diversion

Options
3 – Overbridge on Mill Lane west of the level crossing with local road diversion
4 – Navan Parkway Station Link Road with Widening of River Road,
4a – Pedestrian Cycle underbridge west of level crossing
4b – Pedestrian Cycle overbridge east of level crossing
5 – Low Clearance Canal & Railway Underbridge east of the level crossing with local road diversion
6 – Overbridge east of the level crossing with local road diversion
7 – Overbridge east of level crossing with diversion along route to N3
8 – Pedestrian / Cycle Bridge only east of the level crossing
9 – Railway lowered between Pelletstown and Navan Parkway stations, canal channelised over associated length, train station lowered and new bridge at the location of the level crossing to support Ashtown Road.
10 – Underbridge West of Mill and the level crossing with local road diversion
11 – R102 River Road, R105 Ratoath Road and Nephin Road upgrades and Station Pedestrian Cycle Bridge construction.
12 – New roadway from Navan Parkway interchange with Overbridge crossing the railway and canal west of the level crossing.
13 – Overbridge West of Mill and the level crossing with local road diversion

Ashtown Level Crossing Options

The options are illustrated graphically below:



Ashtown Level Crossing Options considered

The outcome of the first stage of analysis MCA1 is presented in Table 3.15 in EIAR Volume 2A.

The options selected to progress to Stage 2 of the analysis (MCA2) were as follows:

Options
4 – Navan Parkway Station Link Road with Widening of River Road,

Options
4b – Pedestrian Cycle overbridge east of level crossing
10 – Underbridge West of Mill and the level crossing with local road diversion
11 - R102 River Road, R105 Ratoath Road and Nephin Road upgrades and Station Pedestrian Cycle Bridge construction.
12 – New roadway from Navan Parkway interchange with Overbridge crossing the railway and canal west of the level crossing.
13 – Overbridge West of Mill and the level crossing with local road diversion

EIAR Volume 2A Table 3-17 provides a summary matrix of the comparative assessment undertaken at Stage 2 to identify the preferred option.

Option 10 – The underpass offline to the west of the listed mill building was identified as the preferred option over Options 4+4b, 11, 12 and 13.

Characteristics associated with Option 10 which were influential in its option selection for inclusion in the railway order are as follows:

Disadvantageous characteristics include:

- Impacts profoundly on Burke Brothers & Son Ltd.
- Direct impact on Ashton House (RPS 690) lodge and gate;
- Indirect impact on the Mill and outbuildings (RPS 691);
- Significant Complexity in structures.

Advantageous characteristics include:

- Maintain access to community facilities in close proximity to Ashtown village;
- Lower visual impact as below ground;
- Superior land use integration performance as it follows sections of existing roadway along much of it's length curtailing footprint on high amenity and high technology zoned lands.
- No impact on River Road & Tolka River valley;
- Curtails the diversion of traffic onto other local routes;
- Lower impact on commercial enterprises other than Burke Brothers & Sons Ltd.

5. Summary of issue raised – The submission claims that there was a contradiction at option selection where one option was eliminated due to the presence of a feeding site for Brent Geese, while the preferred option wasn't although it has the same issue.

Response to issue raised

The Brent Goose inland feeding sites were identified from the desk study, in particular the results of the Dublin wide Brent Goose Survey. The main source of data for the study was provided by the Irish Brent Goose Research Group. No additional inland feeding sites are identified in the vicinity of Ashtown Stables.

Martin Savage Park is assessed as being of 'Major' Importance for brent geese. In the multi-criteria analysis, the importance of Martin Savage Park was noted and was material in the selection of the preferred option. Options which directly impacted on these feeding areas of major importance were scored accordingly.

The use of the grassland in the Ashtown Stables was highlighted in submissions from the owners of the Ashtown Stables and investigated by Iarnród Éireann. A desk-based assessment was undertaken to assess the suitability of the grasslands at the Ashtown Stables for Brent Goose. The suitability of inland feeding sites by Brent Goose depends on a number of factors. Studies have shown geese to preferentially select grassland with sward heights of approximately 6 cm in height. Other factors determining the suitability of an inland feeding site include the size of grazing area, type of grassland

management, visibility and disturbance. Brent Geese prefer large, open sites where they have clear sight-lines. The need for safety is more important than food supply in influencing where geese feed, with birds feeding mostly in large, open areas and avoiding closed situations or sources of frequent disturbance.

Although it is not disputed that Brent Goose may use the grasslands at the Ashtown Stables, particularly because it is situated beside a feeding site of Major importance and may have optimum sward height, it is considered that the Ashtown Stable lands do not provide ideal feeding habitat for Brent Geese, because the site is approximately 50m x 150m, intersected by fences with trees and surrounded by treelines on all but the north side. Therefore, it is not considered as being of the same level of importance for brent geese.

In relation to habitat loss at the Ashtown Stables lands, the proposed development will result in minimal land take along the edge of the site, which will not change the overall character of the grassland and not diminish its suitability as a feeding site for Brent Goose. The land take at the Ashtown Stables is presented in the EIAR Volume 3A, Chapter 4: Roadwork Design- LC01: Ashtown General Arrangement Sheet 1 of 4 (Drawing No. MAY-MDC-HRW-LC01-DRC-L101-D).

6. Summary of issue raised – The submission claims that the EIAR states that the project will lead to 'direct mortality' of certain species which goes against EU law in relation to Brent Geese.

Response to issue raised

Detailed responses to this point are set out in Section 2.4.1.

7. Summary of issue raised – The submission claims that Ashtown Stables commissioned a bat survey to be undertaken at the rear of Pelletstown House in Sept 2021, which identified a presence of a number of bat species over Ashtown Stables lands. It states that the EIAR missed a number of bat species and that that the EIAR is 'not independent, not partial and therefore unreliable'.

Response to issue raised

Detailed responses to this point are set out in Section 2.4.2.

8. Summary of issue raised – The submission claims that the EIAR highlights the presence of bats, otters and badgers in the area where major construction will take place and that this can lead to 'direct mortality'. States that the killing of these species goes against Irish and EU law.

Response to issue raised

'Direct Mortality' is listed as a potential impact on protected species in the EIAR Vol. 2 Chapter 8 Biodiversity Section 8.8.2.2. Section 8.8.3, Table 8-25 presents the construction and operational phase impacts on each Key Ecological Receptor, without mitigation measures. Reference is made specifically to 'Direct Mortality'.

Vol. 2 Chapter 8 Biodiversity Section 8.9 of the EIAR presents the mitigation measures, including measure for bats, otter and badger, to reduce the risk of and/or avoid Direct Mortality during the construction and operational phases.

The EIAR Vol. 2 Chapter 8 Biodiversity Section 8.10, Table 8-28 presents the impacts following the application of the mitigation measures. The residual risk of 'Direct Mortality' following the application of mitigation measures is acknowledged. It is considered that the maintenance of access for animals such as Otter across the railway corridor outweighs the habitat fragmentation that would result if the railway was fenced off securely to prevent badger and otter crossing the railway line.

9. Summary of issue raised – The submission claims that the presence of two construction compounds at Ashtown is an overkill in terms of environmental impacts.

Response to issue raised

Due to the suburban nature of the area and geometry of the works, i.e. split by the rail line, it was deemed necessary to have a number of compounds. The main construction compound is to be located

within the Ashton House Demesne as agreed with the landowner. This construction compound will facilitate site offices, site welfare facilities, plant and machinery storage and material storage. Other construction compounds identified are located adjacent to the works for the footbridge, station and substation works and will be used to store materials on a daily need basis.

10. Summary of issue raised – The submission claims that the project contravenes the Climate Action Plan, National Biodiversity Action Plan and the Wildlife Amendment Bill (2016).

Response to issue raised

The DART+ Programme has been identified in the Climate Action Plan as a key action required to deliver the sectoral emissions target set for transport. The negative impacts associated with the developments have been mitigated as far as practicable, in accordance with National Biodiversity Action Plan. No activities which would constitute an offence under the Wildlife Acts are proposed.

11. Summary of issue raised – The submission claims that communication during Public Consultation was poor and that there were multiple errors in the documentation presented for the public, and further information requests have not been answered.

Response to issue raised

Refer to Section 2.2.2 for full details of the non-statutory consultations undertaken for the project. See below some more specific responses.

The majority of the public consultation for this project was virtual due to public health restrictions. Public webinars were held for communities to engage with the project team, when in person was not permitted. There was a dedicated webinar on the Ashtown area in Public Consultation no.1 and no.2. Following on from the strong feedback that was received in Public Consultation no.2, the Project team re- examined the preferred option at Ashtown and a consultation was held on the Revised Preferred Option at Ashtown, which was held both virtually and in person to accommodate people's preference as we emerged from the pandemic.

Every effort was made to ensure that all information that was published as part of the non-statutory public consultations that were held into DART+ West, as well as the information that was contained within the railway order application was accurate. Contributors and creators of the content are competent experts and have the requisite experience to provide the best possible information. Throughout the periods of public consultation and at all other times every effort was made from the initial launch of this project, right through the non-statutory consultations and the statutory consultation to engage proactively with this landowner The Reid family attended a number of public webinars that were held by the DART+ West project team and voiced their concerns to the team. The DART+ West project team was made available to meet in person, when public health restrictions allowed or virtually when they did not, to discuss any concerns that this landowner may have. During the local Ashtown Public Consultation, members of the project team were at the in-person consultation and were available to engage with any members of the public including the Reid family. The Landowner agreed to two meetings, both of which the CEO attended. All other offers to engage were declined. Separate to this, there was prolific email communication from this landowner both to the Community Liaison Team, the CEO's office and the FOI office. All emails and FOI requests were responded to.

The efficacy of the public consultation process is demonstrated by the fact the design of the project in Ashtown was substantially altered in light of the feedback and representations that were received in relation to *inter alia,* the amenity value of Ashtown Stables during the public consultation process.

12. Summary of issue raised – The submission claims that IÉ refuse to provide basic information on the project, such as the identities of the DART+ West Team, and the cost.

Response to issue raised

Members of the DART+ West team were clearly identifiable during the public webinars that were held as part of Public Consultation No. 1 and No.2 webinars and the local Ashtown in person Consultation. Costs associated with the project were refused under FOI for commercial reasons.

13. Summary of issue raised – The submission claims that there is no guarantee that the project will be powered via renewable energy.

    Response to issue raised

    Refer to Chapter 13 Climate, Volume 2, Section 13.3.4.2 Operational phase rail emissions. IÉ has agreed to purchase up to 80% of its operational demand from certified low or zero carbon electricity for operations. This will represent a very substantial improvement, in relation to carbon emissions, on the diesel trains which operate at present on the line, apart from the private motor vehicles users who may switch to use of the improved electrified service.

14. Summary of issue raised – The submission claims that IÉ refused to provide information on the EIA which identified many protected species in the Ashtown Area with the project leading to direct mortality of these species.

    Response to issue raised

    Detailed responses to this point is addressed in Section 2.4.1.

15. Summary of issue raised – The submission claims that IÉ claimed to engage with the Reid family however, emails have been uncovered (following Freedom of Information Act) directing an IÉ employee to not engage with them

    Response to issue raised

    IÉ has engaged with the Reid family over a number of years and will continue to do so over the project lifetime.

16. Summary of issue raised – The submission claims that there are “Conflicts of Interest” that IÉ has “failed to declare” and a vague insinuation is made against contractors and subcontractors with regard to tax clearance certificate.

    Response to issue raised

    This is an entirely unsubstantiated attack on IÉ and the contractors who have worked on this project. The issue raised is baseless and not relevant to the issues which have to be decided by ABP and is completely inappropriate. Consequently, IÉ does not propose to respond to this point.

17. Summary of issue raised – The submission claims they are concerned about the welfare of the horses as construction work is planned around the Stables, with some 24/7 activities.

    Response to issue raised

    Detailed responses to this point are set out in Section 2.4.3.

18. Summary of issue raised – The submission claims that flooding was not considered when designing the underpass.

    Response to issue raised

    Flood Risk at Ashtown was considered as part of the Site Specific Flood Risk Assessment (SSFRA) and Chapter 10 (Water) of the Environmental Impact Assessment Report (EIAR). As noted in Table 10-4 of the hydrology chapter, the proposed underpass at Ashtown is outside the floodplain of the river Tolka. It should be noted that subsequent to the Tolka flooding of 1954 significant modifications have been made to the main channel floodplain d estuary to reduce flood risk throughout the catchment. Studies undertaken of the River Tolka as it is today indicates that flooding (in a 1 in 1000 year event) from the Tolka is ~80m away from any works proposed for the DART+ West Scheme. As such, fluvial flood risk is estimated to be low at this location.

19. Summary of issue raised – The submission claims that it’s not clear why IÉ is proposing to close the level crossings as different reasons have been stated following the Freedom of Information Request.

Response to issue raised

Level crossings are a major constraint to surrounding road networks causing congestion and increased journey times for all modes of traffic including pedestrians and cyclists. The main aim of the proposed development, and the overarching DART+ Programme, is to increase passenger capacity and train frequencies. Increased train frequencies will result in additional level crossings closures and subsequent increase in congestion and delays in the surrounding road network. Options which have been examined as part of development activity for the project include the following:

- Keep a level crossing in place with future Train Service Specification in operation.
- Implement CCTV control on a level crossing with the full Train Service Specification in place.
- Close a level crossing without providing alternative infrastructure irrespective of the consequent severance and road traffic impact.
- Close a level crossing with provision of appropriate alternative bridge crossing infrastructure proximal to the level crossings to replace vehicular, pedestrian and cycle access.
- Close a level crossing and construct a pedestrian and cycle bridge local to the level crossing to replace access for non-motorised users and divert vehicular traffic onto the local road network with or without out corresponding capacity enhancement dependent on the scale of traffic diversion.
- Lower the railway in the vicinity of a level crossing sufficient to provide clearance for the electrified railway to pass under proposed bridge infrastructure at a level crossing.

The design team examined the feasibility of meeting the project objectives while keeping the existing level crossings in place and it has concluded that the project objectives cannot be delivered on this basis.

20. Summary of issue raised – The submission claims that the foot bridge is not compatible with the area.

Response to issue raised

The proposed pedestrian CORTEN steel bridge was agreed upon as opposed to concrete solutions to tie in with the “look and feel” of the surrounding area. The designers created a counterpoint between the bridge and the landscape of the Canal that will emphasize the vegetation.

21. Summary of issue raised – The submission queries with ABP if they've spotted any errors in the planning documents, questions why ABP only met with the project team and asks ABP to provide minutes of meetings and the details of staff who will be reviewing the application.

Response to issue raised

Section 47B of the 2001 Act provides that a person who proposes to apply for a railway order *“shall, before making the application, enter into consultations with the Board in relation to the proposed railway works””.*

Section 47C(3) provides that the holding of consultations under section 47B shall not “prejudice the performance by the Board of any other of its functions under [the 2001 Act] or the Planning and Development Act 2000 or regulations under either of those Acts and cannot be relied upon in the formal planning process or in legal proceedings. ABP is required to keep a record of any consultations under section 47B and these are listed as Records/Additional Records and may be inspected here: https://www.pleanala.ie/en-ie/case/306587.

22. Summary of issue raised – The submission claims that passenger census data does not back up IÉ's predicted passenger numbers.

Response to issue raised

Detailed response to this point of this submission is provided in Section 2.2.8.

23. Summary of issue raised – The submission claims that IÉ is using powers of the State to CPO lands that are 300m away from the railway line.

Response to issue raised

The proposed acquisition of lands is both necessary for the delivery of the project, completion of which is necessitated by the requirements of the common good and is proportionate to that objective. Specifically, the project is required in order to deliver on the objectives of Project Ireland 2040 comprising the National Planning Framework 2040 (NPF) and the supporting investment package contained in the National Development Plan in relation to climate action and the environment, transition to a climate-neutral and climate resilient society and public transport.

Specifically, the lands at issue in this objection are required to facilitate the new road alignment, which is required because of the construction of the underpass.

3.17 Ref. No.17 – LO016 – Gowan Motor Retail Group Ltd

Representative – Hughes Planning and Development Consultants

3.17.1 Submission Location – Ashtown

Issues raised in submission are addressed with their responses below.

3.17.2 Response to submission

1. Summary of issue raised - Requests ABP to consider the negative implications arising on the business as believes that they will need to look at an alternative location for their business as it would directly interfere with the premises and operational requirements.

   Response to issue raised

   The Railway Order for the DART+ West project will involve total land take of 0.1124ha comprised of 0.0306ha permanent lands, 0.0587ha permanent public road and 0.0231ha temporary lands.

   The impact of the proposed development has been assessed in the EIAR and the significance of this impact is deemed to be 'Significant'. This assessment has considered the area of temporary and permanent land take, the direct impact of land take on the entrance / access to the property and the retail yard for stock, customer and staff parking. The assessment has also considered the permanent reduction in rented retail yard area and the impact on delivery of vehicles to the property.

   In Section 17.3.2 of the EIAR, the criteria for a Significant property impact on a commercial property is "impact on the property where the use of the property can continue. An impact of temporary or permanent duration resulting in a change to the character of the property".

2. Summary of issue raised - At Option Selection a submission was made in relation to how the preferred option impacts the business (loss of approx. 80 no. car spaces) which was not satisfactorily considered.

   Response to issue raised

   The preferred option is based on a number of factors, not only the impact on this property. A number of options were developed at this location along with further development of these options following public consultations at Ashtown.

3. Summary of issue raised - The full scale of impact on the business was not clear from the mapping submitted to ABP as it would have been better to overlay on aerial mapping.

   Response to issue raised

   Both the Property Plan and Works Drawing are presented on OS Mapping for consistency and for land referencing requirements.

4. Summary of issue raised - Concerned that the project will significantly increase traffic along Mill Lane due to the increase capacity of the road. States that this may require the car display area to be relocated which could lead to loss of sales.

   The project will increase traffic along Mill Lane. Section of the existing display area, both owned and leased will be impacted by the project however the main dealership buildings will not be impacted.

5. Summary of issue raised - Additional cars arising from the proposal would result in potentially hazardous conditions for road users during construction and operation stages.

   Response to issue raised

   Noted that there are concerns over access onto the public road for loading and offloading of vehicles. Although the current lane carries less traffic than the proposed road realignment, it is still a public road.

   During the construction phase access to the property and business will be maintained.

   During the operations phase any deliveries and parking on the proposed road will need to be done so as not to obstruct traffic and block the road during peak times in the morning and evening.

   Mill Lane is currently a sub-standard, narrow cul-de-sac road providing local access only, it branches off the Ashtown Road some 100 metres north of the Ashtown Road / Navan Road junction and stops just south of the railway line. Mill lane is approximately 230 metres long, it has footpaths provided on western side of the road only for the first 90 metres from its junction with Ashtown Road. In the final 120 metres the width of the Mill Lane drops significantly allowing only for one-way operation.

   Ashtown Road is a narrow two-way road with footpath provided on the east side of the road, it crosses the Railway line via at-grade crossing and the Royal Canal via a bridge where it provides access to Ashtown. It connects two regional roads R147 Navan Road with R102 Bridge Road running parallel to each other along the Royal Canal and the railway line.

   With the scheme in place existing Ashtown Road will be closed at the at grade crossing and made cul-de-sac north and south of the existing level crossing, the crossing will be replaced with a new pedestrian and cycle bridge to maintain connectivity. The new realigned Ashtown road will follow the alignment of the existing Mill Lane and provide underbridge under the railway line and Royal Canal and tie back into Ashtown Road to the north of the canal. The new realigned road will provide for a 6.5 m wide carriageway with 1.5 m rubbing strip on the western side of the road, and a 3.65 m wide cycleway along the eastern side of the road.

   The submission notes that there is a high level of car entries and exits onto Mill Lane by both staff and customers of Gowan Group and that the traffic re-routed on new Ashtown Road along Mill Lane will result in potentially hazardous conditions for road users. It should be noted that vehicular traffic accessing the Gowan Group property must go through Ashtown Road anyway, therefore already interact with that traffic.

   The new road will be of a much greater standard to the current Mill Lane, will comply to visibility at junctions have appropriate entry radii therefore making it safer than the existing road.

   Vehicular traffic during construction stage will be managed by Temporary Traffic Management. Temporary Traffic Management Plans will be designed in accordance with the relevant standards and agreed with the Local Road Authority prior to implementation to ensure a high level of road safety for all road users. Car transport deliveries can be coordinated and facilitated within the Temporary Traffic Management Plans in consultation with Gowan Motors to ensure road safety for all users.

   In the operational phase, the proposed carriageway has been designed to the latest relevant road design standards and has undergone Road Safety Auditing to ensure the design is safe for all road users.

3.18 Ref. No.18 – LO017 – Burke Brothers

Representative – Tom Phillips and Associates & Ciaran Sudway

3.18.1 Submission Location – Ashtown

Issues raised in submission are addressed with their responses below.

3.18.2 Response to submission

1. Summary of issue raised - The preferred option has detrimental impacts on the operation and commercial viability of enterprise in the area.

   Response to issue raised

   The Railway Order for the DART+ West project will involve total land take of 1.2019ha comprised of 0.9030ha permanent lands, 0.2540ha temporary lands and 0.0449ha temporary public roads from a holding of 2,0755ha.

   The impact of the proposed development has been assessed in the EIAR and the significance of this impact is deemed to be 'Profound'. This assessment has considered the area of temporary and permanent land take, the direct impact of land take on the entrance / access to the property, existing warehouses, commercial yard and staff and customer parking.

   In Section 17.3.2 of the EIAR, the criteria for a Profound property impact on a commercial property is "an impact on the property where the use of the property cannot continue".

2. Summary of issue raised - Recommends other variations of options, including hybrids of previously identified route options be examined further.

   Response to issue raised

   A multitude of options were considered for the Ashtown level crossing replacement during the option selection process (10 do-something options at MCA1 which was reduced to 4 at MCA2). The details of the alternatives considered and the option selection process are set out in Chapter 3 of the EIAR.

   Following significant feedback on the Ashtown preferred option at public consultation no.2 in Summer 2021, a revised option selection process (Section 3.6.4.4.2 of the EIAR) was undertaken to ensure all feedback was analysed and considered in the re-assessment. This resulted in 14 options including some previous options, new options and revised options being assessed through the same two stage MCA process. These options were presented to the public at a localised physical public consultation event in Spring 2022. Appendix A3.2 Public Consultation No. 2 Consultation Findings Report in Volume 4 of this EIAR provides a summary of the feedback received.

   This preferred option has now been assessed in the EIAR and the Natura Impact Statement (NIS) and is the subject of this Railway order application.

3. Summary of issue raised - From a town planning perspective, states that Options 4/4a and 9 are more optimal.

   Response to issue raised

   The proposed preferred option has been developed through a multi criteria assessment and has considered feedback received from the local community, businesses and representatives at three no. public consultations including a specific localised Ashtown Public Consultation.

   The details of the option selection process are set out in Chapter 3 of the EIAR.

   Section - 3.6.4.4.1: Do-Something Option, Ashtown Level Crossing.

Option 4 & 4a: Closure of the level crossing and provision of link from River Road to Navan Parkway Station grade separated junction and the construction of an underbridge structure at existing Ashtown level crossing for pedestrian and cycle access.

Option 9 Closure of the level crossing and lowering of the railway vertical alignment with bridge over railway and canal at Ashtown level crossing, retention of the canal and locks west of the level crossing.

Table 3-11 Stage 1 MCA Matrix provides summary tables of MCA.

Under Economy sub-criterion, Options 4+4a, 4+4b, rated Significant Disadvantage because they involve the construction of substantial works at two locations. Option 9 is rated Significant Disadvantage due to the expense of lowering the railway over a long distance.

Under Integration, Options 4+4a and 4+4b are rated Some Advantage as, although they impact on the rugby grounds west of Ashtown and the high amenity grounds there, they address local access issues in Ashtown.

Under Environment sub-criterion, Options 1, 4 & 4a and 4 & 4b have some comparative disadvantage over other options due to directed impacts on protected cultural heritage sites such as the demesne landscapes associated with Ashbrook and Ashtown Lodge (Options 4 a &b) and Longford Bridge (Option 1). However, these options have the potential to result in reduced impacts on sensitive noise and air receptors. Option 9 also has significant disadvantage over other options due to its construction related impacts on sensitive noise and air receptors, and the potential impact to water quality of the Royal Canal pNHA. Works within the Royal Canal have the potential to impact fish and crayfish which will have to be taken from the canal prior to works. Demolition works could also disturb and displace fauna.

4. Summary of issue raised - Objectivity of MCA - states that the choice and objective interpretation of the six MCA criteria is not clear, neither the choice of Option 10 over other options.

Response to issue raised

An extensive list of options was considered as part of the multi-criteria analysis for option selection at Ashtown. Additional options were added as feedback was received from the non-statutory public consultation process. The final list of options amounted to 13 in number in addition to the Do Nothing and the Do Minimum options. The analysis was carried out in two stages with less likely options pruned away as part of multi-criteria analysis stage 1 (MCA1) and a more refined comparison carried out for multi-criteria analysis stage 2 (MCA2).

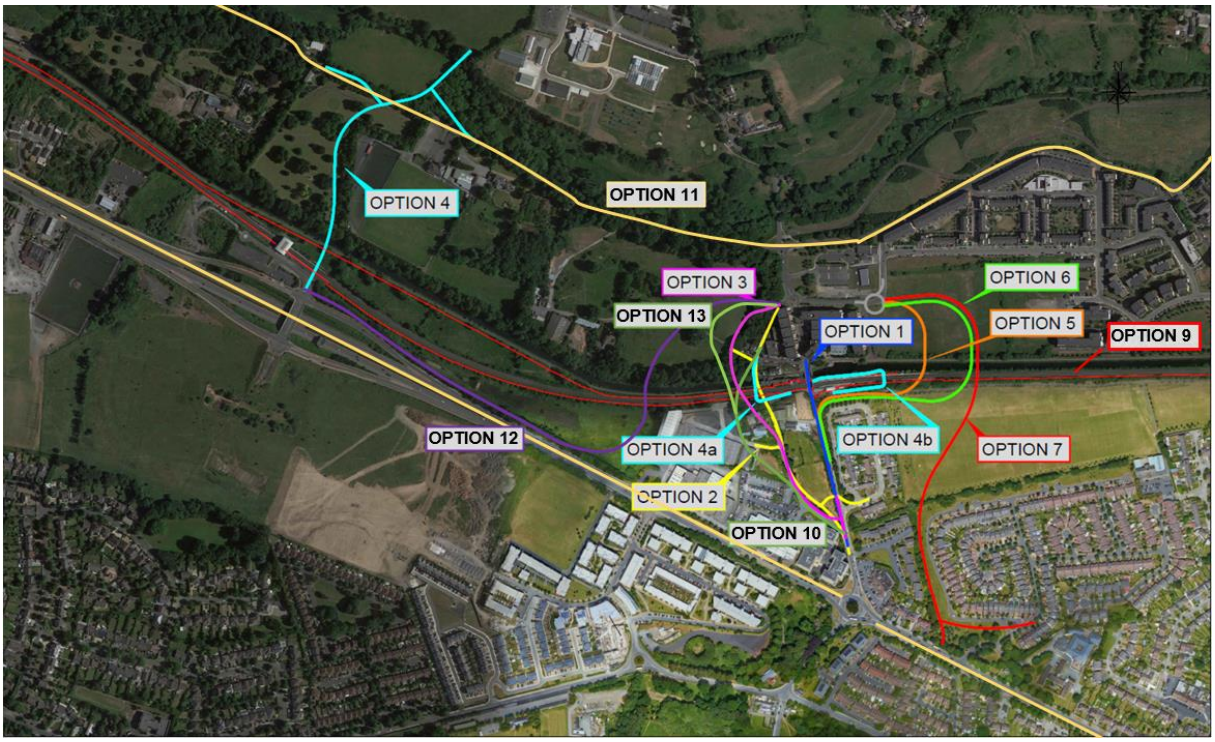
A full list of the 13 do Something Options is presented below:

Options
1 – Online Overbridge / Underbridge along Ashtown Road
2 – Underbridge on Mill Lane west of the level crossing with local road diversion
3 – Overbridge on Mill Lane west of the level crossing with local road diversion
4 – Navan Parkway Station Link Road with Widening of River Road,
4a – Pedestrian Cycle underbridge west of level crossing
4b – Pedestrian Cycle overbridge east of level crossing
5 – Low Clearance Canal & Railway Underbridge east of the level crossing with local road diversion
6 – Overbridge east of the level crossing with local road diversion
7 – Overbridge east of level crossing with diversion along route to N3
8 – Pedestrian / Cycle Bridge only east of the level crossing
9 – Railway lowered between Pelletstown and Navan Parkway stations, canal channelised over associated length, train station lowered and new bridge at the location of the level crossing to support Ashtown Road.

10 – Underbridge West of Mill and the level crossing with local road diversion
11 – R102 River Road, R105 Ratoath Road and Nephin Road upgrades and Station Pedestrian Cycle Bridge construction.
12 – New roadway from Navan Parkway interchange with Overbridge crossing the railway and canal west of the level crossing.
13 – Overbridge West of Mill and the level crossing with local road diversion

Ashtown Level Crossing Options

The options are illustrated graphically below:



Ashtown Level Crossing Options considered

The outcome of the first stage of analysis MCA1 is presented in Table 3.15 in EIAR Volume 2A.

The options selected to progress to Stage 2 of the analysis (MCA2) were as follows:

Options
4 – Navan Parkway Station Link Road with Widening of River Road,
4b – Pedestrian Cycle overbridge east of level crossing
10 – Underbridge West of Mill and the level crossing with local road diversion
11 - R102 River Road, R105 Ratoath Road and Nephin Road upgrades and Station Pedestrian Cycle Bridge construction.
12 – New roadway from Navan Parkway interchange with Overbridge crossing the railway and canal west of the level crossing.
13 – Overbridge West of Mill and the level crossing with local road diversion

EIAR Volume 2A Table 3-17 provides a summary matrix of the comparative assessment undertaken at Stage 2 to identify the preferred option.

Option 10 – The underpass offline to the west of the listed mill building was identified as the preferred option over Options 4+4b, 11, 12 and 13.

Characteristics associated with Option 10 which were influential in its option selection for inclusion in the railway order are as follows:

Disadvantageous characteristics include:

- Impacts profoundly on Burke Brothers & Son Ltd.
- Direct impact on Ashton House (RPS 690) lodge and gate;
- Indirect impact on the Mill and outbuildings (RPS 691);
- Significant Complexity in structures.

Advantageous characteristics include:

- Maintain access to community facilities in close proximity to Ashtown village;
- Lower visual impact as below ground;
- Superior land use integration performance as it follows sections of existing roadway along much of it's length curtailing footprint on high amenity and high technology zoned lands.
- No impact on River Road & Tolka River valley;
- Curtails the diversion of traffic onto other local routes;
- Lower impact on commercial enterprises other than Burke Brothers & Sons Ltd.

5. Summary of issue raised - insufficient detail on drawings - states that full extent of land take necessary has not been shown on the drawings, nor the dimensions (even at high level). Permissions for a planning application (ABP Ref. 305828) was quashed in 2020 for this reason. e.g., Drawing No. MAY-MDC-HRW-LC01-DR-C-0101-D in draft RO

   The case referenced is [2020 No.293 JR] (ABP Ref. 305828) Mr. Justice Richard Humphreys judgement on a housing development in Balscadden, Howth, County Dublin. In the referenced case the issue was in relation to a 15-metre-high sheet piled structure. The sheet piles were to stabilise a high slope at the top of which the objectors' dwelling was located. Cl.61 of said judgement notes that:

   "*These issues arise because there are no planning drawings for the largely although not entirely subterranean sheet piling structures, which consist of five huge structures up to 15 metres high. The only drawings are sketches with incomplete dimensions that are **for proof of concept purposes only** and not as construction drawings."* [Emphasis added]

   Response to issue raised

   This issue highlighted in the case referenced [2020 No.293 JR] (ABP Ref. 305828) is very different to the DART+ West application. The image shown in the submission from Tom Phillips & Associates on behalf of Burke Brothers is from the Ashtown Revised Preferred Option Report. This is an option selection stage report and not the developed design on which the EIA and AA has been undertaken. In the DART+ West Railway Order the drawings of Ashtown are of the developed design which if approved will progress to detailed design/construction. All drawings are shown to scale so any dimension required can be obtained. The following drawings are provided to ABP and available on the project website www.dartwestrailwayorder.ie for inspection:

   The Railway Order Works Plans (specifically WP009) shows the land acquisition line overlaid in red on the OS mapping so each landowner can see the boundary of the proposed lands to be referenced for the DART+ West project which then allows landowners to identify the impact or proximity of the red line to their property boundary.

   The Railway Order Property Plan (specifically DW009) shows the landownership of each plot being referenced for the DART+ West with a unique ID which is referenced in the Book of Reference. This enables the landowners to see exactly which lands are being referenced from them.

   In the Railway Order Structures Plans under the heading of Specific Locations, for Ashtown there are 34 drawings provided which show the following:

- 9 drawings of the proposed Footbridge containing plans, elevations, axonometric views. These show existing ground levels, proposed levels and gradients on the footbridge, widths of stairs and ramps and heights.
- 21 drawings of the Mill Lane road realignment and underpass showing general arrangements, cross sections, plan and profiles, structural plans and elevations.

Further details including Tables with further dimensions, Figures with aerial photography and photomontages are provided in Section 4.8.6 of Chapter 4 of the EIAR (Volume 2A).

6. Summary of issue raised - Lack of Clarity - states that the full land take associated with the underpass as part of Option 10 is not clearly shown on drawings.

   Response to issue raised

   The land take shown on the Railway Order – Property Plans shows the full extent of lands required for the proposed development. This design is now fully developed to inform the EIA and AA submitted as part of this application. It includes all lands necessary to construct, operate and maintain the proposed underpass, overbridge and associated infrastructure. The Book of Reference provides the following details regarding the land take from the landowner in question:

   The permanent land acquisition within Schedule 2 (Part1) indicates a total of 7,980m² to be acquired from Burke Brothers, with Schedule 2 (Part 4) indicating a further 1,118m² to be acquired temporarily for the construction of the scheme. This does involve the Acquisition of buildings and structures used by the business. The permanent acquisition totals 44% of the total land holding of 18,326m². This excludes the lands parcels owned by Burke Brothers to the south of the main holding and business operations which are currently leased to Gowan Motors totalling 2,429m² of which 1,269m² is proposed to be acquired permanently and 1,160m² temporarily.

   During landowner consultations, members of the DART+ West project team liaised with Burke Bros Ltd. which included physically marking out the land take on the ground within the Burke Bros property to assist the representatives of Burke Bros. Ltd. in understanding the extent of the land to be acquired.

7. Summary of issue raised - Business Operations - state that more weight should have been given to employment impacts in the MCA because of how devastating the impacts are on the Burke Brothers. The economic / employment impacts were considered the same for Option 10 as they were for Option 2, 5 and others.

   Response to issue raised

   The rationale behind the preferred option and multi criteria assessment is provided in detail in the previously published options selection reports which is summarised in Chapter 3 of the EIAR.

   The impact on business operations is assessed under the heading Agriculture and Non-Agricultural. In respect of Option 10 the assessment concluded as follows: "The agricultural impact will have a slight impact on Ashtown Stables. The non-agricultural impact will include a profound impact on one commercial (Burke Bros Ltd.) property and significant impacts on one commercial property (Gowans) and development property. The remaining residential, commercial and amenity property impacts will be slight." This resulted in the option being rated Significant Disadvantage Over Other. This is the most negative rating available.

8. Summary of issue raised - Business Operations - concerned about how the dedicated set down area at Ashtown station and proposed underpass be managed and enforced. It is in the interest of the local residents that overspill of parked cars does not cluster around the nearby streets.

   Response to issue raised

   The proposed set down area will be managed by the local authority once the DART+ West project has been completed. Illegally parked cars will be dealt with by the Local Authority Parking Enforcement Department.

With regards to the proposed underpass, the centre line of the proposed underpass is a solid white line. It is illegal to park on the roadway at locations that have a solid white centre line. Similar to the above, illegally parked cars will be dealt with by the Local Authority Parking Enforcement Department.

9. Summary of issue raised - Business Operations - concerned regarding the operation of the business during construction phase, particularly during works along Mill Lane. Queries what mitigation measures are proposed to allow for continued operation of the business.

   Response to issue raised

   The property impact of the proposed DART+ West project has been assessed in the EIAR as Profound. This level of impact is defined as one where the use of the property cannot continue.

   The impact will be mitigated by measures including the provision of suitable property access to the remaining area, replacement of entrance and property boundary treatment and the reinstatement of the temporarily acquired area.

   These measures will facilitate access to the property and allow for limited commercial use of the remaining buildings and lands following the completion of the construction period.

10. Summary of issue raised - Alternative proposal routes - Option 4 & 4a should be reconsidered as the preferable choice as 4a follows the existing meander of Mill Lane, while Option 4 will link existing Navan Road Parkway with River Roads leading towards Ashtown Road.

    Response to issue raised

    Option 4 & 4a comprises closure of the level crossing, a link from River Road to Navan Parkway Station grade separated junction and the construction of a separate ped-cycle and disabled access bridge under the canal and railway with ramped links to the station.

    A multi criteria analysis was carried out of the options considered for replacement of access following closure of the level crossing in Ashtown. Option 4&4a dropped out of consideration at the MCA1 stage of the assessment due to the scale of significant negative impact the option had when compared to others. Negative impacts include the following:

    - Impact on High Amenity lands - At local level, the majority of Option 4 is located within lands zoned by Fingal DP as “High Amenity”. The route travels close to the boundary of the existing Coolmine Rugby Club and could support Fingal DP local map-based Specific Objective 136 “Facilitate pedestrian access from Coolmine Rugby Club grounds over the Canal adjacent to the Phoenix Park Railway Station”. However, the introduction of a new road infrastructure in 'High Amenity' zoned land would go against Objective NH51 (FCDP) to “Protect High Amenity areas from inappropriate development and reinforce their character, distinctiveness and sense of place”.
    - Cultural Archaeology and Architectural Heritage - The option will have direct impacts on River Tolka and former demesne landscapes associated with Ashbrook (RPS No. 941) & Ashtown Lodge, direct impacts on entrance and demesne associated with Ashton House (RPS 690), Indirect impacts on mill and outbuildings (RPS 691), direct impacts on Pelletstown House and outbuildings (structures of architectural merit), potential indirect impacts on the Royal Canal (RPS No. 944a) and the Royal Canal 10th Lock (RPS No. 944b) and potential to encounter archaeological deposits that may survive in undeveloped areas.;
    - Impact on Vulnerable Groups – The stables represent a significant amenity for vulnerable persons. This option is likely to require temporary relocation of the stables for 3yrs and reinstatement on a smaller site or permanent loss of the stables. For this option, road traffic is diverted by approximately with steep gradients north of the railway, a disadvantage to vulnerable road users. Local ped/cycle access will be maintained along ramped access under the proposed bridge with an approximate 400m diversion.
    - Impact on Biodiversity, Flora and Fauna - The alignment will have a very significant impact on the landscape character and structure, trees and woodlands of lands between Ashtown Lodge (and its associated lodge) and Coolmine Rugby Club. Alignment will impact existing landscape character of River Road and lands north to the Tolka River. The majority of the lands are laid out

in mature parkland with trees, walks and boundary woodland - all of which will be impacted by the alignment. The lands and the corridor of the Royal Canal are zoned High Amenity and identified as a Nature Development Area in the Fingal Development Plan. Tree and Woodland preservation objectives in Fingal Development Plan apply to the lands. The underpass will impact on the lands of Ashton House and the corridor of the Royal Canal west of Longford Bridge which are zoned High Amenity and identified as a Nature Development Area in the Fingal Development Plan. Side slopes would have significant impact due to removal of roadside tree-lined hedgerows leading to railway. The option will have a significant impact on the grounds of Ashtown Stables.

- Diversion of Vehicular Access - Option 4+4a results in road diversion associated with relocating access for vehicular traffic west of Ashtown. Community facilities affected by constrained access over the canal and railway include Shopping facilities, Giraffe Childcare, Pelletstown Educate Together National School - North of the railway and Halfway House, Ashtown Post Office, St Dominic's College, Meagher's Pharmacy, Ashtown Stables, Daughters of Charity - south of the railway;
- Impact on Water Resources - Some works north of river road are within floodplain of the river Tolka creating potential increase in flood risk to neighbouring lands. The option creates a potential pathway for pollutants to Tolka River resulting on negative impacts to Water Quality. The underpass excavations also pose potential risk to groundwater quality.
- Agricultural and non agricultural Impacts - The agricultural impact will have a profound impact on Ashtown Stables. The non-agricultural impact will have a significant impact on one residential property. The remaining residential, commercial and amenity property impacts will be slight;
- Economy, This option was more expensive than other options due to the extent of the scheme, its complexity, and the number of affected landowners.

The significant negative characteristics associated with this option resulted in it not being progressed past the first stage of the multi-criteria analysis.

11. Summary of issue raised - The MCA (Multi Criteria Analysis) criteria factors were too generic.

Response to issue raised

Summary matrices are provided in Chapter 3 of the EIAR which collapse the headings down to the 6 key PAG headings of:

- Economy
- Integration
- Environment
- Social Inclusion
- Safety
- Physical Activity

The Option Selection Report and the Ashtown revised Preferred Option report includes the full MCA tables. See the link below for the full MCA 2 contained in the Ashtown revised Preferred Option report.
Appendix-4-Ashtown-Revised-MCA2-(web-viewing).pdf (dartplus.ie)

This includes items such as Biodiversity, Water resources, Cultural, Archaeological and Architectural heritage, Non Agri impacts, Geology and Soils, Stations accessibility, impact on vulnerable groups, social inclusion, connectivity to adjoining cycling facilities, permeability and construction and land costs which would have considered impacts of utilities diversions and connections.

3.19 Ref. No.19 – LO019a – Lintwell Ltd

Representative – James Leonard of Castlethorn and Chartered Land Group

3.19.1 Submission Location – Ashtown

Issues raised in submission are addressed with their responses below.

3.19.2 Response to submission

1. Summary of issue raised - Sought detailed information, incl. proposed sections and CGIs of the works along Ashtown Road and Ashton House lands, however these were not received in advance of the public consultation for the revised option at Ashtown.

   Response to issue raised

   Photomontages of the proposed development at Ashtown / Ashton were prepared and included in the EIAR (Volume 3B). Refer to Section 2.2.9 above for more detailed on this issue.

2. Summary of issue raised - Have concerns with regards to impact on access arrangement to Ashton House and the impact of the project on character and setting of the gate - lodge which forms part of the Protected Structure of Ashton House. Submitted an AHIA as part of the submission which was done by David Slattery of Architectural Conservation Architects.

   Response to issue raised

   Chapter 21 Architectural Heritage of the EIAR recognises that there would be a significant negative effect on the entrance and gate lodge arising from the proposed project. The project has attempted to retain the access arrangements and minimise the change as much as possible. The alternative put forward in the submission would sever the historic vehicular access through the gateway, requiring a new vehicular access through the existing demesne wall to be created which would also represent a significant negative effect.

3. Summary of issue raised - States that the underpass would be a contrived and hostile environment, tunnel-like in character and devoid of any landscape opportunities.

   Response to issue raised

   The proposed underpass is approximately 40m in length with a gap between the railway bridge and canal bridge to allow natural light to supplement the road lighting. The walls will be finished in stone to match the character of the surrounding area. The southern approach has embankments on approach with natural landscaping. The northern approach will be similar to the existing, albeit, with a higher wall on the western side. The boundary walls will be finished in a similar stone to the existing.

4. Summary of issue raised - The underpass makes no provision for safe pedestrian access or egress to their lands at Ashtown House.

   Response to issue raised

   The proposed design makes provision for an uncontrolled pedestrian crossing from the footpath and cycle track on the eastern side to the western side just south of the entrance to Ashton House. This is deemed sufficient for the current use of the Ashton House lands which generates very little pedestrian demand. To future proof the crossing, ducting and chambers will be included to allow for the installation of a standalone signalised pedestrian crossing or the installation of a signalised junction if future vehicular demand increases.

5. Summary of issue raised - States that the pedestrian proposals at gate lodge is a very ill-thought-out proposal, which would be entirely unsafe and unsuitable.

Response to issue raised

The proposed design makes provision for an uncontrolled pedestrian crossing from the footpath and cycle track on the eastern side to the western side just south of the entrance to Ashton House. This is deemed sufficient for the current use of the Ashton House lands which generates very little pedestrian demand. To future proof the crossing, ducting and chambers will be included to allow for the installation of a standalone signalised pedestrian crossing or the installation of a signalised junction if future vehicular demand increases.

6. Summary of issue raised - State that the extent of permanent vs temporary land take is not readily apparent in the Property Plans or Work Layout Plans submitted as part of the RO.

Response to issue raised

Details of the land acquisition for both temporary and permanent acquisition for the owner's land is shown on Railway Order Property Plan (specifically DW009) while the extent of the works is shown on The Railway Order Works Plans (specifically WP009). More detailed plans showing the proposed road and bridge at Ashtown are available in the Railway Order Structures Plans under the heading of Specific Locations, for Ashtown reference MAY-MDC-HRW-LC01-DR-C-0102 to 0110.

7. Summary of issue raised - States that the drawings submitted are limited in detail.

Response to issue raised

All drawings are shown to scale so any dimension required can be obtained. The following drawings are provided to ABP and available on the project website www.dartwestrailwayorder.ie for inspection:

The Railway Order Works Plans (specifically WP009) shows the land acquisition line overlaid in red on the OS mapping so each landowner can see the boundary of the proposed lands to be referenced for the DART+ West project which then allows landowners to identify the impact or proximity of the red line to their property boundary.

The Railway Order Property Plan (specifically DW009) shows the landownership of each plot being referenced for the DART+ West with a unique ID which is referenced in the book of Reference. This enables the landowners to see exactly which lands are being referenced from them.

In the Railway Order Structures Plans under the heading of Specific Locations, for Ashtown there are 34 drawings provided which the following:

- 9 drawings of the proposed Footbridge containing plans, elevations, axonometric views. These show existing ground levels, proposed levels and gradients on the footbridge, widths of stairs and ramps and heights.
- 21 drawings of the Mill Lane road realignment and underpass showing general arrangements, cross sections, plan and profiles, structural plans and elevations.

Further details including Tables with further dimensions, Figures with aerial photography and photomontages are provided in Section 4.8.6 of Chapter 4 of the EIAR (Volume 2A).

8. Summary of issue raised - States that the photomontages are lacking in credibility. There are no photomontages centred on the proposed new entrance arrangement at the gate-lodge. Also notes that View 14 is cropped and does not give a full representation of the proposed entrance. An A3 booklet 'Ashtown Road Upgrade & Entrance to Ashton House' prepared by O'Mahony Pike Architects is appended to the submission and what the observer believes to be more accurate representation of the proposed works.

Response to issue raised

Fully accurate photomontages of the proposed development at Ashtown / Ashton were prepared and included in the EIAR (Volume 3B). The images are not cropped and are in fact are presented in a wide 24mm format. Each image contains the extent of various camera lens along the base of the image.

9. Summary of issue raised - States that the proposed works would visually sever the gate-lodge from its piers and gates, all of which form part of the Protected Structure at Ashton House which would create a very negative and conflicted sense of place at the entrance to the historic demesne.

   Response to issue raised

   Chapter 21 Architectural Heritage of the EIAR recognises that there would be a significant negative effect on the entrance and gate lodge arising from the proposed project. The alternative put forward in the submission would sever the historic vehicular access through the gateway, which would also represent a significant negative effect.

10. Summary of issue raised - Refers to the findings of the EIAR Architectural Chapter and states that the impact on the gate lodge is avoidable and every effort should be made to avoid this level of impact on the Protected Structure of Ashton House.

    Response to issue raised

    This is covered under the responses to 1 and 2 above.

11. Summary of issue raised - States that the proposals at Ashton House entrance would result in very compromised and inadequate vehicular and pedestrian access arrangements. states that lands at Ashton are future development potential and the current proposal would create negative impressions.

    Response to issue raised

    As the Ashton House gates form part of the protected curtilage, every effort was made to retain the character of the entrance. This included retaining the existing wrought iron gates which required the vehicular pillars to be reset to the same width, which is not consistent with 2 lanes of traffic entering. If, in the future, the lands are developed, a signalised junction can be introduced with a setback stop line within the Ashton House lands. This will allow vehicles to enter without being blocked by vehicles waiting to exit. It is a similar scenario with the pedestrian entrances on either side.

    The submission does not provide details of the developer's plans for access at this point that would not result in changing the gate arrangement.

12. Summary of issue raised - Have reservations about the safety and operational efficiency of positioning the vehicular entrance to Ashton House at a low point on the road.

    Response to issue raised

    The proposed entrance satisfies current design standards and visibility requirements.

13. Summary of issue raised - New at-grade vehicular entrance proposed for the existing roundabout junction be re-examined, as supported by Waterman Moylan, their consultant engineer to give greater legibility to the new Ashtown Road corridor alignment and to ensure adequate capacity at this junction between Ashtown Road and Rathborne Avenue. Propose to reposition and redesign the junction as a new purpose-planned vehicular and pedestrian entrance ('4-arm' junction' directly west off this reconfigured junction be accommodated to serve Ashton House. States that this would facilitate a positive relationship with a recently granted scheme (ABP-309318-21).

    Response to issue raised

    The lands at Ashton House do not have planning permission for development and no plans indicating internal layout or use have been developed. The proposed design adequately caters for the current land use/access and attempts to replicate the current setting as much as possible to retain the character of the entrance. The landowners suggested new entrance at the existing roundabout would not tie into anything within the Ashton House Demesne and affectively be an entrance to nowhere. Development of an internal roadway would be outside the scope and need as part of DART+ West. The proposed DART+ West proposal does not prejudice future development of an additional vehicular entrance at the existing roundabout. The land holding also has vehicular access from River Road which will be unaffected by DART+ West.

14. Summary of issue raised - Pedestrian and Cyclist entrance at gate lodge - propose that steps are provided within a within a slightly setback entrance at the Ashton House gate-lodge to facilitate pedestrian access at this original entrance point. Also proposes a ramped Part M and cyclist access is proposed behind the retaining wall.

    Response to issue raised

    Provision of the proposed arrangement does not provide vehicular access to match existing. Alternative vehicular access and internal roadway from the existing roundabout would be outside the scope of DART+ West.

    The design adequately provides for the current situation at Ashton House.

3.20 Ref. No.20 – LO019b – Rathborne Village Management Company

Representative – Rathborne Village Management Company

3.20.1 Submission Location – Ashtown

1. The proposed road alignment works at Ashtown have not considered the impact on the remaining elements of Rathborne Village 'Main Street' and its resultant change to both function, character and use of the village post-completion of works.
2. Redesign of the public realm should occur to take account of both hard and soft landscape opportunities to cater for a more pedestrian and cycle-oriented Village 'Main Street', whilst also addressing the needs of the commercial occupiers actively operating within the plaza.

3.20.2 Response to submission

The Rathborne Village “Main Street” is outside the scope of the DART+ West project. It is envisaged that the function of the village will be improved with the reduction of vehicular traffic through the Main Street. Access for the general public walking, cycling or driving to the village and business has been retained. The project does not impact existing on-street parking.

3.21 Ref. No.21 – LO020 – Flynn & O'Flaherty Construction

Representative – John Smyth of OMS Architects

3.21.1 Submission Location – Ashtown – Navan Road Parkway Station

1. As per the Fingal CDP, the lands proposed to be acquired by IÉ are zoned under Zoning Objective HT (High Technology) and are valuable, and appropriate for high-density development in close proximity to public transport, and the recently completed secondary school St. Brigid's GAA Club
2. Impacts on land and values
3. Justification of the site selection - have requested, but not received the justification for the selection of these lands for the compounds
4. Proposed alternative - propose to move the location of the compound to a different site in their ownership. The site (Appendix 6 of submission) is 1.275ha at the eastern end of the site, adjacent to the railway line and with vehicular access from the N3, via the Ashtown Business Park, noting that although these lands are valuable, they are not as valuable as the site currently selected by IÉ.

3.21.2 Response to submission

1. The lands to be acquired and owned by Flynn O’Flaherty are zoned in the previous and current Fingal County Development Plan 2023-2029. For ‘High Technology uses’. The land use zoning objective states: “Provide for office, research and development and high technology/high technology manufacturing type employment in a high quality built and landscaped environment.” The proposed

development will contribute to providing a high quality-built environment and will support the development of high technology uses through the provision of high quality sustainable transport infrastructure and services.

The development plan includes land use classes that are permitted in principle and not permitted. The proposed development supports employment uses through the provision of high-capacity public transport services. The submission received states that these lands may be considered for residential purposes which would not be consistent with the Development Plan for this land use zoning. The temporary acquisition of CIÉ for a construction compound beside the Navan Road Parkway station which is currently undeveloped would support the development of existing land uses and provide for efficient uses and transportation of equipment along the railway line during the construction phase. The smaller land area that is required for the telecommunications equipment and the maintenance compound is consistent with existing rail based infrastructure land uses in this area and are permitted class of development under the high technology land use zoning objective under Fingal CDP namely under 'telecommunications structures and 'industry light'.

The lands to be acquired and owned by Flynn O'Flaherty are zoned in the previous and current Fingal County Development Plan 2023-2029 For 'High Technology uses'. The subject lands are zoned as part of 'Long term strategic reserve for the lands around Dunsink'. The subject lands are also part of an objective to develop the Navan Road Parkway Local Area Plan (LAP 13.B) which requires the consideration of transport and drainage infrastructure as part of its strategic issues.

The land use zoning objective states: "Provide for office, research and development and high technology/high technology manufacturing type employment in a high quality built and landscaped environment." The proposed development will contribute to providing a high quality-built environment and will support the development of 'high technology' uses through the provision of high-quality sustainable transport infrastructure and services.

The proposed development supports employment uses through the provision of high-capacity public transport services. The submission received states that these lands may be considered for residential purposes which would not be consistent with the Development Plan permitted classes of development identified for this land use zoning. The temporary acquisition by CIÉ for a construction compound beside the Navan Road Parkway station (which is currently undeveloped) would provide for efficient transportation of equipment along the railway line during the construction phase. The smaller land area that is required for the telecommunications equipment and the maintenance compound after the construction phase is also considered to be consistent with existing rail-based infrastructure land uses in this area and is identified as permitted class of development under the high technology land use zoning objective under Fingal CDP namely under 'telecommunications structures and 'industry light'.

2. If the Railway Order is confirmed compensation will be addressed in accordance with statute and Compulsory Purchase practice and procedure as and when statutory notices are served.
3. The EIAR document Chapter 3 Alternatives (Volume 2 Main Text) explains the locations studied for the location of the construction compound and an operational phase maintenance facility in Navan Road. Section 3.6.9.1 explains the MCA developed that leads to selecting the chosen option.
4. The "alternative proposed option" shown in the Appendix 4 was studied as an option in the MCA (Multi Criteria Analysis). Section 3.6.9.1 of Chapter 3 Alternatives (EIAR) sets out the reason for the chosen option:
   - The project option has some comparative advantage over the alternative proposed option under the Environment Criteria. This option is partially located on undeveloped lands and made ground and will require the removal of less vegetation. Additionally, the project option is located the furthest from sensitive noise, and visual receptors compared to the alternative proposed option and is therefore advantageous.
   - Project Option offers an advantage over the alternative proposed option, as the first one provides a shorter access route to the compound and avoids construction traffic gaining access to the compound at the R147(Navan Road) level.

3.22 Ref. No.22 – LO105 – John & Noelle Keenan

Representative – Not Applicable

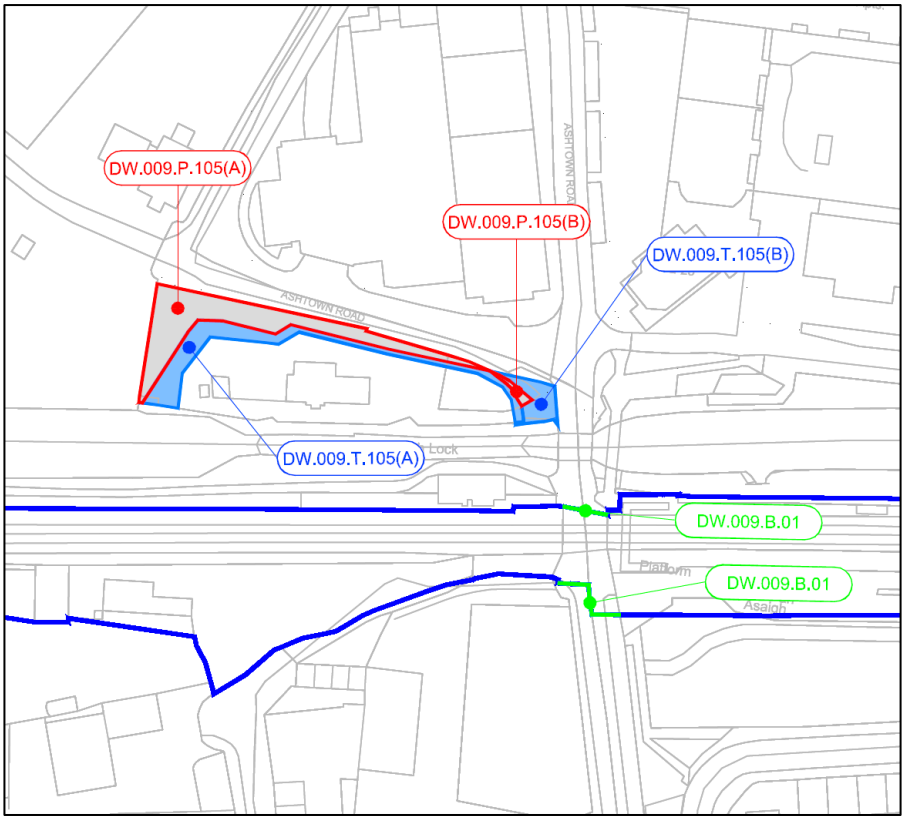
3.22.1 Submission Location – Royal Canal Cottage Ashtown

1. Objects to the acquisition of part of their property. Impacts on land and values
2. State that the plan provided to them does not contain detailed measurements outlining how much land may be permanently acquired or how much additional land would also be temporarily needed for the works. State that this does not make it possible for them to understand the implications of the proposed acquisition on the totality of their holding.
3. IÉ /CIÉ have not provided any evidence that the project is urgent and that they have the funding to complete the scheme if the RO is confirmed. Concerned that if funding is not available, their property may be sterilised for a considerable period of time.

3.22.2 Response to submission

1. The lands are required to construct the scheme including the proposed underpass and regrading works on Ashtown Road. Some of the land is only required temporarily and will be returned to the owners on completion of the works however the lands refenced in the Book of Reference - Schedule 2 (Part 1) - Land which may be acquired, references DW.009.P.105(A) and DW.009.P.105(B) are proposed to be acquired permanently.
2. The extent of the lands required are shown on PROPERTY PLAN NO: DW.009. The permanent acquisition required from the property is 314m^2, shown bounded in red and shaded grey while the temporary lands required total an additional 246m^2 shown bounded in dark blue and shaded light blue.
   - DW.009.P.105(A) - 303 m^2 (Land acquired)
   - DW.009.P.105(B) - 11 m^2 (Land acquired)
   - DW.009.T.105(A) - 188 m^2 (temporary possession)
   - DW.009.T.105(B) - 58 m^2 (temporary possession)
   - Existing holding - 1,402m^2

   Extent of acquisition/possession shown in figure below from the Server Drawing RO-L105-0001 issued to owner in July 2022 – Extract of Railway Order Plan - PROPERTY PLAN NO: DW.009.



Proposed Land Acquisition – Royal Canal Cottage

3. The need for the scheme is provided within Chapter 2 of the EIAR which outlines the key policies for the delivery of the project, in particular the National Development Plan (2021-2030) in which the DART+ Programme is considered as the cornerstone of rail investment within the lifetime of Project Ireland 2040.

   DART+ West is a key element for the implementation of the overall DART+ Programme and therefore this project is a major investment to comply with Project Ireland 2040 and a priority for delivery by Irish Rail. The current National Development Plan (NDP) funding profile provides for the full delivery of DART+ West.

3.23 Ref. No.23 – LO300 – John Malone & Grainne Malone

Representative – Not Applicable

3.23.1 Submission Location – Station House Ashtown

Issues raised in submission are addressed with their responses below.

3.23.2 Response to submission

1. Summary of issue raised - the current proposals at Ashtown have the potential to have serious implications under several aspects of the environment, and particularly residents, land, material assets and cultural heritage as well as the interaction between the various factors.

   Response to issue raised

   The Environmental Impact Assessment Report (EIAR) submitted as part of the Railway Order application for the DART+ West project assesses the potential effects of the project on the environment. The EIAR chapters provide an impact assessment on the environmental factors in

accordance with EIA Directive 2011/92/EU, as amended (the 'EIA Directive'). In relation to the aspects of the environment mentioned in this submission, these are covered under the following EIAR Chapters:

- Residents: Chapters 07 Population, 12 Air Quality, 14 Noise and Vibration and Chapter 23 Human Health;
- Material Assets: Chapters 16 Material Assets Agricultural Properties and 17 Material Assets Non Agricultural Properties, and 19 Material Assets Resource and Waste Management;
- Cultural Heritage: Chapter 20 Archaeology and Cultural Heritage; and
- Interactions: Chapter 25 Interactions.

Where significant effects have been identified within these EIAR Chapters, appropriate mitigation and monitoring measures have been developed to reduce the potential negative effects of the DART+ West project on the environment.

2. Summary of issue raised - As the scheme relates to Station House the assessment is not comprehensive and fails to consider impacts both direct and indirect on the property, the structure, rights of access and fails to consider the impact on the wellbeing of the occupiers particularly during the construction phase.

Response to issue raised

Section 17.6 of the EIAR outlines measures to mitigate the impact of the proposed development on property. These include the reinstatement of any temporarily acquired lands and maintaining of access during construction and operation phase.

3. Summary of issue raised - there is no mention of Station House in s.4.12.5. of the EIAR on the southern side of the canal and it appears from the submitted drawings that access to Station House will be directly affected by the works. Pedestrianisation of the existing canal bridge (Longford Bridge) impacts upon access to Station House. Could not find evidence of this direct impact having been satisfactorily considered and no mitigation measures are proposed. States that the EIAR is silent on the impact the proposed works have on access to the property and is silent on the right of way along the canal towpath.

Response to issue raised

Section 17.6.1.2 of the EIAR outlines measures to mitigate the impact of the proposed development on access to property and states "Access will be maintained to all affected property as much as possible and if interrupted will be restored without unreasonable delay. Traffic management measures will be put in place during construction where temporary or minor diversions are required".

4. Summary of issue raised - Station House is not mentioned at all in the EIAR description of the works. there has been no assessment of the impact on their property to date in the EIAR or elsewhere.

Response to issue raised

Chapter 12 Air Quality does not identify individual properties or buildings. The construction phase study area focuses on air quality receptors adjacent to dust generating activities or roads impacted due to construction activities. Activities that have the potential to generate dust include construction compounds, spoil and transport material and construction activity associated with the construction of the proposed development, including construction of ancillary structures and construction traffic haul routes.

Chapter 14 Noise and Vibration section 14.5.3.5.4 Zone C, makes reference to Station House under Ashtown Level Crossing where it is stated that: Night works are likely to cause a significant effect at surrounding receptors, and in particular at the Station House located adjacent to the rail tracks. During the day period, the likely effects from the works will range from moderate to significant dependent on the activities undertaken. The site can implement typical mitigation measures such as a solid hoarding

for the duration of the works and typical mitigation measures can be implemented, these are discussed in Section 14.6.1.

Chapter 15, Landscape and Visual Amenity identifies 'suburban properties along, fronting and viewing the proposed development not included in land acquisition' as receptors of landscape, townscape and streetscape characteristics and visual impacts (Table 15-6 Summary of Potential Construction Phase Impacts, pg 16/33-16/36). Whereby the significance of effects is rated as being Moderate/ Significant, Negative, Temporary/Short Term.

5. Summary of issue raised - Station House is not listed in the consideration of properties vulnerable to vibration in section 14.5.3.5 of the EIAR.
6. Response to issue raised

The list of properties vulnerable to vibration at Section 14.5.3.5 of the EIAR is not intended to be an exhaustive list but is a list of protected structures which were provided.

Notwithstanding the list of protected structures in Section 14.5.3.5 of the EIAR any other property that is found to be vulnerable to vibration during the construction of the Project will have the lower vibration limits outlined in Table 14-23 applied. For Station House this will be determined through the condition surveys that would take place prior to construction.

7. Summary of issue raised - the measures proposed in EIAR Section 14.6.1 are not considered of meaningful benefit to the occupants of Station House. Having identified it as the nearest receptor, no specific measures are proposed to protect the wellbeing of the occupants. Believe that it would be appropriate there should be further detailed analysis and it is appropriate that noise levels at Station House should have been taken by the Applicant. In particular, noise level readings are appropriate at the front and rear of the property.
8. Response to issue raised

Section 14.5.3.5.3 of the EIAR identifies Station House as being a sensitive receptor where there will be significant noise impacts in particular during night-works to the level crossing. The assessment does identify the possibility of installing a site hoarding which acts as noise screening, however, for works on the rail line it may be difficult to provide mitigation during the night works due to the nature of the sites being temporary worksites for a 4-hour period each night and the plant involved is difficult to mitigate. Therefore, it may not be practical to install site hoarding or permanent noise barriers to the work site. However, measures that can be implemented are discussed in Section 14.6.1

Noise measurements have been taken as part of the EIAR and are discussed in Section 14.4 of the EIAR. The closest monitoring location to Ashtown is N22 located within Martin Savage Park. This monitoring is used to characterise the baseline environment and has found that noise levels in the vicinity of Ashtown are 57dB(A) during the day and 54dB(A) at night. Noise levels will increase at locations closer to the rail line as that is the dominant noise source in the area. For example at survey location N21 located to the east of Ashtown adjacent to the track there noise levels are 66dB(A) during the day and 59dB(A) at night.

Section 14.6.1.2 of the EIAR discusses the noise and vibration monitoring to be undertaken during construction. The specific locations of the monitoring will be identified by the contractor based on their programme of works, however, it is expected that monitoring will take place at locations representative of the closest locations to the major work sites. In the case of Ashtown it is likely that Station House would be selected as a monitoring location during construction for both noise and vibration.

9. Summary of issue raised - It is difficult to accurately determine the likely noise levels at Station House without knowing greater detail than provided in the EIAR. The noise model should account for the impacts on noise propagation associated with the magnitude of the noise source, the distance from the source to the receptor, the intervening ground type and topography, the presence of screens or buildings, meteorological impacts and the time that a noise source would be operating.

Response to issue raised

Section 14.5.3 of the EIAR outlines the methodology adopted for the construction noise calculations. In summary, all construction noise calculations have been performed in general accordance with BS 5228 – 1 Code of Practice for noise and vibration control of construction and open sites - Part 1: Noise, using the plant sound power level method. The standard includes recommended methodologies for calculating construction noise levels and includes a range of best practice mitigation and management measures for the control of noise and vibration from construction sites. Noise levels are calculated taking into account a range of factors affecting the propagation of sound, including:

- The magnitude of the noise source in terms of sound power.
- The distance between the source and receiver.
- The presence of obstacles such as screens or barriers in the propagation path.
- The presence of reflecting surfaces.
- The hardness of the ground between the source and receiver.
- Attenuation due to atmospheric absorption.
- Meteorological effects such as wind gradient, temperature gradient and humidity.

10. Summary of issue raised - An assessment for Station House should be carried out to demonstrate whether or not the appropriate noise criteria can be met for the construction period and the in particular the night-time scenarios considered in the EIAR programme of works. Believes that such assessment would show that there will be profound impacts on the property.

Response to issue raised

Section 14.5.3.3 of the EIAR describes the criteria rating for construction noise significance. The criteria have been applied to the assessment of works at Ashtown and Station House is identified as being significantly impacted.

11. Summary of issue raised - Cumulative noise impact should also be considered from the various site compound and construction sites and activities. Believes that this assessment would show that the house will be uninhabitable throughout much of the construction period as it would exceed the upper limits for noise in the relevant standards.

Response to issue raised

The construction noise assessment in Chapter 14 of the EIAR takes into account the cumulative noise impact of all activities identified to take place during the construction of the Project. Appendix A14.3 of Volume 4 of the EIAR lists the noise sources considered for each phase of work and the noise output of each source. The conclusion of the assessment is that there will be significant impacts at Station House in particular when night-time construction works are ongoing. Section 14.6.1 of the EIAR outlines mitigation measures that can be implemented to reduce the impacts, however, Section 14.7.1 does identify that there will be significant residual impacts during night works at locations within Zone C where Station House is located.

12. Summary of issue raised - Do not believe that the impact of piling for the footbridge and underpass at Ashtown have been satisfactorily assessed or that the effects are suitably mitigated in the noise impact assessment presented in the EIA.

Response to issue raised

Appendix A14.3 of Volume 4 of the EIAR lists the noise sources considered for each phase of work and the noise output of each source. This includes the noise sources associated with piling in the vicinity of Ashtown. Section 14.6.1.9 of the EIAR outlines mitigation measures specific to piling work that can be implemented to reduce the impacts, however, Section 14.7.1 does identify that there will be significant residual impacts during night works at locations within Zone C where Station House is located.

13. Summary of issue raised - Station House is an old building circa. 200 years and has shallow foundations. The proposed location of OHLE supporting poles and excavations for their foundations may have the potential to affect Station House. Seek for cantilevering of the OHLE from the southern side is conditioned so as to mitigate possible subsidence.

    Response to issue raised

    The OHLE proposed at this location has already taken this into consideration and the solution proposed is a Twin Track Cantilever on the south side of the rail line to avoid a clash between Station House and an OHLE pole foundation. The only new element on the north side is a new signal. Signals are however small structures that do not require deep foundations unlike OHLE poles, therefore no issues are expected between the signal and the Station House foundations.

    This new signal is proposed to be approx. 10m from the nearest eastern point of the existing house.

14. Summary of issue raised - concerned at the absence of detail on the site boundary and footbridge and the potential impact upon daylight and night-time glare. Could find no evidence that these factors were considered in the EIAR, or at all.

    Response to issue raised

    Given the immediate proximity of the rail to the property there is little by way of visual screening or landscaping that can be provided. The rail lines will not be oved any closer to the property and as refenced in the point above the OHLE will be on the southern side away form the property.

    The footbridge design is described and presented graphically Section 4.8.5.4 Cycle and footbridge at Ashtown Station of Volume 2A of the EIAR. View 17 (shown below) of Volume 3B of the EIAR presents the context of the footbridge.

    Section 15.5.1.1.3 sets out the Landscape character impacts at the property location. It states *"The sensitivity of the streetscape / townscape in this local area of Ashtown is 'high'. The magnitude of change will be 'very high' and the likely effects in the construction phase will be very significant, negative, short-term."*

15. Summary of issue raised - seek confirmation that threshold vibration levels will be reduced by 50% for the purposes of assessing impact on Station House as per the National Roads Authority Report 2004.

Response to issue raised

The proposed construction works will be carried out in compliance with the recommendations in BS5228-Prt 2:2009 +A1:2014: Code of practice for noise and vibration control on construction and open sites. The maximum peak particle velocities due to intermittent vibrations at occupied properties will be limited to 4mm/s for frequencies less than 10hz and 10mm/s for frequencies between 50 and 100hz. For continuous vibrations the equivalent limits will be 2.0mm/s and 5.0mm/s respectively. The Contractor will be required to monitor vibrations before and during construction activity to ensure compliance with the requirements of the Contract. The proposed construction vibration limits are lower than those requested in the submission.

16. Summary of issue raised - Having identified Station House as the nearest receptor no specific measures are proposed to protect the wellbeing of the occupants in terms of air quality during construction. Station House will be severely impacted as a result of the dust emissions from the construction works and this is unavoidable given the scale of works proposed and the close proximity to the construction works.

Response to issue raised

With respect to dust nuisance, a sensitivity assessment was completed in Section 12.4.3 of the EIAR and an assessment of the potential dust generation due to construction has been completed in Section 12.5.1.4 of the EIAR. Guidance for this assessment was taken from the Institute of Air Quality Management (IAQM). Guidance on the Assessment of Dust from Demolition and Construction V1.1. In addition to the sensitivity assessment and impact assessment in the main body of the EIAR, two appendices have been prepared with respect to dust, one to review activities which have the potential to generate dust (Appendix 12.2. Potential Dust Generating Activities) and a second to document the mitigation measures that are to be applied across the project to minimise and suppress dust generation (Appendix 12.4. Dust Mitigation). This assessment concluded that when the dust minimisation measures detailed in the mitigation section of this chapter are implemented, fugitive emissions of dust from the site are not predicted to be significant and pose no nuisance, human health or ecological risk to nearby receptors. Thus, there will be no residual construction phase dust impacts.

Section 1.1.1 of the Dust mitigation plan relates to communication, and it states that the proposed development will: *"Develop and implement a stakeholder communications plan that includes community engagement before work commences on site" and* "*Display the name and contact details of person accountable for air quality and dust issues on the site boundary*".

Section 1.1.3 of the Dust mitigation plan relates to Monitoring, and it states that the proposed development will: *"Undertake daily on-site and off-site inspection, where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to the local authority when asked. This should include regular dust soiling checks of surfaces such as street furniture, cars and window sills within 100 m of site boundary, with cleaning to be provided if necessary", "Carry out regular site inspections to monitor compliance with the dust management plan, record inspection results, and make an inspection log available to the local authority when asked Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions*" and "*Agree dust deposition, dust flux, or real-time PM_{10} continuous monitoring locations with the Local Authority*."

These aspects will ensure that during construction monitoring is in place to ensure dust mitigation measures are working and if residents have any concerns about dust that a line of communication is available. Through this element, and others listed in the Dust Mitigation Plan to ensure residual dust is minimised, the proposed project will ensure local residents are not impacted by dust and if any dust impacts do occur, there is a line of communication to raise it with an appropriate person on site who can implement further mitigation immediately.

17. Summary of issue raised - the lands identified are the pedestrian access to Station House and are in their ownership and are private lands that make up no part of the canal towpath. The schedule and drawing fail to properly identify the plot and also fail to identify the right of way enjoyed by Station

House over the towpath which is immediately north of the lands identified by the applicant as DW.009.T.01.(E).

Response to issue raised

Noted that the lands are private lands and do not form part of the canal towpath. The existing right of way is along the towpath between the house and canal. The Railway Order does not include any proposals to extinguish this right of way, either permanently or temporarily for access to the Malone's property or along the canal and access will be maintained.

18. Summary of issue raised - there was a failure to identify the lands and to justify the need or any part of the Station House property to facilitate the proposed works or their construction. The proposed Railway Order is fundamentally flawed as it does not confer on the railway authority the requisite legal interests relative to our property for it to carry out the proposed works.

Response to issue raised

IÉ was in consultation with the landowner prior to the submission of the application for the railway order in relation to the proposed temporary acquisition of the lands as part of the railway order. Unfortunately, because of a typographical error, Waterways Ireland was incorrectly listed as the owner of the lands. In view of this error, IÉ is happy that the lands be removed from the draft railway order, or that with the consent of the landowner, the draft railway order be appropriately amended to reflect the landowner's interest in the said lands.

19. Summary of issue raised - It is necessary to maintain vehicular access to Station House, the enjoyment of Station House will be significantly diminished by the removal of vehicular access and the proposed interference will give rise to a very significant diminution to the value of my property.

Response to issue raised

Vehicular access to Station House will be maintained during and post construction. There are no proposals within the Railway Order that would prevent vehicular or pedestrian access to either the towpath for access or to the rear of the house and garage nor Ashtown Road.

20. Summary of issue raised - no provision is made in the proposed Order for the compulsory acquisition of the necessary interest and thus there would be no lawful authority for the proposed works.

Response to issue raised

IÉ was in consultation with the landowner prior to the submission of the application for the railway order in relation to the proposed temporary acquisition of the lands as part of the railway order. Unfortunately, because of a typographical error, Waterways Ireland was incorrectly listed as the owner of the lands. In view of this error, IÉ is happy that the lands be removed from the draft railway order, or that with the consent of the landowner, the draft railway order be appropriately amended to reflect the landowner's interest in the said lands.

Summary of issue raised - Since the property abuts the highway, they are entitled to enter onto the public road at any point where the land adjoins it as a common law right which is an incident of land abutting a highway. Lists a number of cases such as Sligo Corporation v. Gilbride [1929], Holland v. Dublin County Council [1979], Dwyer Nolan Developments Limited v. Dublin City Council [1986] and Futac Services Limited v. Dublin City Council, unreported, High Court, 24 3une, 2003.

Response to issue raised

it is not proposed to remove the owners right to access either the road or right of way abutting their land. Vehicular and pedestrian access will be maintained from the turning facilities north of the Rail line at Ashtown to both the house and towpath.

21. Summary of issue raised - Since the property abuts the highway, they are entitled to enter onto the public road at any point where the land adjoins it as a common law right which is an incident of land abutting a highway. Lists a number of cases such as Sligo Corporation v. Gilbride [1929], Holland v.

Dublin County Council [1979], Dwyer Nolan Developments Limited v. Dublin City Council [1986] and Futac Services Limited v. Dublin City Council, unreported, High Court, 24 June, 2003.

Their property has the benefit of a private right of way over the towpath on the canal. This arises by way of implied grant and/or by prescription. The scheme proposes to interfere with the exercise of that private right of way. There was no provision made for the extinguishment of the public right of way in the Railway Order, and it therefore follows that the proposed works will amount to a public nuisance. The interference with a public right of way is both a civil wrong and a criminal offence.

Response to issue raised

It is not proposed to remove the owners right to access either the road or right of way abutting their land. Vehicular and pedestrian access will be maintained from the turning facilities north of the Rail line at Ashtown to both the house and towpath. As such the extinguishment of the right of way was not included or referenced as there is no proposed extinguishment either permanently or temporarily required at this location.

22. Summary of issue raised - with regards to the closure of the Ashtown level crossing, it is clear from the analysis of the nature of an accommodation way by Laffoy J. in *Kavanagh v CI*É [2009] IEHC 624 that it cannot be restricted or extinguished at the discretion of the railway undertaking. Section 68 creates a statutory obligation to maintain the accommodation way at all times thereafter. The level crossing is also the subject of a public right of way which has not been extinguished. Also states that the level crossing is also part of a public road which has not been abandoned.

    Response to issue raised

    The level crossing along Ashtown Road is proposed to be closed as part of the scheme. The proposed extinguishment of the right of way is indicated on the Property Plan reference DW.038 and refenced indicated in green as DW.009.B.01 which is included in Schedule 6 of the Railway Order Book of Reference.

3.24 Ref. No.24 – LO038 – Brian Lynam

Representative – Not Applicable

3.24.1 Submission, Location – Porterstown

1. Concerned regarding the impact of the Porterstown footbridge on their home at "Abbey Cottage" Porterstown Road.
2. The Porterstown footbridge will be directly across from their home and at a high level, which will have an impact by allowing significant overlooking of the property and private amenity space and will also affect the views from the property.
3. The proposed bridge and associated works will completely alter the rural aspect of their property and substantially depreciate its value.
4. Concerned that the proposed bridge and ramp will give rise to anti-social behaviour.
5. To protect the privacy of their property some form of permanent screening should be provided.

3.24.2 Response to submission

1. Land impacts involve the temporary acquisition of roadbed to the east of the owners' house for works to construct the pedestrian overbridge and access to St Mochta's football club. No permanent acquisition of lands is proposed.
2. The property is located on the west side of Porterstown Road and is visually open to and fronts the road. The proposed structure is to be located east of Porterstown Road c.16m from the front of the property and over 25m from the western and southern aspects of the property. However, the proposed structure is elevated and it is acknowledged in Chapter 15 of the EIAR, that it will give rise to significant impact on the local landscape and visual setting. The EIAR states:

The provision of a new cycle and pedestrian bridge at Porterstown level crossing will involve the introduction of a large, engineered structure into a rural / urban fringe landscape. The works will result in disturbance of the local landscape character and introduction of visual clutter which will impact on the amenity of sensitive landscape receptors such as the Royal Canal (see Section 15.5.2.2.5) and protected structures (See 15.5.1.2.4). There will also be continued effects from the loss of trees and landscape areas as part of the changes to Diswellstown Road Junction, Porterstown Road Junction, Clonsilla Road Junction and Castleknock Road Junction. The sensitivity of the streetscape / townscape character in the vicinity of Porterstown level crossing is 'medium' / 'high'. The magnitude of change will be 'high' and the likely effects in the operational phase will be significant, negative, short-term and moderate, negative, long-term.

Mitigation in terms of visual impacts is proposed as follows: "*At Porterstown, the new bridge structure will be better integrated into the landscape through provision of screening native trees / and shrubs where feasible*."

3. The land acquisition (property) impact of the proposed DART+ West project has been assessed in the EIAR as Not Significant. This level of impact on a residential property is defined as "*an impact on the property that does not affect the use of the property (i.e. acquisition of public road / private road only)".*

   The closing of the level crossing will remove through traffic from immediately outside the property thereby improving the air quality, noise and visual aspects of the property. The provision of a pedestrian and cycle bridge at the level crossing will however introduce a significant piece of infrastructure in close proximity to the property. Landscaping will be provided but due to the required height of the bridge is unlikely to completely screen the view. As stated in Section 15.5.2.1.3 of Volume 2A of the EIAR "*The sensitivity of the streetscape / townscape character in the vicinity of Porterstown level crossing is 'medium' / 'high'. The magnitude of change will be 'high' and the likely effects in the operational phase will be significant, negative, short-term and moderate, negative, long-term*."

4. Refer to response 2.2.17. Mitigation measures have been included in Chapter 23 Human Health, Section 23.6.2 Operation Stage Mitigation. Attractive design measures, lighting and public realm enhancements particularly as part of the level crossing replacement works. As far as practicable these measures shall include:
   - The use of active and passive surveillance measures.
   - CIÉ/the design team shall consult with An Garda Síochána and the respective local authority at the detailed design stage.
   - Appropriate safety lighting on bridges and cul-de-sac at closed level crossings to ensure safety of all road users.

5. Section 15.6.3 Operational Phase of Chapter 15 Landscape and Visual Amenity includes for specific mitigation measures, whereby at Porterstown, the new bridge structure will be better integrated into the landscape through provision of screening native trees / and shrubs where feasible.

3.25 Ref. No.25 – LO042a – Porterstown Owners Management Company Limited by Guarantee

Representative – Petra Management, Property Management and Consultancy

3.25.1 Submission, Location – Coolmine

1. The proposed project calls for the removal of the soft landscaping areas between the surface parking spaces and the boundary wall/railing at Woodbrook Court and Woodbrook Square. This will materially alter the visual appearance of the estate when viewed from both the public road and within the estate.
2. The proposed removal of mature landscaping along the road would result in a significant reduction in the natural noise screening provided by the existing planting scheme. This, coupled with the

realignment of the Diswellstown Road so as to move closer to the Woodbrook blocks will result in a significant Increase in noise levels from the road which are experienced by Woodbrook residents.

3. Impact on Property Values - The proposed CPO of the Woodbrook estate will effectively reduce the size of the estate and will fundamentally alter its layout and visual appearance having a direct impact on the property values of the residential units.
4. Opportunities to be explored if it is possible to retain a landscaping verge between the Diswellstown Road and the Woodbrook parking spaces by making alterations to the exiting Woodbrook roadway and parking areas.

3.25.2 Response to submission

1. Due to the limited space between the proposed road works and Woodbrook, the amount of landscaping that can be retained is limited, Irish Rail and its designers commit to developing a design in consultation with Woodbrook that reduces the impact on this area to retain as much as possible of this landscaping. Furthermore, should the storage building for Woodbrook Court to the south west of the development be impacted this building will be reconstructed at this location to take account of the new boundary.
2. At this section, the Diswellstown Road is being widened to facilitate an additional lane. A 3m wide strip, at its widest, of existing landscaping is to be removed. The area to be removed tapers down to connect to the existing as it narrows heading north. The existing landscaping is approximately 20m wide. The widening will result in a 17m wide strip being retained. The difference in screening is negligible at this width.

   In terms of noise- Annex A of ISO 9613-2 Acoustics - Attenuation of sound during propagation outdoors provides some guidance on this topic. In summary, the foliage of trees only provides a small amount of attenuation to noise and only if the foliage is sufficiently dense to completely block the view along the propagation path. For sufficiently dense foliage that is less than 20m deep there could be reductions of 1-2dB depending on frequency of sound. Lower frequency sound is not affected as much as higher frequency sound.

   With regards to traffic increases on Diswellstown Road, Section 14.5.4.6.6 of the EIAR assesses the potential for noise increases due to increased traffic flows on the road network. This assessment concluded that noise levels would change by less than 1dB and therefore no significant noise increase will occur. It should be noted that due to the logarithmic relationship between traffic volumes and noise, traffic volumes must increase by multiples for significant changes to the noise environment to occur.
3. Detailed responses to point 3 of this submission is provided in the Section 2 – 2.2.11.
4. Due to the limited space between the proposed road works and Woodbrook, the amount of landscaping that can be retained is limited, Íarnród Éireann commit to developing a design in consultation with Woodbrook that reduces the impact on this area to retain as much as possible of this landscaping. Furthermore, should the storage building for Woodbrook Court to the southwest of the development be impacted, this building will be reconstructed in consultation with Woodbrook to take account of the new boundary.

3.26 Ref. No.26 – LO042b – St. Mochta's Football Club

Representative – Eamonn Prenter, Cunnane Stratton Reynolds

3.26.1 Submission, Location – Porterstown

Issues raised in submission are addressed with their responses below.

3.26.2 Response to submission

1. Summary of issue raised - St. Mochta's FC - aim to initiate constructive engagement with IÉ in relation to proposals contained within the draft RO, so that the future of the club can be secured.

   Response to issue raised

   CIÉ will continue to engage with St. Mochta's Football Club.

2. Summary of issue raised - Parking at St. Mochta's FC - the current proposals obliterate elevated spectator viewing from the existing car park, remove parking areas, and affect HGV access to the Castlethorn Developments compound.

   Response to issue raised

   At the construction stage alternative parking area to the east of the existing parking could be provided. CIÉ will continue to engage with St. Mochta's Football Club on measures to reduce potential impacts.

3. Summary of issue raised - Planning history of the site provided with the submission shows ongoing development and investment in the club facilities over a period of 20 plus years.

   Several planning policies support the club's view that the impact on their facilities and the associated land loss should be minimised, and the land loss to accommodate the proposed development should be reduced to the absolute minimum and the integrity of the clubs' facilities maintained, namely the NPF, Eastern and Midlands RSES.

   The submission recognises that the Kellystown LAP proposes to relocate the club grounds, but there is no guarantee that this will happen over the lifetime of the plan.

   Response to issue raised

   The history and importance of St. Mochta's Football Club (FC) in providing community and sporting facilities is recognised by CIÉ and project team. The design and EIA process have tried to avoid, reduce and where possible mitigate impacts to St. Mochta's FC. Ongoing consultation with St. Mochta's (leaseholders), Fingal County Council (the landowners) and Castlethorn Development (the landowners of the adjoining sites) have informed the process. CIÉ will continue to engage with St. Mochta's Football Club for ways to mitigate potential impacts. The relevant planning policy for the area indicates that St. Mochta's will be relocated to a new site (to be confirmed) as part of the Kellystown LAP 2017-2023. However, the plans before the Board do not assume that this will happen and allow for the continued use of St. Mochta's FC in its current location.

   Planning policy context

   The grounds of St. Mochta's club are zoned 'RA - Residential Area' in **Fingal County Development Plan 2017-2023**. The subject site is part of the **Kellystown Local Area Plan 2017-2021** (adopted in January 2021). The LAP contains detailed land use zoning policies and objectives relating to the subject site. The subject site is in 'Development Area 1' identified for new residential. The LAP provides for the relocation of St. Mochta's FC to the 'open space area'. These areas are illustrated in the Figures below.

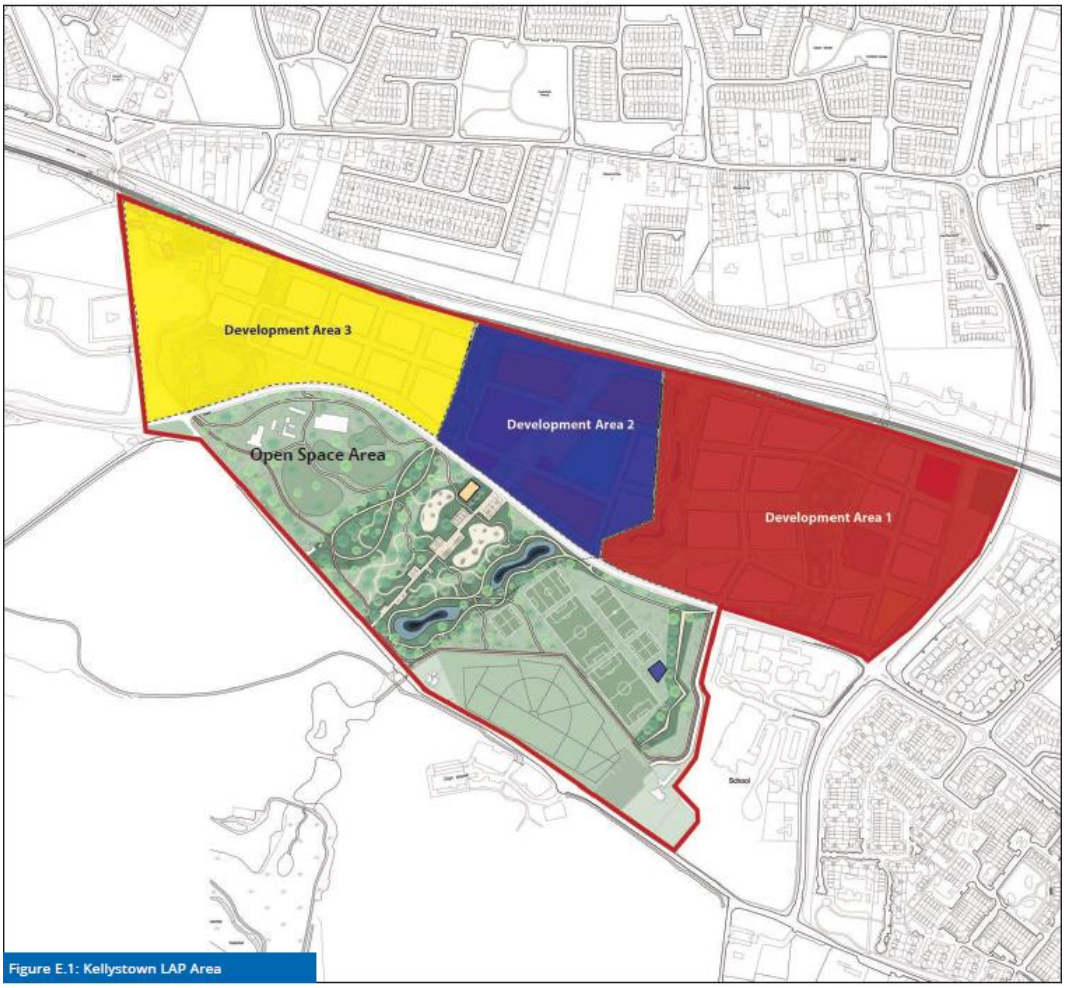


Figure E.1: Kellystown LAP Area

Figure 5.2: Kellystown Opportunities in Context

The LAP objectives ensure that St. Mochta's FC continues in the community in a planned and transparent manner as part of the future planning framework. This is provided for through **Objective 9.6** which states "A programme for the re-location and completion of all works in relation to St. Mochta's Football Club shall be agreed with the Planning Authority in advance of or as part of re-development proposals for the existing grounds. All works in relation to the completion of the new re-located sports grounds shall be completed and made available to the club for use prior to the commencement of re-development proposals at the existing club site."

Other relevant policies:

Key Objective for Development Area 1 include: ***DA 1.1*** *Provide for the relocation of St. Mochta's Football Club to an appropriate site in the Open Space Area in the southern portion of the LAP land bank in close proximity to the existing schools campus. The relocated facilities shall be constructed and finished on site by the developer to a suitable standard to be agreed with Fingal County Council prior to the re-development of the existing St. Mochta's Football Club site;*

The EIAR has identified that DART+ West, namely the design of the pedestrian and cycle bridge which encroaches on part of St. Mochta's site that there will be a 'significant impact on the property entrance for and an area used by club for car parking (identified in Chapter 17 of the EIAR). The mitigation in the EIAR is to 'reinstate temporarily acquired lands. Reinstate property boundary and entrance on a like-for-like basis.' The proposed development allows for the continued use of the entrance to the grounds throughout the construction phases. While it is recognised there will be disruption particularly to the availability of parking, CIÉ will continue to work with the landowners and occupiers to limit this disruption.

The DART+ West project is supported by and is consistent with the NPF, RSES as well as other government policies which support the provision of sustainable public transport infrastructure**.** The submission references a variety of policies contained within these national and regional policies relating to the provision and importance of community/sporting infrastructure and quality of life objectives. Whilst it is recognised there will be impacts to St. Mochta's FC entrance, storage facilities (containers) and parking, the club can continue to function throughout the construction and operation phases which ensures these national and regional objectives are delivered.

The DART+ West project also supports quality-of-life objectives through the provision sustainable public transport, active travel infrastructure, supporting sustainable urban development and increased levels of pedestrian and cyclist movement within and around the area. It will also reduce emissions from the private car use/transport sector which can influence the health and well-being of the population.

In conclusion, DART+ West is consistent with the national, regional, county and local (LAP) planning policies and objectives for this site. The LAP provides for the planned and phased relocation of St. Mochta's Football Club to a new location (objective 9.6). The proposed development is fully aligned and consistent with these objectives and does not compromise existing or future use of St. Mochta's FC and the delivery of the LAP.

4. Summary of issue raised - Porterstown footbridge - the associated turning head will have a major impact on how the club's facilities are secured and accessed, which require them to provide two accesses.

Response to issue raised

The proposed design provides for new blockwork walls, railings and gates at the entrance to secure the football grounds. As the level crossing will be closed it is unlikely that vehicles will use this route unless accessing the football grounds and adjacent properties.

5. Summary of issue raised - Porterstown Level Crossing - proposes that the pedestrian and cycle ramp is relocated to the other side of Porterstown Road.

Response to issue raised

The proposed design was determined to be the preferred option following a multi criteria assessment and non statutory public consultation of several different options. See Section 3.6.4.4.4 of Volume 2A of the EIAR. Locating the pedestrian and cyclist ramp on the western side of Porterstown Road, south of the railway line, was not included in the options selection process as it would result in the demolition of a residential property.

6. Summary of issue raised - Submission acknowledges that the EIAR identified significant impacts of the development on the local environment, including the club, but stated that in other instances the EIAR significantly understates that impact under landscape and visual chapter of the EIAR.

   Response to issue raised

   The landscape and visual assessment in Chapter 15 of the EIAR (Sections 15.5.1.1; 15.5.1.2 & Table 15.6, and 15.5.2.1; 15.5.2.2 & Table 15.7) acknowledges the significant impact of the construction phase on the local environment, and the significant impact of the proposed development in the operation phase. Mitigation measures are set out at Section 15.6 of the EIAR and shown on Drawing MAY MDC LAN ROUT DR U 15113 D in Volume 3A of the EIAR and the residual post-mitigation stage impact is stated as being 'slight negative long-term'.

7. Summary of issue raised - Submission states that the EIAR largely ignored the disruption to the club's activity during construction.

   Response to issue raised

   The EIAR (Chapter 17) has identified that DART+ West will have a 'significant' impact on the property entrance for and an area used by club for car parking (identified in Chapter 17 of the EIAR). The mitigation in the EIAR is to 'reinstate temporarily acquired lands. Reinstate property boundary and entrance on a like-for-like basis. This work will occur during the construction phase.

   Chapter 7 of the EIAR addresses population impacts. Section 7.5.3.4.2 assess the Journey characteristics and journey amenity. It states "*The potential impacts on vehicular users during construction phase are the same as those described for operation phase in Section 7.5.4.4.2."* Which states the impact on vehicular users is "negative, moderate, and long-term."

   The majority of works to the railway will be carried out during night-time, outside of the operational times. However, weekend rail possessions may be required. The potential effect on rail users has been assessed in Section 7.5.1.1.1.

   Chapter 7 Population of the EIAR assesses the impact on the population including impacts on community facilities during construction. Section 7.5.3.4.4 assesses the impact on Community Infrastructure. Construction compounds to facilitate works for the construction of the cyclist and pedestrian bridge at Porterstown level crossing, and for junction upgrade works at Diswellstown Junction will be located within lands adjacent to St. Mochta's Football pitch. While there will be changes required to the site resulting in disturbance to the operation of the facility the construction activities will not impact on the operation of the pitch during the construction phase.

8. Summary of issue raised - the Porterstown footbridge is over scaled and results in excessive and unnecessary land take.

   Response to issue raised

   The Railway Order for the DART+ West project will involve total land take of 0.3000ha comprised of 0.1266ha permanent lands and 0.1734ha temporary lands that are currently occupied by St. Mochta's Football Club.

   The permanent land take is required for the proposed Porterstown footbridge. The temporary land take is required during the period of construction. This land will be re-instated upon completion of construction.

   The proposed bridge is designed in accordance with current design standards to accommodate cyclists and mobility impaired pedestrians. The design standards provide requirements for width, gradients and landing locations which directly impact the scale of the bridge.

9. Summary of issue raised - the development may result in severance of the club's facility from its community and associated catchment (ability to access the facility by private vehicles/coaches will be diminished).

Response to issue raised

Chapter 7 Population of the EIAR Section 7.5.4.4.3 assesses the impact of the proposed project on community infrastructure. The southern extents of the proposed cyclist and pedestrian bridge at Porterstown Level Crossing are located within the premises of St. Mochta's Football Club. The proposed bridge does not directly affect the playing pitches in the club, however access may be impacted. As part of Kellystown LAP it is proposed to relocate St. Mochta's Football Club to a new location and as such, the proposed development will not have a significant effect on this amenity over the long term, once this plan is completed, however the project has completed its assessment based on the existing location. The severance of the club's facility and its community is mitigated by the provision of a dedicated rail crossing for pedestrians and cyclists to minimise the impact. This will result in a safer and more child friendly approach to the sports grounds. Following the level crossing closure vehicular traffic will access the club's premises from the south only, the closure of the level crossing results in diversion of 1.7km. The impact on vehicular traffic was assessed as negative moderate. The land take is required to provide a safe option for pedestrians and cyclists to cross the rail line. Porterstown crossing was reported as having the highest incident count from all at-grade crossings along the scheme. The incidents involved all modes of transport and included near misses for cyclists and pedestrians. By providing safer crossing the use of more sustainable transport options will be supported to access the club.

10. Summary of issue raised - there is potential for the public to overlook into the club's premises and thus, resulting in a loss of revenue for the club. Concerns regarding club's revenue as spectators may not wish to attend games if there is no car parking provided.

Response to issue raised

It should be noted the property is currently overlooked by Dr. Troy Bridge / Diswellstown Road. In this regard, compliance with the design standards and ensuring the safety of cyclists, pedestrians and mobility impaired users are key drivers of the bridge designs valid claims will be addressed in accordance with Section 2.2.11 of this report.

11. Summary of issue raised - there will be a negative impact on health by diminishing the provision, use and enjoyment of the club's sporting facilities which has not been addressed in the EIAR.

Response to issue raised

It is recognised in the EIAR there will be impacts to the entrance to the grounds and the construction works will cause disruption and impacts during the respective construction phases. These impacts will be temporary in nature and mitigation measure are presented in various chapters of the EIAR to reduce the negative effects. Chapter 7 Population, and specifically Chapter 23 includes mitigation measure to reduce potential effects to human health. The sporting grounds will remain open and operational throughout the construction phase which is recognised as promoting positive health outcomes for the community.

12. Summary of issue raised - the loss of sporting facilities and amenities and diminished use is contrary to national and regional planning policy and guidance.

Response to issue raised

The DART+ Programme (inclusive of the DART+ West project) is consistent and supported by national and regional policy outlined in Sections 4.2 National Policy and 4.3 Regional Policy of the Planning Report. This includes, NPF, NDP 2021-2030, National Sustainable Mobility Policy, NIFTI, The Climate Action Plan, RSES.

Furthermore, the proposed development is consistent with local planning policy where the DART+ programme is recognised as a strategic aim of the Fingal Development Plan 2017-2023. At the time of writing the Draft Fingal Development Plan 2023-2029 was prepared and published for public consultation on 24th February 2022.The local map-based planning objectives applicable to

Porterstown level crossing includes Objective 88: Ensure pedestrian and cyclist connectivity is provide across the canal and rail line at this location.

The Kellystown Local Area Plan 2021 approved by Fingal County Council in January 2021. FCC through the Kellystown LAP recognise the plans for the closure of the level crossings by IÉ to facilitate the roll out of the DART+ Programme. The project supports the LAP by providing safer and improved walking and cycling infrastructure at the level crossing. Additionally, the LAP will relocate St. Mochta's Football Club to a new location. The new site will accommodate a full-sized soccer pitch along with new sports facilities in the form of multi-use games areas (MUGAs) which will be accessible by the new schools. The planned relocation of St. Mochta's Football Club will facilitate the development of residential units within Development Area 1. This project supports the club continued operation in its current location.

3.27 Ref. No.27 – LO050 – Cathal Ross

Representative – Not Applicable

3.27.1 Submission, Location –Coolmine

Submission is with regards to land take along Clonsilla Rd / Clonsilla Link Road. May be affected by various proposal to acquire temporary land-take in proximity to their dwelling and request CIÉ to liaise with the use of the lands prior to the carrying out of works to ensure lands are restored appropriately.

3.27.2 Response to submission

Irish Rail will consult with the landowner with regard to the finalised layout at the detailed design stage to ensure that the verge/edge treatment and works are sympathetic to the existing walls and gate/entrance at the junction. If any modifications to the boundary wall are required these will be undertaken in consultation with the landowner.

3.28 Ref. No.28 – LO053 – Maribel Martin

Representative – Not Applicable

3.28.1 Submission, Location – Clonsilla

1. Closure of the road bridge at Clonsilla station will completely change daily life for them due to their age as accessing Clonsilla village will involve a significantly increased road journey. States that they will be completely cut-off from all services at Clonsilla once they stop driving.
2. Concerned that the proposed temporary compound at Greenmount will increase security threat to their property with the new entrance for commercial vehicles driving into the compound.
3. Proposed to move the Clonsilla compound to the north of the railway line and canal, adjacent to the signal box. States that this would be less invasive and would not require the destruction of habitat for the wildlife.
4. Proposes another alternative site for the compound across the R121 road on Beech Park lands.
5. The ability of returning the land at Greenmount to its previous condition after the removal of the proposed temporary compound is of particular concern.
6. An engineering assessment of Greenmount and the two other houses. The Mews and The Cottage, Greenmount, prior to any proposed works, will have to be carried out.

3.28.2 Response to submission

1. Vehicular traffic will be redirected via the existing road network creating a 4.1 km to 5.9 km diversion. The traffic modelling analysis undertaken as part of Chapter 6 Traffic and Transportation determined that there will be a 'moderate' impact on vehicular traffic. The likely effect on journey amenity of these vehicular users is negative, moderate, and long-term. The proposed development will improve the journey amenity of cyclists and pedestrians through the provision of a dedicated pedestrian and cycling footbridge over the Royal Canal, which will provide much safer crossing than it currently is. The segregated cycling and pedestrian facility may also encourage the uptake of active travel modes of travel in the area, having a positive and long term effect on journey characteristic (Refer to Chapter 7 Population, Section 7.5.4.4.2.)
2. Chapter 23 Human Health acknowledges that there is a potential for anti-social behaviour in the form of trespass and theft to arise on construction sites. All areas will be provided with suitable fencing/hoarding and appropriate security which will be monitored by the contractors.
3. Compound locations have been considered during the multi-criteria analysis of the project. The Clonsilla compound, located in a greenfield, serves the improvement and extension works of the existing siding, located to the south of the tracks, parallel to the proposed compound.

   The compound's location on land to the north of the railway line and the Royal Canal is not compatible with the location of the work to be carried out on the aforementioned siding.

   Work on the tracks requires materials, rails, sleepers, ballast, track devices, and pre-assemblies of these assets that must be located adjacent to the tracks. The chosen location is deemed the most suitable in terms of access and safety.

4. As per the previous answer, the location of the proposed compound is deemed the most suitable for the works of improvement and extension of the sidings.

   Locating the compound on the other side of the road would result in inconveniences both for construction work and for mobility and safety as construction vehicles constantly have to cross the R121 road.

5. The successful contractor will be required to reinstate the area on a like for like basis.
6. As per Section 27.14 of the EIAR Volume 2A "*Prior to construction and subject to written agreement with the relevant property owners, property condition surveys will be undertaken in relation to all buildings / structures in use located within 50 metres of the extents of the landtake boundary"*.

3.29 Ref. No.29 – LO058 – Seamus Ross

Representative – Not Applicable

3.29.1 Submission, Location – Barberstown

1. Consultation is required to ensure works concerning the observers' property are carried out sensitively and proper restoration takes place.
2. Observer uses land for keeping horses, which requires consideration.
3. Observer owns land on both side of laneway off of Kellystown lane, where a nearby level crossing is proposed. Proposed roundabout may not be required, as observer and any tenants are only people who use the lane leaving public access to this laneway may result in antisocial behaviour (dumping).
4. Observer proposes to extinguish the right of way to laneway and provide dedicated access for the observer from Kellystown Lane.
5. Observer is concerned that new boundaries created will be hedgerows, and would prefer them to be maintenance free, e.g., stone wall.

3.29.2 Response to submission

1. Noted – Draft Accommodation Works can be discussed with the landowner and their agent in advance of the approval of the scheme. Once the scheme is approved the landowner will be able to agree the finalised accommodation works with Irish Rail and CIÉ regarding accommodation works including boundary treatment and other restoration works to the property.
2. Noted that this land is used for horses and has been assessed accordingly within the EIAR.
3. Currently Irish Rail propose to close the level crossing but maintain access to the rail from this location for track access and maintenance.
4. Should the owner wish to extinguish the right of way along this lane for the public this would be for the owner to agree with Fingal County Council as part of a separate request, noting that as part of this process Irish Rail would seek to maintain it right of way to access the rail along the existing Barberstown Lane / Milestown Road, south of the existing level crossing.
5. Preference noted – boundary treatment is proposed on a like for like basis, noting that flexibility exists in the accommodation works which will recognise the mature nature of the existing hedgerow boundary and the loss of existing screening that will result from the proposed scheme.

3.30 Ref. No.30, 31 & 33 – LO060 & LO062 – Alanna Homes, Alcove Ireland Four Ltd & Dragonglen Limited

Representative – McCutcheon Halley

- Ref. No.30 – LO060 & LO062 – Alanna Homes
- Ref. No.31 – LO060 & LO062 – Alcove Ireland Four Ltd
- Ref. No.33 – LO062 – Dragonglen Limited

3.30.1 Submission, Location – Barberstown – Barnhill Garden

Submissions relate to the interface between the DART+ West project and the Barnhill Garden Village SHD, planning reference - Strategic Housing Development at Barberstown, Barnhill and Passifyoucan, Clonsilla, Dublin 15, An Bord Pleanála Case reference: TA06F.314125.

The Draft Railway Order proposes permanent and temporary land acquisition to facilitate construction of DART+ West, which would restrict development of the Barnhill Garden Village SHD. Proposed modifications which are agreeable to both parties and would allow for both developments to proceed are set out below:

1. Proposed Platform Access Ramp at Hansfield Station and relocated emergency services turning.
2. Lands for Rail Access.
3. Proposed Access to Hansfield station and Electrical Substations Hansfield Station.

These proposed modifications were presented by the applicant for Barnhill Garden Village SHD as part of their planning submission to An Bord Pleanála

3.30.2 Response to submission

CIÉ have met with the developers to discuss the issues raised in their submission and will continue to liaise with the developers to address the issues raised in their submission, subject to planning conditions that may arise in relation to either project.

3.31 Ref. No.32 – LO061– Joan Reynolds, Edel Reynolds, Madeline Reynolds, Francis Reynolds, Anthony Reynolds

Representative – Ciaran Sudway

3.31.1 Submission, Location – Barberstown

Issues raised in submission are addressed with their responses below.

3.31.2 Response to submission

1. Summary of issue raised - RO should not be approved until the Bord is satisfied there is an urgent need for the scheme and CIÉ have the funding to complete the scheme.

   Response to issue raised

   The need for the scheme is provided within Chapter 2 of the EIAR which outlines the key policies for the delivery of the project, in particular the National Development Plan (2021-2030) in which the DART+ Programme is considered as the cornerstone of rail investment within the lifetime of Project Ireland 2040.

   DART+ West is a key element for the implementation of the overall DART+ Programme and therefore this project is a major investment to comply with Project Ireland 2040 and a priority for delivery by Iarnród Éireann. The current National Development Plan (NDP) funding profile provides for the full delivery of DART+ West.

2. Summary of issue raised - RO should not be approved until the CIÉ have provided drawings to appropriate scale and the client has opportunity to consider these drawings.

   Response to issue raised

   Drawings detailing the design are shown within the draft Railway Order and EIAR. Railway Order Property Plans and Railway Works Plans were issued with the server packs for the Railway Order. Further design drawings providing more detail of the proposed works near the property at an appropriate scale and level of detail are included within the Railway Order Drawings, Book 3 Structures Plans, Specific Locations, Barberstown as follows:

Drawing Title	Reference Number
Roadworks Design - LC05: Barberstown - General Arrangement - Plan - Sheet Layout - Sheet 1 of 1	MAY-MDC-HRW-LC05-DR-C-0100-D
Roadworks Design - LC05: Barberstown - General Arrangement - Plan - Sheet 1 of 2	MAY-MDC-HRW-LC05-DR-C-0101-D
Roadworks Design - LC05: Barberstown - General Arrangement - Plan - Sheet 2 of 2	MAY-MDC-HRW-LC05-DR-C-0102-D
Roadworks Design - LC05: Barberstown - Typical Cross Sections – Sheet 1 of 1	MAY-MDC-HRW-LC05-DR-C-0103-D
Roadworks Design - LC05: Barberstown - Road Alignment Proposed - Sheet 1 of 3	MAY-MDC-HRW-LC05-DR-C-0104-D
Roadworks Design - LC05: Barberstown - Road Alignment Proposed - Sheet 2 of 3	MAY-MDC-HRW-LC05-DR-C-0105-D
Roadworks Design - LC05: Barberstown - Road Alignment Proposed - Sheet 3 of 3	MAY-MDC-HRW-LC05-DR-C-0106-D
Structures Design - LC05: Barberstown - Bridge General Arrangement - Plan - Sheet 1 of 3	MAY-MDC-STR-LC05-DR-C-0201-D
Structures Design - LC05: Barberstown - Bridge General Arrangement - Elevations - Sheet 2 of 3	MAY-MDC-STR-LC05-DR-C-0202-D

Drawing Title	Reference Number
Structures Design - LC05: Barberstown - Bridge General Arrangement - Sections - Sheet 3 of 3	MAY-MDC-STR-LC05-DR-C-0203-D

3. Summary of issue raised - Works Layout Plan No. WP025 shows the proposed CIÉ Scheme connecting into "*the proposed Ongar to Barnhill Distributor Road to be constructed by others*", and that Fingal made an application for a CPO (Ongar to Barnhill Distributor Road) Order 2008, Reference No. 06F.CH3079, on the 3rd July 2008.

   Response to issue raised

   The Ongar to Barnhill Distributor Road has received planning approval and is currently at tender stage with site clearance and fencing commenced. The project being delivered by Fingal County Council is due to be completed by Q3 2025.

   The DART+ West project will tie in to the Ongar to Barnhill Distributor Road which is proposed to be built in advance of the DART+ West construction being completed. However, should anything arise to prevent the completion of the Ongar to Barnhill Distributor Road, it is feasible for the DART+ West proposals at this location to tie in to the existing Barberstown Lane within the lands to be acquired as part of the DART+ West Railway Order.

4. Summary of issue raised – Following consultation with Fingal and its engineers, an agreement was reached stating that a suite of work would be included in the proposed scheme, providing services to the retained Reynolds lands which are zoned for residential development. On foot of this agreement, the claimants withdrew their objection and the CPO was subsequently confirmed and a Notice to Treat was served on the 20th May 2010. Since 2010, representative of client has been unable to submit a claim for compensation as Fingal has not been in a position to provide any final, or any drawings for the scheme reflecting the works that were agreed between the Parties. Fingal has not decided whether they intend to proceed with CPO or concede that it has abandoned it.

   Response to issue raised

   Agreements with Fingal County Council as part of the Ongar to Barnhill Distributor Road are outside the scope of the DART+ West project.

5. Summary of issue raised - It is not clear whether the Ongar Scheme referred to on CIÉ's drawing is the same as the Scheme for which a Notice to Treat was served in 2010 or whether it is a different Scheme and for which no CPO exists. It appears that the CPO has been abandoned, there is therefore no certainty that CIÉ can build or complete the current scheme as shown on the drawings presented to the Bord.

   Response to issue raised

   The design of the Ongar Barhill Distributor Road that the DART+ West project will tie into at this location is based on the latest design information provided by Fingal County Council and their consultants that is currently at tender stage. The Ongar Barhill Distributor Road is a separate project to DART+ West being delivered by Fingal County Council and is outside the scope of the DART+ West project.

   The proposed road at Barberstown as part of the DART+ West is proposed to be built subject to any conditions of the planning.

3.32 Ref. No.34 – LO121 – Lim Cheng Wah, Tan Wei Mai, Kateryna Gorodokin, Chris Ward, Olivia Ward, Joyce Bright

Representative – Castleknock Mews Residents' Association

3.32.1 Submission, Location – Castleknock Mews, Old Navan Road

Issues **raised in submission are addressed with their responses below.**

3.32.2 Response to submission

1. Summary of issue raised - CIÉ have not indicated the reason for the acquisition of the piece of land within the boundary of the Castleknock Mews development (DW.011.T.LO121(A)). This piece of land is the only access route for the residents of the development to access the Old Navan Road by vehicle, bicycle or by foot.

   Response to issue raised

   DW.011.T.121(A) is proposed to be acquired temporarily to allow the section off road/ access on this section to be regraded to tie in with the Old Navan Road, which is also proposed to be regraded to facilitate the raising of the Old Navan Road to provide the necessary clearances for the electrification of the rail line. Access to and from the entrance will be maintained.

2. Summary of issue raised - CIÉE should detail how they intend to access (DW.011.T.LO121(A)) with the gate.

   Response to issue raised

   CIÉ and their contractor will agree access arrangement with the affected residents to maintain access and security while the works are being undertaken.

3. Summary of issue raised - CIÉE should address the security concerns of the residents of Castleknock Mews if the gate is to be removed, or remain open indefinitely, or be controlled by a person other than the residents of Castleknock Mews.

   Response to issue raised

   It is proposed that the gate will be reinstated as part of the accommodation works for these lands. While the works are being undertaken at this location security in terms of temporary gates will be agreed with Irish Rail and the residents.

4. Summary of issue raised - CIÉ should detail how, with the bridge out of service, the residents of Castleknock Mews would access refuse collection.

   Response to issue raised

   The construction contractor will be required to maintain access for refuse collection during the construction contract including notifying refuse companies of alternative access arrangements during this period.

5. Summary of issue raised - CIÉ should retain M50 footbridge access for residents of Castleknock.

   Response to issue raised

   Access to the M50 Footbridge will be maintain albeit along the proposed diversion through Ashleigh Green while the Old Navan Road bridge is inaccessible to pedestrian traffic. Residents of the Castleknock Mews will continue to access the footbridge as they currently do.

6. Summary of issue raised - CIÉ should indicate how the walls, railings, trees and green areas will be reinstated when the works are completed.

Response to issue raised

It is proposed that any walls and railings will be replaced on a like for like basis. Any green areas impacted will be reinstated by clearing and then levelled, topsoiled and grassed. Where trees are removed new trees will be planted as per the landscaping requirements in the EIAR.

7. Summary of issue raised - CIÉ should Indicate if a pedestrian access route to Ashleigh Green from Old Navan Road will remain when works are completed.

Response to issue raised

Access to Old Navan Road from Ashleigh Green is proposed to allow access to the residential properties at Castleknock Mews during the construction modifications to OBG9 Old Navan Road Rail Bridge. This access route through Ashleigh Green is not proposed to be permanent and will be closed and affected areas reinstated once the works are completed.

8. Summary of issue raised - CIÉ should indicate how long will the works on the Old Navan Road Bridge will take to complete.

Response to issue raised

EIAR Volume 2 Chapter 5 Construction Strategy Section 5.6.10 sets out the construction strategy for OBG9 Old Navan Road Bridge. Section 5.3.8.1.2 Flat deck bridges – sets out the proposed construction methodology and the timescales for the construction. The total construction duration is estimated at approximately 42 weeks. This includes:

- 9 weeks of total road closure.
- 25 weeks of partial road closure (one lane open).
- 7 weeks of total pedestrian closure (from 22nd week the temporary jersey barrier or similar will be placed in the carriageway and in 22nd and 23rd weeks temporary pedestrian ramps will also be placed to allow pedestrian to cross).

3.33 Ref. No.35 – LO066 – Confey GAA Club

Representative – CORR Property Consultants Ltd

3.33.1 Submission, Location – Cope - Glendale

Issues raised in submission are addressed with their responses below.

3.33.2 Response to submission

1. Summary of issue raised - Owners object that land acquisitions appear to be surplus to scheme requirements.

Response to issue raised

Land Acquisition is limited to what is required for the construction of the project which includes modifications to the existing road and bridges, construction of new pedestrian and cycle bridges and associated footpaths and cycles, drainage and boundary treatment with temporary land acquisition required for the construction of an overhead electrical pole diversion and the construction of the new footpaths and cycle paths.

2. Summary of issue raised - Inadequate drainage details have been provided, potential for negative consequences.

Response to issue raised

Drainage from the works will discharge to the road drainage system, this will discharge away from the landowner's property. This drainage design will be further detailed during the detailed design stage and comply with all relevant standard and guidance.

3. Summary of issue raised - Inadequate information provided regarding mitigation measures for noise pollution.

Response to issue raised

Chapter 14 of the EIAR assesses the noise impact at a number of locations along the proposed development. The nearest receptor to Confey GAA club is N31 which is located at Glendale Meadows directly opposite the train line from Confey GAA Club and is therefore the closest representative assessment location. At this location a slight noise impact of 1dB is reported in Table 14.43, therefore no specific mitigation measures are required at this location as the scheme does not change the noise environment significantly.

4. Summary of issue raised - Lack of clarity in relation to access during/post construction, specifically new bridge works and footpaths/cycleways.

Response to issue raised

The new pedestrian and cycle bridges will be built before the reconstruction of the Cope Bridge, therefore ensuring access for pedestrians/cycles during construction works.

5. Summary of issue raised - More clarity relating to pedestrian access across the bridge to the club during road closures.

Response to issue raised

The new pedestrian and cycle bridges will be built before the reconstruction of the Cope Bridge, therefore ensuring access for pedestrians/cycles during construction works.

The timing of new footbridges and the bridge reconstruction is described in section 5.8.3.2. of the Chapter 05 Construction Strategy, included in Volume 2 Main Text of the EIAR.

6. Summary of issue raised - Health and safety issues for cyclists. Where will they go after they cross the bridge and arrive at first house on the east / club side?

Response to issue raised

Cycleways and footpaths beyond what is shown is outside the scope of DART + West project. Signage to advise the end of the cycleway will be provided.

7. Summary of issue raised - Lack of clarity around timeframe of works at Confey GAA club location. No commencement / completion dates.

Response to issue raised

EIAR Chapter 05 Construction Methodology shows an indicative Construction Programme for the entire project of approximately 47 months, with the structural works near Confey commencing approximately a year after the award of the contract.

Chapter 05, section "*5.8.3 OBG14 Cope Bridge deck reconstruction and widening*", details the construction duration: 46 weeks for the two pedestrian bridges and 40 weeks for the road bridge reconstruction (to be done after footbridges construction).

As explained in section "*5.3.8.1.1.4 Construction duration*", a total road closure is required of 15 weeks. A partial closure (one lane open) is required for 19 weeks.

8. Summary of issue raised - Direct Specific Impacts - works will impact the club's ability to play and train on the pitches. Severe pressure already exists regarding training space. Works will also impact on Bar and Sports Hall, which are a source of revenue for club.

Response to issue raised

Section 17.6 of the EIAR outlines measures to mitigate the impact of the proposed development on property. These include the reinstatement of temporarily acquired lands, the replacement of property boundaries on a like for like basis and the maintenance of access during construction and operation phase. Accommodation works which may involve the provision of boundary treatment and other works to mitigate the impacts on the property will be agreed after the confirmation of the Railway Order. Draft accommodation works and other details can be discussed with Iarnród Éireann in advance of this.

The Railway Order for the DART+ West project will involve total land take of 0.2073ha comprising of 0.0.0633ha permanent lands, 0.1030ha temporary lands and 0.0410ha public road.

The impact of the proposed development on this property has been assessed in the EIAR and the significance of this impact is deemed to be 'Significant'. This assessment has considered the area of temporary and permanent land take, the direct impact on sports pitches, the existing property boundary, footpaths and a right of way.

The 'Significant' impact results from the area of land being acquired, which is of such a scale that the mitigation required to continue operations are considered as significant.

Summary of issue raised - What entity is responsible for works being carried out at club location (i.e., Kildare CC, Irish Rail). On completion which entity will own the acquired land?

Response to issue raised

On completion the permanently acquired lands will belong to CIÉ / Iarnród Éireann, while the temporarily acquired lands will revert back to the current owners. The maintenance of the road, footpaths and cycle path will become the responsibility of Kildare County Council.

9. Summary of issue raised - Lack of clarity regarding hedging, screening and boundary treatment.

Response to issue raised

Section 15.6.3 of the EIAR states the following - *"17. At Confey GAA Club the existing pitch will be adjusted, safety net reinstated and the permanent boundary established at the new boundary line."*

Hedging, screening, walls and other details can be agreed as part of the overall accommodation works.

10. Summary of issue raised - Lack of detail in relation to finished road levels.

Response to issue raised

Drawings showing the proposed and existing road levels are provided in the Draft Railway Order Book 3: Structures Plan, showing the details for the road works at Leixlip Confey. The proposed road levels will be similar to the existing road levels north of the rail and canal.

11. Summary of issue raised - Lack of detail provided re. new lighting along scheme works.

Response to issue raised

Lighting is already provided along the existing carriageway. New and replacement lighting will be provided to light the existing road and new pedestrian and cycle facilities. Lighting and other details will be designed and agreed with Kildare County Council during the detailed design phase once the scheme has received approval.

3.34 Ref. No.36 – LO090 – Sherwood Homes Limited

Representative – Suzanne McClure of Brock McClure Planning & Development Consultants

3.34.1 Submission, Location – depot

Issues raised in submission are addressed with their responses below.

3.34.2 Response to submission

1. Summary of issue raised - The majority of the lands lie within the development boundary of Maynooth and are zoned for agricultural uses, under the current Maynooth LAP 2013-2019.

   Response to issue raised

   The proposed development is located within sections of lands zoned for agriculture within the Maynooth Local Area Plan 2013-2019 (Amendment No.1). The use of these lands by the project is required to construct a new offline track alignment leading into the proposed depot. Due to the existing track being below the 1:1000 flood level at Jackson's Bridge and to reduce significant impacts on the protected structure Jackson Bridge itself the preferred option at this location is to realign the tracks offline through these agricultural lands and to raise the level of the tracks above the 1:1000-year flood level. The land use zoning does not preclude the development of transport infrastructure on agricultural lands.

2. Summary of issue raised - any consideration of the impact of the proposed RO on the clients lands must consider (a) current use and operation of these lands, (b) the impact on the delivery of critical planned road Infrastructure (MOOR and N4 Scheme) within these lands, and (c) the potential future development of these lands having regard to KCCs population targets for Maynooth and desire to provide a second train station In this area to serve the Western side of Maynooth.

   Response to issue raised

   The impact of the DART+ West project on this property has been considered and assessed within Section 17 Material Assets: Non-agricultural property of the EIAR. The assessment of the property impact has been assessed and the significance of this impact is deemed to be 'Moderate'. This assessment has considered the area of temporary and permanent land take, the lands being zoned for agricultural use under the Maynooth Local Area Plan 2013-2019 and the current agricultural land use.

   As identified on Map 1 in the Maynooth Local Area Plan 2013-2019 (Amendment No.1) the location of map based Road Objective (i) – (vii) which cumulatively form the Maynooth Outer Orbital Road (MOOR) are 'indicative only'. At the time of preparation of the draft Railway Order application for the DART+ West project, the planning stage of the MOOR had not commenced (i.e. there is no options or preferred option to consider). The project team on MOOR will therefore need to be cognisant of the DART+ West, and incorporate the design of the project, where appropriate.

   The Constraints and Options non statutory public consultation for the N4 Maynooth to Leixlip Project was held in September 2022, after the draft Railway Order application for the DART+ West was submitted. According to the information on display at the public consultation, the options considered are mainly confined to the existing N4 /M4 road corridor, and therefore this project outside of the development boundary of the DART+ West project.

   See 2.7.14 of this report in relation to the second train station for Maynooth.

3. Summary of issue raised - The proposed works will result in permanent severance of the only existing agricultural access to these lands with no suitable compensatory access arrangement being provided to allow for the continued undisrupted operation of these lands for agricultural uses and will effectively render the entire remainder of the client's lands unusable.

Response to issue raised

The existing lands along the L5041 are zoned as agricultural lands. Access to the L5041 is proposed via a new agricultural access that will replace the existing agricultural access to the south of Jackson's Bridge. The existing access is shown below. The access from the east will remain unaffected.

Existing Access to Lands South of Jackson's Bridge (Google Street View)

4. Summary of issue raised - The proposed works will impact on delivery of the MOOR. There has been no reference to KCCs aspirations for the MOOR as set out in statutory planning policy.

   Response to issue raised

   As identified in the Maynooth Local Area Plan 2013-2019 (Amendment No.1). the location of map based Road Objective (i) – (vii) on Map 1 which cumulatively form the Maynooth Outer Orbital Road (MOOR) are 'indicative only'. At the time of preparation of the Railway Order application for the DART+ West project, the planning stage of the MOOR had not commenced. The project team on MOOR will therefore need to be cognisant of the DART+ West, and incorporate the design of the project, where appropriate.

5. Summary of issue raised - The proposed works will impact and undermine the delivery of the Maynooth to Leixlip N4 Scheme.

   Response to issue raised

   The Constraints and Options non statutory public consultation for the N4 Maynooth to Leixlip Project was held in September 2022, after the draft Railway Order application for the DART+ West was submitted. According to the information on display at the public consultation, the options considered are mainly confined to the existing N4 /M4 road corridor, and therefore this project outside of the development boundary of the DART+ West project.

6. Summary of issue raised - The proposed works will impact on the future development potential of the strategically located lands on the western side of Maynooth.

   Response to issue raised

   Under the Maynooth Local Area Plan 2013-2019 (Amendment No.1), lands west of Maynooth are currently zoned for agriculture, the purpose of which is to *"ensure the retention of agricultural uses and protect them from urban sprawl and ribbon development".*

7. Summary of issue raised - As per the Maynooth LAP Issues Paper, the proposed works will obstruct the delivery of a second train station due to the closure of all public road accesses at this area.

   Response to issue raised

   See 2.7.14 of this report in relation to the second train station for Maynooth.

8. Summary of issue raised - The RO conflicts with the Maynooth LAP objective TRO 2 and the Kildare County Development Plan objective M 06 and Section 17.2.8 of the Development Management Standards. It jeopardises the future developmental potential of Maynooth and the subject lands. The RO is premature as it has no regard to KCCs planned development aspirations for Maynooth as set out in the Maynooth and Environs Joint LAP Issues Paper 2024-2030.

   Response to issue raised

   The proposed development does not preclude the development of other planning policies. Maynooth Local Area Plan, 'TRO 2: TRO 2: To facilitate the future construction of the following roads and in the interim protect these routes from development:

   (a) ..... (e) Between the Kilcock Road (F) and the Rathcoffey Road (G)

   (f) Between the Rathcoffey Road (G) and the Straffan Road (A)....".

   There is no design information available for these projects. The proposed development does not preclude the future delivery of any future road projects, however future projects will have to be cognisant of the DART+ West project. IÉ will continue to work with Kildare County Council as appropriate.

   The Kildare County Development Plan 2017-2023 M 06 states 'Improve safety and capacity at the M4 Maynooth Interchange (Junction 7) and to investigate the provision of a future improved connection to the M4, at this location or elsewhere near Maynooth.' IÉ have been in discussions with Kildare County Council roads department and are aware of the development of this project which is at design stage and has not been submitted for planning. The proposed development does not preclude the achievement of this roads objectives and supports the development of safety and capacity improvements as it relates to the rail infrastructure.

   Section 17.2.8 Development standards relates to, "Access to Land" and states, Development should be designed in such a fashion that it will not prejudice the provision of vehicular or pedestrian access, or key infrastructural services in adjoining lands. Development should also be designed so as to ensure 'ransom strips' will not inhibit future development." As already stated the proposed development has been designed as far as practicable online however as part of the options assessment process, offline interventions are required in certain locations such as at Jackson bridge.

   The Pre-draft consultation Issues Paper to inform the preparation of the Joint Maynooth and Environs Local Area Plan (LAP) 2024-2030 was issued for consultation by Kildare and Meath County Councils in September 2022, after the draft Railway Order application for this proposed development was submitted to An Bord Pleanála. Having reviewed the Issues Paper the DART+ West project supports a spatial framework for guiding the future development of Maynooth and it's environs based on sustainable high quality integrated rail based transportation services for existing and future housing, retail, heritage, employment, and social and community infrastructure in Maynooth. It does not preclude any future concepts presented in the issues paper including a station to the West of Maynooth or roads objectives all of which will be subject to further studies and appropriate assessments.

9. Summary of issue raised - Inaccuracy in EIAR: Assessment of impact on the client's land under Chapter 17 does not appear to comply with the EIAR's own stated methodology as stated under Section 17.3-2.1 (Refer to Section 4.3 of the accompanying Infrastructure Report by DBFL).

   Response to issue raised

   The impact of the proposed development on this property has been considered and assessed within Section 17 Material Assets: Non-agricultural property of the EIAR. The assessment of the property

impact has been assessed and the significance of this impact is deemed to be 'Moderate'. This assessment has considered the area of temporary and permanent land take, the lands being zoned for agricultural use under the Maynooth Local Area Plan 2013-2019 and the current agricultural land use.

The methodology for determining the significance of the impact on this property is set out in Section 17.3.2.1 and is based on the assigned baseline rating together with the Magnitude of Impact on the property. The baseline rating for this property is deemed to be Medium (as per Table 17-2 of the EIAR) which is defined as "Land / site that is not zoned and / or planning permission does not exist for development". Under the Maynooth LAP 2013-2019 this property is within the LAP boundary and is Zoned Agricultural. This status is considered comparable with the definition for Medium in Table 17-2 given the lands are not zoned for development.

The Railway Order for the proposed development will involve permanent landtake from ID 89 of 3.8771ha agricultural lands and temporary landtake of 0.0859ha agricultural lands as well as permanent landtake of 2.7488ha agricultural lands and 0.0191ha public road. The Magnitude of Impact for this property is deemed to by Medium (as per Table 17-3 of the EIAR) which is defined as "An impact on the property where the use of the property can continue". The Medium Magnitude of Impact is deemed appropriate for development lands with access from the east. The Significance of Impact for this property is deemed to be Moderate (as per Table 17-4 of the EIAR) based on a Medium Baseline Rating and a Medium Magnitude of Impact.

Section 17.6 of the EIAR outlines measures to mitigate the impact of the proposed development on property. These include the reinstatement of temporarily acquired lands, the replacement of property boundaries on a like for like basis and the maintenance of access during construction and operation phase.

Where the property to be considered an agricultural property and an impact assessment carried out per Chapter 16 of the EIAR, the significance of the residual agricultural impact would be Moderate. The significance of the impact (as per Table 16-4 of the EIAR) is determined by a medium baseline rating and a medium Magnitude of Impact. The Residual Impact would have considered the implementation of mitigation measures including the restoration of agricultural access. In the absence of agricultural access being restored the significance of the residual impact would be Very Significant (as per Table 16-4 of the EIAR).

10. Summary of issue raised - CIÉ noted that bridging MOOR at this location is cost prohibitive due to span and height of bridge that would be required.

    Response to issue raised

    The MOOR is not part of the DART+ West project however the indicative location of the MOOR would need to take account the level and road constraints with regard to flooding, proposed new rail levels, existing development and the existing road levels of the R148 to the north of the rail line. The proposed DART+ West does not preclude the delivery of the MOOR.

11. Summary of issue raised - Highlights inaccuracy in EIAR: Calculation and assessment errors within the Traffic Impact Assessment.

    Response to issue raised

    The impact on vehicular traffic was assessed based on distance and journey time criteria. The impact on the Jackson's bridge was assessed correctly as negative moderate as stated in section 6.5.2.5 of the EIAR, however the 2.5km diversion at Jackson's Bridge was not included in the results in Table 6-15. The maximum % change in journey time in AM and PM peak periods should be between 95% and 94% respectively for this route. This will be addressed at Oral Hearing stage.

3.35 Ref. No.37 – LO090 – Sherwood Homes Limited

Representative – Tom Phillips and Associates

3.35.1 Submission, Location – depot

Submission relates to the non-consideration of Sherwood Homes Ltd lands at Newtown, Maynooth, questioning how access could be provided to facilitate, expedite and integrate the DART+ West project with delivery of the Maynooth Outer Orbital Route.

3.35.2 Response to submission

Responses to points raised in this submission are provided in above in Section 3.34 of this report.

3.36 Ref. No.38 – LO093 – St. Patrick's College Maynooth

Representative – John Spain Associates

3.36.1 Submission, Location – depot

Issues raised in submission are addressed with their responses below.

3.36.2 Response to submission

1. Summary of issue raised - the level of population growth identified in Maynooth will have significant impacts on the existing and planned upgrades to the Maynooth railway line and suggests that a new DART station to the west of the town, where most new housing is likely to be developed, should now be actively planned for as part of the DART + West proposals.

   Response to issue raised

   The existing project includes modifications to Maynooth train station to allow for the planned increases in capacity. This project does not preclude the provision of a new train station and or park-and-ride facility which can be progressed as part of a separate application at a later date.

   Section 7.5.4 of Chapter 7 Population of the EIAR, the increased frequency of train services will have a significant positive long-term effect on rail passenger travel, accessibility to employment and will promote sustainable travel patterns and future development opportunities across the study area and beyond. Furthermore, the proposed development will likely have positive, significant and long-term residual effect on the existing and emerging land use trends which support population growth and zoned development.

   The now adopted Transport Strategy for the Greater Dublin Area 2022-2042 recognises that 'As the commuter rail network is electrified under DART+, the benefits in terms of improved and more uniform train speeds and frequencies along these lines can facilitate additional stops.'

   The provision of the new station is not included in the DART+ West scope- however, any future station will be considered as a separate project, taking the DART+ West project proposals into consideration.

2. Summary of issue raised - The RO application has not adequately addressed a new and emerging planning policy framework, namely the draft Transport Strategy for the GDA 2022-2042 and the draft Kildare CDP 2023-2029 and the issues paper on the new Joint Maynooth Local Area.

   Response to issue raised

   The EIAR, specifically Chapter 2 Policy Context and Need for the Project; and the Planning Report submitted with the Railway Order application have considered the existing and emerging planning

policy framework. The proposed development supports and is consistent with the previous 'draft' and now approved; Transport Strategy for the Greater Dublin Area 2022-2042, and the Kildare County Development Plan 2023-2029 which took effect from January 2023.

While this project does not include capacity enhancements at Maynooth Station or a new station to the west of Maynooth this project does not preclude the provision of a new train station and or park-and-ride facility as identified within the Issues Paper on the Joint Kildare and Meath County Councils for Maynooth and Environs Local Area Plan (LAP) 2024-2030, which can be progressed as part of a separate application at a later date.

3. Summary of issue raised - It is the objective of the draft Transport Strategy for the GDA 2022-2042 to develop a new train station west of Maynooth. Given this objective, the submission states that it is critical that the current design included in this RO application, explicitly addresses this objective and either shows how a new station could be accommodated within the existing plans for DART + West as submitted, or how the plans can be modified to so accommodate the station, including vehicular and pedestrian access arrangements.

   Response to issue raised

   See 2.7.14 of this report in relation to the second train station for Maynooth.

4. Summary of issue raised - The draft Transport Strategy also includes an objective for the provision of park and ride facilities. The submission asks ABP to ensure that the future delivery of this park & ride facility is not prejudiced by but is facilitated by the DART + West.

   Response to issue raised

   The objectives of the DART+ West project is to increase capacity and electrify the line. Additional car parking facilities are not within the scope of the DART+ West project. However, Iarnród Éireann's Network Enhancement Division and the National Transport Authority's Park & Ride Development Office are working on other projects to deliver enhanced parking at stations, for cars and bicycles in parallel to DART+ West.

5. Summary of issue raised - Based on the foregoing, it is clear that the proposed new Kildare County Development Plan 2023-2029 will include specific objectives to supply the delivery of both a new train station to the west of Maynooth town and an associated train-based park & ride facility nearby, and therefore the submission asks ABP to have regard to the local planning policy with regards to the current proposals.

   Response to issue raised

   As previously stated above, DART+ West is consistent with Kildare County Development Plan 2023-2029, Maynooth LAP and these areas emerging planning and transportation needs. It does not preclude the development of a new train station to the west of Maynooth town and any associated train-based park & ride facility nearby.

6. Summary of issue raised - There is now the opportunity to maximise the benefits of this investment in the DART + West project by integrating it more fully with other proposed transport infrastructure in the area and with spatial plans for the future development of Maynooth.

   Response to issue raised

   CIÉ are committed to investing in the delivery of integrated and sustainable transportation services. The existing RO does not preclude any future infrastructure improvements that would be subject to separate planning applications.

7. Summary of issue raised - The inclusion of a new train station and associated P&R identified in the regional and local planning policy should be fully detailed so as to be compatible with the flood compensatory measures required in this area.

Response to issue raised

The provision of a new train station and associated P&R is not within the scope of the DART+ West project. The existing RO does not preclude any future infrastructure improvements and any such infrastructure improvements will need to be assessed separately including flooding and all other environmental considerations in accordance with the proper planning and sustainable development of the area.

8. Summary of issue raised - Maynooth Outer Orbital Road (MOOR): Submission is concerned that raising the railway west of Maynooth has significant consequences relating to the delivery of MOOR as it is understood that any new vehicular route crossing the railway would require a circa. 5m clear head height from track level. Suggests that there is an opportunity to align the proposals by safeguarding elements of the infrastructure already proposed to become a link within the future orbital road.

Response to issue raised

As identified in the Maynooth Local Area Plan 2013-2019 (Amendment No.1). the location of map-based Road Objective (i) – (vii) on Map 1 which cumulatively form the Maynooth Outer Orbital Road (MOOR) are 'indicative only'. At the time of preparation of the Railway Order application for the DART+ West project, the planning stage of the MOOR did not commence. The project team on the MOOR will therefore need to be cognisant of the DART+ West project proposals, and incorporate the design of the project, where appropriate.

With regard to any proposals for a road crossing of the rail along the indicative route of the MOOR the level of the proposed rail is required to overcome the existing flood conditions. Although the preference at this location is to divert the rail offline, any future road over the existing or proposed rail at this location would need to take account of the now determined flood level and the requirements for Irish Rail with regard to minimum clearances which will include drainage, electrification, and structural clearance constraints.

9. Summary of issue raised - Suggest that the road crossing west of Jackson's Bridge incorporates the future technical requirements of the MOOR, so that it can serve as both the replacement of the L5041 and the future MOOR. This would significantly enhance the proposals and avoid the costs and risks of delivering a second bridge across the railway and Royal Canal.

Response to issue raised

At the time of preparation of the Railway Order application for the DART+ West project, the planning stage of the Maynooth Outer Orbital Road (MOOR) had not commenced. The project team on MOOR will therefore need to be cognisant of the DART+ West project proposals, and incorporate the design of the project, where appropriate.

10. Summary of issue raised - Proposes re-route the existing high voltage electricity line which traverses the observer's lands in the vicinity of the proposed realigned track to east of Jackson's Bridge to a more advantageous location, such as along the route of the Outer Orbital Road.

Response to issue raised

The overhead lines will remain in the same location but heightened to achieve safe vertical clearances above the tracks

11. Summary of issue raised - Further clarity is needed in relation to the precise nature of the works that are being carried out along the public road and area of land that is being acquired permanently.

Response to issue raised

- DW.039.P.93(A) – (Permanent Acquisition) Existing roadbed required for construction of the realigned R148.
- DW.039.P.93(B) – (Permanent Acquisition) Existing lands required for construction of the realigned R148.

12. Summary of issue raised - Clarity will be needed in relation to the future ownership of the lands that are being acquired.

    Response to issue raised

    Other than access roads to serve Irish Rail or other private landowners, it is proposed that operation and maintenance of all other public roads and related infrastructure will revert to the local authority after construction. Where there is temporary land acquisition for roads it is proposed that the ownership will remain with the owner.

13. Summary of issue raised - There is a permanent acquisition plot DW.038 - P.93(A) that is being acquired in relation to an ESB Pylon/Mast. Why has this mast location to be a permanent acquisition as that would not be the standard practice in relation to electric lines? Will this plot be owned by ESB.

    Response to issue raised

    The piece of land is being acquired permanently to allow for the construction of a new 220kV tower. ESBI are seeking the permanent acquisition of the land so as to avoid any issues with planning of the proposed tower which is a significant structure in its own right. This is common practice on recent transportation schemes involving the diversion of high voltage ESBI infrastructure. The lands are being acquired by Irish Rail and could be returned to the College with a wayleave on it in favour of ESBI should this be agreeable with ESBI and the College.

14. Summary of issue raised - In relation to the various temporary areas, can the acquiring authority please confirm that all of the temporarily used lands will be returned to the owners in an equivalent or better state than existed prior to the works with no change in the existing legal status and no additional burdens on the title?

    Response to issue raised

    All of the temporary acquisition areas will be returned to the owners in an equivalent or better state than existed prior to the works except in the following cases,

    - DW.038.T.93(A) – (Temporary Acquisition) Required for construction area for ESBI line modifications - will require wayleave over lands for maintenance of tower which ESBI currently has to access the power lines under statutory powers.
    - DW.038.T.93(B) – (Temporary Acquisition) Required for turning head – turning head will be permanent however land ownership will remain as is.

15. Summary of issue raised - When is it envisaged that the works on the temporary acquisition areas will commence and what is the expected duration of the works?

    Response to issue raised

    - The temporary lands required for ESBI tower - DW.038.T.93(A) will be required for up to two months for the construction of the tower and modifications to the cables. This could be in advance of the main construction contract or during the construction contract.
    - The temporary lands for the ESBI pole modifications DW.037.T.93(A) and DW.037.T.93(A) will require access for a number of days for the works to raise the existing poles. This could be in advance of the main construction contract or during the construction contract.
    - The temporary acquisition for the turning area DW.038.T.93(B) and DW.038.T.93(C) will require access for up to 2 months for construction of the turning area and associated works. This will occur during the main construction contract.

3.37 Ref. No.39 – LO099a – Carlos Clarke Limited

Representative – Tom Phillips and Associates in collaboration with Maxpro Consultants and Transport Insights

3.37.1 Submission, Location – depot

Issues raised in submission are addressed with their responses below.

3.37.2 Response to submission

1. Summary of issue raised – the objector has concerns in relation to the option selection process of the emerging preferred EMU Maintenance depot location at Maynooth West which it claims lacks the required level of transparency and robustness.

   Response to issue raised

   The site selection process is described in EIAR Volume 2 Chapter 3 Alternatives and in Volume 4 Appendix A3.4 which provides more detailed consideration of the option selection process. It also includes detailed consideration on why the location at Maynooth West was selected over other options.

2. Summary of issue raised – the objector states that the selection of Maynooth West for the depot location compared to an alternative location at Hazelhatch West does not appear to be sufficiently clearly justified.

   Response to issue raised

   Pages 3/190 and 3/192 of EIAR Volume 2 Chapter 3 set out the advantages and disadvantages associated with the Maynooth West site. Table 2-3 of Volume 4 Appendix A3.4 presents salient comparators between the three options to the forefront of assessment.

   When comparing Maynooth West and Hazelhatch West, the following observations are made:

   - Maynooth West: The delivery of DART+ West exhibits the strongest EMU passenger growth characteristics of projects on the DART+ Programme and consequently the best modal shift in support of project objectives. There is advantage to delivery of the DART+ West project first. A depot on the Maynooth line, consequently, best suits the effective delivery of the proposed train service specification.
   - Hazelhatch West: The Kildare Line exhibits weaker EMU passenger growth characteristics than the Maynooth Line.
   - Maynooth West: Based on the current train service specification, electrification of the Maynooth Line would displace 9 ICR/DMU trains which would be cascaded to other non-electrified lines.
   - Hazelhatch West: Based on the current train service specification, electrification of the Kildare Line would displace 4 ICR/DMU trains which would be cascaded to other non-electrified lines.
   - Maynooth West: The railway fronting the site is straight on plan for a length of 2.5km. The site configuration is better suited to installation of the depot with associated stabling than is Option 4 Hazelhatch West.
   - Hazelhatch West: The railway fronting the site is approximately 1.7km long. The site configuration is less well suited to installation of the depot with associated stabling than is Option 2 Maynooth West.
   - Maynooth West: The R148 runs parallel to the railway, north of the proposed site and the M4 is located to the south of the site. The site is well located for staff access from Maynooth or Kilcock;
   - Hazelhatch West: Access to the site is more constrained than for the Maynooth West site, being located remotely from both the M4 and M7 motorways;
   - Maynooth West: There are no houses within the site of the proposed depot.
   - Hazelhatch West: There are three houses within the site of the proposed depot. These will constrain the layout of a proposed facility, or some may need to be acquired.

3. Summary of issue raised – the objector considers that the proximity of the depot to 3 no. dwellings located on the landholding would materially impact upon the amenity value enjoyed by them.

   Response to issue raised

   The proposed depot will be located at least 150m from the 3 no. dwellings and on the southern side of the Royal Canal and rail line. Screening is proposed to the dwellings from the proposed depot buildings and planting is proposed along the Royal Canal and railway line.

   There is a temporary impact on amenity to dwellings associated with the construction of the proposed depot access bridge and link to the R148 (Kilcock road). A Construction Environmental Management Plan (CEMP) will be prepared by the contractor to address potential impacts during the construction phase.

4. Summary of issue raised – the objector states that the fundamental weaknesses of the site have been minimised and positive attributes overstressed in privileging Maynooth West over the other possible locations, namely the better suited Hazelhatch West locations. Also believes that the comparative advantages between these sites have been underestimated and undervalued. Namely that the deciding criteria was better road access and less negative impact on the delivery of DART Expansion. States that the preferred criteria of ease of access merely benefits the construction phase of the depot, which then becomes a relatively immaterial factor in the day-to-day operation of the depot and logistics.

   Response to issue raised

   The principal comparators between the Maynooth West and Hazelhatch West options are set out under point 2 above. The decision to choose one option over others is based on a balanced assessment across the full spectrum of the CAF assessment criteria. It is not the case that access or project delivery were deciding factors.

   It is, however noted that implementation of DART+ West as the first project on the DART+ Programme, with the necessary depot facility, best facilities achievement of the objectives of the Climate Action Plan in the earliest practicable timeline.

5. Summary of issue raised – the objector questions the proposal's direction in the approach to mitigating impact upon the environment, with specific regard to the liability to flooding of the chosen proposed depot site, and the injuring of character of the Royal Canal Greenway.

   Response to issue raised

   Flood mitigation measures have been proposed so as to not adversely affect the existing flood regime within the vicinity of the development. All compensatory storage areas will be revegetated following excavation to required level. The vegetative cover will either consist of grasses in keeping with the current land cover or diverse wetland mosaic with features promoting biodiversity.

   As shown in the photomontages in Volume 3B of the EIAR the canal corridor is well screened from the site of the proposed depot by boundary hedgerows. Where these existing hedgerows are required to be removed, landscape planting is proposed to assist in mitigating any impact to the views. Sheet 38 to 41 of the Landscape Mitigation plans in Volume 3B show the level of landscape planting proposed.

6. Summary of issue raised – the objector claims that the land take is significant and is a costly loss of valuable, fertile agricultural land which would undermine the viability of the landowner's farm and livelihood.

   Response to issue raised

   The Railway Order for the DART+ West project will involve total land take of 45.7652ha (113.0883 acres) from a tillage farm of 143ha (353.3607 acres). Land take is comprised of 44.3071ha (109.485 acres) permanent agricultural lands, 0.3638ha (0.8989694 acres) permanent public road, 0.6385ha (1.577768 acres) temporary agricultural lands, and 0.4558ha (1.126306 acres) temporary public road.

The impact of the proposed development on this agricultural holding has been assessed in the EIAR and the significance of this impact is considered to be 'Significant'. The level of impact is such that the farm enterprise(s) is viable but will require considerable management changes. This assessment has considered the area of land take, the quality of the agricultural lands and the temporary and permanent impacts on the operation of the tillage enterprise.

7. Summary of issue raised – the objector states that there will be severe impacts on the existing habitat, and wildlife degradation, specifically along the rural greenbelt between Maynooth and Kilcock.

   Response to issue raised

   The Royal Canal and adjacent habitats form an ecological corridor. This is reflected in the EIAR, which lists both the 'Royal Canal pNHA' and the 'Railway line Ecological Corridor' as Key Ecological Receptors.

   The dominant habitat at the depot lands is arable farmland, with some pasture at the eastern and western sides. These habitats are not important for biodiversity themselves, but they can link areas of greater biodiversity value and act as a buffer zone. The Royal Canal, the Lyreen River, the Ballycaghan Stream, treelines and hedgerows at the depot site are of greater biodiversity value. In particular, the treelines at the eastern end of the depot site consist of mature oak and ash trees.

   The levels of protection afforded to the habitats and species are stated in the EIAR Biodiversity Chapter Section 8.2 (Legislation, Policy and Guidance). The protections afforded to individual species are described in Sections 8.4 (Desk Study Results) and 8.5 (Field Survey Results).

   Impacts on biodiversity (noise, vibration, lighting, visual disturbance etc) are identified in the EIAR Biodiversity Chapter Section 8.8 (Description of Potential Impacts (unmitigated). Table 8.25 presents the unmitigated construction and operational phase impacts on each Key Ecological Receptor. The Key Ecological Receptors include Badger, Otter, Bats and Birds. Mitigation is presented in Section 8.9. The residual impacts on the Key Ecological Receptors, following the application of the mitigation measures, are presented in Section 8.10. Although it has not been possible to eliminate all impact on biodiversity on an infrastructure project of this magnitude-, the impacts on Key Ecological Receptors have been reduced to sub-significant levels.

8. Summary of issue raised – the objector states that through the destruction of (Jackson's Bridge) and the dissection of the depot through the lands of the landowner, it disjoins the lands, making the land impossible to traverse between both sides of the canal.

   Response to issue raised

   The proposed development will directly impact on the existing private access to lands south of the Royal Canal and rail line. Mitigation of access to the remaining lands south of the Royal Canal and rail line is provided via a new bridge. Mitigation of access to the remaining area of forestry will involve alternative access via the proposed depot bridge and an access accommodation road to the remaining lands. Jackson's Bridge itself will be maintained without any direct impact.

9. Summary of issue raised – the objector states that with regards to Jackson's Bridge, the proposed works represent an environmental degradation and historical obliteration.

   Response to issue raised

   This submission appears to be based on a misunderstanding. It is not proposed to carry out any works to Jackson's Bridge, in fact the railway is to be diverted away from the bridge and traffic is to be removed from it. While there will be some impact on the setting of the bridge, mitigated by planting, the bridge itself will benefit from the removal of traffic.

10. Summary of issue raised – the objector states that unclassified Barrow KD005-033----: is not referenced at any point in the EIAR, however, it is mapped in Appendix 4 of the EIAR with no further mention. This neglect and failure to mention it and the impacts of the depot on this historical feature suggests improper analysis.

Response to issue raised

The unclassified Barrow KD005-033 is listed as AH37 in Chapter 20 of the EIAR. It is included in Table 20.29 (recorded monuments) and is included in the impact/mitigation Table (20.35) of the EIAR. The fact that the site is located within the depot is acknowledged, the impacts are defined and mitigation to reduce impacts have been provided.

11. Summary of issue raised – the objector states that Chambers Bridge Reg No. 11900504 will be impacted upon through the development of the depot and associated infrastructure, with the character and integrity of its surroundings impacted upon as a result.

Response to issue raised

It is not intended that there would be any direct impact on Chambers Bridge arising from the works and the bridge will not be used by construction traffic. The EIAR recognises that there will be some effect on the setting of the bridge and it is intended to mitigate this with screen planting, significantly reducing the predicted effects.

12. Summary of issue raised – the objector states that 3 no. scenic viewpoints are identified in the area of the depot. The depot will interrupt, in a material way, the integrity of this linear landscape feature provided by the canals and rivers and is in direct contravention to the Kildare CDP 2017-2023.

Response to issue raised

The only identified viewpoints in the vicinity of the proposed depot are to and from the bridges on the Royal Canal. The views to the bridges are linear vistas along the waterway and/or towpaths. The canal corridor is well screened from both the existing railway and the site of the proposed depot by boundary hedgerows between the canal corridor and the railway. Views from the bridges are more elevated by nature, however the primary vista along the canal corridor is not impacted. The proposed depot will be visible through weaker sections of the canal-side hedge to the south of the canal corridor. Additional screening is proposed to assist in mitigating any impact to the views.

It is considered that material contravention of the Kildare CDP 2017-2023 does not arise in this regard.

13. Summary of issue raised – the objector states that the DART depot along the Kilcock / Maynooth segment of the Royal Canal Greenway would detract from the aesthetics and function of the Greenway, in turn disrupting a significant section of the over 130km long Royal Canal Greenway.

Response to issue raised

The proposed depot is located on unzoned agricultural lands adjacent to the Royal Canal Greenway. While observation on the aesthetics are noted, there are no works proposed that would impede the operation of the greenway.

14. Summary of issue raised – the objector believes that the siting of the depot contravenes many NPOs included in the NPF, in particular NPOs 60, 61 and 62.

Response to issue raised

NPO 60 aims to "*Conserve and enhance the rich qualities of natural and cultural heritage of Ireland in a manner appropriate to their significance"*.

The EIAR Volume 2 Chapter 8 Biodiversity acknowledges the significance of the natural heritage features in accordance with best practice guidelines. The EIAR Volume 2 Chapter 8 Biodiversity Section 8.9 presents the mitigation measures which reduce and/or avoid the negative impacts on the Key Ecological Receptors, which include 'the Royal Canal pNHA' and the 'Railway Line Ecological Corridor'. Biodiversity enhancements including wetland creation, pond construction, tree and shrub planting, the construction of artificial holts and the provision of bat and bird boxes on existing trees will be provided at various locations along the route of the proposed development.

In relation to cultural heritage, EIAR Chapter 20 Archaeology and Cultural Heritage identified features of cultural heritage significance within the depot lands. Where appropriate, the assessment identified mitigation measures to conserve known and unknown archaeological and cultural heritage assets.

NPO 61 relates to the "*preparation of a National Landscape Character Map and development of guidance on local landscape character assessments*" which is within the remit of local authorities and is therefore not applicable to the proposed development.

NPO 62 aims to "*identify and strengthen the value of greenbelts and green spaces at a regional and city scale, to enable enhanced connectivity to wider strategic networks, prevent coalescence of settlements and to allow for the long-term strategic expansion of urban areas*". The proposed depot is located on unzoned agricultural lands outside of the periphery of the Kilcock and Maynooth Local Area Plans (LAPs). The proposed development does not preclude the long-term strategic expansion of these urban areas in accordance with national, regional and local planning policy.

15. Summary of issue raised – the objector claims that the location of the depot contradicts RPO 5.8 of the Eastern and Midland RSES which aims to enhance and support the expansion of greenway infrastructure.

Response to issue raised

The proposed depot is located on unzoned agricultural lands adjacent to the Royal Canal Greenway. There are no works proposed that would impede the operation or expansion of the greenway infrastructure at this location.

16. Summary of issue raised – the objector claims with regards to RPO 7.8 of the Eastern and Midland RSES, that the siting of a depot on these lands would significantly change the dynamics and character of these lands throughout all stages of the project. It is also claimed that the location contradicts RPO 7.7 and RPO 7.9. with regards to light pollution and air pollution respectively. Furthermore, stating that the depot sets to disrupt existing waterways, contrary to RPO 7.10, 7.11 and 7.16.

Response to issue raised

Regarding RPO 7.10 & 7.11 A Water Framework Directive Assessment was undertaken as part of the Environmental Impact Assessment Hydrology Chapter and is presented in the Hydrology Chapter. The Lyreen, Ryewater, there tributaries and the Rye Water Valley/Carton SAC were included in this assessment. The catchments are subject to pressures from historic modifications and agriculture. When considering the proposed mitigation measures to be included as part of the development e.g. restoration of riparian planting, construction of wetland mosaics etc.). During the operational phase, the impact to hydromorphology and ecological integrity of the subject reach (Lyreen and Ballycaghan) is likely positive. The proposed development will not hinder implementation of measures outlined in the 2nd Cycle RBMP. The proposed works will have a negligible effect on the subject waterbodies significant pressures and will not prevent the attainment of Good Status.

Chapter 11 Hydrogeology of the EIAR considers impacts of the development on the Ryewater Valley / Carton SAC. Section 11.5.3.5 of Chapter 11 notes the following:

The area lies in the Lyreen catchment which flows into the Ryewater at a confluence approximately 450 m upstream of the Rye Water Valley SAC boundary. The site lies 3 km from the Rye Water Valley SAC and there is approx. a 15 m fall in topography from the lowest point of the depot area to the floodplain of the SAC. Between the two points, the River Lyreen flows through the town of Maynooth'

Section 11.5.3.8 concluded that given the spatial relationship between the site and the Eastern and Midland RSES and the impact on the local groundwater system being "*imperceptible to slight*" that impacts of the SAC "*will be attenuated with distance from the depot and it is considered that likely effects upon the SAC will therefore be imperceptible*".

Noise input:

Section 14.5.3 of Chapter 14 of the EIAR assesses the construction phase impact of the project. The majority of the construction work associated with the depot is remote from sensitive locations such as

dwellings and therefore noise impacts are minimised. However, some activity is identified as having a potentially significant impact for short periods of time. Mitigation measures are outlined in Section 14.6.1 to reduce these impacts.

Section 14.5.4.6.8 of the EIAR assesses the noise impact as a result of the depot operation. This assessment includes maintenance, cleaning and stabling activities as well as fixed plant serving the depot and movement of EMU's within the depot area. The assessment has concluded that the noise levels beyond the boundary of the depot are not significant.

Air quality:

RPO 7.7 of the Eastern and Midland RSES states it is a goal to reduce harmful emissions and achieve and maintain good air quality for all urban and rural areas in the Region.

Localised traffic related emissions during the construction or operational phase were not found to produce significant impacts on local air quality.

The regional mass emissions modelling for NO_x, $PM_{10,}$ $PM_{2.5}$ and SO_2 produced by the railway operations found that for the proposed future operational scenario the emissions are decreased compared to the do-nothing emissions. This reduction is a result of the electrification of the rail line and move away from a diesel fleet. Therefore, the proposed development does comply with RPO 7.7 as it has the potential to reduce harmful regional emissions.

With respect to dust nuisance during construction, a sensitivity assessment was completed in Section 12.4.3 of the EIAR and an assessment of the potential dust generation due to construction has been completed in Section 12.5.1.4 of the EIAR. This assessment included the depot site and the railway alignment. Guidance for this assessment was taken from the Institute of Air Quality Management (IAQM). Guidance on the Assessment of Dust from Demolition and Construction V1.1. In addition to the sensitivity assessment and impact assessment in the main body of the EIAR, two appendices have been prepared with respect to dust, one to review activities which have the potential to generate dust (Appendix 12.2. Potential Dust Generating Activities) and a second to document the mitigation measures that are to be applied across the project to minimise and suppress dust generation (Appendix 12.4. Dust Mitigation). This assessment concluded that when the dust minimisation measures detailed in the mitigation section of this chapter are implemented, fugitive emissions of dust from the site are not predicted to be significant and pose no nuisance, human health or ecological risk to nearby receptors. Thus, there will be no residual construction phase dust impacts to cause a noncompliance with RPO 7.7.

Landscape and Visual

It is acknowledged in Chapter 15 of the EIAR that the proposed depot will give rise to significant impact on the local landscape and visual environment. However, this is in the manner that any such larger-scale development gives rise to landscape and visual impacts. Despite this assessment the local landscape is flat and fields are defined by tree-lined hedgerows which substantially reduces the visibly of development in the wider environment. The existing hedgerow between the canal and the existing railway / proposed depot will provide appropriate visual screening of the proposed depot development from the canal corridor and additional screening planting is provided to enhance this screening. New screen planting is also proposed along the southern boundary of the proposed depot lands to provide for landscape and visual integration and screening in the wider landscape.

17. Summary of issue raised – the objector claims that the lands between the Local Area Plan boundaries of Kilcock and Maynooth within which the depot is located are zoned for agricultural uses, and not for any future development purposes.

Response to issue raised

The proposed depot is located on lands used for agriculture outside the development boundaries of both the Kilcock and the Maynooth Local Area Plans. The Kildare County Development Plan (CDP) 2017 – 2023 was also consulted and these lands are not zoned. There are no land use zoning objectives identified for unzoned lands and therefore this type of development could be considered on

its merits. Furthermore, the development of such a facility within an existing urban centres/ development boundary would not be compatible with residential, commercial and other uses given its operational requirements therefore to avoid impacts on existing communities and considering the availability of land banks in the GDA area this site was considered the preferred site following a site selection process. Refer to consideration of alternatives for the depot site at point 2 of responses to this landowner.

18. Summary of issue raised – the objector states that the functioning of the depot will produce very significant noise, air and light pollution.

Response to issue raised

Noise & vibration:

Section 14.5.4.6.8 of the EIAR assesses the noise impact as a result of the depot operation. This assessment includes maintenance, cleaning and stabling activities as well as fixed plant serving the depot and movement of EMU's within the depot area. The assessment has concluded that the noise levels beyond the boundary of the depot are not significant.

Air Quality

A Depot Sustainability Strategy has been produced with an objective to design a functional, efficient and comfortable building with a minimum environmental impact, being an nZEB, Nearly Zero Energy Building and achieving EXEED certification. This will mitigate operational phase energy demand and ensure it is minimised.

There will be some use of natural gas at the proposed depot west of Maynooth. These emissions have been considered with respect to the Directive (EU) 2015/219 which is commonly known as Medium Combustion Directive (MCD). 4

The combined total output of natural gas at the depot is 188.12 KW, the MCD states that individual combustion plants with a rated thermal input less than 1 MW (1,000 KW) should not be considered for the purpose of calculating the total rated thermal input of a combination of combustion plants. Therefore, the impact due to combustion emissions from the depot can be considered not significant.

In addition to the depot, there is a single 80 KVA diesel generator in the proposed substations. These are considered a minor emission point and are put in place as an emergency backup in the unlikely event that power is cut to the substation. The substations have looped connection with the ESB (redundant connection) and therefore already has a backup which will be used prior to the generator being required. The six substations each have an electrical power requirement of 43.6 KW.

In accordance with the EPA Guidelines (EPA 2022) and considering the potential likely effects of emissions from the operational minor emissions at the depot, the impacts are considered overall neutral, not significant and long-term.

The regional mass emissions modelling for the rail line found that for the proposed future operational scenario the emissions are decreased compared to the DN emissions which are currently exceeding emission limit ceilings. Ireland has exceeded its emission ceilings for NO_x by 50% in 2019 and has exceeded the ceiling for all years since 2010. The impact in emissions due to the change in energy source is significant enough that the increased frequency (6 trains presently to 12 trains in the future per hour) and capacity of the service does not result in an overall significant adverse impact. Impacts are also likely to reduce in future years due to additional renewable proportions in the electricity utilised for the rail and the improvements in technology that allow some of the remaining DMUs to change to EMUs or improve their efficiency.

Lighting and Visual impact

It is acknowledged in Chapter 15 of the EIAR that necessary night-time lighting at the depot / CCE Compound will increase the visual presence and sense of change in the area. Nevertheless, the local landscape is flat and fields are defined by strong tree-lined hedgerows which substantially reduces visibly in the wider environment. The existing hedgerow between the canal and the existing railway /

proposed depot will provide appropriate visual screening from the canal corridor and additional screening planting is provided to enhance this screening. New screen planting is also proposed along the southern boundary of the proposed depot lands. New operation phase lighting will conform to current best practice with directional and horizontal cut-off cowled fittings to minimise light spill or light glow. Night time photomontages of the proposed depot have been provided in Volume 3B of the EIAR (Views, 39, 41, 42 and 44) to graphically present the anticipated night time lighting levels.

19. Summary of issue raised – the objector claims that the demands of the plans for copious and guaranteed water supply and for foul sewage disposal may well be in excess of the capacity of existing and planned sewage facilities in the district.

    Response to issue raised

    Water supply and sewage connections shall be designed in coordination with KCC and utility providers to satisfy depot requirements. Section 4.11.12.8 depot Utilities Connection of the EIAR Volume 2A assesses the utilities connection with the depot, highlighting how the water supply and the sewage connections are foreseen to be developed. During Detailed Design stage this will be further developed in coordination with KCC and Irish Water.

20. Summary of issue raised – the objector claims that during construction of the depot and probably throughout its operation the in-situ aquifer will be damaged with ongoing implications for water supply to local agricultural enterprises and also to local households dependent upon wells for supply.

    Response to issue raised

    During construction in-situ assets will be protected from impact or damage. Construction planning will identify these assets and mitigate any risks to their operations. This will be set out in the contractors detailed construction methodology.

21. Summary of issue raised – the objector questions with reference to the access route to the depot at Exit 7 from the M4 via the centre of Maynooth, why a more holistic approach to planning was not adopted. It is claimed that the preferred options fail to recognise that HGVs are currently banned from the town centre of Maynooth.

    Response to issue raised

    HGV access during construction and in the operational phase is not planned to pass through the centre of Maynooth. Alternative routing form the M4 is incorporated into the design. Non-HGV traffic accessing the site may pass through the centre of Maynooth.

22. Summary of issue raised – the objector claims that the depot is neither integrated into regional planning nor observance of policies designed to protect a unique urban heritage of Maynooth.

    Response to issue raised

    The proposed DART+ West project is identified and supported in National, Regional and Local Planning policies. The proposed depot is located on unzoned agricultural lands outside of the development boundaries of the Kilcock and Maynooth Local Area Plans (LAPs). Agricultural land use zoning does not preclude the development of transport infrastructure. Chapter 20 Archaeology and Cultural Heritage and Chapter 21 Architectural Heritage of the EIAR identifies both the positive and negative impacts (direct, indirect, secondary and cumulative) including those at the depot. These impacts are detailed in Sections 20.5.2 and Section 21.5.3 regarding operational impacts on these environmental factors, respectively.

23. Summary of issue raised – the objector claims that any extensive earth works on this site is liable to discharge silt to the Canal and cause severe damage and impose negatively upon fluvial species causing potential death.

Response to issue raised

Sediment and erosion control measures will be in place from commencement of construction in-line with TII Guidance through the requirement for a Construction Environmental management Plan (CEMP) which the contractor will be required to prepare.

24. Summary of issue raised – the objector states that because there is a risk that the Canal and other receiving waters will be polluted due to discharge from the depot (e.g., oil, wash water) the existing discharge to the Canal may have to be diverted to the Gragadder-Lyreen through oil interceptors and some form of treatment. A large attenuation pond or treatment wetland, for which no provision is made, and for which the proposed site is too small, would be required to reduce the risk of pollution and further widespread flooding.

Response to issue raised

The entirety of the depot site surface water drainage network is to discharge through Sustainable Drainage Systems (SuDS) as to ensure that water quality is treated to an appropriate standard prior to discharge. It should be noted that two attenuation ponds are included in the proposed depot design. Section 4.11.12.7 depot drainage of EIAR Volume 2A describes the proposed drainage provisions. Chapter 10 of the EIAR documents the assessment of the impact the proposed drainage works.

25. Summary of issue raised – the objector states that the flooding at the location of the depot is extensive, frequent and prolonged. States that an initial FRA to confirm the sources of flooding that may affect the site were not carried out. The submission also makes several points in relation to the catchment and extents of the flooding incl. information from 3 no. previous Catchment FRAs, see page 23 of the submission.

Response to issue raised

Reviews of previous hydraulic assessments of the Lyreen and its tributaries were conducted as part of the flood risk assessment. A thorough walkover survey of the catchment was completed for the scheme that informed proper delineation of the catchment. This subsequently informed further assessments e.g. the topographical survey and hydraulic assessment.

The restrictions posed by upstream culverts including at the M4 were not represented in the hydraulic model for the Ballycaghan stream. This allows us to consider the potential effects of future restorative or enhancement works upstream of the subject site. Therefore, the hydraulic assessment can be considered precautionary.

26. Summary of issue raised – the objector believes that, with regards to the Rye Water Valley / Carton SAC, there will be a direct effect on this SAC from the proposed works, namely the proposed redirection of streams and the overall changing of the natural watercourse dynamics for the construction. States that this SAC is a dynamic habitat and is noted to be a site which is likely to be significantly impacted by any reduction in water supply. With regards to petrifying springs, the NPWS Conservation Objectives document notes that "*water flow should not be altered anthropogenically*", which the submission believes the construction of the depot contradicts. Also states that 2 species of Vertigo Snail may be impacted. States that the increased intensification of heavy machinery at construction, and the train washing facilities may potentially be a risk of pollution and contamination at this location.

Response to issue raised

The Rye Water Valley / Carton SAC is ~3km downstream of Jacksons bridge and ~4.5km downstream of the modifications to the Ballycaghan Stream at the proposed depot site. The Ballycaghan stream has a history of Significant modifications stemming from the construction of the canal/railway and agricultural practices. The proposed depot location will require approximately 400m of the stream to be realigned. The general shape of the channel is to be maintained although local amendments that may be made to improve flow heterogeneity within the reach. There will also be vegetative riparian buffer planted along the modified and unmodified sections of the Ballycaghan stream under IÉ control.

Overall, the hydromorphology of the reach will likely improve with benefits to the wider catchment, extending to the Lyreen and potentially the Ryewater.

The hydrogeology chapter of the EIAR considers impacts on the development on the Ryewater Valley / Carton SAC. No potential impact linkage through groundwater pathways were identified, due to distance and the underlying geology.

To avoid repetition, this response references the Natura Impact Statement (NIS) lodged with the draft Railway Order application. The EIAR Volume 2 Chapter 8 Biodiversity Section 8.8.1 describes the overlap between the NIS and the EIAR.

The location of the Rye Water Valley/ Carton SAC relative to the depot site is presented in the NIS Section 3.1, Table 3-1. A description of the site is presented in Section 3.2.1 of the NIS. Section 3.3, Table 3-2, presents the evaluation of potential adverse effects on the three Qualifying Interests on this European site.

The evaluation of potential adverse effects on each of the Qualifying Interests is similar and in relation to petrifying springs for examples, states that "*The proposed development includes two new watercourse crossings, a new bridge over the canal with approach roads, a stream diversion, and the construction of a flood compensatory storage area 3.5 km upstream of the SAC. These works have the potential to alter the hydrological regime within the SAC that could lead to adverse effects on this Qualifying Interest*".

Section 4.2 of the NIS provides a detailed assessment of the potential effects on each of the three Qualifying Interests and in the case of all three, that "*In the absence of appropriate mitigation, the construction of the proposed development has the potential to adversely affect the Conservation Objective for 'Petrifying Springs' in the Rye Water Valley/ Carton SAC (as per the River Barrow and River Nore SAC) through changes in the hydrological regime, water quality and through the spread of invasive species which may in turn affect …… for this Qualifying Interest*".

Mitigation measures for the Rye Water Valley/ Carton SAC are presented in Section 5.2.1 of the NIS. These include measures to avoid and/or reduce the negative effects of changes in water quality, hydrology, and the introduction of invasive species.

Section 5.4 presents the residual effects following the implementation of the mitigation measures and states that "*it is considered that the mitigation prescribed in Section 5.2 and the implementation and compliance measures prescribed in Section 5.3 will reduce all negative impacts on Petrifying Springs to imperceptible levels. Any residual effects on hydrology or water quality will not adversely affect this Qualifying Interest*".

The submission rightly points out the potential for adverse effects on the Rye Water Valley/ Carton SAC, and these are addressed thoroughly in the NIS, therefore it can be concluded beyond all reasonable scientific doubt that construction and operation of the proposed development will not adversely affect the integrity of the Rye Water Valley/Carton SAC in view of its Conservation Objectives.

27. Summary of issue raised – the objector notes that the SSFRA report classifies the development lands as Flood Zone A. They state that the OPW Guidelines stipulate that typically highly vulnerable developments (essential transport infrastructure) are only appropriate in Flood Zone C.

Response to issue raised

A Stage 2 Flood Risk Assessment of prospective sites was carried out as part of the options selection process. On the basis of existing published OPW flood mapping for a 1 in 200 and 1 in 1000 year return period, the Maynooth site was seen as comparable or marginally beneficial compared to other proposed locations. As part of the DART+ West project the flood risk assessment process identified greater flood risk on the site than initially envisaged. As a result, the optioneering process for the depot site was revisited and the outcome remained the same. As part of the FRA process the sequential approach was applied which informed the proposed optioneering for the depot and track design. The proposed design is the result of that Multi criteria analysis. See also Section 2.7.2 of this report.

28. Summary of issue raised – the objector states that the SSFRA report downplays the role of groundwater flooding of the area.

    Response to issue raised

    As discussed in the SSFRA (Section 3.7.5), no indication of groundwater derived flooding was identified as part of the flood risk assessment. Nonetheless, groundwater levels in the vicinity of the depot has been subject to monitoring with results thus far indicating sufficiently low levels to accommodate the excavations required to provide the compensatory storage.

    Groundwater flooding is covered in Section 11.4.2.9 of the EIAR which states "*The GSI groundwater flood mapping information shows both the extent of historic groundwater flooding, and predictive flood outlines, but shows no areas of groundwater flooding within the area of the proposed development. The closest area of historic groundwater flooding identified on the mapping is south of the Maynooth, centred on ITM 694010, 736230*".

29. Summary of issue raised – the objector claims that the existing flood mapping as related to the proposed depot site is incomplete.

    Response to issue raised

    The CFRAMS and other schemes prior to this draft Railway Order did not assess the flood extents along the Ballycaghan stream. As part of the scheme flood risk assessment, flood maps have been produced that depict the 1 in 100-year (Flood Zone A) and 1 in 1000 year (Flood Zone B) flood events for areas throughout the scheme including the proposed depot lands. Additional maps have been produced for the climate change scenarios and post development scenarios (with and without climate change factors).

30. Summary of issue raised – the objector claims that, in accordance with the Planning System and Flood Risk Management Guidelines for Planning Authorities, IÉ failed to carry out a flood risk identification process which would have identified the flooding or surface water management issues related to the development. States that in order to carry out this assessment, it would be necessary to correct the errors in the catchment area boundaries, to measure and log the flows in the unnamed stream and in the culvert discharging to the Canal and at the same time logging rainfall and ground water level.

    Response to issue raised

    A Stage 2 Flood Risk Assessment of prospective sites was carried out as part of the options selection process. On the basis of existing published OPW flood mapping for a 1 in 200 and 1 in 1000-year return period, the site was seen as comparable or marginally beneficial compared to other proposed locations. As part of the DART+ West scheme the flood risk assessment process identified greater flood risk on site than initially envisaged. As a result, the optioneering process for the depot site was revisited and the outcome remained the same. As part of the FRA process the sequential approach was applied which informed the proposed optioneering for the depot and track design. The proposed design is the result of that Multi criteria analysis.

    The catchment areas the submission refers to are those presented in the CFRAMS. The catchment areas used as part of the scheme flood risk assessment have been delineated from site walk over surveys and are subsequently more accurate. The catchment areas are presented in Figure 5-3 of the SSFRA document. Flow estimation was carried out using a suite of industry standard flow estimation methodologies. These were compared with previous studies and gauge data where available. The flow estimation procedure is detailed in section 5 of the SSFRA. In all occurrences the most conservative estimation method defined the design flows used in the assessment

31. Summary of issue raised – the objector states that its of interest to their submission that the SFRA for the project has conducted an analysis of the hydrology of the lands and local areas for the proposed depot and not mentioned the aquifer which occurs close to the surface, on Flood Zone A lands, and directly beneath the proposed Compensatory Storage Areas.

Response to issue raised

The likely impacts on the underlying aquifers of the proposed compensatory storage and substituting agricultural land uses with wetlands has been considered in the EIAR Hydrogeology chapter 11 (Table 11-26 & table 11-27).

As discussed in the SSFRA (Section 3.7.5), no indication of groundwater derived flooding was identified as part of the flood risk assessment. Nonetheless, groundwater levels in the vicinity of the depot has been subject to monitoring with results indicating sufficiently low levels to accommodate the excavations required to provide the compensatory storage. It should also be noted that as per OPW Guidance that groundwater derived flooding where it occurs is not to be used to define flood zones.

32. Summary of issue raised – the objector claims that according to the maps included in the SFRA there is a source of the Ballycaghan Stream located on the north-west area of the depot, however the report does not discuss what or where is the source of this stream.

Response to issue raised

The centre line and catchment of the Ballycaghan stream is depicted in its entirety in Figure 5-3 of the scheme SSFRA. This was delineated following extensive site visits of the area.

33. Summary of issue raised – the objector considers that environment plays a small role in the assessment criteria.

Response to issue raised

Environmental concerns were given appropriate consideration in each of the supporting studies. The 2021 study included a review of the earlier studies and further comparative examination of the environmental characteristics of each option to account for the Project application of the CAF criteria in the multi-criteria analysis. They received equal rating to Economy, Integration, Physical Activity, Safety and Accessibility & Social Inclusion. This is set out in EIAR Volume 4 Appendix A3.4 – depot Site Selection Supplementary Report.

34. Summary of issue raised – the objector claims that it's unclear when a stakeholder workshop mentioned in the report took place, what stakeholder organisation were represented, and what information was presented to them as the basis for decisions taken at the workshop. Also notes that accessibility and social inclusion criteria have been excluded from the MCA.

Response to issue raised

The report takes account of workshops held with stakeholders in respect of the depot site selection. The outcome of those workshops is taken account of and documented in the report. Accessibility and Social Inclusion characteristics of the options were considered equivalent. While the 2019 study discounted them from the MCA, the subsequent review reinstated them in the assessment. Refer to EIAR Volume 4 Appendix A3.4 – depot Site Selection Supplementary Report.

35. Summary of issue raised – the objector claims that flooding was not listed as a factor when deciding the location of a depot.

Response to issue raised

Flooding was given consideration as documented in Volume 4 Appendix A3.4 of the EIAR prepared as part of the option selection process. It is clear that the process gave detailed consideration to the risk of flooding on prospective sites and that the identification of the risk of flooding following a Stage 3 flood risk assessment of the emerging preferred option, the initial site selection activity was revisited to ensure the appropriate site had been chosen for the proposed depot.

36. Summary of issue raised – the objector claims that the two criteria that Maynooth outperforms Hazelhatch West in are least relevant in the day-to-day running and overall long-term impact of the DART West scheme.

Response to issue raised

The principal comparators between the Maynooth West and Hazelhatch West options are set out under the response to Point 2 for this landowner above.

It is, however noted that implementation of DART+ West as the first project on the DART+ Programme, with the necessary depot facility, best facilities achievement of the objectives of the Climate Action Plan in the earliest practicable timeline as DART+ West exhibits the strongest passenger growth characteristics of projects on the programme.

37. Summary of issue raised – the objector claims that Hazelhatch West has an advantage over other options regarding empty running time, and that the depot west of Maynooth will require the laying of a second track.

Response to issue raised

The cost of additional trackwork throughout the depot has been accounted for in the economic assessment. The cost of the additional infrastructure is small in comparison to other economic benefits associated with the site as identified in the response to Point 2 for this landowner above.

38. Summary of issue raised – the objector claims that, with regards to maximising track access time for maintenance, it has little correlation to the siting of a depot. Also due to the current location of the depot being after the final stop at Maynooth Station, approx. 5km of extra unserviceable track will have to be constructed, which in turn will need to be maintained, a feature which the submission believes to be unnecessarily costly and counterproductive.

Response to issue raised

Facilitating access to the railway for maintenance purposes is an important rail safety and public service obligation. The siting of the depot at Maynooth West offers superior characteristics in this regard. It was established by the study that this is a salient comparator for sites. This remains the case. In regard to the cost of additional track and its maintenance costs, refer to the response to Point 37 for this landowner above.

39. Summary of issue raised – the objector claims that, with regards to the criteria of complexity of access and egress, a quantitative analysis of the significance of the Cork line effect on differentiation is necessary. The objector also considers that the analysis ignores the fact that Maynooth West will require additional 5km of track beyond the Maynooth terminus.

Response to issue raised

The complexity of access to positions for timetables services was considered for the proposed electrified network for each site considered. The assessment took account of the existing and planned level of services on the relevant lines. It also took account of planned alterations to those lines and services. The assessment concluded equivalence between the Maynooth West and Hazelhatch West sites in in respect of access and egress. We consider the relative ratings of the sites to be appropriate. Refer to the response to Point 37 for this landowner above in respect of the cost of additional trackwork.

40. Summary of issue raised – the objector claims that, under the availability of suitable lands, the Maynooth West land does not meet the requirements, as it's susceptible to flooding, requires the demolition of a historically significant bridge and requires 5km of additional track to be constructed solely for accessing the depot. The objector also argues that a depot located on an electrified or planned electrified track is more suitable option for the depot. Also notes that the reasoning behind this differentiation is not transparent.

Response to issue raised

The design team is satisfied that the site is a suitable development for the proposed depot. The risk of flooding is addressed as part of the Stage 3 Flood Risk Assessment and proposals for compensatory storage included in the scheme design. It is understood that reference to "a historically significant bridge" refers to the listed Jacksons' Bridge which is to be retained as part of the scheme design.

41. Summary of issue raised – the objector claims that, under the consideration of neighbouring environmental criteria, the works associated with modification to watercourses, and flooding are extremely unnecessary and potentially harmful to the existing environment and may potentially harm a WFD protected watercourse only a few km downstream. Also states that ecological and heritage issues are ignored but remain significant for Maynooth West, namely on the Royal Canal Greenway. Also, the feasibility, extent, and cost of mitigating such impacts do not appear to either have been considered nor have been the subject of a comparative evaluation.

    Response to issue raised

    Is it considered that the characteristics of both the Hazelhatch West site and the Maynooth West sites are equivalent in respect of water resources. Both sites are adjacent to watercourses which are subject to the risk of flooding. The measures proposed at Maynooth West to address the risk of flooding have been assessed in the Environmental Impact Assessment Report (EIAR). Biodiversity was considered as part of the options assessment. The options are rated equally under this criterion. The 2021 study was prepared in cognisance of the need to implement compensatory storage measures on the site. This was accounted for the updated assessment.

42. Summary of issue raised – the objector claims that, under the road vehicle routing for access to site, the routing to Maynooth West depot location is through town centres of either Kilcock or Maynooth, is not viable for the timely and synchronous construction of a depot.

    Response to issue raised

    The traffic impact assessment produced for the project assesses the impact of traffic associated with the construction of the proposed depot.

    It reports that "*significant changes in traffic flows during construction are expected to occur on the links in the immediate vicinity of the new depot west of Maynooth. These are however short-term changes and represent the greatest change which would occur over the construction of the proposed development, as peak construction numbers for each location was assumed to occur simultaneously. It is unlikely that the peak construction at each site would occur at the same time and therefore the impact across the network would, in reality be less than that set out in Table A-3 in Appendix A6.1 in Volume 4 of this EIAR. The impact of construction vehicles on the network does represent likely short term, negative and moderate effects which would be mitigated and for the duration of construction before returning to normal levels once the construction is complete*."

    Mitigation measures including traffic management, a CTMP available in Appendix A6.3 Construction Traffic Management Plan in Volume 4 of this EIAR, and a Mobility Management Plan, including detail on how construction workers will be managed, will be implemented to reduce the impact of the construction phase on road users over the course of the construction period.

    We are satisfied that the routing of construction traffic associated with the depot is viable for the timely and synchronous construction of the depot.

43. Summary of issue raised – the objector claims that, under the compliance with transportation and land use development policy, the Hazelhatch West location had the addition of the area that is contained within the Kildare County functional area, which is perceived to be an additional bonus to the site.

    Response to issue raised

    It is understood from the submission that the objector considers there to be advantage in the Hazelhatch West site not being contained within the Kildare County functional area. This is not considered to be an advantage to the site.

44. Summary of issue raised – the objector includes in the Appendix 1 of the submission the Maws Farm Depot Site Risk Assessment of Flooding.

Response to issue raised

The Maws flood risk assessment is the basis of the queries above. As such the main queries have been raised in the main body of the report and have been responded to above. However, it should be noted, 1) the Maws report was written prior to the publishing of the detailed site-specific flood risk assessment for the scheme. The majority of the concerns raised relate to previous flood studies; 2) A WFD assessment demonstrating that the proposed works will not lead to a degradation of status has been completed as part of the Hydrology assessment included in the EIAR; 3) The report states that the proposed track level will flood, however, the proposed track level in the vicinity of Jacksons bridge and the depot has been designed to be above the 1 in 1000 year + climate change factor + freeboard.

3.38 Ref. No.40 – LO099b – Carlos Clarke Limited

Representative – Callan Tansey Solicitors LLP

3.38.1 Submission, Location – depot

Issues raised in submission are addressed with their responses below.

3.38.2 Response to submission

1. Summary of issue raised – the objector claims that the depot site selection procedure was flawed and should be revisited.

   Response to issue raised

   The depot option selection process is described in Chapter 4 of the Options Selection Report July 2021 as presented in DART+ West Public Consultation No. 2, which is a robust assessment of the depot locations.

   Annex 10.1 and Annex 10.3 to the EIAR set out the depot location *assessment.* The 2019 study clearly sets out the basis of the comparative assessment of options. This supplementary Site Selection Report, dated 2021 provides further clarification to the selection process.

   The reader is referred to Section 2.7.1 of this document in respect of the Site Selection Process.

2. Summary of issue raised - the objector claims that the Hazelhatch site and the Maynooth West site ranked equal in the final assessment which was made before the problems with site road access and the rail access via Jacksons Bridge were identified. The development cost of the selected site is considerably greater than that envisioned during the selection process.

   Response to issue raised

   The sites were not ranked equally. There are clear distinctions between the sites as set out in Section 2.7.1 of this document. Appropriate road access would be necessary for any chosen site. A high level comparison of access to the sites was made during the assessment. It was identified at the site selection stage that there were challenges associated with access to the Hazelhatch West site.

3. Summary of issue raised – the objector claims that there are environmental and hydraulic problems arising from the proposed depot access and layout.

   Response to issue raised

   The depot access has been designed with due regard to flood risk and an appropriate surface water drainage system.

4. Summary of issue raised – the objector claims that the development will detract from the recently developed Greenway and may increase the flooding frequency of the M4.

Response to issue raised

The canal corridor and greenway is well screened from both the existing railway and the site of the proposed depot by boundary hedgerows between the canal corridor and the railway. Views from the bridges over the canal are more elevated by nature, however the primary vista along the canal corridor is not impacted. The proposed depot will be visible through weaker sections of the canal-side hedge to the south of the canal corridor. Additional screening is proposed to assist in mitigating any impact to the views.

The pre and post development flood modelling results presented in the SSFRA indicate that there is no increase in water levels at the M4 motorway (Modelling node 04REA00530C).

5. Summary of issue raised – the objector claims that the design details as presented with the railway order are incomplete and there isn't sufficient information supplied with the submission to allow an informed decision to be made.

Response to issue raised

The necessary level of design has been prepared to inform the draft RO submission. Detailed design of the depot is a future stage as set out in the NTA Project Approval Guidelines 2020.

6. Summary of issue raised – the objector claims that there are no elevation or longitudinal sections of the depot.

Response to issue raised

This information is provided in drawing MAY-MDC-CIV-DEPM-DR-Y-0006-D-DEPOT CIVIL DESIGN GENERAL ARRANGEMENT SECTIONS.

Also section 4.11.12 of the EIAR provides information on the depot levels.

7. Summary of issue raised – the objector claims that there are no details of the depot stormwater drainage, treatment, flow rates or discharge parameters given.

Response to issue raised

Section 4.11.12.7 depot drainage of the EIAR presents the details of the stormwater drainage.

8. Summary of issue raised – the objector claims that, while some Sustainable Drainage Systems (SuDS) technics are shown in the drawing, the SuDS design details are omitted.

Response to issue raised

Section 4.11.12.7 depot drainage of the EIAR assesses the use of the following SUDs elements proposed for the depot: filter strips, pervious pavements and attenuation ponds. More information about these systems can be seen in the standards mentioned: Building Regulations, BS EN 752 and EN 12056, and the CIRIA SUDS Manual. The specific detail of these systems will be finalized during Detail Design stage.

9. Summary of issue raised – the objector claims that no study was made of possible direct access to the site by the construction of new motorway exits.

Response to issue raised

The existing motorway junctions on the M4 are considered appropriate for temporary access to the proposed depot site during the construction phase.

10. Summary of issue raised – the objector claims that no study was made of continuing the site drainage to the Royal Canal.

Response to issue raised

During the project design process, two culverts discharging into the Royal Canal were detected, and the possibility of their use for stormwater discharge was studied.

This option was ruled out by Waterways Ireland, as it is not considered acceptance to allow the discharge of new stormwater systems into the Royal Canal.

11. Summary of issue raised – the objector claims that there is only a passing reference that future planning and expansion of the transport services has been considered.

    Response to issue raised

    One of the primary objectives of the DART+ West project is to provide increased capacity on the Maynooth and Dunboyne lines to facilitate passenger growth and increased use of the railway for transport purposes. This is proposed in line with the Climate Action Plan.

    Delivery of capacity will facilitate additional stations and other transport infrastructure which may be developed in the coming years. Several projects have been moted in the Maynooth area which are yet at a very early stage of consideration. The design of such developments is outside the scope of this project. It is also not practicable to make specific provision for such as, again, they have not been developed in sufficient detail to facilitate the design of accommodation measures.

12. Summary of issue raised – the objector claims that both Maynooth and Kilcock Stations are congested with limited car parking and there are no proposals for providing park and ride facilities accessible from the M4.

    Response to issue raised

    Upgrades to Kilcock Station and the provision of park and ride facilities are outside the scope of the DART+ West project.

13. Summary of issue raised – the objector claims that, in relation the Western Line, Location Feasibility Study (2020), in the 2010 report the disadvantages of the site are not mentioned, some of which would have serious financial implications for the project and invalidated this conclusion e.g., no road access to site, clearance under Jackson's Bridge, presence of an aquifer.

    Response to issue raised

    The options selection process is discussed in Section 2.7.1. All of the sites were examined on a comparative basis and the criteria are set out in the reports referenced. Particular characteristics of a chosen site may become available as the preliminary design of the preferred option is advanced, One would only consider re-evaluating the option selection if a significant matter arose. Of those matters which did arise for the Maynooth West site, the outcome of the Stage 3 flood risk assessment was the only matter warranting such a reconsideration. The option selection process was fully reviewed based on the new information and the site confirmed. The design team is satisfied that the correct site was chosen for the proposed depot.

14. Summary of issue raised – the objector claims that, in relation the Western Line, Location Feasibility Study (2020), the site was selected in 2008 and the subsequent “site selection assessments” were only window dressing.

    Response to issue raised

    The site selection process was fully re-evaluated in 2021 to take account of new information uncovered consequent on the Stage 3 flood risk assessment and to fully align the site selection process with the multi-criteria analysis process being applied to DART+ West.

15. Summary of issue raised – the objector claims that, in relation to the Maintenance depot Site Location Assessment Options Report (2019), no analysis or justification was given for including on the same site as the Maintenance depot all the other services such as stabling, train washing replenishment of consumables internal cleaning. States that there is no reason the new Maintenance depot should not be located at either Portlaoise, Drogheda or Inchicore where this function is currently established.

Response to issue raised

The services referenced are listed in the 2019 assessment as key components of a depot facility. It was always intended that such would be provided for at the proposed depot site.

16. Summary of issue raised – the objector claims that, in relation to the Maintenance depot Site Location Assessment Options Report (2019), based on review of the minimum requirements identified in it, only one of the 13 sites (Hazelhatch) put forward for Preliminary Pre-Appraisal meets with both these minimum requirements. This of course was obvious from the start, and the so-called selection review of the other 12 options was meaningless.

Response to issue raised

It is unclear what the objector is suggesting in this item. Maynooth West is clearly a superior site to Hazelhatch West in respect of the criteria set out in the 2019 report. This is clarified in Section 2.7.1 of this document.

17. Summary of issue raised – the objector questions why, in relation to the re-appraisal of site selection, the large site on the North East McBride station (Drogheda) was not selected for study.

Response to issue raised

Two options in proximity to Drogheda were considered, one North of the station, one south. It is noted that there is already a depot in Drogheda Station. The options in the Drogheda area fell away at an early stage in the assessment.

18. Summary of issue raised – the objector states that, in relation to the re-appraisal of site selection, Maynooth West site was given a high score as it was identified that there are no significant watercourse crossings. The submission argues that this is not correct. The other point raised was that there were no environmental issues identified which the submission also argues isn't correctly, namely due to the presence of the aquifer, Royal Canal and Lyreen watercourses, the Royal Canal Greenway and the greenbelt between Kilcock and Maynooth. The submission also notes that IÉ failed to carry out a flood risk identification process prior to advancing the proposed site for final selection.

Response to issue raised

The objector is referred to Section 2.7.1 of this document for considerations on the options selection process. Flooding and Environmental issues given appropriate consideration as part of the site selection process.

19. Summary of issue raised – the objector claims that, in relation to the Planning System and Flood Risk Management Guidelines, the depot Site Appraisal includes an incorrect statement in relation to the presence of watercourses and flood zoning. Submission notes that Jackson's Bridge crosses the Lyreen which is prone to flooding. Also, that there are no pockets of 100-year pluvial flood zones and noted that the assessment was based on November 2000 photograph.

Response to issue raised

Flood risk was considered at a high level during the optioneering process. On the basis of existing information, the Maynooth site was seen as comparable or marginally beneficial compared to other proposed locations. As part of the DART+ West scheme the flood risk assessment process identified greater flood risk on site than initially envisaged. As a result, the optioneering process for the depot site was revisited and the outcome remained the same. As part of the FRA process the sequential approach was applied which informed the proposed optioneering for the depot and track design. The proposed design is the result of that Multi criteria analysis.

20. Summary of issue raised – the objector states that, in relation to the Planning System and Flood Risk Management Guidelines, there are 5 no. reports of flooding in the Maynooth area on floodinfo.ie as well as a Nicholas O'Dwyer report "Lyreen River Flood Relief Scheme" (2001).

Response to issue raised

Flood risk was considered at a high level during the optioneering process. On the basis of existing information, the Maynooth site was seen as comparable or marginally beneficial compared to other proposed locations. As part of the DART+ West scheme the flood risk assessment process identified greater flood risk on site than initially envisaged. As a result, the optioneering process for the depot site was resisted and the outcome remained the same. As part of the FRA process the sequential approach was applied which informed the proposed optioneering for the depot and track design. The proposed design is the result of that Multi criteria analysis.

21. Summary of issue raised – the objector claims that, in relation to the Planning System and Flood Risk Management Guidelines, the flow through these culverts should have been measured to develop a reasonable accurate flow/flood model rather than using the various empirical models which are based on much larger rural catchments.

Response to issue raised

Flow estimation was carried out using a suite of industry standard flow estimation methodologies. Methodologies specifically developed for small rural catchments (such as the Ballycaghan stream) were included in his assessment. These were compared with previous studies and gauge data where available. The flow estimation procedure is detailed in section 5 of the SSFRA. In all occurrences the most conservative estimation method defined the design flows used in the assessment.

22. Summary of issue raised – the objector states that, in relation to the Planning System and Flood Risk Management Guidelines, there were several previous Catchment Flood Risk Assessments carried out which focused on the flooding in Maynooth area. There are problems with the OPW Eastern CFRAM Study HA09 Hydraulics Report Maynooth Model (reasons are detailed in the submission).

Response to issue raised

It should be acknowledged that the primary scope of the hydraulic assessment undertaken for the Lyreen as part of the CFRAMS was to assess flood risk within the urban area of Maynooth town and areas of the M4 motorway. As such some of the finer detail associated with small watercourses within the catchment was not incorporated. A prime example of this is the representation of the Ballycaghan stream.

This was identified as part of the DART+ West SSFRA and included for in the assessment. The DART+ West assessment differs from the CFRAMS in key ways, such as:

- The Ballycaghan stream is modelled in 1D with floodplains represented in 2D.
- Catchment areas have been refined to account for the canal/rail line acting as a watershed.
- The Lyreen and Ballycaghan stream catchments have been subdivided to better estimate flow in the respective watercourses.

23. Summary of issue raised – the objector states that, in relation to the reappraisal of the site selection, the Depot Options Selection Report (2020) has not noted or addressed the issue with storm water drainage.

Response to issue raised

Surface water drainage characteristics are not considered pertinent to the site selection process as the works would implement SuDS principles in design and consequently the impacts on adjacent lands would be equally mitigated. All sites would be equivalent in this regard.

24. Summary of issue raised – the objector states that, in relation to the reappraisal of the site selection, in the “Preliminary Options Selection Report- Main Report”, dated 18th August 2020, the construction of a new access from R148 was the preferred road access option. This is contrary to what was stated in the Public Consultation Brochure showing the current design. This increases the land take from the original requirement of 25 Hectares to 89 Hectares.

Response to issue raised

The depot option selection process is described in Chapter 4 of the Options Selection report July 2021 as presented in DART+ West Public Consultation No. 2, which is a robust assessment of the Deport locations.

Annex 10.1 and Annex 10.3 of this process outlines the depot location assessment. Within this annex it states “In terms of depot scale, sites will be assessed with certain minimum thresholds. These thresholds are: Minimum site area – 20 hectares; and Minimum linear length off / parallel to operational line – 1.8km.” not the 25 hectares referred to in this submission.

The geometric detail of the alignment design for the realigned R5041 and the proposed link to the R148 underwent reconfiguration at the preliminary design stage to meet the requirements of design standards and those of Kildare County Council. The change resulted in some adjustment in the area of lands to be acquired. The design of the access roads is not related to the site selection process and was only carried out after the site had been selected.

25. Summary of issue raised – the objector claims that, in relation to the reappraisal of the site selection, in the Site-Specific Flood Risk Assessment of July 2020, Maynooth West was selected for railway operational reasons but no detail or cost benefit analysis for this decision was given. This conclusion contradicts the previous site evaluations conclusions where the better relative values due to road access was given as the reason for selection Maynooth West.

Response to issue raised

The basis for the choice of site is set out in Section 2.7.1 of this document and the supporting documents to the EIAR. The reference in the Site Specific Flood Risk Assessment is incidental and the referenced documents should be consulted for the full detail of the site selection process.

26. Summary of issue raised – the objector claims that, in relation to the reappraisal of the site selection, and as it is now relatively economical and technically feasible to construct the required facilities on a raised platform linking it with an existing elevated rail embankment, by not considering this option possible suitable sites were not considered.

Response to issue raised

It is not considered either practicable or economical to construct the full extent of the depot on an elevated platform. This is not considered a reasonable option.

27. Summary of issue raised – the objector claims that there are serious problems both with the original CFRAM study and with these proposals. The assessment is based on the CFRAM study: “OPW Project: Eastern CFRAM Study, Document: BE0600Rp0027_HA09 Hydraulics Report, Model: Maynooth”. The submission raises some queries relating to track and canal bank levels at Jackson’s bridge.

Response to issue raised

The level of the rail line and canal was based upon the topographical survey conducted for the scheme. This was supported by the high-resolution Lidar also completed for the scheme.

Topographic levels at Jacksons Bridge. The surveyed track level (top of ballast) between Jacksons bridge and the canal culvert is 59.49mOD. It is acknowledged that there is a short embankment between the rail track and the canal immediately west of Jacksons Bridge. However, this lowers to below the 1 in 100 year flood level (59.88mOD) within ~50m of Jacksons bridge. As such in the 1 in 100 year event the track is over topped and discharges to the Royal canal.

Regarding queries relating to the CFRAMS outputs. Although informative initially, the hydraulic assessment for the scheme is significantly more refined than that of the CFRAMS and issues relating to the CFRAMS hydraulic assessment methodology are not applicable to the assessment undertaken for the DART+ West Scheme.

28. Summary of issue raised – the objector claims that, in relation to the SSFRA 2022, using five different equations to model the flow, FSR, FSR-3 variable, FSSR No 6, IH124/ICP 124 and FSU 4.2 does not make sense. The model used is either appropriate for use on the catchment or it is not. Reasons for this comment are included in the submission. The objector raises queries in relation to the representation of railway canal culvert UBG22 and catchment parameters.

    Response to issue raised

    Assessing a catchment with multiple flow estimation methodologies is standard practice and aids in understanding catchment sensitivities and defining parameters. With multiple methods of assessment, a comparison can be made with an understanding that some methodologies are better suited for certain catchments than others.

    The Lyreen Rail / canal culvert (UBG22) was represented in the model as a submerged orifice. As with all hydraulic modelling this is a simplification of physical processes but is nonetheless representative of the hydraulic regime. Manning's equation is useful under optimal conditions however the complexity of the culvert arrangement discounts an appraisal based solely on manning equation. This structure as represented in the hydraulic model, was calibrated against existing flood data.

    The delineation of the subject catchments (Lyreen, Ballycaghan stream and tributaries) was based on LiDAR data and slope analysis within GIS software. This was refined by a series of site walk overs and topographic survey data. This process also informed the location, length and slope of watercourses within the subject reaches. The variation in slope and catchment area compared to previous studies was observed but can be explained as a series of constant refinements based on new topographic surveys of the catchments.

29. Summary of issue raised – the objector claims that essential information listed under s.9 for the development of the compensatory storage areas was not submitted with the RO Application and accordingly, the application cannot be evaluated.

    Response to issue raised

    The following information is provided as part of the application and is seen as sufficient to appraise the compensatory storage:

    - Topographic data has been produced for the site in a number of drawings throughout the submission.
    - Flood levels throughout the subject lands
    - Flood levels shown of the existing and proposed scenarios.
    - The displaced volumes for several flood events (return periods).

    All elements of the development that are to be located within floodplains have been included in the displacement calculations including access roads and embankments.

30. Summary of issue raised – the objector claims that the sections drawings of the compensatory storage submitted with the application are illegible and no construction drawings are submitted.

    Response to issue raised

    The compensatory storage drawings are not for construction stage. The information depicted in the flood compensatory storage drawings including plan area and tiers of excavation are of sufficient detail to appraise the likely impacts of the compensatory storage at planning stage.

31. Summary of issue raised – the objector claims that the compensatory storage at Jackson's Bridge is located on a karst outcrop and no details of the methodology to protect the ecology or the groundwater is presented.

Response to issue raised

No karst outcrops were identified as part of the EIA process. Refer to Soils and Geology and Hydrogeology chapters. Geophysical and intrusive investigations were undertaken in the vicinity of Jackson's Bridge and observed variable rock at depths of approximately 3.6m to 5.6m in the vicinity.

32. Summary of issue raised – the objector claims that details of the compensatory outflow controls and levels are not given.

Response to issue raised

The compensatory storage areas fill as water levels in the adjacent watercourses rise and discharge as they fall. No pumps are required as all base levels are above the 1 in 2 year flood level and the areas will discharge by gravity.

33. Summary of issue raised – the objector claims that, in relation to the compensatory storage, the ground water level has not been measured or logged.

Response to issue raised

Groundwater levels are being continuously logged. Groundwater monitoring to continue to construction. The design currently assumes that there will be some groundwater ingress into the compensation area and will incorporate measures to shed this water across the ground surface into the watercourse. Groundwater ingress will therefore be dealt with in a similar way to rainfall falling within the flood compensation area.

34. Summary of issue raised – the objector claims that, in relation to the compensatory storage, the location of the maximum depth of excavation is not given but it most likely below the ground water level.

Response to issue raised

Groundwater levels are being continuously logged. Groundwater monitoring to continue to construction. As stated in section 5.9.9.1 of the EIAR the maximum depth of excavation is to be ~3.4 m at OBG23 Jackson's Bridge while maximum depth of ~1 m is required at the depot lands. The design currently assumes that there will be some groundwater ingress into the compensation area and will incorporate measures to shed this water across the ground surface into the watercourse. Groundwater ingress will therefore be dealt with in a similar way to rainfall falling within the flood compensation area.

35. Summary of issue raised – the objector claims that, in relation to the compensatory storage, neither the geology nor the hydrogeology at the compensatory ponds site were analysed. The Geological Survey of Ireland states that it is likely that geology of the depot site is also karst.

Response to issue raised

Assessment of the likely impact of the compensatory storage on Soil, Geology and Hydrogeology has been considered in the relevant chapters of the EIA. Geophysical and intrusive investigations to confirm the ground and groundwater conditions were undertaken in the vicinity where access was granted.

Section 9.4.7 of EIAR Vol.2 provides the relevant information on karst where pertinent observations were made in the geotechnical ground investigations. The relevant GSI mapping and datasets have been used to inform the EIAR as identified.

The hydrogeology chapter of the EIAR notes. "*The flood compensation areas, especially the one neighbouring the River Lyreen has the potential to increase groundwater vulnerability through the removed of the overlying till and excavation into the Lucan Formation. The current intention is intention would be to return it to grassland for low intensity grazing*".

36. Summary of issue raised – the objector claims that the locally important aquifer will become vulnerable through the construction of the flood compensation area. The ground water level rises seasonally and could well fill the compensatory storage ponds before a storm event.

Response to issue raised

Groundwater levels are being continuously logged. Groundwater monitoring to continue to construction.

Although groundwater may enter the compensation area, there is no suggestion that there is not a way to allow this water to drain and not to pool within the compensatory storage. The rate of groundwater ingress should be lower than the designed outflow rate.

37. Summary of issue raised – the objector claims that the percolation rate of the depot and the compensatory storage sites have not been measured or assessed. This has a major impact on the design of infiltration sustainable drainage system.

Response to issue raised

All the necessary calculations have been undertaken to assess the main characteristics of both the drainage of the depot and the compensatory storage areas to inform the assessments undertaken as part of the draft Railway Order. Runoff coefficients have been considered for the design of the drainage in the depot, using the adequate values for the different types of surface: ballast areas, impervious areas such as concrete or pavement and green areas.

38. Summary of issue raised – the objector claims that there are conflicting statements regarding the design of the compensatory storage areas. There is reference to wetland plants growing in ponds and to the excavation of ponds. If this is the case the infiltration capacity of the existing land will be lost, and the storm water runoff will be increase.

Response to issue raised

The proposed wetland features comprise not only ponds but a diverse wetland mosaic that is in line with natural floodplain management principles. In practice this will entail multiple different forms of depressions from very shallow “scrapes” which are predominantly dry to permeant pools of water in small ponds. The compensatory storage areas will be mainly dry with the aforementioned features dispersed throughout. As such, the effect on runoff generation is minimal.

39. Summary of issue raised – the objector claims that the proposed compensatory storage area at Jackson’s Bridge is less than the existing area in which the flood water presently contained. This implies that the five compensatory storage areas at this location are all indirect systems.

Response to issue raised

The compensatory storage areas have been provided outside of the 1 in 2 year floodplain. The proposed storage areas are tiered at their periphery in order to provide the required storage level for level. The difference in displaced area and proposed compensatory storage area is marginal with any difference accounted for in the requirement for slope stability.

40. Summary of issue raised – the objector states that the data shows that flow through culvert decreases as the level down steam rises with increasing flow. This would indicate that the flooding at Jackson’s bridge was caused in part by the downstream mill weir. If this is so the solution to flooding problem at Jackson's Bridge and on the M4 would be by creating flood water storage structures just upstream of the weir and as proposed in this observation.

Response to issue raised

The hydraulic model within study area has been calibrated against historic flood data and previous assessments. The flood regime as depicted in the model is seen as representative of flood risk within the objector lands.

41. Summary of issue raised – the objector claims that the CFRAM flood estimation is not based on site specific measurements and does not take the culverts and other structures into account.

Response to issue raised

The CFRAMS considered the likely effects of constraints to flow (such as culverts, weirs etc). The resultant flows are what is recorded in the final hydraulics reports and mapping of the CFRAMS. These flows were considered as part of the SSFRA for the scheme.

42. Summary of issue raised – the objector claims that detailed flood risk assessment has not been carried out. The report indicates that the M4 flooding will continue but does not confirm that it will not get worse or become more frequent because of the proposed modifications to the floodplain.

Response to issue raised

The pre and post development modelling results presented in the SSFRA indicate that there is no increase in water levels at the M4 motorway (Modelling node 04REA00530C). As such the required information has been provided for a complete SSFRA.

43. Summary of issue raised – the objector claims that the designs submitted do not indicate that SuDS have been incorporated.

Response to issue raised

SuDS have been incorporated as part of the proposed depot and wider scheme.

Longitudinal track drainage in depot area is based on SuDS, mainly open ditches with the minimum 1:500 gradient as per TII DN-DNG-03064. The proposed ditch will be in the form of a green trench as well as an earth ditch. In cutting sections, collector drains are provided that outfall to the ditches. Oil separator is placed before this discharge when it is required.

44. Summary of issue raised – the objector claims that the Drawing entitled "The General Design Compensatory Storage Areas Cross Sections" No. MAY MCC GEN SC07 DR Y 0002 Phase C Sheet 3 of 3" purports to show the cross sections of these compensatory storage ponds but is illegible.

Response to issue raised

The compensatory storage drawings are not for construction stage. The information depicted in the flood compensatory storage drawings including plan area and tiers of excavation are of sufficient detail to appraise the likely impacts of the compensatory storage at planning stage.

45. Summary of issue raised – the objector claims that all the drawings submitted with the Railway Order application have the spot levels removed.

Response to issue raised

Topographic spot levels are not shown on the flood drawings. However, spot levels are shown throughout drawings. The information included in the documentation is sufficient to appraise the likely impacts at planning stage.

46. Summary of issue raised – the objector claims that the proposed perimeter ditch is not shown on the drawings.

Response to issue raised

The perimeter ditch (Ballycaghan stream diversion channel) is shown in Section 4.11.12.7 depot drainage of the EIAR.

47. Summary of issue raised – the objector claims that the area in the depot lands identified as liable to flood in hydraulic assessment are not identified. The flooding west of Bailey's bridge access ramp is caused by problems with the culvert under the railway through which this area drains to the Royal Canal.

Response to issue raised

All flood extent drawings for the scheme are presented in the SSFRA. This is referred to in the EIA Water (including Hydrology & Flood Risk) chapter of EIAR Volume 2 (Chapter 10).

48. Summary of issue raised – the objector claims that, in Chapter 11 Paragraph 4.2.5, it is stated that Zone F contained no areas of moderate or high groundwater recharge base on the subsoils present and recharge coefficients for those areas and this is not so as soils in areas are noted as having the following types: Tls, RcK, and the Groundwater Drawing in Volume 3b shows areas of high to extreme vulnerability where the compensatory storage areas are located.

Response to issue raised

Section 11.4.2.5 describes the GSI Groundwater Recharge 40k mapping outputs and correctly identifies that the mapping shows "*Zone F contained no areas of moderate or high groundwater recharge based upon subsoils present and recharge coefficients for those areas*". Groundwater vulnerability is described in Section 11.4.2.8.1 stating:

"*The section running from Maynooth Station to the proposed depot is composed of moderate to extreme groundwater vulnerability with two small areas of high vulnerability which were below 50 m in length (see Table 11-16).*"

And further in Section 11.5.3.5: "*Along the boundary valley of the River Lyreen, the till is mapped by the GSI as being thin or absent. In this area the Lucan Formation outcrops, and groundwater vulnerability is extreme. Where the till is mapped as being present elsewhere on the site, groundwater vulnerability is classified as being moderate. Based upon GSI mapping data the extremely vulnerable reach is approx. 800 m long, with approx. 350 m contained within the proposed development boundary*."

The groundwater vulnerability map for Zone F is also reproduced in Figure 11.7.

49. Summary of issue raised – the objector claims that, in Chapter 11 Hydrology, it is stated that the Ballycaghan Stream has been subject to significant historic alterations and this is not the case and, as per photograph included in Appendix 1, the stream has not been altered for the past 110 years. On this basis, the objector considers that the proposal to realign the Ballycaghan stream should be re-evaluated and its effect on the ecology of the Rye and the Lyreen.

Response to issue raised

As stated in the EIA, the modifications to the Ballycaghan stream were primarily a result of the canal/railway construction which took place circa 1800. This is supported by subsoil maps that indicate sediments derived from flooding (alluvium) throughout the depot lands though not aligning with the current route of the stream. It is likely that further modifications have been made to ensure sufficient drainage for agricultural land uses.

The proposed realignment of the Ballycaghan Stream has been assessed within the EIA Water (including Hydrology & Flood Risk) chapter of EIAR Volume 2 (Chapter 10).

50. Summary of issue raised – (s.11.3) The objector made an observation on the text relating to drainage and flooding in the vicinity the proposed depot - the submission states that there are a number of problems with this analysis. The proposals are listed under s. 11.3.1 to s.11.3.7 of the submission.

Response to issue raised

The proposed realignment of the Ballycaghan stream has been assessed as part of the scheme EIAR under both the Biodiversity and Water Chapters of the EIAR.

The assessment of flooding within the proposed depot lands assumed that the existing canal culverts were prone to blockage. Where the depot lands currently flood from the Ballycaghan stream these volumes will be diverted and temporarily stored within the proposed compensatory storage areas. This ensures that peak volumes equal to or less than existing thus maintaining or slightly improving the existing flood regime downstream of Jacksons Bridge.

Moreover, the depot drainage design is based on SuDS to manage both flow and water quality emanating from the site. Attenuation ponds have been arranged to meet the flow rate requirements and to attenuate the peak flows. In extreme events the ground will likely be saturated and the groundwater levels will be high, consequently drainage cannot fully rely on the percolation to the ground. The attenuation ponds proposed discharge the drainage to the Lyreen system at a controlled flow rate which is the greenfield runoff equivalent rate.

51. Summary of issue raised –The objector claims that the impermeable surfaces of the stabling, platforms, maintenance and other buildings, will reduce infiltration over these areas to zero, so increasing stormwater runoff rates and volumes. The impervious surfaces of the development will increase the run off rate and result in an increase in flood risk.

    Response to issue raised

    A response to this comment is included in Section 2.7.5.

52. Summary of issue raised – (s.11.5) The objector claimed in respect of Hydrology Flooding of depot Site - There were no proposals for surface water disposal or management in the documents issued for public consultation nor was it taken into account during the site selection process.

    Response to issue raised

    It is considered that surface water drainage is not a distinguishing factor for site selection. This is because the drainage design for all sites would be prepared on Sustainable Drainage Design (SuDS) principles and as such can be expected to be equivalent from the perspective of surface water drainage.

53. Summary of issue raised – LO99B.53. (s.11.6) Hydrology Flooding of depot Site - Only spot levels of the ground water level are given in the report and as this level fluctuates depending on the season and the weather and rainfall history, the level should be measured and logged at selected locations over at least 12 months.

    Response to issue raised

    The groundwater level monitoring programme currently in place will progress through to construction stage.

54. Summary of issue raised – (s.11.7) The objector claimed in respect of Hydrology Flooding of depot Site - None of the available SuDS techniques to allow percolation to the ground and to attenuate the runoff from the impervious surfaces have been employed. The diversion of the flow presently flowing to the Royal Canal as now proposed will increase the flow to the Lyreen upstream of the inverted siphon increasing the risk of flooding of both the depot access and the M4.

    Response to issue raised

    This comment is addressed in Section 2.7.5.

55. Summary of issue raised – (s.12.1 and s.13.2) Confirmation with recommended planning procedures - Having identified the risk Irish Rail should in accordance with the guidelines have designed a systematic and transparent framework for the consideration of flood risk. In accordance with planning guidelines Flood Risk Assessments (FRA) must be carried out in all areas where flood risk have been identified.

    Response to issue raised

    A Flood Risk Assessment was undertaken as per the OPW Guidelines (2009) and published as part of the draft Railway Order application. The site is deemed to have satisfied the justification test.

56. Summary of issue raised – (s.14.1) WFD - The design details and performance of the contaminated water treatment systems are not included in the Railway Order Application.

Response to issue raised

The surface water drainage network for the depot area includes two attenuation ponds as stated in Section 4.11.12.7 depot drainage of the EIAR. The two attenuation ponds are features with a permanent pool of water that provide both attenuation and treatment of surface water runoff. Runoff from each rainfall event is detained and treated within the ponds. The ponds (in conjunction with filter strips and pervious pavements) will help to protect fine sediments from resuspension. The drainage network will incorporate Sustainable Drainage Systems (SuDS), which are to be designed following the relevant sections of the Building Regulations, BS EN 752 and EN 12056, and the CIRIA SUDS Manual. Sufficient information on the proposed surface water drainage network was provided to assess the likely effects as documented in the scheme EIAR.

57. Summary of issue raised – (s.14.1) WFD - The range of criteria for assessing the importance of hydrological features within the study area (site boundary + 250 m." This methodology is totally inappropriate and not fit for purpose in the impact the assessment of the depot site.

Response to issue raised

As stated in sections 10.2.3 and 10.3.1 of the EIAR Volume 2A, the criteria for assessing the importance of hydrological features within the study area (site boundary + 250 m) and the criteria for quantifying the magnitude of impacts follow the TII guidelines and the EPA (2022) 'Guidelines on the Information to be contained in Environmental Impact Assessment Reports'. Consideration is also given to the surface waterbodies that are potentially hydrologically linked to the study area, this includes the Tolka and Liffey estuaries.

58. Summary of issue raised – (s.16.1) Alternative Suggestions - Locate depot Maintenance Building at Hazelhatch.

Response to issue raised

The depot maintenance building is an essential component of the depot facility and needs to be located at the depot.

59. Summary of issue raised – (s.16.2) Alternative Suggestions - Inspect the operation of the weir and mill race in the College Grounds.

Response to issue raised

Flood relief works for Maynooth are outside the scope of the DART+ West project. It should be noted that the proposed development does not prejudice any works (e.g. modifications to the weir or flood storage provision) as part of future flood relief schemes within the Maynooth environs.

60. Summary of issue raised – (s.16.3) Alternative Suggestions - Build flood storage upstream of the weir on the Lyreen.

Response to issue raised

Flood relief works for Maynooth are outside the scope of the DART+ West project. It should be noted that the proposed development does not prejudice any works (e.g. modifications to the weir or flood storage provision) as part of future flood relief schemes within the Maynooth environs.

61. Summary of issue raised – (s.16.4) Alternative Suggestions - Construct a new entrance to the site from the M4.

Response to issue raised

Given the expected low number of movements in and out of the depot during the operation phase and due to the proximity to the Maynooth and Kilcock interchanges, the assessment undertaken for the access to the facilities considered primarily the existing local road network. The construction of a new interchange from the M4 to access the depot would create a greater disruption to the local network and have a more significant impact on private lands along this area.

62. Summary of issue raised – (s.16.5) Alternative Suggestions - Provide attenuation ponds adjacent to the B-R culvert under the M4.

    Response to issue raised

    Flood relief works for the M4 or Maynooth are outside the scope of the DART+ West project. It should be noted that the proposed development does not prejudice any works (e.g. modifications to the weir or flood storage provision) as part of future flood relief schemes within the Maynooth environs.

63. Summary of issue raised – (s.16.6) Alternative Suggestions - Drain the depot site to the Royal Canal and to ground infiltration through underground infiltration and attenuation SuDS structures.

    Response to issue raised

    During the project design process, two culverts discharging into the Royal Canal were detected, and the possibility of their use for stormwater discharge was studied. This option was ruled out by Waterways Ireland, as it is not considered acceptance to allow the discharge of new stormwater systems into the Royal Canal. Attenuation ponds are included in the drainage design for the depot.

64. Summary of issue raised – (s.16.7) Alternative Suggestions - Lower the railway track at Jackson's Bridge and avoid the railway by-pass and raise the syphon upstream walls.

    Response to issue raised

    The option of lowering the railway through Jackson's Bridge was examined and set aside due to the potential for causing downstream hydrological and environmental impacts.

65. Summary of issue raised – (s.16.8) Alternative Suggestions - Omit all the compensatory flood water storage.

    Response to issue raised

    The compensatory storage proposed in the Railway Order design is necessary to address the risk of flooding.

66. Summary of issue raised – (s.16.9) Alternative Suggestions - Install lined wetland treatment with one inlet and isentropic flow to an unlined wetland for surface water treatment prior to discharge to an underground infiltration/attenuation water storage system.

    Response to issue raised

    The proposed SuDS measures will incorporate measures to treat runoff prior to discharge. The ponds proposed as part of the surface water drainage network do not allow for percolation to ground. In extreme flood events the ground will likely be saturated, and the groundwater levels will be high.

4. RESPONSE TO OTHER SUBMISSIONS ON THE PROPOSED SCHEME

4.1 Ref. No.1 – Env16 – Dublin Commuter Coalition

Representative – Not Applicable

4.1.1 Submission, Location – City Centre

1. Lack of consideration given to building integrated transport system.
2. Despite need for improved transport link, no new stations are being built aside from Spencer Dock.
3. Provision of step free access from platform to train.
4. No lifts at stations.
5. Replace current AV system with RTP info system.
6. Bicycle parking at all stations.
7. All stations to have proper tactile paving, safe crossings and dished paving at all stations.
8. Cycling infrastructure to be fully segregated.
9. Highest possible quality safe walking and cycling infrastructure.
10. Completion of Royal Canal Greenway with increase permeability to allow greater numbers to access DART.
11. Visual aesthetics of stations and platforms.
12. Broombridge design (use of stone).
13. Spencer Dock cycle parking garage.
14. Opposed to Ashtown Mill lane road design (road and pedestrian/cycling facility on same level).
15. Provision to be made for future upgrade of a station at Kilcock.
16. Upgrade to Clonsilla Station.
17. Need for North-inner city stations.

4.1.2 Response to submission

1. The proposed development will improve multimodal transport connectivity through the interchange with the Luas network at Broombridge and at the proposed Spencer Dock Station, and the future Metrolink project at Glasnevin / Phibsborough creating an integrated and well-connected public transport system to meet future public transport demands in line with the projected increase in population within the Greater Dublin Area. The proposed Spencer Dock station will replace the existing Docklands Station and will primarily serve the population catchment residing or working in the Docklands area by providing an alternative mode of travel. It's likely that the location of this station will attract more people to use the rail as a form of transport and will likely change the journey characteristics in this population catchment. Furthermore, the close proximity of the new station to the Luas line, specifically to the Spencer Dock Luas stop will improve the interchange between the light rail and heavy rail network in Dublin and will be a more attractive option for commuters in place of private car use.
2. The provision of additional new stations is outside the scope of the DART+ West project.
3. Accessibility of DART carriages are outside the scope of the DART+ West project. The new DART+ Fleet is being procured as part of a separate project but one of the primary objectives of the design of the DART+ Fleet is to provide improved accessibility for train users. Low level flooring and entrance doors reduce the stepping height for passengers and improve access for persons with reduced mobility. The new carriages will prioritise independent access, with each of the low-height doorway thresholds being equipped with an automatic retractable step and offering the potential for unassisted level access from suitable platforms, aligned with platform enhancements.

   Within the scope of the DART+ West project station modifications are required in the following existing stations in order to enhance their capacity, accessibility and connectivity between platforms to facilitate increases in passenger capacity associated with the proposed development. Station modifications are required at:

- Connolly Station (Zone A)
- Ashtown Station (Zone C)
- Coolmine Station (Zone C)
- Maynooth Station (Zone F)

4. Detailed response to point 4 of this submission is provided in Section 2.2.7.
5. The provision of AV systems is outside the scope of the DART+ West project.
6. Detailed responses to point 6 of this submission is provided in Section 2.2.4.
7. The details of the walking and cycling finishes and textiles will be developed during the detailed design phase of the project. These will be required to be in compliance with the relevant standards, such as the National Cycle Manual, DMURS and relevant Local Authority standards. A Road Safety Audit Stage 1 has been undertaken on road designs, where appropriate at this stage. In future design stages, IÉ will continue to liaise with the relevant stakeholders and undertake further Road Safety Audits and Road User Audits as the detailed design is developed.
8. Cycling infrastructure provided as part of DART+ West has been provided as segregated cycle tracks as much as practicable. The majority of interventions on the public roadway have been provided as segregated cycle tracks with the exception of a number of short sections of shared areas at, for example, junctions.
9. See response to point 7 of this submission.
10. While the Royal Canal Urban Greenway (RCUG) Project is being progressed by Fingal County Council and not within the scope of DART+ West, the IÉ design team have had extensive consultations with the RCUG design team and will continue to do so through the future design stages to ensure that both projects complement each other. It should be noted that DART+ West intends to provide a shared cyclist and pedestrian ramp linking the RCUG to road level at the Canal Bridge at Clonsilla Station. This will be a significant improvement on the stepped access which is currently the only access/egress point to the tow path in the vicinity of Clonsilla Train Station.
11. The visual aesthetic will be developed during the detailed design phase of the project. These finishes need to be in compliance with will be in compliance with the Irish Building Regulations TGD- Part M Access and Use.
12. Initially the preferred option was to re-use the original facing stone, but it became clear that this would not be successful due to the technical constraints of the new construction. The string course is an essential element of the existing composition, but the increased height of the arch would distort its connection to the string course over the canal.

    The precast arch construction would reduce the existing voussoirs to cladding stones and the facing stone of the spandrels would also become cladding stones tied back to the concrete structure behind. The combination of all these factors made it very difficult to design or build stonework that would sit well with the original fabric on each side.

    After careful assessment it was decided to proceed with a concrete finish as this will sit most comfortably with the remaining original stonework. Provided a suitable colour and finish are achieved on the concrete, it should complement, not dominate the original structure.

    It is acknowledged that this precast arch deck option impacts significantly on the protected railway bridge (NIAH reference 50060126), however engagement with a Grade 1 Conservation Architect has taken place to ensure that the reconstruction is done sympathetically and in keeping with the historic canal structure that sits alongside it.

13. Currently, there is a covered parking area for 60 bicycles at Spencer Dock to the south of the Luas station. The inclusion of the DART+ station in the area will increase the demand for bicycle parking in the area therefore 120 additional new parking spaces will be provided.
14. It is understood the submission proposes that pedestrians and cyclists should be taken through the proposed underbridge along a separate corridor raised above road level. It is considered this proposal would not be appropriate as access to Ashton house is required for vehicles, pedestrians and cyclists. A crossing of the road is therefore necessary at a common level.
15. Detailed responses to point 15 of this submission is provided in Section 2.2.14.

16. The upgrade of the Clonsilla Station is outside of the DART+ West project scope.
17. Detailed responses to point 17 of this submission is provided in Section 2.2.13.

4.2 Ref. No.2 – Env19 – Ruadhán MacEoin

Representative – Not Applicable

4.2.1 Submission, Location – City Centre

1. Outlines how the project is split between DART Southwest and DART West applications, and how both are concurrent with Metro Link project.
2. Current rail plans for Dublin are based on assessment maps in which the 5km line between Broombridge and Docklands was omitted, and that 100,000 residents could be served if locations were open at logical places on Irish Rail's Dublin network.
3. At Cross Guns Bridge, a new a station is not proposed until Metrolink has been developed. States that there is no provision in the absence of Metro Link being approved, and therefore, proposal to upgrade railway lines at Cross Guns Bridge and not open station would be in breach of DCDP policy MT 07.
4. Outlines the need of a rail station at Croke Park, the absence of which is contrary to sustainable accessibility as required by national policies.
5. Opposes the construction of the underground station at Spencer Dock.

4.2.2 Response to submission

1. DART+ West and DART+ Southwest are separate projects involving separate planning applications. DART+ West is the first project of the DART+ programme. This rail improvement project will provide a sustainable, electrified, reliable and more frequent rail service while improving capacity on Maynooth and M3 Parkway to city centre rail corridors. The project will involve the electrification of approximately 40 km of permanent way (railway line) from the Dublin City centre to west of Maynooth and to M3 Parkway Station and all associated supporting infrastructure.

   The second of the infrastructural projects of the DART+ Programme to be delivered will be the DART+ South West Project. This rail improvement project will provide a sustainable, electrified, reliable and more frequent rail service while revolutionising capacity between Hazelhatch & Celbridge station and Dublin City Centre. The potential cumulative effects of this project and the DART+ Southwest have been assessed under Tier 4 'Other NTA Projects' in Section 26.4.4 in EIAR Chapter 26 Cumulative Effects.

2. Detailed responses to point 2 of this submission is provided in Section 2.2.3.
3. New station at Cross Guns Bridge is not within the scope of the DART+ West project.
4. Detailed responses to point 4 of this submission is provided in Section 2.2.13.
5. The provision of this purpose-built station will better serve the north Docklands area and help improve the attractiveness of sustainable modes of transport while increasing connectivity to other public transport options including improving interchange with the Luas, Dublin Bus and support sustainability mobility. This new station will help support a modal shift to help support a climate resilient low carbon economy.

4.3 Ref. No.3 – Env21 – Kenneth Pierce

Representative – Not Applicable

4.3.1 Submission, Location – City Centre

1. Asks for serious consideration to be given to the trains stopping down the line from Spencer Dock line, and not allowing houses in Northbrook Terrace to be overlooked by trains.
2. Chapter 5 of EIA states that some trees/vegetation will need to be removed. Submitter asks that consideration can be given to retain the trees between the Spencer Dock Line and the Connolly line.
3. States concern over vibrations of trains causing damage to structural integrity of the property.
4. States concerns of the effect of the DART scheme on the value of her property.
5. Requests pre-works building and structural survey to be carried out by property owner, cost of which to be borne by Irish Rail/DART+ West.
6. Requests that track on the Spencer Dock Line be lowered to below the height of the wall of property.
7. Requests that track is laid on silent, solid support, such as the Edilon, from the bridge at North Strand Road until track reaches natural ground level on descent to Spencer Dock.
8. Requests to be ensured that no damage will be done to property via narrow laneway separating property and Spencer Dock Line. Also states that property owners retain right of way over this laneway.

4.3.2 Response to submission

1. The commissioning of Spencer Dock Station and the increase in the frequency of trains require the line to be re-signalled, so the signal in question will no longer be used in the future. With the new signalling planned, in principle, under normal operation conditions, no train should stop in front of the property. The final position of the new signals will be identified at the detailed design stage.
2. Detailed responses to point 2 of this submission is provided in Section 2.2.3.
3. Detailed responses to point 3 of this submission is provided in Section 2.2.12.
4. Detailed responses to point 4 of this submission is provided in Section 2.2.11.
5. Detailed responses to point 4 of this submission is provided in Section 2.2.11.
6. Operationally it is not possible to lower the tracks. Between North Strand Jct and Ossory Rd, the GSWR tracks have a downward gradient towards Spencer Dock of 2.5%. This slope is the highest of the entire network and well above the maximum recommended by IÉ (1.67%). Given that the level of the tracks cannot be lowered at their junction above North Strand Rd, lowering the tracks further east (in the direction of Spencer Dock) would mean further increasing this already extreme slope, making the line inoperable.
7. The Edilon track is a slab track system. The existing track system is ballast track. Implementing a track system like the one described would mean carrying out very significant works that are not within the scope of the work of this project. The project only contemplates this track system along the railway line where it is necessary to serve the new electrification requirements. In general, throughout most of the project, and also in this section in particular, no track works are carried out.
8. A pre-condition survey can be carried out on the property prior to construction. With regard to the laneway to the rear of the rear of 6 Northbrook Terrace it is not proposed to extinguish any existing rights of way along the laneway.

4.4 Ref. No.4 – Env22 – Beatrice Vance

Representative – Not Applicable

4.4.1 Submission, Location – City Centre

Same observations raised as Ref. No. 4 – Env21.

4.4.2 Response to submission

See detailed responses to this submission in Section 4.3.1.

4.5 Ref. No.5 – Env23a – Siocha Costello (Ashtown Stables)

Representative – Not Applicable

4.5.1 Submission, Location – Ashtown

All concerns raised are common issues dealt with in Section 2.

4.6 Ref. No.6 – Env23b – Amy Lewis (Ashtown Stables)

Representative – Not Applicable

4.6.1 Submission, Location – Ashtown

All concerns raised are common issues dealt with in Section 2

4.7 Ref. No.7 – Env23c – Aoife Webb (Ashtown Stables)

Representative – Not Applicable

4.7.1 Submission, Location – Ashtown

All concerns raised are common issues dealt with in Section 2

4.8 Ref. No.8 – Env23d – Catherine Thorpe (Ashtown Stables)

Representative – Not Applicable

4.8.1 Submission, Location – Ashtown

All concerns raised are common issues dealt with in Section 2.

4.9 Ref. No.9 – Env23e – Liane Roberts (Ashtown Stables)

Representative – Not Applicable

4.9.1 Submission, Location – Ashtown

All concerns raised are common issues dealt with in Section 2

4.10 Ref. No.10 – Env23f – Rachael Byrne (Ashtown Stables)

Representative – Not Applicable

4.10.1 Submission, Location – Ashtown

All concerns raised are common issues dealt with in Section 2

4.11 Ref. No.11 – Env24 – Sharon Weldon

Representative – Not Applicable

4.11.1 Submission, Location – Ashtown

1. Impact on horses during construction.
2. Anti-social behaviour at underpass.
3. In favour of alternative option of lowering the track.
4. Lack of communication with community.
5. Impact on Ashtown Stables wildlife (Brent Geese, bats, etc.).
6. Excessive construction.
7. No consideration for flooding on Mill Lane and south side of the canal.

4.11.2 Response to submission

1. Detailed responses to point 1 of this submission is provided in Section 2.4.3.
2. Detailed response to point 2 of this submission is provided in Section 2.4.5.
3. Detailed response to point 3 of this submission is provided in Section 2.4.6.
4. Detailed response to point 4 of this submission is provided in Section 2.2.2.
5. Detailed response to point 5 of this submission is provided in Sections 2.4.1 and 2.4.2.
6. Due to the constraints present in close proximity of the level crossing at Ashtown, the construction compound has been located slightly further from the IÉ lands. The construction compound are temporary facilities that support the construction of the different elements of the project. Construction compounds are required at specific site locations, such as at closures of level crossing and associated replacement works, or structure modification works. The compound duration is indicated by the full program of works at specific locations. Once the work has been completed, the temporary construction compounds will be removed the existing land use will be reinstated.
7. Review of OPW records and consultations with Dublin City Council did not identify any history of elevated flood risk at Mill Lane. Due to the location the likely source of flooding is derived from the surface water drainage network serving mill lane. As part of the proposed development the surface water drainage network serving mill lane is to be upgraded in conjunction with the drainage network of the proposed canal underpass.

4.12 Ref. No.12 – Env25 – Emer Rath

Representative – Not Applicable

4.12.1 Submission, Location – Ashtown

1. Anti social behaviour at underpass
2. Lack of communication with community
3. Proposal is contrary to Climate Action Plan maintenance of forests
4. Impact on Ashtown Stables wildlife (Brent Geese, bats, etc.)

5. Impact on horses at Ashtown stables

4.12.2 Response to submission

1. Detailed response to point 1 of this submission is provided in Section 2.4.5.
2. Detailed response to point 2 of this submission is provided in Section 2.2.2.
3. The development is operationally beneficial with regards climate and is even specifically in the Climate Action Plan (and previous iterations). The Climate Action Plan three key transport actions are considered using a 'Avoid-Shift-Improve' framework:
   - *developing services, communities, and infrastructure in such a manner as to AVOID the need to travel as much as we do today;*
   - *improving the relative attractiveness of sustainable travel modes such as Public Transport, Cycling and Walking, to SHIFT away from car use; this will facilitate increased use of lower-carbon modes and reduce the percentage of total journeys that are made by private car (modal share) from over 70% (today) to just over 50% in 2030; and*
   - *complement these measures by increasing the proportion of EVs in our car fleet to 30% by 2030, which will IMPROVE the efficiency of the national car fleet; electrification of the freight and public transport sector will also be key.*

   The proposed development facilitates the modal shift from private transport to public by providing a more frequent rail service. The proposed development also is required to enable the movement away from fossil fuel powered trains to electricity, which can be generated from renewable sources. IÉ have agreed to purchase up to 80% of its operational demand from certified low or zero carbon electricity for operations. A Corporate Power Purchase Agreement (CPPA) is a financial contract with a renewable generator that will allow for a guaranteed source of renewable power for the operation of the proposed development in future.

   The Construction phase of the proposed development is predicted to result in the removal of grassland and trees to facilitate construction. However, the landscaping plan includes the widespread planting of native Irish species of trees and shrubs and wildflower planting. It is predicted that 11 Ha of replanting will be completed in association with the construction phase of the proposed development.
4. Detailed response to point 4 of this submission is provided in Sections 2.4.1 and 2.4.2.
5. Detailed response to point 5 of this submission is provided in Section 2.4.3.

4.13 Ref. No.13 – Env26 – Anna Lalor

Representative – Not Applicable

4.13.1 Submission, Location – Ashtown

1. Pedestrian & cycle bridge at Ashtown be made permanently available to the public at all times.
2. Further engagement with bodies representing wheelchair users & elderly to determine if accessibility & inclusion objectives met at Ashtown. If not, lift to be installed.
3. Steps taken by Irish Rail to minimise risk of anti-social behaviour & engage proactively where issues of anti-social behaviour arise during operational phase, incl. engagement with Gardaí / DCC / FCC / Councillors / local community.
4. Provide additional photomontages to better demonstrate visual impact of proposed pedestrian/cycle bridge to An Bord Pleanála / local residents in Rathborne village / Martin Savage Park residents / nearby homes.
5. Consider approaches to soften the appearance of the bridge at Ashtown (and potentially other locations) and engage with the local community at the design phase.
6. Irish Rail proactively engage with Rathborne Village Owners Management Company Limited by Guarantee / Castlethorn Construction / DCC to agree appropriate use of Ashtown Road once level crossing closed and agree appropriate enhancements to public realm.

7. Irish Rail consider & budget for appropriate fencing / cover of palisade fencing where located in sensitive areas ,i.e. at the level crossing adjacent to Longford bridge, and engage with local community to find solutions that complement existing public realm.
8. Demonstrate how the EIAR meets EC's Technical Guidance on climate proofing of infrastructure 2021-2027 (C/2021/5430). Where not demonstrated, relevant assessment to be completed & shared with ABP / public.
9. Conduct Arboricultural Impact Assessment & share with ABP / public and evaluate how tree & vegetation loss can be minimised from current proposals.
10. Reassess distribution of bicycle parking north & south of canal/railway at Ashtown, and the proposed landtake for bicycle parking.
11. Re-assess feasibility of moving proposed substation & construction site at Ashtown to Irish Rail lands west of Ashtown Road.
12. Provide stronger explanation for the planned capacity increase (frequency and carriages).
13. Designate Mill Lane for vehicular traffic only - pedestrians/cyclists to use pedestrian/cycle bridge as their preferred route over the railway/canal. Redesign of the road layout and surrounding area (remove need for embankments).
14. Apply mitigation measures proposed during construction phase at Ashtown, proactively engage with residents where issues arise, and identify opportunities to reduce significant impacts of construction works on local residents, particularly at night.
15. Irish Rail engage with Castlethorn Construction / DCC where there's contemporaneous development of sites surrounding Rathborne Village to: assist in application of mitigating actions on dust and pollution, and coordinate activities to minimise impact on the area.

4.13.2 Response to submission

1. The pedestrian & cycle bridge is being constructed as relief infrastructure to replace the closure of the level crossing, therefore, it will be open to the public on a 24-hour basis.
2. IÉ will continue to engage affected stakeholders. As part of the Ashtown Station upgrades, the construction of a new steel bridge/ramp is proposed. The bridge will be suitable for pedestrians, cyclists and mobility impaired persons and it will allow passengers to cross from the north platform to the south platform and vice versa. It will also provide a connection across the canal. Section 2.2.1 provides a detailed response with regards to the installation of lifts at station.
3. Detailed responses to point 3 of this submission is provided in Section 2.2.17, 2.4.5 and 2.4.9.
4. Detailed responses to point 4 of this submission is provided in Section 2.2.9.
5. The proposed bridges have been designed to tie in with the aesthetic look and feel of the surrounding area and in compliance with the regulations and standards. During the public consultations, there was significant negative feedback received in relation to the reliability and availability of lifts for a public thoroughfare. Therefore, in the subsequent design development of the overbridges, it was required to incorporate a bridge with stairs and ramps, to ensure full accessibility for pedestrians, vulnerable users, and cyclists. During detailed development aesthetic refinement can be carried out to soften the appearance of the bridge.
6. IÉ to continue engagement with affected stakeholders during detailed design and construction stage of the DART+ West project.
7. A palisade fence is proposed on the closure of the level crossings to secure the railway against trespass and vandalism. The palisade fence is included in Irish Rail standards and provides the required security level in this location. Furthermore, this option allows for the installation of a gate to the track. Other IÉ standard fences do not offer the same track access and in this specific location, it is required for the purposes of railway maintenance access. The palisade fence has been used in other situations along the rail line, for example, in the closure of Hamilton View, east of Pelletstown Station, adjacent to Reilly's Bridge (the Royal Canal lock 8th).
8. In December 2022, after the publication of DART+ West EIAR and Railway Order, TII published Climate Guidance for National Roads, Light Rail and Rural Cycleways (PE-ENV-01104). PE-ENV-01104 states that the assessment is guided by the principles set out in two overarching best practice guidance documents:

- The European Commission's 2021 Technical guidance on climate proofing of infrastructure 2021-2027 with respect to the Climate Change Risk Assessment.
- The Institute of Environmental Management and Assessment (IEMA) 2020 EIA Guide to: Climate Change Resilience and Adaptation.

PE-ENV-01104 states in Section 7.2.4 that an alternative risk framework can be adopted for the assessment if the Climate Practitioner deems appropriate. This statement acknowledges that TII understand other assessments are viable when assessing the potential climate change risk to infrastructure.

Within the DART+ West EIAR an assessment of the potential impact of future climate change on the project was conducted in line with LA 114 – Climate' (UKHA 2019). LA 114 includes a methodology for undertaking a risk assessment where there is a potentially significant impact on the proposed development receptors due to climate change. This assessment approach is used as an example of an appropriate method in the IEMA EIA Guide to: Climate Change Resilience and Adaptation (IEMA 2020), one of the best practice guidance documents recommended by the TII December 2022 published Guidance PE-ENV-01104. Therefore, it can be considered a valid guidance document for assessment of climate vulnerability of a project. TII have historically recommended use of UKHA guidance documents for air quality assessment, which include regional and climate pollutants, in the 2011 Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes.

Project team workshops were conducted with project specialises (i.e. flood risk), designers and wider EIA team in order to consider the vulnerability of the proposed development to future climate change. Section 13.5.4 of the EIAR assesses the Impact of Climate Change on the proposed development Operational Phase which includes a Site Specific Flood Risk Assessment (SSFRA) (pluvial, fluvial, coastal) conducted by a specialist in the area. A number of key areas of the proposed development were found to have elevated levels of flood risk however management strategies have been prepared in order to reduce the vulnerability of the project to this risk. In addition to the potential for flooding, an assessment of the vulnerability of the project to increased temperature, Ice or Snow and major storm damage have also been considered within the EIAR (see Section 13.5.4). The finding of the assessment was that with design mitigation in place that the residual risk was not significant. These assessments will require monitoring and updating in detailed design and throughout the project lifespan to ensure they remain appropriate.

The purpose of the ECs Technical Guidance on climate proofing of infrastructure is to ensure these considerations have been included within the design and the residual risk is not significant. Such assessments have been conducted using the UKHA assessment technique.

During detailed design further consideration will be given to the potential impact of future climate change and the mitigation of significant vulnerabilities through grey (design), green (nature-based solutions) or soft (system or behaviour management) adaptation techniques. Future assessments will include consideration of the Met Éireann research project 'TRANSLATE', which is aimed at standardising national climate projections for Ireland and is due to finish in early 2023.

9. Detailed responses to point 9 of this submission is provided in Section 2.2.3.
10. 37 bicycle parking spaces are needed at Ashtown Station. Bicycle´s spaces provision is calculated based in the National Cycle Manual Section 5.5.7 "How much parking – Cycle parking Guidance", which states a guidance of minimum number of spaces that should be provided initially at new private and public facilities in urban areas. It has been considered that a space of 61 m2 is sufficient to include the required 37 bicycle parking spaces.
11. Traction Substations are needed to feed energy to the electrified trains. The general location of substations was investigated as part of a power simulation study, that identified that a traction substation is needed at Ashtown. A Multi-Criteria-Analysis (MCA) has been undertaken at option selection stage to inform the selection of the preferred location for the substation at Ashtown, with the current location emerging as the preferred option. The option to have the substation to the west of Ashtown Road at the north of the stables, was explored. Land take is required to facilitate the

construction of the substation as the lands within the ownership of Irish Rail are not large enough to facilitate the construction of the substation and a new access road. With the selected option, the substation is now part of a project that it is now integrated with the bridge. During the detailed design and construction phases of the project further analysis can be carried out to try and mitigate the numbers of trees and vegetation required to be removed.

12. Detailed responses to point 12 of this submission is provided in Section 2.2.8.
13. It is currently government policy to provide safe cyclists routes where possible to encourage a modal shift from car dominance to more sustainable transport modes such as cycling. This initiative is supported and facilitated by the NTA and local authorities such as DCC and FCC. The provision of a segregated cycle track along the proposed Mill Lane provides a safe route for cyclist that wish to bypass Rathbourne Village. This route also provides future proofing for connection to the Tolka Greenway and the future link to the Phoenix Park Cycle Track. Embankments are provided in the proposed design, where possible, to provide a more open feeling to the roadway as in approaches the underpass.
14. Mitigation measures identified in the EIAR and NIS prepared for the DART+ West project will be applied at construction phase. EIAR Chapter 05 Construction Methodology exposes a high-level indicative Construction Programme for the project of approximately 47 months, starting in the middle of 2024 and ending before the middle of 2028. Traffic diversion during construction is described in the section 5.8.3.4. of the Chapter 05 Construction Strategy, included in the Volume 2 Main Text of the EIAR “Appendix A6.2, Traffic Impacts Assessment”, describes the traffic impact in the construction phase. “Section 8.2 Construction Traffic Management Plan” explains that as with any construction project, “the contractor will be required to a prepare a comprehensive traffic management plan for the construction phase” and “It will be the project contractor’s responsibility to prepare a Traffic Management Plan for the approval of local authorities. Mitigation measures proposed for Population (Chapter 7, Section 7.6.1) requires the Contractor to develop and implement a Stakeholder Management and Communication Plan which will outline the means of the stakeholder and members of the public to communicate with the project team, and for the project team to communicate relevant information of the project.
15. The cumulative effects arising from the proposed development with other existing and/or approved plans and projects during the construction and operational phases of DART+ West project can be found in Chapter 26 Cumulatives. Table 26-6 Tier 3 Projects within the functional area of Dublin City Council, of Section 26.3.1.2 has included the Planning Applications of Ruirside Developments (EIA Portal ID 2020109, DCC reg no. SHD0016/20 & ABP ref no. TA29N.307656) and Castlethorn Construction Unlimited (DCC reg no. SHD0003/21 & ABP Ref TA29N.309318). The EIAR for Ruirside Developments (Stephen Little & Associates, 2020) indicates that the construction phase will be in two phases, with the first phase commencing 2021 and completing in 2023, and the second phase commencing in 2023 and competing in 2026. The construction programme indicated for the Castlethorn Construction Unlimited development is indicated to commence in the second half of 2021, with a 30 month programme. Therefore, there is only a likely overlap of construction phases with the DART+ project (with construction anticipated to commence in 2024) and the Ruirside Developments.

    The implementation of the mitigation measures proposed as part of each of the respective EIARs, CEMPs, CTMPs and CDWMPs will mitigate potential cumulative dust, traffic and pollution impacts and therefore the effects are assessed as not-significant. Additionally, mitigation measures proposed for Population (Chapter 7, Section 7.6.1) requires that:

    The Contractor will be required to develop and implement a Stakeholder Management and Communication Plan (SMCP) which will be agreed with Iarnród Éireann prior to the construction phase.

    a) The Employer will appoint a Public Liaison Officer, or equivalent, who will be consulted in the preparation of the Plan as well as its maintenance and implementation. The SMCP will provide the means of the stakeholder and members of the public to communicate with the project team, and for the project team to communicate relevant information of the scheme.
    b) All stakeholders will be required to be agreed with Iarnród Éireann prior to construction commencing and reviewed periodically; and

c) Details of general construction process/phasing will be communicated to the relevant stakeholders prior to implementation to ensure local residents and businesses are fully informed of the nature and duration of construction.

Currently there are no planning applications submitted for the planned upgrades to the St. Oliver Plunkett and Phoenix Football club pitches in Martin Save Park and therefore any proposed future developments will need to consider the DART+ West project in the cumulative assessment.

With respect to dust nuisance, a sensitivity assessment was completed in Section 12.4.3 of the EIAR and an assessment of the potential dust generation due to construction has been completed in Section 12.5.1.4 of the EIAR. Guidance for this assessment was taken from the Institute of Air Quality Management (IAQM). Guidance on the Assessment of Dust from Demolition and Construction V1.1. In addition to the sensitivity assessment, and impact assessment in the main body of the EIAR, two appendices have been prepared with respect to dust; one to review activities which have the potential to generate dust (Appendix 12.2. Potential Dust Generating Activities) and a second to document the mitigation measures that are to be applied across the project to minimise and suppress dust generation (Appendix 12.4. Dust Mitigation).

- Section 1.1.1 of the Dust mitigation plan relates to Communication, and it states that the proposed development will: “Develop and implement a stakeholder communications plan that includes community engagement before work commences on site”.
- Section 1.1.2 of the Dust mitigation plan relates to Site Management, and it states that the proposed development will: Hold regular liaison meetings with other high risk construction sites within 500 m of the site boundary, to ensure plans are co-ordinated and dust and particulate matter emissions are minimised. It is important to understand the interactions of the off-site transport/deliveries which might be using the same strategic road network routes.

Through these elements, and others listed in the Dust Mitigation Plan, coordination will be ensured to mitigate cumulative dust impacts from construction projects in proximity to each other.

4.14 Ref. No.14 – Env27 – Tony Mooney

Representative – Not Applicable

4.14.1 Submission, Location – Ashtown

1. Tunnel at Ashtown would sever communities on either side of the railway line. People will not descend 8m into 30m long tunnel & reascend 8m, or use high stairs / long walkway over railway line. Not practical or safe.
2. Plan threatens existing local amenities, i.e. riding stables, industrial estate, protected structures and wetlands to the west of the station.
3. Proposed installation of substation in Martin Savage Park will destroy green space.
4. Set-down point is convoluted - detours vehicles away from the main road and the station.
5. Preferred option is to lower the rail-line under Ashtown Road. Independent evaluation requested for this option taking into account advantages to communities.

4.14.2 Response to submission

1. Detailed responses to point 1 of this submission is provided in Section 2.2.1, Section 2.2.16, and Section 2.4.10.
2. Detailed responses to point 2 of this submission is provided in Section 2.
3. The size of the substation is small in relation to the total green area, and it is located largely on IÉ owned lands. Chapter 7 Population of the EIAR assessed the potential impact of the proposed substation on this amenity area during the operation phase. As the amenity will largely remain functional, the potential effect was determined to be not significant.

4. The proposed set down configurations north and south of the railway are considered straightforward and intuitive for users. The vehicular detours associated with the proposed scheme at Ashtown are very small and are in the order of approximately one minute between the north and south of Ashtown village.
5. Detailed responses to point 5 of this submission is provided in Section 2.4.6.

4.15 Ref. No.15 – Env28 – Rathborne Community Association

Representative – Not Applicable

4.15.1 Submission, Location – Ashtown

1. Additional photomontages be provided that would assist in understanding the aesthetic impact on the area.
2. Engagement with local community on: material used for bridge, how steel is maintained / corrosion managed, how bridge is resistant to graffiti, and examples of bridges with similar material in use in Ireland/UK.
3. Further community consultation on omission of lifts
4. Proposed alternative construction compound location west of Ashtown Station.
5. Retain as much existing tree cover as possible.
6. Alternative substation location further east / to the west of Ashtown Station.
7. Flooding that occurred in MSP (2020) not referred to in Site-Specific Flood Risk Assessment (July 2022)

4.15.2 Response to submission

6. Detailed responses to point 1 of this submission is provided in Section 2.2.9.
7. Iarnród Éireann will retain responsibility for maintenance for the bridge on completion. The material choice and the corrosion protection will be resolved as part of the detailed design so as to ensure curtailed maintenance interventions. Details will be implemented to discourage graffiti and, where practicable, coatings will be used at vulnerable locations to facilitate the removal of same. Iarnród Éireann adopts a proactive approach to the management of graffiti with rapid response targeted to discourage recurrence.

   Safety concerns related to cyclists, pedestrians and disabled people using the bridge led the designers to propose a robust concept to avoid any risk of falls and vandalism.

   Dublin Port is the closest example related to the application of Corten steel. This is a weathering steel which exhibits superior corrosion resistance and is typically unpainted. The steel develops a natural patina which stabilises shortly after installation. It consequently requires less maintenance.
8. Detailed responses to point 3 of this submission is provided in Section 2.2.7.
9. Multi Criteria Analysis (MCA) has been undertaken at option selection stage to investigate possible locations for the construction compound. The current location has been selected as the preferred option. At Public Consultation No. 2, the preferred option was option 1, but after some discussions with ESB, it was reassessed, as there is no available space in the West, near the station, as described in EIAR Volume 2 (main text), Chapter 3 (alternatives), section 3.6.1.5.9.1. Going to the other side of the Royal canal is not a good design option, as it introduces safety, operation & maintenance and environmental issues related with crossing the high-voltage electrical feeders cablings through the canal, and additionally it increases the cost of the project.
10. Detailed responses to point 5 of this submission is provided in Section 2.2.3.
11. Traction Substations are needed to feed energy to the electrified trains. The general location of substations was investigated as part of a power simulation study, that identified that a traction substation is needed at Ashtown. A Multi-Criteria-Analysis (MCA) has been undertaken at option selection stage to inform the selection of the preferred location for the substation at Ashtown, with the

current location emerging as the preferred option. The option to have the substation to the west of Ashtown Road at the north of the stables, was explored. Land take is required to facilitate the construction of the substation as the lands within the ownership of Irish Rail are not large enough to facilitate the construction of the substation and a new access road. With the selected option, the substation is now part of a project that it is now integrated with the bridge, minimising the impact for the neighbourhood. Detailed response regarding vegetation loss / removal is provided in Section 2.2.3.

12. Information contained within the SSFRA was collated from various sources including the OPW's record of historic flood events and consultations with Dublin City Council drainage division. No indication of flooding at Martin Savage Park was presented in the consulted sources.

    The flooding appears to be derived from deficiencies in the surface water drainage network within Martin Savage Park. Irish Rail will liaise with Dublin City Council during the detailed design stage to confirm cause of flooding and facilitate remedial measures by Dublin City Council.

4.16 Ref. No.16 – Env29 – Rathborne Village Residents Committee

Representative – Not Applicable

4.16.1 Submission, Location – Ashtown

All issues raised are as per Section 4.13.1 Ref. No. 13 – Env26 – Anna Lalor.

4.16.2 Response to submission

See detailed responses in Section 4.13.2 Ref. No. 13 – Env26 – Anna Lalor.

4.17 Ref. No.17 – Env87 – Aviva Life & Pensions Ireland DAC

Representative – Not Applicable

4.17.1 Submission, Location – Ashtown

Issues rais**ed in submission are addressed with their responses below.**

4.17.2 Response to submission

1. Summary of issue raised - proposed works are considered to have the potential for disruption to Aviva's tenants using the car park facility on a daily basis.

   Response to issue raised

   Vehicular traffic during construction stage will be managed by Temporary Traffic Management. Temporary Traffic Management Plans will be designed in accordance with the relevant standards and agreed with the Local Road Authority prior to implementation to ensure a high level of road safety for all road users.

2. Summary of issue raised - concerns as to the accessibility into the main vehicular entranced for the Ashtown Gate Complex car park following the construction period and realignment of the road network.

   Response to issue raised

   In the operational phase, the proposed carriageway and access has been designed to the latest relevant road design standards and has undergone Road Safety Auditing to ensure the design is safe for all road users.

3. Summary of issue raised - The revised junction layout proposed direct access from the rear entrances of the Ashtown Gate Complex, thus making it more challenging for tenants/ users to leave the property without the benefit of a signalised junction for easy access and egress.

   Response to issue raised

   With the roundabout in place there will be gaps in the traffic which will provide opportunities for access/ egress at these locations.

4. Summary of issue raised - there are no yellow boxes indicated on the drawings, raising safety concerns for Aviva and their tenants. observation is raised as to the possible mitigation measures that could be introduced to make it more accessible to their tenants when implemented. Provision of a yellow box in front of both entrances, it will allow for easier and safer entry & exit to the complex, in turn providing greater reassurance to Aviva and its tenants when the programme of works have been completed.

   Response to issue raised

   No safety concerns are anticipated here however the provision of yellow boxes opposite the entrances on the northern side of the road would assist in access during peak times while a yellow box could be provided at the main entrance and for the underground parking.

5. Summary of issue raised - there is a lack of information provided within the CMP to indicate the proposed period of traffic disruption that will take place during the change over from the existing Ashtown Road, and its connection with the Local Distributor Road.

   Response to issue raised

   The construction period at this location is likely to take 2.5 years due to the requirements for the construction of the realigned Ashtown Road and then closure of the level crossing, however, works outside the property will not be taking place continuously over this period. Access will be maintained at all times but will be subject to temporary traffic management measures to be agreed with Dublin and Fingal Councils.

6. Summary of issue raised - The impacts of the BusConnects project from City Centre to Blanchardstown will also affect the upper parts of the Ashtown Road and Roundabout over the coming years. There should be co-ordination between both projects to create as minimal disruption as possible.

   Response to issue raised

   'Other' identified NTA projects that are in the public domain/at preliminary design (i.e., not in the planning system or granted) but have the potential for cumulative effects with the project have been assessed as part of the Cumulative Environmental Assessment. The project team have been in close consultation with several of the other NTA funded projects that are currently at public consultation and/or are in the public domain. As such it was deemed prudent to include these planned NTA transportation projects that are reasonably foreseeable and are likely to have cumulative effects with the DART+ West project and therefore are included as part of the CEA.

   BusConnects Blanchardstown to City Centre Core Bus Corridor No.5 has been assessed as part of the DART+ West cumulative assessment. Refer to Table 26-10 on Pg.26/188 of EIAR Volume 2 Chapter 26 Cumulative Effects

7. Summary of issue raised - Requested that, to avoid potential major disruption caused during the construction period, a specific management programme and traffic management plan should be agreed prior to commencement of works.

   Response to issue raised

   Specific traffic management plans will be developed by the Contractor in advance of the contract. The traffic management plan here will need approval not only from Irish Rail but approval from Dublin City Council and Fingal County Council for the works on Ashtown Road and Mill Lane.

8. Summary of issue raised - The location of the pedestrian crossing at the Ashtown Gate Complex may introduce issues with its interactions to the road users, by introducing a small roundabout which offers pedestrians no real protection from speeding vehicles around corners.

   Response to issue raised

   It is proposed that the crossing point to the south of the roundabout will be raised thus helping slow down vehicle taking the left turn onto the roundabout. This has been agreed as part of the Road Safety Audit. In addition, the crossing will be signalised for pedestrians, further assisting in reducing speeds in this area and enhancing pedestrian safety.

9. Summary of issue raised - a review of the submitted design proposals should be considered, with particular attention given to the interaction of road vehicles with pedestrian and cyclist infrastructure, as Aviva believes there is potential for serious accidents if not addressed.

   Response to issue raised

   The road design including the interactions with vehicles and other road users has been considered, with a Road Safety Audit of the design undertaken and any issues raised therein addressed. Further Road Safety Audits will address any other design issues raised at the detailed design stage, construction stage and post construction stage.

4.18 Ref. No.18 – Env88 – Musgraves Operating Partners Ireland Limited

Representative – Not Applicable

4.18.1 Submission, Location – Ashtown

1. Works proposed at Ashtown will hinder operation and servicing of the existing supermarket.
2. Delivery vehicles will no longer be able to access the servicing unit due to the proposed cul-de-sac. The proposed new access point through the existing egress which will pass over a footpath and 2-way cycle lane is not a feasible solution due to gradient and traffic safety. Revised layout is requested.
3. Store planning to expand its operations, DART+ West jeopardises the store's plans to expand due to the impact of the proposals on the service arrangements on site.

4.18.2 Response to submission

1. Access to the existing parking and entrances around Ashtown will be maintained during the construction period. Any works on a or near the ramps will be co-ordinated to minimise disruption and maintain access.
2. It is not proposed to alter the access / egress onto the Mill Lane from the building. The level to the rear of the footpath on this road will be the same as it currently is at the vehicular access / egress points.
3. Noted that it is proposed to maintain access to the store and warehousing facilities.

4.19 Ref. No.19 – Env89 – Navan Community Council C/O Patricia Dunleavy

Representative – Not Applicable

4.19.1 Submission, Location – Ashtown

1. Ask that it be acknowledged that local knowledge and input into all such traffic proposals and infrastructure is essential for good planning into the future - not sudden decisions planned by unseen professionals, lacking all local knowledge and information.

2. Acknowledges that there was a reference to 'EU sustainable development goals/ climate action plan 2019, Planning & Urban Design' but queries if some of the proposals mentioned may well not include good Urban Design?
3. State that there was lack of information to surrounding communities about the public consultation.
4. Unclear how Fingal may consider this RO application, in relation to its listed buildings; Ashton House, Gate Lodge & Gates; Ashtown Mill; and Longford Bridge.
5. Concerned regarding the plan to turn Ashtown Road to cul-de-sac with all closing off the crossing on each side.
6. Concern regarding severing the existing communities of Ashtown / Navan Road from Scribblestown / Pelletstown.
7. Project imposes a large footbridge which many older people; infirm; with child buggies or small children; with sight difficulties, are unable or indeed, unwilling to cross over.
8. Every closure of Ashtown tunnel would sever all road traffic, traffic will travel throughout their living area to access their homes in Scribblestown, River Road and Pelletstown.
9. State that Newstalk Radio on 15th of Sept 2022 had an item on the Port Tunnel which suggested the entrance / exit areas of the Port Tunnel had the highest carbon emissions in the country.
10. State that there is no school within Pelletstown and the children who have to walk across the footbridge is likely to regularly delay these children, resulting in missed buses.
11. Concerned that a child walking along across the bridge, would be out of sight of general public, and vulnerable to bullying or worse.
12. If in future, Phoenix Park is closed to traffic for any events, all horses from the Stables with young learning riders, will have to walk down along the proposed traffic tunnel.
13. Propose to 'lower the rail line, not the people.
14. There is no justification to closing the crossings, given that trains are carrying substantially fewer than before the pandemic.
15. The project teams assertion that the crossings have to be closed on safety grounds are unfounded given the small number of incidences at the crossings and that modern signalling and warning technologies are yet to be implemented.
16. The idea that tall trucks will strike the cables is bogus, given that similar electrification exists all over the world.
17. Increased tonnage of trains and increased frequency of train services will add further to the structural slippage affecting the rail and canal embankment at Ashtown.
18. Lowering the track to the original ground level would allow it to run under the current Ashtown Road and resolve the instability of the current elevated track bed.
19. The cutting option has the advantage of being cheaper to build than the proposed Mill Road underpass and resolves the structural deficiencies in the canal embankment.
20. Disability: access to the station must be available to all people.
21. All extra car traffic generated out of Dublin 15, within Fingal C.C. will cross through their Navan Road residential areas, bringing extra carbon emissions with their living area.
22. Unclear from the public consultation on extra carbon emissions, whether BusConnects, planners including the NTA, have ever consulted with DART+ Maynooth planners, including NTA, on the ongoing effects on each adjoining Local Authority area and the residents within each.

4.19.2 Response to submission

1. The design team has liaised and consulted with the local authorities in relation to road design and traffic flows. IÉ will continue to consult with stakeholders as the design progresses.
2. The proposed road design is designed to current standards, National Cycle Manual and DMURS.
3. Detailed response to point 3 of this submission is provided in Section 2.2.2.
4. Detailed response to point 4 of this submission is provided in Section 2.4.7.
5. The proposed development at Ashtown will facilitate all user access through an underpass connecting the two communities on either side of the level crossing. A segregated pedestrian and cyclist footbridge is also proposed at this location which will maintain access to both sides of the level crossing on a 24/7 hour basis. Detailed response in relation to community severance is provided in Section 2.2.16.
6. Detailed response to point 6 of this submission is provided in Section 2.2.16 and 2.4.10.

7. Detailed response to point 7 of this submission is provided in Section 2.2.1.
8. It is not envisaged that the underpass will be closed unless in an emergency such as a traffic accident. In which case, it will be a temporary closure and diversions routes, such as River Road are available in the vicinity.
9. Regarding the Newstalk segment, as an air quality and climate consultant I believe the pollutant the programme may have discussed was nitrogen dioxide (NO_2) which is a traffic pollutant of concern in proximity to the port tunnel. I believe the point raised in the submission may relate to high concentration of pollutants near underpasses or tunnels. The reason for high pollutant concentrations, in particular NO2, at the port tunnel exit and entrance is due to all emissions generated within the ~4.5km of tunnel have one exit point, with fans and the momentum of cars push the airflow in one direction. There are no ventilation points along the port tunnel to allow pollutants to escape. Therefore, the pollutants emitted from cars driving the length of the tunnel emitted is concentrated into a single exit point, rather than spread over a larger area as would be the case on an open road. The underpasses proposed within DART+ West are at 38m in length and therefore concentrations will not have the same ability to build up along a long-enclosed length.

   In December 2022, after the publication of DART+ West EIAR and Railway Order, TII published Climate Guidance for National Roads, Light Rail and Rural Cycleways (PE-ENV-01104). PE-ENV-01104 states that the assessment is guided by the principles set out in two overarching best practice guidance documents:

   The European Commission's 2021 Technical guidance on climate proofing of infrastructure 2021-2027 with respect to the Climate Change Risk Assessment

   The Institute of Environmental Management and Assessment (IEMA) 2020 EIA Guide to: Climate Change Resilience and Adaptation

   PE-ENV-01104 states in Section 7.2.4 that an alternative risk framework can be adopted for the assessment if the Climate Practitioner deems appropriate. This statement acknowledges that TII understand other assessments are viable.

   Within the DART+ West EIAR an assessment of the potential impact of future climate change on the project was conducted in line with LA 114 – Climate' (UKHA 2019). LA 114 includes a methodology for undertaking a risk assessment where there is a potentially significant impact on the proposed development receptors due to climate change. This assessment approach is used as an example of an appropriate method in the IEMA EIA Guide to: Climate Change Resilience and Adaptation (IEMA 2020), one of the best practice guidance documents recommended by the TII December 2022 published Guidance PE-ENV-01104. Therefore it can be considered a valid guidance document for assessment of climate vulnerability of a project. TII have historically recommended use of UKHA guidance documents for air quality assessment, which include regional and climate pollutants, in the 2011 Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes.

   Project team workshops were conducted with project specialises (i.e. flood risk), designers and wider EIA team in order to consider the vulnerability of the proposed development to future climate change. Section 13.5.4 of the EIAR assesses the Impact of Climate Change on the proposed development Operational Phase which includes a Site Specific Flood Risk Assessment (SSFRA) (pluvial, fluvial, coastal) conducted by a specialised in the area. A number of key areas of the proposed development were found to have elevated levels of flood risk however management strategies have been prepared in order to reduce the vulnerability of the project to this risk. In addition to the potential for flooding, an assessment of the vulnerability of the project to increased temperature, Ice or Snow and major storm damage have also been considered within the EIAR (see Section 13.5.4). The finding of the assessment was that with design mitigation in place that the residual risk was not significant. These assessments will require monitoring and updating in detailed design and throughout the project lifespan to ensure they remain appropriate.

The purpose of the ECs Technical Guidance on climate proofing of infrastructure is to ensure these considerations have been implemented within the design and the residual risk is not significant. Such assessments have been conducted using the UKHA assessment technique.

During detailed design further consideration will be given to the potential impact of future climate change and the mitigation of significant vulnerabilities through grey (design), green (nature-based solutions) or soft (system or behaviour management) adaptation techniques. Future assessments will include consideration of the Met Éireann research project 'TRANSLATE', which is aimed at standardising national climate projections for Ireland and is due to finish in early 2023.

10. The proposed development will result in a 24/7pedestrian and cyclist access across the rail line as opposed to regular closure and delays caused by the closure of the level crossing particularly at the AM and PM peak times, which can be associated with school times. The proposed development will have a positive impact on journey characteristics not only for rail users but also those walking and cycling north and south across the rail line as it will not require any wait time for barrier operation when trains are passing.
11. Detailed response to point 4 of this submission is provided in Section 2.2.17 and Section 2.4.5.
12. From a review of Ashtown Stables website, it would appear that Ashtown Stables give riding lessons in the outdoor school and has organised treks in the Phoenix Park. Research on Ashtown Stables practices shows that the horses appear to have been ridden on the local roads to access the Phoenix Park - this is a distance of approximately 550m along busy urban roads which required trekking along the Ashtown Road (R147), crossing the dual carriageway at the N3 /R147 trekking up the R806 before entering the Phoenix Park at the Ashtown Gate.
    In the professional experience of the equine expert, it is remarkable that horses are still ridden along this particular route. If confirmed, this is further evidence of their biddable and docile nature and therefore, it would be expected that if these horses can traverse the route between Ashtown Stables and the Phoenix Park, they would be able to adapt to walking through the proposed underpass, to the west of the Old Mill.
13. Detailed responses to point 13 of this submission is provided in Section 2.4.6.
14. Detailed responses to point 14 of this submission is provided in Section 2.2.8.
15. Detailed responses to point 15 of this submission is provided in Section 2.2.5.
16. Detailed response to point 16 of this submission is provided in Section 2.2.5.
17. Detailed responses to point 17 of this submission is provided in Section 2.2.12.
18. Detailed responses to point 18 of this submission is provided in Section 2.4.6.
19. Detailed responses to point 19 of this submission is provided in Section 2.4.6.
20. Detailed responses to point 20 of this submission is provided in Section 2.2.1.
21. With respect to additional car journeys being brought to the area. Section 13.5.3.3 of EIAR Chapter 13 Climate considers the carbon footprint of potentially longer car journeys in the traffic study areas and in Section 13.5.3.2 the impact of the proposed development on rail emissions is considered.

    While there is an impact of longer car journeys in some areas due to level crossing closures, the impact of the change from diesel to electric trains far outweighs it. It should be noted that the car fleet modelled in the EIAR is considered an "old" or "dirtier" fleet due to the modelling tool used. The model did not account for the shift to electric vehicles (including indirect emissions from charging) or newer Euro classes, which are included in the new TII Roads Emission Model (REM) published in December 2022, after the EIAR was submitted. Instead, the proportion of the fleet that has moved to less polluting models or electric vehicles were considered to remain as old" or "dirtier" fleet and therefore have higher emissions. If the operational phase traffic assessment was remodelled, with the more modern fleet included, the impact of the car journeys would be even lower.

    Electric cars have the advantage that they can be charged by renewable energy. Climate Action Plan aims that by 2030 up to 80% of the national grid electricity will be powered by renewable energy.

    It should be noted thought that CO2 emissions are not considered to impact residents in specific areas and are considered nationally. Therefore, although there may be some increased car journeys in Dublin 15, the impact of the operational phase of the proposed development as a whole will be beneficial with respect to carbon.

22. Climate Chapter consultants from BusConnects and DART+ West have consulted each other regarding schemes.

4.20 Ref. No.20 – Env90 – Pat Allison

Representative – Not Applicable

4.20.1 Submission, Location – Ashtown

1. Requests an Oral Hearing to redress the failure to provide access to the digitally excluded communities impacted by developments, such as BusConnects, DART+ Maynooth.
2. States that in the developer's initial documents Ashton House was incorrectly identified as 'Ashtown House'.
3. States that the errors are sufficient to misdirect residents, particularly older residents of established residential areas, into believing the development related to the former Ashtown House rather than to the Protected Structures of Ashton House.
4. The proposed gigantic new footbridge has about 46 steps on each side, accompanied by a long and winding walkway, taking one out of sight of all people through a long, and lonely, winding structure. Throughout the elevated journey users are trapped in a no-exit structure which is not overseen from surrounding buildings and may encounter muggers or organised gangs of youths.
5. Poorly designed engineering solutions have already resulted in increased social exclusion for vulnerable local residents. These mistakes are now to be repeated, and augmented, at the other level crossings that are proposed to be closed, increasing social exclusion yet further.
6. Retention and automation of the level crossings provides a better solution at considerably lower cost and considerably greater community acceptance and has the additional benefit of not increasing social exclusion.
7. The claimed sub-optimal operational efficiency of the railway needs to be balanced with the needs of the receiving communities and their long-established residential, economic and social amenity, not to mention their legal right to effective social inclusion.
8. States that children within the Pelletstown development, with no access to secondary school (and no plans to build one), must walk up the Ashtown Road to access buses. States that school children will lose their current travel independence as a result of this development.
9. Queries if school children have been consulted, how many, and what for and what was their view?
10. States that as an older person, who regularly pops to the shops in Rathborne Village from their home in Martin Savage Park, their access to these essential local services in the dark winter evenings will be curtailed by this development.
11. The viability of businesses in Rathborne Village may be undermined by this development which will cut them off from an important source of customers.
12. States that anti-social activities have taken place at Pelletstown footbridge since it opened - leading to call out of Gardai.
13. Horses from both sides of railway line - Ashtown and Scribblestown - cannot walk over the proposed footbridge.
14. States that any closure at the proposed road tunnel in Ashtown would sever all traffic from both sides, leading to long winding trips along River Road in both directions.
15. Proposes for the railway to be lowered in a cutting below the level of Ashtown Road, leaving the road and footpaths safely in place for people.
16. Longer train would increase capacity, especially at Peak AM and PM.
17. Increased trains not necessary during off Peak hours.

4.20.2 Response to submission

1. Detailed responses to point 1 of this submission is provided in Section 2.2.2.
2. The misspelling of ‘Ashton House’ was rectified in Public Consultation No. 2.

3. As these errors were corrected for public consultation number two and in the Draft Railway Order Application, the two subsequent public consultations clarified the error.
4. Detailed responses to point 4 of this submission is provided in Section 2.2.1 and 2.2.17.
5. Detailed responses to point 5 of this submission is provided in Section 2.2.16 and 2.4.10.
6. Detailed responses to point 6 of this submission is provided in Section 2.2.5.
7. Detailed responses to point 7 of this submission is provided in Section 2.2.16 and Section 2.4.10.
8. The proposed development will result in a 24/7pedestrian and cyclist access across the rail line as opposed to regular closure and delays caused by the closure of the level crossing particularly at the AM and PM peak times, which can be associated with school times. The proposed development will have a positive impact on journey characteristics not only for rail users but also those walking and cycling north and south across the rail line as it will not require any wait time for barrier operation when trains are passing. The proposed footbridge will be segregated from vehicular traffic and provide safer crossing facilities for cyclists and pedestrians, including school children.
9. All three non-statutory public consultations as well as the statutory public consultation is open to all to particpate.
10. Detailed responses to point 10 of this submission is provided in Section 2.2.16 and Section 2.4.10.
11. Detailed responses to point 11 of this submission is provided in Section 2.2.16 and Section 2.4.10.
12. Detailed responses to point 12 of this submission is provided in Section 2.4.5 and 2.4.9.
13. Detailed responses to point 13 of this submission is provided in Section 2.4.3.
14. It is not envisaged that the underpass will be closed unless in an emergency such as a traffic accident. In which case, it will be a temporary closure and diversions routes, such as River Road will need to be used.
15. Detailed responses to point 15 of this submission is provided in Section 2.4.6.
16. The length of the trains is constrained by the existing infrastructure, in particular, the platforms in the stations. Most of the stations in the network could not cope with longer trains, and 168m trains is the only available option without major interventions.
17. Detailed responses to point 16 of this submission is provided in Section 2.2.15.

4.21 Ref. No.22 – Env30 – Imelda Bermingham

Representative – Not Applicable

4.21.1 Submission, Location – Coolmine

All concerns raised are common issues dealt with in Section 2.

4.22 Ref. No.23 – Env31 – Delwood Residents Association

Representative – Not Applicable

4.22.1 Submission, Location – Coolmine

All concerns raised are common issues dealt with in Section 2.

4.23 Ref. No.24 – Env32 – Niamh Digan (Luttrellpark Lawn Residents)

Representative – Not Applicable

4.23.1 Submission, Location – Coolmine

1. Insufficient Public Consultation.
2. The plan to electrify the Maynooth line was developed in the pre-pandemic period. We all now realise the need for greater flexibility since the attendance at the workplace has reduced.
3. By simply moving from shorter diesel trains to longer DART ones, Irish Rail could resolve the current issue of capacity without increasing frequency. It remains unclear to us why increasing capacity in this way is not being considered.
4. Given the fact that during the preparation of the plan by Irish Rail it appears that the number of passengers was decreasing, we would like to know why an increase in frequency was planned?
5. It would seem logical to consider optimising the current service capacity before increasing the frequency.
6. Even with the current capacity, Connolly station cannot cope with the service from Maynooth.
7. Off-peak trains are rarely half full at present so a requirement for any increase in this service would be uncalled for unless need is demonstrated.
8. The length of time that the traffic barrier at the crossings is lowered (causing traffic congestion) is worth examining. At present, the barriers are not automatic and are controlled manually from a central point.
9. It would be a waste of energy for Irish Rail to run trains that are not occupied fully, i.e. if frequency was increased before maximising capacity.
10. There may be other uses of carbon within the project that needs consideration too. To build steel and/or concrete bridges (especially if the actual need has not yet been measured) will also be a significant source of carbon generation.
11. If barriers remain permanently closed, then longer car journeys and traffic jams will also increase carbon emissions.
12. It is easy to categorise moving from diesel trains as a green initiative. True responsibility lies in accepting the implication of all aspects of carbon generation, e.g. permanently increasing car journeys. This could be mitigated by continuing to allow rail and road traffic to share the line. Trains are always given priority and right of way so it is hard to comprehend why the crossing must remain closed when not in use.
13. Bus Connects - Will this capacity to evolve be limited by the many proposed road closures?
14. How will the remaining two bridges facilitate extra lanes? One of these bridges has a protection order prohibiting interference in its structure. A 60% reduction in access is untenable.
15. Delays to emergency services due to closure of roads - serious health and safety concern.
16. Drivers north of the line will have no access to the car park at Coolmine train station when the road is closed. This could exacerbate the existing difficulty of drivers parking in local estates to avoid the charges for the station car park.
17. The building of bridges for non-vehicular access has been proposed. These will have ramps as Irish Rail have insisted that there will be no lifts. Walking up ramps can be difficult for those with health issues and disabilities.
18. Traffic will increase and risk for children travelling to and from school. It will result in an increase in noise pollution.
19. Impacts on Royal Canal - the Deep Sinking. Numerous floodlights at the pedestrian bridge will cause light pollution in this ecosystem which has a large nocturnal activity.
20. There is real concern about the likely potential of anti-social behaviour around Coolmine Station as the absence of traffic and creation of cul-de-sacs will be an obvious attraction for such activity.
21. Detailed traffic assessment of Dublin 15 required.

4.23.2 Response to submission

1. Detailed response to point 1 of this submission is provided in Section 2.2.2.
2. Detailed response to point 2 of this submission is provided in Section 2.2.8.

3. The length of the trains is constrained by the existing infrastructure, in particular, the platforms in the stations. Most of the stations in the network could not cope with longer trains, and 168m trains is the only available option without major interventions.
4. Detailed response to point 4 of this submission is provided in Section 2.2.8 and 2.2.15.
5. The need to optimise the current service capacity is one of the reasons of the project. The current system needs a complete change of the existing signalling and operational functionalities to be able to cope with a major number of trains, being Connolly station the current bottle neck of the network.
6. The proposed DART+ West project includes for station capacity improvements at Connolly Station to facilitate the running of additional fleet that, with the new signalling system, changes in the operation of the network and a new track crossover on the northern throat of the station, will allow for more effective timetabling and better services. The proposed development will also provide new access / egress at Connolly Station to facilitate better movement of additional passengers within the station.
7. Detailed response to point 7 of this submission is provided in Section 2.2.15.
8. Detailed response to point 8 of this submission is provided in Section 2.2.5.
9. Detailed response to point 9 of this submission is provided in Section 2.2.8 and 2.2.15.
10. Section 13.5.1.2 of the EIAR quantifies the Construction phase embedded carbon, this includes steel and concrete within the bridges using the TII Carbon Toolkit V2.1. This toolkit has the ability to quantify carbon in infrastructure projects using Ireland-specific emission factors and data.
11. Section 13.5.3.3 considers the carbon footprint of potentially longer car journeys in the traffic study areas and in Section 13.5.3.2 the impact of the proposed development on rail emissions is considered.
12. While there is an impact of longer car journeys in some areas due to level crossing closures, the impact of the change from diesel to electric trains far outweighs it. It should be noted that the car fleet modelled in the EIAR is considered an “old” or “dirtier” fleet due to the modelling tool used. The model did not account for the shift to electric vehicles (including indirect emissions from charging) or newer Euro classes, which are included in the new TII Roads Emission Model (REM) published in December 2022, after the EIAR was submitted. Instead, the proportion of the fleet that has moved to less polluting models or electric vehicles were considered to remain as old” or “dirtier” fleet and therefore have higher emissions. If the operational phase traffic assessment was remodelled using the more modern fleet included in the that the impact of the car journeys would be even lower.

    Electric cars have the advantage that they can be charged by renewable energy. Climate Action Plan aims that by 2030 up to 80% of the national grid electricity will be powered by renewable energy.

13. It is understood this question relates to the impact of proposed road closures on bus routes during construction and in the operational phase. During construction the temporary relocation of stops and routes will be agreed with Dublin Bus. Every effort will be made to mitigate the impact. In the operational phase no routes are affected by the proposed works in Coolmine.
14. It is not proposed to provide additional lanes on the existing bridges. The traffic assessment documented in Chapter 6 of the EIAR has determined that no additional road space is needed on the bridges. Rather additional capacity is needed at the junctions on the approaches to the bridges. Capacity enhancements and additional lanes are proposed for the junctions.
15. Detailed response to point 15 of this submission is provided in Section 2.4.8.
16. Parking control in adjacent housing estates is a matter for the local authority. IÉ will engage with the local authority, providing them with the relevant information to facilitate control measures it may elect to put in place.
17. Detailed response to point 17 of this submission is provided in Section 2.2.1 and 2.2.7.
18. A traffic impact assessment has been carried out and is documented in Chapter 6 of the EIAR. It identifies increases in traffic on some routes and reduction in others. The assessment concludes that once the junction improvements have been implemented and the level crossing closed:

    “the network wide statistics from Blanchardstown LAM indicate that the impact of the development across the modelled area would be positive in terms of travel time, travel distance and average speed. The level crossings closures and the increase in rail frequency reduces the total vehicular demand by 0.8% in the morning peak and by 0.2% in the evening peak, therefore representing a likely positive effect on the road network.”

The junction improvements have been designed to take account of the traffic adjustments and the proposed junction configurations are detailed to mitigate the risk to vulnerable road users such as pedestrians and cyclists. The proposed junctions are considered superior to those in place at present from the perspective of the safety of vulnerable road users.

19. Detailed response to point 19 of this submission is provided in Section 2.2.6.
20. Detailed response to point 20 of this submission is provided in Section 2.2.17 and Section 2.4.9.
21. See response in point 18 of this submission.

4.24 Ref. No.25 – Env33 – Castlefield Park Residents Association

Representative – Not Applicable

4.24.1 Submission, Location – Coolmine

1. The investigation of the alternative options in the Rail Order is not complete as all the "Do Something" options only consider built options they do not consider the upgrade of the level crossing.
2. The Public Consultation process has not extensively explored alternative infrastructure upgrades, such as tunnels.
3. As well as operational simplicity, Irish Rail site safety as a reason for closing the level crossings. The introduction of automated level crossings which would be closed for less time in conjunction with proper signage could improve safety at the level crossings.
4. Significant concerns exist regarding the increased traffic load that will be forced onto the roads in Clonsilla Village, particularly the Clonsilla Road due to the proposed closing of Clonsilla, Porterstown and Coolmine level crossings.
5. Concerned over increase in traffic volumes on the Dr Troy bridge, which is already congested at peak times and impacts in surrounding areas.
6. Concerned over impact on buses as there is no bus lane on Dr Troy Bridge impacting the travel times for the 37 Bus Route, with the knock-on congestion also impacting the L52, 39, 139 and 39X routes.
7. At a time when people are being encouraged to cycle the proposals from Irish Rail will discourage people from cycling due to the traffic volume increase in Clonsilla and resultant safety concerns.
8. The proposal does not take into consideration the increased traffic volumes that will occur when the remaining lands around Clonsilla Village are developed.
9. The proposal does not take into consideration the increased traffic volumes that will occur when the remaining lands in Clonsilla Village namely Kellystown, the Aldi site, the site at the lodge near the train station, the site at the Old School House and the site opposite are inevitably developed. The closing of the level crossing blocks both existing residents and future residents in these developments from access to local amenities & resources and has a detrimental impact on the character and viability of Clonsilla Village.
10. The proposed bridge west of Barberstown will not serve residents of Clonsilla or the rest of Dublin 15.
11. The proposed access bridges at Clonsilla and Porterstown are unsightly and will dominate the view in these areas.
12. The large size and unsightly nature of the bridges will impact negatively on the Greenway and the ecology and biodiversity of the proposed Natural Heritage Area.

4.24.2 Response to submission

1. Detailed response to point 1 of this submission is provided in Section 2.2.5.
2. At Clonsilla, an underbridge option was discounted prior to optioneering as the layout of the existing roadway and properties on the north side of the railway was not conducive to an underpass.
3. Detailed response to point 3 of this submission is provided in Section 2.2.5.
4. Detailed response to point 4 of this submission is provided in Section 2.4.8.
5. Detailed response to point 5 of this submission is provided in Section 2.4.8.

6. DART + West proposals impact directly on one current and one future Bus route (at Clonsilla level crossing), while the changes in travel patterns around Blanchardstown area will alter following the implementation of the proposed scheme, the proposed changes to existing junctions as part of DART+ West have been designed to minimise impact on both traffic and ped/cyclists and in many cases implemented/reinstated the right vehicular traffic vs pedestrian / cyclist balance and priority. This change will have an impact on vehicular traffic, which was assessed in the TIA.
7. Detailed response to point 7 of this submission is provided in Section 2.4.8.
8. Detailed response to point 8 of this submission is provided in Section 2.4.8.
9. Detailed response to point 8 of this submission is provided in Section 2.4.8 and Section 2.4.16.
10. The proposed bridge at Barberstown will serve the existing population catchment as the existing Barberstown level crossing as it only moved slightly to the west. The proposed bridge, and associated road infrastructure will also serve future population at Kellystown Local Area Plan (LAP) and Barnhill LAP as it was designed to be cognisant of the road infrastructure proposals within both LAPs.
11. Section 2.2.1 of this report provides a description of the footbridge design and its aesthetics. Chapter 15 Landscape and Visual Amenity of the EIAR assesses the likely effects from construction and operational phases of the proposed development on the landscape and visual amenity. The assessment included (but limited to) a review of all relevant planning policy allowing for the identification of designated and potential significant/ sensitive landscape and visual areas. An overview of the landscape planning context is presented in Section 15.4.2.2 Fingal Development Plan 2017-2023 which has been taken into consideration in the assessment.
12. Detailed response to point 12 of this submission is provided in Section 2.4.11.

4.25 Ref. No.26 – Env34 – Desmond Brown & Anna Keane

Representative – Not Applicable

4.25.1 Submission, Location – Coolmine

1. Object to the proposed type of foot /cycle bridge at Keenan Bridge which would create a dangerous precedent in terms of its elevation, density / height, bulk and massing of the built format.
2. What other design alternatives were considered with the proposal if any?
3. How many other design concepts were sought in relation to such footbridge/cycle passages over a canal & rail line? Which building contractor and/or "designers" were responsible for the proposed design of the cycle and footbridge as outlined in the draft rail order? How is this project being funded
4. These types of bridge designs are typically defaced by graffiti (as is the case on Troy Bridge) and many concrete and steel structures across the entire country.
5. The proposed development facilitates the realisation of Objective 6.13 of the LAP. We would ask in what way is the proposed development considered visually attractive given its excessive height and scare?
6. Has the proposal been accepted by environmentalists and preservation groups within community who are frequent public users of the canal walkway?
7. Such overpasses considered suitable in meeting the needs of disabled persons. It can be argued the proposed design discriminates against disabled members of communities.
8. There does not appear to be any traffic impact study showing the numbers of pedestrian and cyclist traffic currently crossing Keenan bridge.
9. We ask that the Level Crossings at Ashtown, Coolmine, Porterstown, Clonsilla and Barberstown be retained following the development of the DART+ West Railway Project.
10. We would suggest the railway gate is opened for local/residential access at off-peak times.

4.25.2 Response to submission

1. Detailed response to point 1 of this submission is provided in Section 2.2.1.
2. Several different options where initially considered, as shown below. These options where assessed in a Multi Criteria Assessment (MCA) which involved a number of criteria, including visual impact.

Details of the MCA is provided in the Preliminary Options Selection Report (Section 9.3.4 onwards) and EIAR (Chapter 3, Section 3.6.4.4.4) provided on the DART+ West website, link provided below at the following link: https://www.dartplus.ie/en-ie/railwayorder/dartwest.

Option	Description
Option 1	Pedestrian Link to Porterstown Viaduct
Option 2	Pedestrian and Cycle Bridge – Nested Ramps
Option 3	Pedestrian and Cycle Bridge – Straight Approach Ramps
Option 4	**Pedestrian and Cycle Bridge – Alternative Nested Ramps**

Figure 9-43 below presents the options considered in Stage 1 MCA on aerial photography. Drawing MAY-ROD-HRW-LC03-DR-C-0030 provided in Volume 2 shows the Options considered in MCA Stage 1 on aerial photography and OS Mapping background.

Figure 9-43 Porterstown Level Crossing Options (Copyright Ordnance Survey Ireland – 0039720)

In relation to visual impact, all options were assessed in relation to visual impact by a competent expert both integration into the existing landscape and visual. This assessment feed into the determination of the preferred option present to ABP.

3. As outlined in Section 3.6.4.4.4 of the EIAR Chapter 3 Alternatives, four options, in addition to the Do-Minimum and Do-Nothing option have been considered at Porterstown at Stage 1 MCA. Detailed description of these options is available in EIAR Chapter 3. Three options have been brough forward from Stage 1 MCA into Stage 2 MCA.
   Funding is available to take the project though the planning phase, subsequent funding for undertaking the construction and delivery of the project will be at the discretion of the funding authority (NTA) and Government. As this is the key project for the delivery of the DART + Programme and in turn a major investment in rail for Project Ireland 2040 and is a priority project for delivery by Irish Rail.
4. Detailed response to point 4 of this submission is provided in Section 2.4.9.
5. Detailed response to point 5 of this submission is provided in Section 2.2.1.
6. Public consultations have been held for the proposed development as described in Section 2.2.2. Submissions from private individuals or organisations, some of which included locals have been reviewed and taken into consideration during the planning and design stage of the proposed development.
7. Detailed response to point 7 of this submission is provided in Section 2.2.1 and 2.2.7.
8. To inform EIAR Chapter 6 Traffic and Transportation (Section 6.4.1.2), pedestrian and cyclist counts were undertaken between November 2015 and February 2020.

9. Detailed response to point 9 of this submission is provided in Section 2.2.5.
10. Detailed response to point 10 of this submission is provided in Section 2.2.5.

4.26 Ref. No.27 – Env35 – Conor Casey

Representative – Not Applicable

4.26.1 Submission, Location – Coolmine

All concerns raised are common issues dealt with in Section 2.

4.27 Ref. No.28 – Env36 – Helena Coggins & John Coggins

Representative – Not Applicable

4.27.1 Submission, Location – Coolmine

All concerns raised are common issues dealt with in Section 2.

4.28 Ref. No.29 – Env37a – Emma Colley & David Power (Residents of St Mochta's Estate)

Representative – Not Applicable

4.28.1 Submission, Location – Coolmine

All concerns raised are common issues dealt with in Section 2.

4.29 Ref. No.30 – Env37b – Joseph Drew (Residents of St Mochta's Estate)

Representative – Not Applicable

4.29.1 Submission, Location – Coolmine

All concerns raised are common issues dealt with in Section 2.

4.30 Ref. No.31 – Env37c – Sabine Maher (Residents of St Mochta's Estate)

Representative – Not Applicable

4.30.1 Submission, Location – Coolmine

All concerns raised are common issues dealt with in Section 2.

4.31 Ref. No.32 – Env37d – Marian Finnerty (Residents of St Mochta's Estate)

Representative – Not Applicable

4.31.1 Submission, Location – Coolmine

All concerns raised are common issues dealt with in Section 2.

4.32 Ref. No.33 – Env37e – Carol O'Reilly (Residents of St Mochta's Estate)

Representative – Not Applicable

4.32.1 Submission, Location – Coolmine

All concerns raised are common issues dealt with in Section 2.

4.33 Ref. No.34 – Env37f – Aishling Begley & Liam Smith (Residents of St Mochta's Estate)

Representative – Not Applicable

4.33.1 Submission, Location – Coolmine

All concerns raised are common issues dealt with in Section 2.

4.34 Ref. No.35 – Env38 – Mary Keane

Representative – Not Applicable

4.34.1 Submission, Location – Coolmine

1. The closure of the crossing would result in serious traffic congestion in surrounding roads which are already congested.
2. The proposed bridge would cause a serious deterioration in safety for people (a) using Coolmine Railway station (b) using the road as a natural walkway between estates.
3. The proposed bridge would be an eyesore and totally out of scale with the surrounding estates.
4. The proposed bridge would result in a deterioration in access for emergency services for Riverwood estate and surrounding estates.
5. The proposed bridge totally ignores the proposed improvements for the canal.

4.34.2 Response to submission

1. Detailed response to point 1 of this submission is provided in Section 2.4.8.
2. Detailed response to point 2 of this submission is provided in Section 2.2.1, Section 2.2.16 and Section 2.4.10.
3. Section 2.2.1 of this report provides a description of the footbridge design and its aesthetics. This is further to section 4.8.13.4 Cycle and footbridge at Coolmine Station of the EIAR which also refers to Section 4.8.5.4 Cycle and footbridge at Ashtown Station as the two bridges are considered similar bridges. Volume 3B of the EIAR contains the following photomontage of the bridge.

Chapter 15 Landscape and Visual Amenity of the EIAR assesses the likely effects from construction and operational phases of the proposed development on the landscape and visual amenity. The assessment included (but limited to) a review of all relevant planning policy allowing for the identification of designated and potential significant/ sensitive landscape and visual areas. An overview of the landscape planning context is presented in Section 15.4.2.2 of the EIAR which has been taken into consideration in the assessment.

The following mitigation is also set out in Chapter 15 of the EIAR *"At Coolmine Station there will be the provision of a high-quality urban realm with block paving to shared pedestrian / cycle access, new seating, street furniture, street tree planting, raised planters, ornamental planting, native trees / shrub planting, and species-rich grassland. Water management will be integrated into the landscape with planted bioswales taking runoff from the car park and road."*

Following the implementation of mitigation measures the impact is identified as *"Significant, Negative, Temporary / Short-term".*

4. Detailed response to point 4 of this submission is provided in Section 2.4.8.
5. Detailed response to point 5 of this submission is provided in Section 2.2.1 and 2.2.6.

4.35 Ref. No.36 – Env39 – Shay Cox

Representative – Not Applicable

4.35.1 Submission, Location – Coolmine

1. Local communities on the north/west side of the rail-line who currently approach the station by vehicle using the Coolmine Road will not have any carpark access unless they divert using Diswellstown Road. The cycle parking facility is also non-existent for those users of the station.
2. The road closure will have a detrimental impact on school/shopping access on both sides.
3. The proposed pedestrian/cycle bridge lacks clarification on potential health & safety and security risks particularly in non-daytime hours.

4. The original plan to build a bridge close-by was a much better solution but was changed by a small group of local residents. The new proposal, as submitted, adversely effects a much wider community and for those of us living north/west of the rail-line it could be described as discriminatory.

4.35.2 Response to submission

1. Detailed response on the provision of bicycle parking as part of the DART+ West project is provided in Section 2.2.4. As described in Section 4.8.13.3 of EIAR Volume 2 Chapter 4 'Description of the Proposed Development', 100 bicycle parking spaces are needed at Coolmine Station. 165 m^2 has been allocated to include for provision of 100 bicycle parking spaces at the Coolmine station.
2. Detailed response to point 2 of this submission is provided in Section 2.2.16 and Section 2.4.10.
3. Detailed response to point 3 of this submission is provided in Section 2.4.9 and Section 2.2.17.
4. The Multi Criteria Analysis was carried out in an objective manner which includes the consideration of public consultation feedback at all stages. The process followed is a Multi-Criteria Analysis (MCA) approach, as recommended by the Common Appraisal Framework (CAF) *Guidelines for Transport Projects and Programmes*, published by the Department of Transport (2016 and updated in 2020). The MCA process provides a coherent mechanism for choosing between options on a comparative basis. Each option is characterised under six principal categories as defined within the CAF and compared on a qualitative basis. The mechanism allows for an objective approach to be taken to selection of the most suitable option to be advanced for the project. The project presented for the Railway Order is Preferred option based on the result of this process.

4.36 Ref. No.37 – Env40 – Dr. Dara Coyne

Representative – Not Applicable

4.36.1 Submission, Location – Coolmine

All concerns raised are common issues dealt with in Section 2.

4.37 Ref. No.38 – Env41 – John Devitt

Representative – Not Applicable

4.37.1 Submission, Location – Coolmine

1. Requests that capacity assessment be undertaken by Irish Rail on the Maynooth line after the electrification of the line before a final decision on the future of the level crossing at Coolmine.
2. Requests Irish Rail engage in meaningful public consultation and public information efforts with affected communities during the capacity assessment.
3. Improve signalling to reduce waiting times at Coolmine level crossing.
4. In collaboration with Fingal County Council, introduce appropriate safety measures along Coolmine and Carpenterstown Road and the approach to the level crossing.
5. States that closing level crossing in Coolmine will increase journey time for emergency services.
6. States that closing level crossing in Coolmine will cause community disconnection between areas either side of track.
7. States that closing level crossing in Coolmine will increase traffic congestion.
8. States that increased traffic congestion will lead to more air pollution.

4.37.2 Response to submission

1. Detailed response to point 1 of this submission is provided in Section 2.2.8.

2. The train capacity assessment is complete and has informed the DART+ West of the required trains per direction per hour. IÉ will however, hold consultation of the upcoming construction works during the construction stage of the project.
3. Detailed response to point 3 of this submission is provided in Section 2.2.5.
4. Safety measures have been incorporated into the design of the proposed structures at level crossings and the associated road works.
5. Detailed response to point 5 of this submission is provided in Section 2.4.8.
6. Detailed response to point 6 of this submission is provided in Section 2.2.16 and Section 2.4.10.
7. Detailed response to point 5 of this submission is provided in Section 2.4.8.
8. An assessment was conducted in Section 12.5.1.7 of the EIAR regarding the air quality impact of traffic during the operational phase of the project as a result of the level crossing closures. This included an assessment in the Coolmine and Clonsilla areas, including in proximity to Stationcourt View. This assessment found that concentrations of NO_2 at modelled receptor locations were, at worst, considered to have small increases in concentrations. All increases of PM_{10} and $PM_{2.5}$ were considered to be negligible. Receptor locations were chosen due to their potential to be impacted by the proposed development. Due to the proposed level crossing closures, the closest road to Stationcourt View was found to have improvements in air quality.

   Using the assessment criteria outlined in Chapter 12 of the EIAR (derived from TII 2011 Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes), the impact of the proposed development, which takes into account the background pollutant concentrations, in terms of NO_2, PM_{10} and $PM_{2.5}$ is considered negligible.

4.38 Ref. No.39 – Env42 – St. Mochta's National School Parents' Association & Board of Management

Representative – Not Applicable

4.38.1 Submission, Location – Coolmine

1. The closure of level crossings would result in traffic congestion in surrounding St. Mochta's school.
2. The closure of level crossings would result in traffic congestion on Dr Troy Bridge, which is already heavily congested.
3. Closure of Porterstown crossing will result in set down area of St. Mochta's to be only accessible via Clonsilla Road end of Porterstown Road, which will cause considerable traffic congestion on Clonsilla Road.
4. Increased traffic congestion will discourage students from cycling.
5. Closure of Porterstown crossing will make the school's Traffic Warden the sole arbiter of access to the school for cars.
6. States concern over air quality and pollution impacts on school-going population.
7. No photomontage of Coolmine Road junction was provided.
8. States concerns of increased expected traffic from Kellystown LAP.
9. States concerns over additional expense of the access bridges at Clonsilla, Porterstown and Coolmine.
10. Extension of cycle lanes and path/road widening to the pupil entrance of St. Mochta's National School.
11. The upgrade of the junction between Porterstown Road and Clonsilla Road to include the introduction of traffic light signals, the relocation of the pedestrian crossing if necessary, and addition of yellow box.
12. Installation of aesthetically pleasing protective barriers at the crossings controlled by the school wardens to protect the children who are waiting to cross from the increased levels of traffic.
13. Clonsilla, Porterstown and Coolmine level crossings to remain open.
14. Automatic level crossing gates to be installed and the signalling system upgraded to enable short closure times.
15. Access bridges should not be built.

16. A revised capacity assessment and traffic analysis should take place to assess capacity requirements and the impact of the Covid pandemic, new working from home legislation and proposed new developments such as Kellystown.
17. Introduction of revised safety measures at all level crossings, road signage, engineering changes of roads around current level crossings, traffic calming measures e.g., cars to be stopped further from the actual crossing when gates down etc.

4.38.2 Response to submission

1. Detailed response to point 1 of this submission is provided in Section 2.4.8.
2. Detailed response to point 2 of this submission is provided in Section 2.4.8.
3. Detailed response to point 3 of this submission is provided in Section 2.4.8.
4. With respect to journey characteristics and journey amenity for non-motorised users at Porterstown, EIAR Chapter 7 Population, Section 7.5.4.4.2 states the proposed development *"will improve the journey amenity of cyclists and pedestrians through the provision of a dedicated pedestrian and cycle bridge over the Royal Canal and railway in proximity to the existing level crossing. This safer facility may also encourage an increase in active travel modes in the area, having an indirect positive and long-term effect on journey characteristics and journey amenity"*.
5. The closure of Porterstown Road might increase safety and efficiency at the current one-way set up at the school drop off. Traffic travelling from the direction of the railway line accessing school drop off area (turning right to access the entry) is blocking vehicles exiting the drop off area, which in turn disrupts the operation of the drop off and smooth exiting of vehicles from the school.
6. EU Air Quality limit values are set for the protection of the health of sensitive populations within society, this includes children. St. Mochta's National School was included as a sensitive receptor (Area2_R34) during the modelling operational road traffic impacts, detailed in Section 12.5.1.7.2 of the EIAR. The school was chosen as a sensitive receptor to model sensitive populations, such as children, and confirm that they would not be significantly adversely impacted by the proposed development. The impacts at the school in the opening and design year were considered negligible using the assessment criteria outlined in Chapter 12 of the EIAR (derived from TII 2011 Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes).
7. Detailed response to point 7 of this submission is provided in Section 2.2.9.
8. Detailed response to point 8 of this submission is provided in Section 2.4.8.
9. The cost of the bridges has been included in the options assessment process for the project. The expenditure is considered necessary to facilitate the removal of the level crossings.
10. The DART+ West project is a railway infrastructure project and is only permitted to undertake works to facilitate the closure of the level crossing and associated impacts in this area. The proposals as suggested are outside the redline of the project and not within the scope of DART+ West. The observer should direct this request for additional infrastructure to the local authority, Fingal County Council.
11. The DART+ West project is a railway infrastructure project and is only permitted to undertake works to facilitate the closure of the level crossing and associated impacts in this area. The proposals as suggested are outside the redline of the project and not within the scope of DART+ West. The observer should direct this request for additional infrastructure to the local authority Fingal County Council.
12. The DART+ West project is a railway infrastructure project and is only permitted to undertake works to facilitate the closure of the level crossing and associated impacts in this area. The proposals as suggested are outside the redline of the project and not within the scope of DART+ West. The observer should direct this request for additional infrastructure to the local authority Fingal County Council.
13. The pedestrian's overbridges provide a safe crossing of the railway once the level crossing have been removed as part of the project delivery. The overbridges are intended to provide a sustainable travel link over the railway to ensure that the local community can retain access to amenities and facilities on either side of the railway line.
14. Detailed response to point 14 of this submission is provided in Section 2.2.5.
15. Detailed response to point 15 of this submission is provided in Section 2.2.5.
16. Detailed response to point 17 of this submission is provided in Section 2.4.8.
17. It is understood that the submission relates to not closing the level crossings permanently and implementing other works. The requirement to close the level crossing to facilitate the efficient

operation of the DART service and safety of users has been set out in detail in numerous reports available on the DART+ West website. In most instances alternative access across the railway line has been provided. A number of reports are available outlining the requirement to close the level crossings to provide an efficient DART service.

4.39 Ref. No.40 – Env43 – Lucy Flint

Representative – Not Applicable

4.39.1 Submission, Location – Coolmine

1. Expresses wish for the retention of some of the level crossings, which contain historic value, specifically Clonsilla Road LX.

4.39.2 Response to submission

1. It is not possible to retain any level crossing as a means of crossing the railway. The majority of level crossings within the scheme do not have gates of historic value, being served by modern automatic lifting metal barriers. The crossing at Ashtown is manually operated with a single timber bar as a barrier. The crossing at Clonsilla has the traditional timber truss gates hung on cylindrical metal posts. Consideration will be given to leaving these in place, permanently closed, as a historic memory.

4.40 Ref. No.41 – Env44 – Kirkpatrick Rockfield Coolmine Residents' Association

Representative – Not Applicable

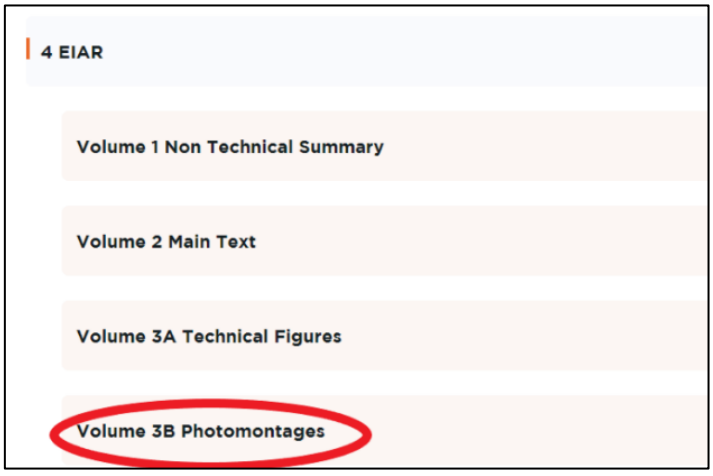
4.40.1 Submission, Location – Coolmine

1. Request a revised capacity assessment reflecting post Covid shift and prolonged delay in commencement of developments (Draft Fingal Dev Plan 2023-2029).
2. Railway Order in 2008 from Clonsilla to Pace '...one train every 15 minutes...' (peak service) ABP Inspectors Report pg.7. Currently 15 years post order-trains run every 30 minutes peak hour and hourly outside peak hours.
3. Independent body to carry out realistic assessment of expected passengers and trains required along this line in 5-, 10-, 15- and 20-years' time. Level crossing closures to be justified using accurate and realistic figures.
4. NTS (p.49) states development aims to increase frequency from the current 10-minute frequency. Currently we do not have a 10-minute frequency at Coolmine or any other station.
5. A 5 min frequency would mean 432 trains per day- question how Connolly would cope with this. IÉ to also justify the requirement for this level of service when current service operates less trains than this.
6. IÉ to justify why level crossings need to close on Maynooth line when there are 210 trains through Merrion Gate and level crossings between Pearse and Bray. Stating these level crossings will close too is not an explanation.
7. Reports state Coolmine LX is currently closed for 40mins during peak times and increase will mean total closure. Unable to find any details relating to the upgrading of the signalling systems and leaving crossings open.
8. 'Subject to passenger demand' comment in NTS pg.49 is concerning. If passenger demand is not as predicted, what service will IÉ provide.
9. Connolly station ability to cope to be looked in more detail. Re-signalling project completed in August 2021- still daily capacity issues.
10. Photomontages- can't visualise what pedestrian bridge will look like from North of the LX. Requested additional photomontages from IÉ.

11. Difficult to locate Photomontages on the website. Require separate prominent tab.
12. Abysmal public consultation process conducted online during pandemic and exclusion of citizens with no online access.
13. No standardisation in pedestrian cycle bridges at all stations. Request bridges at Porterstown and Clonsilla to be redesigned to reduce footprint, restricting construction (Clonsilla) and reducing impact on Royal Canal.
14. Coolmine bridge is long and inaccessible for mobility impaired users. At PC2 there were lifts - disappointed that the Railway order has removed the lifts based on concerns raised.
15. Request condition of the granting of the RO be for IÉ to liaise and meet An Garda Siochana to discuss best practice in terms of crime prevention (lighting, CCTV).
16. Request a condition be included that Sheepmoor Lane and other secluded areas be well lit and fenced off from the Royal Canal to reduce anti-social behaviour.
17. In NTS under Landscape and Visual- landscape mitigation measures propose replace or additional tree planting where possible. Request these mitigation measures to be made a condition of RO.
18. Graffiti on new bridges and request condition of RO that bridges are treated with anti-graffiti coating and maintenance be responsibility of IÉ.
19. Parking concerns. Coolmine safe drop off point and vehicle turn area- unacceptable.
20. Castleknock bridge- currently unsafe and not suitable for pedestrians or cyclists.

4.40.2 Response to submission

1. Detailed response to point 1 of this submission is provided in Section 2.2.8.
2. Detailed response to point 2 of this submission is provided in Section 2.2.8 and Section 2.2.15.
3. Detailed response to point 3 of this submission is provided in Section 2.2.5.[text – re assessment of passenger numbers in the near future]
4. The current train frequency along the Maynooth line on average is 6 trains per hour per direction which equates to arrival of a train every 10 minutes.
5. The proposed DART+ West project includes for station capacity improvements at Connolly Station to facilitate the running of additional fleet, which will allow for more effective timetabling and better services.
6. Detailed response to point 6 of this submission is provided in Section 2.2.5.
7. Detailed response to point 7 of this submission is provided in Section 2.2.5.
8. The increase in train frequency and capacity proposed as part of the scheme is to meet passenger the future passenger demand which is anticipated to increase from 5,000 in 2019 to 13,200 passengers in 2025.
9. See response in point 5 of this submission.
10. Detailed response to point 10 of this submission is provided in Section 2.2.9.
11. The DART+ West team have made every effort to make the documentation as easy to navigate as possible. The Photomontages are included within the Environmental Impact Assessment Report (EIAR) as Volume 3B under its own section and are clearly highlighted once the EIAR section is opened as shown below.



Additionally, hard copies were available for public display at 7 locations and hardcopies can be purchased from Iarnród Éireann. The DART+ West team had also offered to arrange a virtual meeting to talk to KRCRA on how to navigate the photomontages.

12. Detailed response to point 12 of this submission is provided in Section 2.2.2.
13. Detailed response to point 13 of this submission is provided in Section 2.2.1.
14. Detailed response to point 14 of this submission is provided in Section 2.2.1 and Section 2.2.7.
15. Detailed response to point 15 of this submission is provided in Section 2.2.17 and Section 2.4.9.
16. Detailed response to point 16 of this submission is provided in Section 2.2.17 and Section 2.4.9.
17. Mitigation measures proposed in EIAR Chapter 15 Landscape and Visual Amenity will be adhered to during construction and operation phase of proposed development, as appropriate.
18. Iarnród Éireann will retain responsibility for maintenance for the bridge on completion. The material choice and the corrosion protection will be resolved as part of the detailed design so as to ensure curtailed maintenance interventions. Details will be implemented to discourage graffiti and, where practicable, coatings will be used at vulnerable locations to facilitate the removal of same. Iarnród Éireann adopts a proactive approach to the management of graffiti with rapid response targeted to discourage recurrence.
19. The IÉ project team has consulted extensively and agreed the proposed design with the LA. Illegal parking outside of the IÉ property is the responsibility of the LA and An Garda Siochana.
20. Detailed response to point 20 of this submission is provided in Section 2.4.13.

4.41 Ref. No.42 – Env45 – Bláthnaid Mac Criostail & Pádraig Mac Criostail

Representative – Not Applicable

4.41.1 Submission, Location – Coolmine

Representative – Not Applicable

4.41.2 Submission, Location – Coolmine

1. Level crossings at Coolmine, Porterstown & Clonsilla not be closed.
2. Independent review of Irish Rail's justification for closing level crossings carried out utilising data from upgraded & automated level crossings, not current manual ones.
3. Alternatives to level crossing closures at Coolmine & Clonsilla must be considered, i.e. tunnel at Stationcourt/Riverwood and road bridge west of Clonsilla Station.
4. Analysis of alternative options should include: upgrade & automation of existing level crossings and closing level crossings during peak times.
5. Bridges should be in keeping with the goal of protecting & enhancing local historical heritage. Bridge at Clonsilla should be west of current station, a greater distance from the canal and the 4 local protected heritage structures in Clonsilla, and be combined with the car/bus bridge - not limited to pedestrians, to mitigate safety risks and traffic gridlock.
6. Clonsilla Village be offered a meeting to address their specific concerns, as with Ashtown & Coolmine.
7. Revised capacity assessment & traffic analysis should take place to assess capacity requirements, impact of the Covid-19 pandemic & new working-from-home legislation.
8. More detailed environmental assessment should be carried out on impact of Clonsilla & Porterstown bridges on the ecology & biodiversity of the proposed greenway and proposed National Heritage Area along canal.
9. Automatic level crossing gates to be installed and signalling system upgraded to enable short closure times.
10. Consideration of level crossing closures should be done under a separate process only where the actual frequency of trains requires it.
11. All traffic junction modifications & building of the new road at Barberstown need to be completed, trialled & monitored before changes to level crossings are made permanent.

12. Ongoing traffic surveys & analysis of traffic in Clonsilla Village should be carried out before & after road modifications are made and before & after permanent changes to level crossings. All results & data from surveys & analysis should be publicly available.
13. Planning permission should not be granted to new developments in Clonsilla Village / surrounding area until comprehensive study carried out on impact that changes to level crossings will have on traffic volumes in Clonsilla Village, and whether this can be handled by the road network in Clonsilla Village.
14. Condition should be added explicitly making Irish Rail responsible for the future remediation of traffic issues that may result from the project.

4.41.3 Response to submission

1. Detailed response to point 1 of this submission is provided in Section 2.2.5.
2. Detailed response to point 2 of this submission is provided in Section 2.2.5.
3. Both of the referenced options were considered in the option selection process and were set aside in favour of the proposed design.
4. Detailed response to point 4 of this submission is provided in Section 2.2.5.
5. The option referenced was considered in the option selection process and was set aside in favour of the proposed design.
6. As the project is now before An Bord Pleanála, there is a design freeze so having a meeting at this time would not be appropriate. Webinars for the Clonsilla area were held during both rounds of public consultation and the project team was available at all other times to answer specific questions.
7. Detailed response to point 7 of this submission is provided in Section 2.2.8.
8. Detailed response to point 8 of this submission is provided in Section 2.4.11.
9. Detailed response to point 9 of this submission is provided in Section 2.2.5.
10. Detailed response to point 9 of this submission is provided in Section 2.2.5.
11. It is intended to construct the road diversions before the level crossing is closed.
12. Detailed response to point 12 of this submission is provided in Section 2.4.8.
13. Detailed response to point 13 of this submission is provided in Section 2.4.8.
14. Detailed response to point 14 of this submission is provided in Section 2.4.8.

4.42 Ref. No.43 – Env46 – Jane McKevitt

4.42.1 Submission, Location – Coolmine

1. Area surrounding Coolmine crossing will be severed from shopping areas (Roselawn, Coolmine Industrial Estate, Blanchardstown mall) and recreation area at Millennium Park.
2. Feeder roads into the proposed diverted crossing are not adequate to take the increased traffic and are neighbourhood roads - cannot be 'upgraded' and subjected to increased traffic.
3. Short-sighted to close crossing - 'nothing' plan is kicking problem down the road. Another crossing will be required in future.
4. Alternative to closure: humpback bridge located at Coolmine Station (similar to one at Castleknock Station).

4.42.2 Response to submission

1. Detailed response to point 1 of this submission is provided in Section 2.2.16.
2. Detailed response to point 2 of this submission is provided in Section 2.4.8.
3. Detailed response to point 3 of this submission is provided in Section 2.2.5.
4. It is not technically practicable to provide a bridge similar to the one at Castleknock Station at Coolmine. There is a significant embankment on the Approaches to Castleknock Station which is not present at Coolmine. Option 1 in the options selection process is similar in concept but was dropped at the first stage of assessment as it was impracticable.

4.43 Ref. No.44 – Env47 – Anne Mooney (Residents of Luttrell Park View)

Representative – Not Applicable

4.43.1 Submission, Location – Coolmine

1. Public consultation- inadequate.
2. Additional information not already gathered, including the impact on traffic in Dublin 15, should be examined prior to commencement.
3. Permanent closure of crossings needs to be examined. No evidence provided for capacity of the trains.
4. In the event that crossings closures are not required, the building of bridges for non-vehicular access should be reviewed and delayed till they are shown to be necessary.
5. In the interim, electrification of the railway should proceed, and automation of barriers should take place as per current DART services.
6. Significant number of permanent closures over a small area will provide a number of barriers to local access. Community should not be disproportionately adversely affected.
7. Bus service is best opportunity to get people out of cars and is utilised more frequently, as it has the capacity to be more flexible: proposed road closures will limit BusConnects capacity to evolve.
8. Between bridge at Castleknock and bridge at Clonsilla, there are 5 roads traversing railway line, all with a single lane in each direction. This will be reduced from 5 to 2. Dublin 15 already extremely congested. Not obvious how remaining bridges can facilitate extra lanes, one has a protection order prohibiting interference to its structure.
9. Those south of railway line will have decreased access to fire & ambulance services from Snugborough Road Station; most direct route will be closed and increased traffic on other bridges will be delaying factor too - health & safety risk.
10. Those north of line will have access to car park at Coolmine Station blocked when road closed, increasing current issue of parking in local estates to avoid station car park charges.
11. Those north/south of the line will have reduced access to amenities, i.e. supermarkets, Shackleton Gardens, Royal Canal, etc.
12. Communities, incl. older people, will be sundered by the development.
13. Bridges will have ramps but no lifts. Walking up inclines can be a problem for those with health issues. Lifts should be provided.
14. Photomontages misleading, bridges significant eyesore in a mature and residential area.
15. Sub-station proposed on area used by the community for leisure activities - not communicated to residents. Amenity will be significantly adversely impacted.
16. Cycling unlikely amongst older population of Dublin 15 in a congested area. Increased traffic in residential areas will increase risk for children going to/from school, increase noise pollution, decrease air quality with consequent health risks.
17. Adjacent to Kirkpatrick bridge at Coolmine, there is a unique area of the Royal Canal known as the 'Deep Sinking'. Floodlights at the pedestrian bridge will cause light pollution in this ecosystem which has a large nocturnal activity.
18. Likelihood of anti-social behaviour in vicinity of Coolmine Station with the lack of traffic and back-to-back cul-de-sacs.
19. Delays will be accepted with the understanding that rail always has precedence.
20. Clarity on whether frequency of trains need to be increased - optimise service capacity before increasing frequency.
21. Consideration into the generation of electricity used. IR have responsibility to minimise use of energy to appropriate levels. Closing of barriers increases emissions.

4.43.2 Response to submission

1. Detailed response to point 1 of this submission is provided in Section 2.2.2.
2. Detailed response to point 2 of this submission is provided in Section 2.4.8.
3. Detailed response to point 3 of this submission is provided in Section 2.2.5 and Section 2.2.8.
4. Detailed response to point 4 of this submission is provided in Section 2.2.5.
5. Detailed response to point 5 of this submission is provided in Section 2.2.5.

6. Detailed response to point 6 of this submission is provided in Section 2.2.16.
7. Detailed response to point 7 of this submission is provided in Section 2.4.8.
8. Detailed response to point 8 of this submission is provided in Section 2.4.8.
9. Detailed response to point 9 of this submission is provided in Section 2.4.8.
10. The IÉ project team has consulted extensively and agreed the proposed design with the LA. Illegal parking outside of the IÉ property is the responsibility of the LA and An Garda Siochana.
11. Detailed response to point 11 of this submission is provided in Section 2.2.16 and 2.4.10.
12. The proposed pedestrian bridge designs adhere to the design standards described in Section 2.2.1 of this Report, such as Building for Everyone (ADA-The National Disability Authority).
13. Detailed response to point 13 of this submission is provided in Section 2.2.7.
14. Photomontages have been prepared from key or illustrative viewpoints across the full extent of the proposed development. These views assist in providing an indication of the changes and potential effects resulting from the proposed development during the operational phase after the implementation of the scheme. The proposed views are shown with proposed planting / mitigation at approximately 10 to 15 years post-completion of the construction phase. T The methodology for the preparation of Photomontages has regard to the VRDP (Landscape Institute 2019), and is further informed by experience in photomontage production. The Photomontages are prepared as accurate verified photo-realistic views (equivalent to Type 4 as set out in VRDP) (Landscape Institute 2019). Full methodology describing the process of preparing photomontages is provided in section 15.3.3.6 in EIAR Chapter 15 Landscape and Visual Amenity.
15. The size of the substation is small in relation to the total green area, and it is located at one side (not in the middle). Chapter 7 Population of the EIAR assessed the potential impact of the proposed substation on this amenity area during the operation phase. As the amenity will largely remain functional, the potential effect was determined to be negative, slight, and permanent.
16. The proposed scheme is predicted to have a likely beneficial impact on the air quality for the residents of Luttrellpark View due to predicted lower traffic volumes on local roads, including Luttrellpark Road and Carpenterstown Road. These changes in air pollutant concentrations are detailed in Section 12.5.1.7.2 of the EIAR, with a modelled sensitive receptor (Area2_R46) being located 50m from Luttrellpark View.

    In addition, an assessment of the rail line emissions indicates that the regional mass emissions of air pollutants NOx, PM10, PM2.5 and SO2 produced by railway operations for the proposed future operational scenario is lower than do-nothing emissions. Therefore, the proposed development has the potential to improve air quality in the long-term by reducing diesel emissions from railstock.

    With regards to traffic increases on local roads, Section 14.5.4.6.6. in Chapter 14 Noise and Vibration of the EIAR assesses the potential for noise increases due to increased traffic flows on the road network. This assessment concluded that noise levels would change by less than 1dB and therefore no significant noise increase will occur. It should be noted that due to the logarithmic relationship between traffic volumes and noise, traffic volumes must increase by multiples for significant changes to the noise environment to occur.

17. Detailed response to point 17 of this submission is provided in Section 2.2.6.
18. Detailed response to point 18 of this submission is provided in Section 2.2.17.
19. Detailed response to point 19 of this submission is provided in Section 2.2.5
20. Detailed response to point 19 of this submission is provided in Section 2.2.8.
21. The proposed development also aims to reduce the energy demand with passive architectural strategies, reducing energy consumption with energy-efficient equipment and producing energy with renewable technologies. Energy is also related to CO2 emissions and IÉ's future Carbon Neutrality goal. The use of building design to maximise natural lighting and solar gain, use of motion-controlled lighting systems and LEDs will reduce building energy requirements. Potable water consumption will be minimised using low consumption fixtures and recycling and reuse of greywater. In addition, Iarnród Éireann will prioritise the use of environmentally friendly materials and the use of recycled and recyclable materials during the operation of the proposed development. A Depot Sustainability Strategy has been produced with an objective to design a functional, efficient and comfortable building

with a minimum environmental impact, being an nZEB, Nearly Zero Energy Building and achieving EXEED certification. This will mitigate operational phase energy demand and ensure it is minimised.

4.44 Ref. No.45 – Env48 – Christine Moore & Louis Watters

Representative – Not Applicable

4.44.1 Submission, Location – Coolmine

1. Overcomplicated consultations with huge number of documents. Excluded older people, overreliance on online communications & meetings.
2. Provide post-Covid-19 figures to show, with the increase in hybrid & remote working, the demand still exists.
3. Local community in Coolmine use crossing routes more often than taking the train. Automated level crossings used successfully around the world. No safety data provided to show Coolmine level crossing is a safety concern.
4. Reducing 5 crossing points to 2 already congested bridges, while developing new Kellystown townland will cause traffic chaos. Local journeys cannot be made by train.
5. If Coolmine Road becomes a cul-de-sac; amplifies existing anti-social behaviours.
6. No lifts in Coolmine crossing despite obvious need, instead building huge pedestrian/cycle bridges at Coolmine, Porterstown & Clonsilla. Out of place along the Royal Canal setting (protected structure & pNHA), would not be needed if Irish Rail invested in automated fast-lift level crossing gates.
7. Project runs along secluded part of the Royal Canal in Dublin 15, teeming with wildlife (the 'Deep Sinking'), unnecessary disruption to canal.

4.44.2 Response to submission

1. Detailed response to point 1 of this submission is provided in Section 2.2.2.
2. Detailed response to point 2 of this submission is provided in Section 2.2.8.
3. Detailed response to point 3 of this submission is provided in Section 2.2.5.
4. Detailed response to point 4 of this submission is provided in Section 2.4.8.
5. Detailed response to point 5 of this submission is provided in Section 2.2.17 and 2.4.9.
6. Detailed response to point 6 of this submission is provided in Section 2.2.5 and 2.2.7.
7. Detailed response to point 7 of this submission is provided in Section 2.2.6.

4.45 Ref. No.46 – Env49 – Kieran O'Callaghan

Representative – Not Applicable

4.45.1 Submission, Location – Coolmine

1. Undertake capacity assessment on Maynooth line after electrification of the line before a final decision on the future of the level crossing at Coolmine.
2. Improve signalling to reduce waiting times at Coolmine level crossing.
3. In collaboration with FCC, introduce appropriate safety measures along Coolmine & Carpenterstown Road and the approach to the level crossing.
4. Closure of level crossing at Coolmine will affect emergency service response times.
5. Closure of level crossing at Coolmine will cut-off two communities, affecting the elderly, young children & the disabled. Pedestrian bridge is without lift access.
6. Increased traffic congestion due to closure of level crossing at Coolmine on already congested bridges, through housing estates or along busy Clonsilla Road.
7. Increased traffic congestion will lead to air pollution, risks to children & other users in housing estates.

8. IR passenger number projections do not take into account the increase in those working from home since the pandemic / do not reflect NTA data.
9. No alternative pedestrian/cycling bridge designs considered or that would allow retention of Coolmine level crossing. Furthermore, there are no proposals for lifts similar to those provided at Broombridge interchange to allow for easier access for the elderly and/or disabled.
10. Coolmine level crossing could be provided with speed ramps, rumble strips, radar speed signs, reduced speed limits, highly visible road safety/detection camera.
11. None of the level crossings on the Rosslare line / Howth branch line were closed after electrification / upgrades.
12. Average closure times at Coolmine previously stated by Irish Rail are based on diesel powered trains, Landsdowne Road Dart line level crossing average closure times half that - doubling in the number of trains would mean waiting times remain largely unchanged.

4.45.2 Response to submission

1. Detailed response to point 1 of this submission is provided in Section 2.2.8.
2. Detailed response to point 2 of this submission is provided in Section 2.2.5.
3. All design solutions proposed by the DART+ West project will propose suitable safety measures in line with current guidance and best practice. The DART+ West project team have been in consultation with Fingal County Council regarding the proposed design for the scheme, which included the proposed road works at Coolmine and Carpenterstown Road.
4. Detailed response to point 4 of this submission is provided in Section 2.4.8.
5. Detailed response to point 5 of this submission is provided in Section 2.2.16 in relation to community severance, Section 2.2.1 in relation to bridge design and Section 2.2.7 in relation to provision of lifts. In relation to walking, the proposed development will improve the journey amenity and journey characteristics through a purpose built pedestrian and cycle bridge over the Royal Canal and railway always allowing unrestricted access over the railway line improving journey times, amenity, and safety. Furthermore, the junction upgrade works will ensure that there is continuation of existing cycling facilities by providing dedicated lanes on approach to the new roundabouts. The segregated cycling and pedestrian facility may also encourage the uptake of active travel modes in the area, having a positive and long-term effect on journey characteristics.
6. Detailed response to point 6 of this submission is provided in Section 2.4.8.
7. An assessment of air quality impacts was conducted in Section 12.5.1.7 of the EIAR regarding the impact of traffic during the operational phase of the project as a result of the level crossing closure. This included an assessment in the Coolmine and Clonsilla areas. The proposed scheme is predicted to have a likely beneficial impact on the air quality for the residents of Riverwood Court due to predicted lower traffic volumes on local roads, including Riverwood Road.

   On roads where increases in traffic do occur, such as the Diswellstown Road, the assessment found that concentrations of NO2 at modelled receptor locations were, at worst, considered to have small increases in concentrations. All increases of PM_{10} and $PM_{2.5}$ were considered to be negligible. Receptor locations were chosen due to their potential to be impacted by the proposed development.

   Using the assessment criteria outlined in Chapter 12 of the EIAR (derived from TII 2011 Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes), the impact of the proposed development, which takes into account the background pollutant concentrations, in terms of NO2, PM10 and PM2.5 is considered negligible.
8. Detailed response to point 8 of this submission is provided in Section 2.2.8.
9. Detailed responses to point 9 of this submission are provided in Section 2.2.5 and Section 2.2.7.
10. Detailed response to point 10 of this submission is provided in Section 2.2.5.
11. Detailed response to point 11 of this submission is provided in Section 2.2.5.
12. The closure times for barriers at level crossings are unrelated to the use of diesel power. Each level crossing has its own particular constraints which may result in differing closure durations and the level of service may affect the closure duration throughout the day. The design team has examined the scope for retention of the level crossings once the planned level of service is implemented and have concluded it is not practicable. The level crossings need to be closed.

4.46 Ref. No.47 – Env50 – Michael O'Connor

Representative – Not Applicable

4.46.1 Submission, Location – Coolmine

1. Dublin 15 planned with separate parts for residential, shopping, schools, industry, etc. with expectation that residents can move freely within entire area. Railway line / canal a barrier to that free movement. Only 5 crossing points with project proposing to close 3. Distances between areas necessitate motorised transport. Modifying road junctions will not address problem of bottlenecks.
2. Closing of level crossings will split the community.
3. Clarity on why current level crossings not replaced with other forms of crossing.

4.46.2 Response to submission

1. Detailed responses to point 1 of this submission are provided in Section 2.2.16, Section 2.4.10, and Section 2.4.8.
2. Detailed response to point 2 of this submission is provided in Section 2.2.16.
3. Detailed response to point 2 of this submission is provided in Section 2.2.5.

4.47 Ref. No.48 – Env51 – Ciara O'Neill

Representative – Not Applicable

4.47.1 Submission, Location – Coolmine

1. Effect on Emergency services – diversions and length of journeys.
2. Amount of construction will nullify any environmental benefits of scheme that this whole electrification process would bring.
3. Traffic effects as a result of closures and re-routing due to tailbacks. Fear that if traffic problems then occur then new road bridge as previously proposed may be required.
4. Contradictive to the Fingal Development plan.
5. People on both sides of the level crossing will be cut off from each other - longer journey times to access within community.
6. There is credible potential for an increase in antisocial behaviour in areas such as where dead-end roads, underpasses and long elevated pedestrian bridges.
7. In addition to the potential anti-social behaviour that the closing of the level closings could bring, there is the added issue of the pedestrian bridges for mobility impaired.
8. Bus routes would also be greatly affected by this closure include the 37 bus route, the 39 bus route as well as the 38 and 70D.
9. Vastly increased passenger numbers and train journeys will require the closure of level crossings: the passenger numbers are based on assumptions and projections that are now out of date.
10. None of the recommendations made by the European Road Safety Observatory on enhanced safety measures at level crossings have been adopted by Irish Rail. It also appears that very little effort has been made by either Irish Rail or Fingal County Council to address safety concerns on the assumption that the level crossing will be closed.
11. Irish rail also says that Coolmine level crossing slows down both rail and road traffic however, all of these proposed closures could be avoided by simply upgrading the already outdated signalling system.
12. There are numerous level crossings along the current DART route that work absolutely fine with similar predicted train volumes.

4.47.2 Response to submission

1. Detailed response to point 1 of this submission is provided in Section 2.4.8.

2. The proposed projects embodied carbon is sizeable however Iarnród Éireann is committed to the minimisation of this figure during detailed design where opportunities to mitigate the impacts using the IEMA hierarchy will be available. This will provide a potential to minimise the embodied carbon significantly with a focus on elements which have the highest impact on the proposed development embodied carbon as a key mitigation target. Project designers have already raised potential sources of mitigation that they will investigate during detail design as possible avenues to reduce the projects embodied carbon. This includes the use of tapial blocks made of rammed earth which can replace the concrete piles and a concrete wall as the interior finishing face within the Spencer Dock excavation.

   The proposed development is operationally beneficial with regards climate and is even specifically mentioned in the Climate Action Plan as a key project to assist in Irelands transition to net zero by 2050. The Climate Action Plan three key transport actions are considered using a 'Avoid-Shift-Improve' framework:

   - *developing services, communities, and infrastructure in such a manner as to AVOID the need to travel as much as we do today; improving the relative attractiveness of sustainable travel modes such as Public Transport, Cycling and Walking, to SHIFT away from car use;*
   - *this will facilitate increased use of lower-carbon modes and reduce the percentage of total journeys that are made by private car (modal share) from over 70% (today) to just over 50% in 2030; and*
   - *complement these measures by increasing the proportion of EVs in our car fleet to 30% by 2030, which will IMPROVE the efficiency of the national car fleet; electrification of the freight and public transport sector will also be key.*

3. Detailed response to point 3 of this submission is provided in Section 2.4.8.
4. DART+ West does not affect local Objective 141 of Fingal County Development Plan 2017–2023 "*To prohibit any road bridge at this location"* across the train line and canal at Riverwood/Station Court.

   As stated in the Planning Report at Section 4.7.1.3.1, based on the capacity enhancements and increased frequency of service required to deliver the DART+ Programme it is not possible to maintain the level crossing or the right of way in its current form. This affects local Objective 142 '*Preserve the existing pedestrian and vehicular right of way'.* Section 4.7.2 of the Planning Report sets out a review of relevant proposed changes to planning policy published in the Draft Fingal CDP 2023-2029, which was published at the time of writing the EIAR and lodging of the Railway Order, the draft Plan proposed to replace Objective 142 with the draft Objective 91 of the Draft Fingal CDP 2023-2029 which stated *"Ensure pedestrian and cyclist connectivity is provided across the canal and rail line at this location."* This was adopted as Objective 113 of the Fingal DP 2023-2029.

   Whilst the proposed development will permanently close the existing Coolmine level crossing, an alternative segregated and safer pedestrian and cyclist infrastructure will be provided at this location therefore maintaining a right of way at the level crossing. The proposed development will enhance cyclist and pedestrian infrastructure at the location of the existing Coolmine level crossing, in line with the objectives of the Fingal CDP 2023-2029, as adopted, whilst the junction upgrade works will cater for the redirected traffic flows in the wider area. The proposed development is therefore consistent with the emerging planning policy.

   Similarly, Objective 137 of Fingal County DP 2017–2023 states *"Preserve the existing pedestrian and vehicular right of way at the level crossing at Porterstown"* level crossing which would be affected. However, Section 4.7.2 of the Planning Report considered the emerging planning policy according to the Draft Fingal County DP 2023-2029, which indicated that Objective 137 would be replaced with draft Objective 88 *"Ensure pedestrian and cyclist connectivity is provided across the canal and rail line at this location"*. (This was adopted as Objective 110.) Therefore, DART+ West in its current form would support the emerging local planning policy objectives.

   The proposed development will improve journey characteristics for cyclist and pedestrian in the area supporting future development trends which prioritises sustainable modes of travel including rail, walking and cycling as demonstrated in Chapter 6 Traffic and Transportation of the EIAR. The existing

road network together with the proposed junction upgrade works will provide an upgrade to the existing road network to cater for displaced vehicular traffic.

The EIAR states that based on the capacity enhancements and increased frequency of service required to deliver the DART+ Programme it is not possible to maintain the vehicular right of way. However, the proposed development maintains and improves pedestrian and cyclist access with the construction of a purpose built pedestrian and cyclist footbridge. If the interventions are not built and the DART+ Programme progresses the vehicular traffic impacts would result in effectively complete closure of the level crossing with no alternative provided for car, pedestrians or cyclists leading to extensive delays across the road network and the significant impacts to communities north and south of the railway line. The proposed solution offers a safer and integrated pedestrian and cyclist bridge structure at the station facilitating the planned increases in capacity, ensuring the community remains connected, supporting the proper planning and sustainable development of the area.

5. Detailed responses to point 5 of this submission are provided in Section 2.2.16 and Section 2.4.10.
6. Detailed response to point 6 of this submission are provided in Section 2.2.17 and Section 2.4.9.
7. Detailed response to point 7 of this submission are provided in Section 2.2.1 and 2.2.7.
8. It is understood this question relates to the impact of proposed road closures on bus routes during construction and in the operational phase. During construction the temporary relocation of stops and routes will be agreed with Dublin Bus. Every effort will be made to mitigate the impact. In the operational phase no routes are affected by the proposed works.
9. Detailed response to point 9 of this submission is provided in Section 2.2.8.
10. Iarnród Éireann monitors the safety of level crossings on an ongoing basis and is satisfied that level crossings on the railway network in Ireland are safe.
11. Detailed response to point 11 of this submission is provided in Section 2.2.8.
12. Detailed response to point 12 of this submission is provided in Section 2.2.5.

4.48 Ref. No.49 – Env52 – Pat Lynch

Representative – Not Applicable

4.48.1 Submission, Location – Coolmine

1. The closure of the Coolmine level crossing will mean a detour of 3km either to the west over Dr Troy Bridge and in doing so passing through 6 sets of traffic lights and passing the access point to 4 schools all of which are at capacity.
2. There are no continuous cycle routes locally to accommodate a transition to bicycles and so forces the cyclist on to the road to compete with the extra needless journeys being generated.
3. This proposal in its current form is only catering for movement of people from east to west and vice versa and for areas further west trying to access the city - There is no proposal for access north/south at this location.
4. Carpenterstown /Clonsilla has 3 lanes for vehicular traffic North and South within 1km of each other the proposal in its current form reduces this to 1 lane of traffic North and South over the Dr Troy bridge. No provision has been made to widen the bridge to accommodate the additional traffic.
5. No provision has been made for a lift for people with mobility issues at Coolmine train station. With the current proposal they are tasked with trying to use the biggest and highest bridge and judging by the bridge installed at the new Pelletstown station on the line it is very difficult for wheelchair users to use and its half the size of what is propose for Coolmine.
6. No meaningful effort has been made by Irish Rail to hold full open and in person consultation on this radical proposal to annex off 2 communities.
7. Keep these crossing open until such time that a full assessment of need and capacity is carried out on the rail line and a fully automated rapid drop barrier system be installed to all crossings.
8. Provide an accurate traffic survey and work with Fingal Coco to resolve North/South traffic journeys in Clonsilla/Carpenterstown/Castleknock.

4.48.2 Response to submission

1. Detailed response to point 1 of this submission is provided in Section 2.2.5.
2. The provision of cycle routes through the local area is a matter for the local authority. The objector is referred to the Fingal County Development Plan for objectives in respect of the provision of cycle networks in the local area.
3. A traffic impact assessment was carried out in support of the EIA for the project and reported in Chapter 5 of the EIAR. It included a local area model of vehicular traffic in the Blanchardstown area both north and south of the railway. It concluded that with the proposed junction enhancements no significant changes are predicted in traffic congestion consequent on the project.
4. Detailed response in relation to impacts on traffic is provided in Section 2.4.8. EIAR Chapter 5 Traffic and Transportation identified that there will be no significant changes on traffic in the Blanchardstown area to warrant an upgrade to Dr Troy Bridge as suggested in this submission. This work will also be outside the scope of the DART+ West project.
5. Detailed response to point 5 of this submission are provided in Section 2.2.1 and Section 2.2.7.
6. Detailed response to point 6 of this submission is provided in Section 2.2.2.
7. Detailed response to point 7 of this submission is provided in Section 2.2.5 and Section 2.2.8.
8. Detailed response to point 8 of this submission is provided in Section 2.4.8.

4.49 Ref. No.50 – Env53 – Blanche Retail Nominee Limited

Representative – Not Applicable

4.49.1 Submission, Location – Coolmine

1. Significant concerns regarding closure of Coolmine Level Crossing. To off-set these concerns they are seeking the following commitment within the planning - "The applicant will liaise with the NTA and TII in respect of the provision of a direct local bus link between Coolmine Station and Blanchardstown Town Centre, and for Active Travel improvements between these two destinations, with details to be submitted to and agreed in writing with the Planning Authority prior to the closure of the existing level crossing at Coolmine Station."

4.49.2 Response to submission

1. The provision of bus services/links is outside the scope of the DART+ West project.

4.50 Ref. No.51 – Env54 – St. Mochta's Residents Association

Representative – Not Applicable

4.50.1 Submission, Location – Coolmine

1. The public consultation to date has been inadequate.
2. Irish Rail are relying on out-dated data - To date, Irish Rail has not been able to confirm the number of trains planned for off peak times. Nor have they supplied a plan for peak time trains, which remains subject to demand. In addition, capacity reports which are essential for ramping up the train frequency has not been provided. The data that Irish Rail is using for their calculations predates Covid.
3. The Level Crossings need to be kept open.
4. There will be major traffic implications - Currently there are 5 crossing points, over the Maynooth rail line, between Castleknock and Clonsilla - 2 bridges and 3 level crossings.
5. Antisocial behaviour.

6. Pedestrian/Cycle bridges are poorly designed - those who are less mobile and those who cannot participate in Active Travel, would be obliged to use these large, ramped pedestrian bridges, instead of simply crossing the level crossing, as they have always done.
7. Impacts on the Royal Canal, a proposed Natural Heritage Area (pNHA), with wildlife protected under the Habitats Directive, it is inevitable that wildlife would be impacted during the construction phase and in the 24/7 lighting that would be required once completed.
8. The visual impact of the proposed pedestrian/cycle bridges in Coolmine, Clonsilla and Porterstown, is awful and would detract from the landscape along the Deep Sinking, a particularly beautiful stretch of the Royal Canal.

4.50.2 Response to submission

1. Detailed response to point 1 of this submission is provided in Section 2.2.2.
2. Detailed response to point 2 of this submission is provided in Section 2.2.15.
3. Detailed response to point 3 of this submission is provided in Section 2.2.5.
4. Detailed response to point 4 of this submission is provided in Section 2.4.8.
5. Detailed response to point 5 of this submission is provided in Section 2.2.17.
6. Detailed responses to point 6 of this submission are provided in Section 2.2.1 and Section 2.2.7.
7. Detailed response to point 7 of this submission is provided in Section 2.2.6.
8. The following specific mitigation is proposed in Section 15.6.3 of Volume 2A of the EIAR at the three locations mentioned:

   8. At Coolmine Station there will be the provision of a high-quality urban realm with block paving to shared pedestrian / cycle access, new seating, street furniture, street tree planting, raised planters, ornamental planting, native trees / shrub planting, and species-rich grassland. Water management will be integrated into the landscape with planted bioswales taking runoff from the car park and road.

   9. At Porterstown, the new bridge structure will be better integrated into the landscape through provision of screening native trees / and shrubs where feasible.

   10. At Clonsilla there will be the provision of high-quality urban realm to the junction of Hansfield Road and Clonsilla Road, with block paving to shared pedestrian / cycle access and pedestrian crossings, new seating, street furniture, street tree planting, raised planters, ornamental planting, native trees / shrub planting. There will be native tree / shrub planting to the area surrounding the southern ramp of the proposed bridge to aid in integrating the structure into the landscape, and to aid in compensating for trees removed during construction.

   Table 15-9 sets out the "*Predicted Operational Phase Impacts Following the Implementation of Mitigation and Monitoring Measures*" with the greatest impact being rated as "*Moderate, Neutral, Long-Term*" at Clonsilla and Coolmine stations whilst the impact on the Royal Canal in general is identified as "*Slight, Negative, Long-Term"*

4.51 Ref. No.52 – Env55 – Brian O'Connor

Representative – Not Applicable

4.51.1 Submission, Location – Coolmine

1. Junction Upgrades are inadequate without an upgrade to the Dr Troy Bridge to provide more lanes.
2. Coolmine Pedestrian Bridge – Visual Impact.
3. Coolmine Pedestrian Bridge – Security.
4. Can see no benefit in closure of Level Crossing, no communities are in favour of this. Irish Rail simply Ignoring or understating the many and varied negative impacts on the local communities. See simply

Ignoring or understating the many and varied negative impacts on the local communities. Seeking automated systems at the level crossings.

4.51.2 Response to submission

1. Detailed response to point 1 of this submission is provided in Section 2.4.8.
2. Section 2.2.1 of this report provides a description of the footbridge design and its aesthetics. This is further to section 4.8.13.4 Cycle and footbridge at Coolmine Station of the EIAR which also refers to Section 4.8.5.4 Cycle and footbridge at Ashtown Station as the two bridges are considered similar bridges. Volume 3B of the EIAR contains the following photomontage of the bridge.

Chapter 15 Landscape and Visual Amenity of the EIAR assesses the likely effects from construction and operational phases of the proposed development on the landscape and visual amenity. The assessment included (but limited to) a review of all relevant planning policy allowing for the identification of designated and potential significant/ sensitive landscape and visual areas. An overview of the landscape planning context is presented in Section 15.4.2.2 of the EIAR which has been taken into consideration in the assessment.

The following mitigation is also set out in Chapter 15 of the EIAR *"At Coolmine Station there will be the provision of a high-quality urban realm with block paving to shared pedestrian / cycle access, new seating, street furniture, street tree planting, raised planters, ornamental planting, native trees / shrub planting, and species-rich grassland. Water management will be integrated into the landscape with planted bioswales taking runoff from the car park and road."*

Following the implementation of mitigation measures the impact is identified as *"Significant, Negative, Temporary / Short-term".*

3. Detailed response to point 3 of this submission is provided in Section 2.2.17.
4. Detailed response to point 4 of this submission is provided in Section 2.2.5.

4.52 Ref. No.53 – Env56 – Fred Rogers

Representative – Not Applicable

4.52.1 Submission, Location – Coolmine

1. Consultation conducted during pandemic and online only - question of legitimacy. Excluded large number of citizens without skills to engage fully.
2. Errors detected in MCAs that were never revisited/corrected before process moved on.
3. Revised capacity assessment - changed working practices with pandemic and legislation introduced to support.
4. Signalling should be upgraded, and level crossings left open until 'turn up and ride' service in place. Level crossing at Merrion Gates operates with similar service to that proposed.
5. Although pedestrian/cycle bridges are of improved design, not acceptable for mobility issues, imperative lifts fitted in all rail stations.
6. Drop-off facility at Coolmine Station will not solve parking in local housing estates, which will be exacerbated by lack of access to railway carpark. Request for condition which ensures FCC / IR / residents introduce agreed parking management plan.
7. Suggestion that condition attached which ensures trees/lands/hedgerows tampered with, cut down or damaged, be reinstated post-construction and landscapes enhanced to mitigate visual impact of development.
8. Conditions should be attached that Irish Rail construct footbridge at Troy Bridge realigned junction to ensure children accessing schools have safe crossing space.
9. Closure of level crossings will result in busy level crossings turning into dark areas overshadowed by large pedestrian/cycle bridges with no surveillance from passing vehicles. Request Irish Rail meet with An Garda Siochana to ensure lighting, access points & surrounding areas are safe & monitored by CCTV.
10. Castleknock Bridge not safe for suitable access to busy train station. Condition that Irish Rail, in conjunction with FCC, fund & deliver suitable access road to station.
11. Many protected bridges along the development - prefer lowering of railway line & using shorter overhead lines to avoid interference/damage to architectural bridges.
12. Further exploration of need for underground tunnel at Ashtown - expensive & intrusive.

4.52.2 Response to submission

1. Detailed response to point 1 of this submission is provided in Section 2.2.2.
2. EIAR Chapter 3 Alternatives provides an accurate description and methodology undertaken during the Multi-Criteria Analysis undertaken.
3. Detailed response to point 3 of this submission is provided in Section 2.2.8.
4. Detailed response to point 4 of this submission is provided in Section 2.2.5.
5. Detailed response to point 5 of this submission is provided in Section 2.2.1.
6. The IÉ project team has consulted extensively and agreed the proposed design with the LA. Illegal parking outside of the IÉ property is the responsibility of the LA and An Garda Siochana.
7. Detailed response to point 7 of this submission is provided in Section 2.2.3.
8. The proposal by Mr Rogers is not a matter for IÉ.
9. Detailed response to point 7 of this submission is provided in Section 2.2.17.
10. The redesign of station access roads in this instance is outside the scope and funding of the DART+ West project.
11. Three options have been assessed to construct the OHLE beneath the protected bridges:
    - Reduced height OHLE solution
    - Track lowering
    - Bridge reconstruction

    Multi-criteria analysis (MCA) has been undertaken to consolidate the quantifiable and non-quantifiable impacts of each option on the bridges. EIAR Chapter 21 Architectural Heritage assessed the potential

impacts on protected structures and prescribed mitigation measures, as appropriate to reduce the potential negative effects.

12. Detailed response to point 12 of this submission is provided in Section 2.4.6.

4.53 Ref. No.54 – Env57 – Kieran O'Neill

Representative – Not Applicable

4.53.1 Submission, Location – Coolmine

1. Before opening of Dr Troy Bridge, the closure of the Coolmine level crossing at evening peak times caused extensive congestion in Carpenterstown area. If level crossing retained with improved rail service, concern this would result in gridlock on Carpenterstown Road, Carpenterstown Park Avenue & Luttrellpark Road, making the roundabout on Carpenterstown Road impassable and impacting bus services.
2. Closure of level crossing in Coolmine will restrict access to Roselawn Shopping Centre & Blanchardstown Town Centre by car.

4.53.2 Response to submission

1. Detailed response to point 1 of this submission is provided in Section 2.4.8.
2. Detailed responses to point 2 of this submission are provided in Section 2.2.16 and Section 2.4.10.

4.54 Ref. No.55 – Env58 – Bill Fordyce

Representative – Not Applicable

4.54.1 Submission, Location – Coolmine

1. Given a combination of state-of-the-art rail safety systems, innovative thinking and adoption of EU best practice highly efficient and reliable Rail Networks can interface safely with vehicular, cycle and pedestrian traffic via a system of automated level crossings.
2. At Coolmine by moving the westbound platform to the opposite side of the roadway crossings closure times would be further reduced.
3. States that the proposed solution will merely 'kick the cars down the road'.
4. Closing the level crossing will obviously mean closure of the Coolmine Road at the Station meaning cars from Coolmine side will have to take 'long way round' to get to Rail Station car park.
5. Drop and go pattern will result at Carpenterstown side and this will further increase interfaces and associated risks of accident involving vehicles and pedestrians in the immediate area of Coolmine Station.
6. States that the virtually continual use of the respective pedestrian crossings at peak times will cause extreme levels of stress and frustration amongst respective vehicle drivers and this along with the increased numbers of vehicles no longer being able to travel over the rail crossing will further increase risk to the school children involved to a totally unacceptable level.
7. By incorporating modern crossing infrastructure into the overall DART+ West project current crossing closure time could actually be reduced even with the envisaged increase in train numbers...[.] this will maintain the status quo in terms of road and rail users within the respective communities.
8. States that during the consultation period, the public incl. residents expressed that they preferred minor inconvenience of delays whilst crossings are closed to permanent crossing closure and the associate creation of 'no go' areas around the stations and associated increase in anti-social behaviour.

9. Crossing upgrades must therefore be seen as an integral part of the DART+ Project to maintain the present open and safe environment in and around rail stations as well as the surrounding amenity of the respective areas.

4.54.2 Response to submission

1. Detailed response to point 1 of this submission is provided in Section 2.2.5.
2. Detailed response to point 2 of this submission is provided in Section 2.2.5.
3. Detailed response to point 3 of this submission is provided in Section 2.4.8.
4. Detailed response to point 4 of this submission is provided in Section 2.4.8.
5. The proposed set down area will be managed by the local authority once the DART+ West project has been completed. Illegally parked cars will be dealt with by the Local Authority Parking Enforcement Department.
6. Detailed response to point 6 of this submission is provided in Section 2.2.1.
7. Detailed response to point 7 of this submission is provided in Section 2.2.5.
8. Detailed response to point 8 of this submission is provided in Section 2.2.17 and 2.4.9.
9. Detailed responses to point 9 of this submission are provided in Section 2.2.5 and 2.2.17.

4.55 Ref. No.56 – Env59 – Brendan O'Brien

Representative – Not Applicable

4.55.1 Submission, Location – Coolmine

1. Closure of Coolmine road to through traffic would be an irrational and arbitrary measure that does not achieve a proper planning balance between impact on community and proposed rail development.
2. Splitting of a highly populated and integrated community represents an unprecedented imposition of 'brutal' engineering solutions to divide a mature residential community, business networks and social family network.
3. The options considered and the criteria used do not include all relevant local factors and is clearly at variance with the criteria being adopted in many other similar situations on the DART rail network in greater Dublin area.
4. The preferred option results in a 70% increase in traffic on roads that are is already blocked with traffic, so motorists will divert to alternative residential roads in large numbers.
5. Structures of the size and scale proposed are total inappropriate in an urban setting which contravenes all local planning guidelines.
6. The original proposal recognized the need for a bridge crossing adjacent to Coolmine station crossing. If the need for such a traffic crossing was recognized at outset, what has changed now that makes the elimination of such a crossing acceptable?
7. There are feasible options / alternatives not advanced in current Irish Rail proposals which ought to be considered if the balance in planning objectives is to be achieved on an objective basis that takes account of community considerations.
8. There is a community based inter-generational and family support services. Any proposal that puts barriers in place to restrict these local services is a retrograde step that will disadvantage vulnerable groups in the community, especially in context of aging population.
9. It is essential to differentiate between (i) 'point to point' commuter traffic which will be provided by DART West and (ii) community based or intra-community traffic i.e. within the local communities that are impacted by proposed development.
10. The selection of preferred option is fundamentally and methodologically flawed as it based on incomplete information, in particular no Local Area traffic study has been completed in the areas affected by proposed road closure. States that it renders the whole process illogical, invalid and probably illegal.
11. The traffic impact analysis does not address the environmental and safety aspects from proposed road closure on roads through surrounding residential areas which will be directly impacted re-routed traffic.

12. It is not clear the extent to which the latest traffic analysis has been extended to take account of these factors - there has been only limited additional traffic counts during 2022 and the traffic count has not been updated on all the roads that are relevant to proposed solution.
13. Any junction improvements for increase traffic volumes will be severely constrained by pedestrian priority, especially at peak times when both traffic and pedestrians will be at their maximum.
14. The closure of Coolmine road would have a major impact on the effectiveness of the Fire and Ambulance service from the near-by Coolmine station in reaching a significant segment of the affected area.
15. The proposals are based on fundamentally flawed assumptions as they are based on current and historical technologies and operating procedures as well as selective use of isolated survey data.
16. Asserting that the 'level crossing would not be able to operate' in report is fundamentally flawed as (a) it's based on current signalling technology and work practices (b) the options of moving the south platforms to the west of Coolmine road has not been evaluated (c) no provision was made for the large % of time that the crossing would be free from traffic.
17. Other intermediate options have not been considered for Coolmine e.g., closure of Coolmine road during peak times only; the use of 'low height' tunnels under railway and other canal.
18. If Irish Rail is satisfied with its projections, then it should conduct a trial and close the Coolmine road on a trial basis for 3-6 months to assess impact for real, even on an incremental daily / weekly basis.
19. The multi criteria analysis is subjective, vague, incomplete and, most importantly, does not take account or give adequate weighting to local factors and has not been adopted for a residential community.
20. The proposed large-scale pedestrian and footbridge contravenes the Fingal Development plan namely:
    - To preserve the existing pedestrian and vehicular right of way at the Coolmine Level Crossing',
    - To prohibit any road bridge' across the train line and canal at Riverwood/Station Court
    - The zoning objectives for the green open spaces affected by the proposed bridge are to 'Preserve and provide for open space and recreational amenities', with a view to providing 'recreational and amenity resources for urban and rural populations subject to strict development controls.
21. The proposed bridge will have very significant landscape and visual impact on open space zoned lands between St. Mochta's/Rockfield, Stationcourt Way/Kirkpatrick and through Riverwood. There would be very significant visual impact for residential properties at St. Mochta's, Rockfield, Stationcourt Way/Hall, Kirkpatrick and Riverwood.
22. There would be tree and vegetation loss and significant visual impact in crossing the Royal Canal and hence for Objective CFI43 of Fingal Development Plan.
23. Two High Court cases have clearly indicated that any developments must comply with current development plans and guidelines (Spencer Place Development Company Ltd - v- Dublin City Council and O'Neill & anor -v- An Bord Pleanála).
24. The revised selection report lacks objectivity and rigor. It seems largely to be a restatement of the initial proposals, which have been 'cobbled' together to justify a predetermined outcome. States that IÉ has already stated its position to Fingal Council in a letter dated 24 July 2019.

4.55.2 Response to submission

1. The closure of the Coolmine road to through traffic is required to deliver the DART+ West capacity enhancements and increased frequency of service required to deliver the DART+ Programme it is not possible to maintain the level crossing or the right of way and achieve the project objectives. While it is regrettable that vehicular traffic will be affected, the community connectivity will be maintained through a new pedestrian and cycle bridge providing safer and unhindered connectivity to the communities north and south of the railway line. Detailed response in relation to the requirement to close the level crossing is provided in Section 2.2.5 of this Report, whist Section 2.2.16 provides a detailed response in relation to community severance.
2. The proposed development does not divide this mature community. Instead, it will improve the journey amenity and journey characteristics for rail users as well as walkers and cyclists travelling north and south of the railway. Through the provision of a purpose built pedestrian and cycle bridge over the Royal Canal and railway it will allow unrestricted 24/7 access over the railway line improving journey

times, amenity, and safety. There will be no severance for pedestrians and cyclists. The improved segregated cycling and pedestrian facility may also encourage the uptake of active travel modes in the area, having a positive and long-term effect on journey characteristics in this area. Furthermore, the junction upgrade works will ensure that there is continuation of existing cycling facilities by providing dedicated lanes on approach to the new roundabouts.

Chapter 7 Population of the EIAR, Section 7.5.4.4.4 recognises that with vehicular traffic being redirected to the existing road network that there will be significant effects for those communities located directly either side of the level crossing particularly those who rely on vehicular access. However, in general the effects to vehicular road users will result in moderate, negative and long-term effects.

3. A wide range of options have been considered at option selection at this location. The criteria used to assess each option follows the 2016 Department of Transport's Common Appraisal Framework for Transport Projects and Programmes (updated in 2021).
4. Detailed response to point 4 of this submission is provided in Section 2.4.8.
5. Chapter 15 Landscape and Visual Amenity of the EIAR assesses the likely effects from construction and operational phases of the proposed development on the landscape and visual amenity. The assessment included a review of all relevant planning policy allowing for the identification of designated and potential significant/ sensitive landscape and visual areas. An overview of the landscape planning context is presented in Section 15.4.2.2 Fingal Development Plan 2017-2023 which has been taken into consideration in the assessment.
   Section 15.5.1.1.3 of the EIAR addresses the construction stage impacts "*The existing level-crossing will be closed with junction improvements on the surrounding road network which will result in loss of verges and planted areas. There will be the introduction of a large bridge structure within a suburban area. There will be loss of areas of mature trees. The sensitivity of the streetscape / townscape character in the vicinity of Coolmine Station is 'medium' / 'high'. The magnitude of change will be high and the likely effects in the construction phase will be significant, negative, temporary / short-term.*"

   Section 15.5.2.1.3 of the EIAR addresses the operations stage impacts. "There will be substantial changes to streetscape in the vicinity of Coolmine Station with the provision of a new shared pedestrian and cycle bridge over the railway and canal, which will form a new prominent feature in a suburban residential area. There will be remaining effects in the operational phase from loss of trees, verges and planted areas removed during construction, most notable stands of trees along the Royal Canal and at Coolmine Station Car Park. The sensitivity of the streetscape / townscape character in the vicinity of Coolmine Station is 'medium'. The magnitude of change will be 'medium' / 'high' and the likely effects in the operational phase will be moderate / significant negative short-term and moderate, negative, long-term."

6. The option referred to as the original plan was one of 10 options presented at non statutory public consultation no.1 and identified then as the emerging preferred option. The purpose of the two stage non statutory public consultation process was to seek feedback from the public on the proposed options. Following each stage of consultation options were re-evaluated taking account of submissions from the public. The design team is satisfied that the design proposed in the Railway Order represents the optimal option taking account of all criteria identified as part of the multi-criteria analysis completed for the scheme.
7. As stated in EIAR Chapter 3 Alternatives, policy influence, project history as well as the previous studies that have led to the development of the DART+ Programme have influenced the design of the proposed development. The Multi-Criteria Analysis (MCA) technique used to inform the option selection process that has been applied to determine the end to end preferred option of the proposed development has been informed by the Common Appraisal Framework (CAF) for Transport Projects and Programmes (Department of Transport Tourism and Sport, March 2016 and updated October 2020). The CAF Guidelines require projects to undergo a MCA under a common set of six CAF criteria referred to as parameters presented below.

CAF parameter	Summary description
Economy	Economy relates to impacts of a transport investment on economic growth and competitiveness are assessed under the economic impact and economic efficiency criteria
Integration	Integration considers the extent to which the project being evaluated promotes integration of transport networks and is compatible with Government policies, including national spatial and planning policy
Environment	Environment embraces a range of impacts, such as emissions to air, noise, and ecological and architectural impacts
Accessibility and Social Inclusion	Accessibility and social inclusion embraces the notion that some priority should be given to benefits that accrue to those suffering from social deprivation, geographic isolation and mobility and sensory deprivation.
Safety	Safety is concerned with the impact of the investment on the number of transport related accidents
Physical Activity	This relates to the health benefits derived from using different transport modes

As can be seen from the table above, the Integration parameter considers the options in relation to the government policy and objectives at local, regional and national level.

8. See response in point 2 of this submission.
9. See response in point 2 of this submission and a detailed response in Section 2.4.8 of this report.
10. In August 2019 CSEA / Systra completed the Maynooth Line Transport Study Final Report, on behalf of the NTA and Iarnród Éireann, in respect of the implications of permanently closing six level crossings along the Maynooth rail line. The traffic outcomes of this study have been used in the MCA process to determine the preferred option at the selected level crossings. The methodology applied to this study involved a road-based assessment and a pedestrian and cyclist assessment. The options were developed to identify what extent of replacement road infrastructure, if any, is required to allow the level crossings to be closed without having significant impacts on network performances. The options considered are outlined below:
    - The Do Minimum scenario where the level crossings are closed without the provision of any replacement infrastructure.
    - Options 1-3 investigated if providing a replacement at one of the level crossings within the N3/N4/M50 boundary area would be appropriate to accommodate the re-routing of traffic from other closed crossings.
    - Options 4-6 provided replacement infrastructure at a combination of level crossings, to identify if there is any particular location where a road-based alternative may not be needed.
    - Option 7 considered closing the Ashtown level crossing to vehicular traffic to identify the impact this would have on the surrounding road network.
    - Option 8 includes the provision of replacement road infrastructure at Ashtown, Coolmine, Clonsilla and Barberstown. This option represented a 'Do Everything' scenario with all crossings replaced about from Porterstown (alternative bridge at Diswellstown Rd) and Blakestown.

    Based on the results of the road-based assessment undertaken, it was recommended that Ashtown, Coolmine and Barberstown would require road based replacement infrastructure to facilitate the closure all level crossings on the Maynooth rail line to vehicular traffic. The findings of the pedestrian and cyclist assessment concluded that pedestrian and cycle access to be provided for Ashtown, Coolmine and Clonsilla.

    For Barberstown, it is envisaged that the replacement road infrastructure at this location will be sufficient to cater for future pedestrian and cyclist movements and that due to the low usage level at Blakestown level crossing, it is recommended that no replacement infrastructure for pedestrians and cyclists is required.

    The design team has carried out a review of, and has accepted, the conclusions of the above report and the design development was advanced on the basis of the conclusions and project data included in the report. In addition, design development was carried out in respect of local area impacts of additional options considered in progressing from emerging preferred option to confirmation of the preferred option in respect of each level crossing.

11. Following the CAF Guidelines for Multi-Criteria Analysis, impacts on the environment from the proposed options, have been assessed under the Environment parameter, whist any safety related impacts have been assessed under the Safety parameter in the MCA.
12. Section 6.3.2.1 in EIAR Chapter 6 Traffic and Transportation describes the traffic counts carried out to inform the traffic analysis. Baseline road traffic surveys undertaken in January 2019 include the following:
    - Automatic Traffic Counts (ATC) at 35 locations.
    - Pedestrian and cyclist count at two locations.
    - Junction Turning Counts (JTC) at 48 locations.
    - Supplementary counts by Fingal County Council.
    - Journey time information from the NTA database.

    Some supplementing traffic counts were also carried out in November 2021.
13. Detailed response to point 13 of this submission is provided in Section 2.4.8.
14. Detailed response to point 14 of this submission is provided in Section 2.4.8.
15. Detailed response to point 15 of this submission is provided in Section 2.2.5. In relation to traffic, the direct and indirect impacts of the proposed development were considered with reference to the following study area extents:
    - Direct Study Area - immediate vicinity of the alignment of the proposed development.
    - Indirect Study Area - due to proposed level crossing closures at Ashtown, Coolmine, Porterstown, Clonsilla and Barberstown, wider study areas around Blanchardstown and Ashtown were included in the assessment.

    The two identified indirect study areas have been modelled as two Local Area Models (LAMs) to assess the potential impacts on traffic. A number of traffic surveys were carried out as identified in response to point 12 of this submission.
16. Detailed response to point 16 of this submission is provided in Section 2.2.5.
17. An extensive list of options was considered as part of the multi-criteria analysis for option selection at Coolmine. The Do-Nothing scenario for level crossings considers leaving the current level crossings in place. Additional options were added as feedback was received from the non-statutory public consultation process. The final list of options amounted to 10 in number, in addition to the Do Nothing and the Do Minimum options. The analysis was carried out in two stages with less likely options pruned away as part of multi-criteria analysis stage 1 (MCA1) and a more refined comparison carried out for multi-criteria analysis stage 2 (MCA2). A full list of the 10 do Something Options is presented below:

Options
1 – Closure of the level crossing with online overbridge.
2 – Closure of the level crossing with online underbridge with opening canal bridge.
3 – Closure of the level crossing with a new overbridge connecting St. Mochta's Grove to Luttrellpark Road with a footbridge at Coolmine Station.
4 – Closure of the level crossing with a new underbridge with opening Canal Bridge Connecting St. Mochta's Grove to Luttrellpark Road.
5 – Closure of the level crossing with new underbridge connecting St. Mochta's Grove to Luttrellpark Road with diversion of Royal Canal over the proposed road.
6 – Closure of the level crossing and overbridge to east of Coolmine Road and Carpenterstown Road.
7 – Closure of the level crossing and provision of a pedestrian/cycle overbridge.
8 – Modifications to level crossing with online road bridge and lowering of the railway vertical alignment.
9 – Closure of the level crossing and upgrade to existing road network.
10 – Closure of the level crossing and online underbridge including droplock solution.

Following Stage 1 MCA, Options 1, 3,6 and 9 were brought forward to Stage 2 MCA. Option 9, Closure of the level crossing and upgrade to existing road network, was identified as the preferred option over Options 1,3 and 6.

Characteristics associated with Option 9 which were influential in its option selection for inclusion in the railway order are as follows:

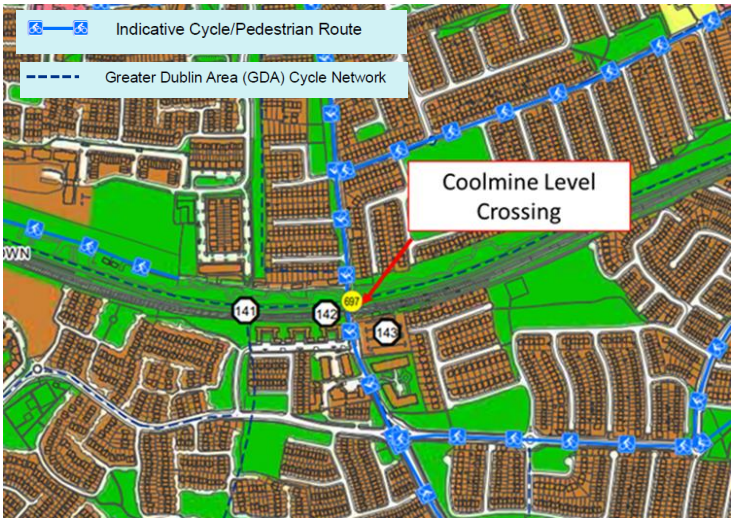
Disadvantageous characteristics include:

- Vehicular diversions on the local road network;.
- It impacts on one planning objective.

Advantageous characteristics include:

- It provides enhanced non-motorised user access and does not impact significantly on the parking facilities at the station in comparison to other options;
- It does not impact on the amenity space west of the level crossing;
- It impacts on fewer planning objectives than other options;
- The impact on Kirkpatrick Bridge and the Royal Canal (RPS) is less severe than for other options;
- It has lower visual impact than other options;
- It is less expensive that other options.

18. It is intended that improvements to the local road network to increase capacity will be carried out before a level crossing is closed. The benefits of the improvements would not be evident in a trial without the works having been completed.
19. See response provided in point 7 of this submission.
20. The EIAR is based on Fingal County Development Plan 2017-2023 (FCDP) this response does not take into account the updated and now adopted Fingal County Development Plan 2023-2029.



The figure above is an extract from the FCDP 2017-2023 Blanchardstown Sheet 13 South Land use zoning indicating the location of the map based objectives.

- DART+ West does not affect the Objective 141 “To prohibit any road bridge at this location” which is a map based local objective relevant to an area of the train line and canal in the vicinity of residential areas at Riverwood Court (to the south) and Sheepmoor Lane and Stationcourt park (to the north).
- FCDP Objective 142 “Preserve the existing pedestrian and vehicular right of way at the Coolmine Level Crossing”. The closure of the Coolmine level Crossing is addressed in the EIAR Chapter 7 Sections 7.5.4.4.1 Land use change and again in the Planning Report Section 4.7. In Planning Report Section 4.7.1.3.1 it states that based on the capacity enhancements and increased frequency of service required to deliver the DART+ Programme it is not possible to maintain the level crossing or the right of way in its current form. This affects local Objective 142 ‘Preserve the

existing pedestrian and vehicular right of way'. In Section 4.7.2 of the Planning Report it details a review of relevant proposed changes to planning policy published in the Draft Fingal CDP 2023-2029, which was published at the time of writing the EIAR and lodging of the Railway Order, the draft Plan was proposed to replace Objective 142 with the draft Objective 91 of the Draft Fingal CDP 2023-2029 which stated "Ensure pedestrian and cyclist connectivity is provided across the canal and rail line at this location."

- Whilst the proposed development will permanently close the existing Coolmine level crossing, an alternative segregated and safer pedestrian and cyclist infrastructure will be provided at this location therefore maintaining a right of way at the level crossing. The proposed development will enhance cyclist and pedestrian infrastructure at the location of the existing Coolmine level crossing whilst the junction upgrade works will cater for the redirected traffic flows in the wider area. The proposed development is consistent with the emerging planning policy.
- The proposed development will improve journey characteristics for cyclist and pedestrian in the area supporting future development trends which prioritises sustainable modes of travel including rail, walking and cycling as demonstrated in Chapter 6 Traffic and Transportation of the EIAR. The existing road network together with the proposed junction upgrade works will provide an upgrade to the existing road network to cater for displaced vehicular traffic.
- The EIAR states that based on the capacity enhancements and increased frequency of service required to deliver the DART+ Programme it is not possible to maintain the vehicular right of way. However, the proposed development maintains and improves pedestrian and cyclist access with the construction of a purpose built pedestrian and cyclist footbridge. If the interventions are not built and the DART+ Programme progresses the vehicular traffic impacts would result in effectively complete closure of the level crossing with no alternative provided for cars, pedestrians or cyclists leading to extensive delays across the road network and the significant impacts to communities north and south of the railway line. The proposed solution offers a safer and integrated pedestrian and cyclist bridge structure at the station facilitating the planned increases in capacity, ensuring the community remains connected, supporting the proper planning and sustainable development of the area.

Open Space zoning: The northern extents of the proposed bridge structure will be located on the edge of land zoned as OS-Open Space "Preserve and provide for open space and recreational amenities". The bridge structure will reduce the amount of this land use zoning in this area however it does not preclude the long-term realisation of objectives under the OS-Open Space land use zoning including the, Indicative Cycle / Pedestrian Route' associated with the Royal Canal Walking and Cycle route and the GDA Cycle Strategy. The proposed development will ensure this objective is realised and will maintain and improve pedestrian and cyclist and recreational amenities at this location.

21. See response to point 5 of this submission.
22. Detailed response to point 22 of this submission is provided in Section 2.2.3 of this report.
23. As is seen in the planning report, IÉ was cognisant of national and regional policies and objectives at the time that the Railway Order was submitted, and in particular the relevant county development plans. The planning report demonstrates that the proposed development is supported by, and is consistent with National and regional policies and objectives. Further, as can be seen from this submission, the proposed development is supported by, and is consistent with, planning policies, including those of the relevant local authorities, as such policies have emerged in the intervening period.
24. See response to point 10 of this submission.

4.56 Ref. No.57 – Env60 – Kevin Ó Ceallaigh

Representative – Not Applicable

4.56.1 Submission, Location – Coolmine

1. Irish Rail should upgrade line & level crossings and revisit topic of level crossings following capacity assessment of line after the upgrade. Level crossing does not need to close permanently to permit line upgrade. Major unexamined planning impacts associated with the closing of level crossings.
2. Closing level crossing at Coolmine will not improve to DART frequency. Not the concern of Irish Rail how long barriers closed for once DART is not delayed/inconvenienced as a result.
3. Upgrading level crossing should be considered instead of permanent closure. Automatic level crossings operate faster, offer shorter closing times, allowing for increased train frequency. Clarity on why these level crossings must be closed when several automated crossings in service elsewhere in Dublin.
4. Irish Rail have not considered improving siting of existing barriers, location/type signage, or layout of level crossings to mitigate risk, e.g. double barrier system would prevent strikes.
5. Passenger demand cited by IÉ as reason to triple capacity, not reflected in NTA data.
6. Recent transformation to blended/remote working gives reasons to question demand projections.
7. Attendance at workplaces down over 26% on average, should be considered.
8. Closure of level crossing curtails local journeys to access schools, work, emergency services, family and retail. Many trips carried out by walking & cycling - access eliminated by imposition of over-/underpasses, forcing modal shift to cars for vulnerable users. Cost benefit in carbon terms needs to be examined to assess sustainability of these modal shifts.
9. Closure of level crossing to increase local traffic on already congested road routes due to modal shift to cars.
10. Increased traffic flow impact on schools (St Mochta's, Scoil Cholm & Luttrellstown Community College) unexamined.
11. Irish Rail statistics that demonstrate need to increase train frequency that would necessitate closure of level crossing only representative of peak hours. Statistics on frequency of trains at weekends/off-peak times not provided. Not necessary to close Coolmine level crossing at all times.
12. Access bridge at Coolmine is unnecessary cost to taxpayer. Visual intrusion likely to attract graffiti/anti-social behaviour. Closure of level crossings discredited solution, not based on town planning expertise.
13. Likelihood for increase in anti-social behaviour where dead-end roads proposed / at underpasses / at bridges.
14. Physical divide between long established communities, detrimental to social cohesion of community, surrounding demographic leaning towards aging population.
15. Proposed closure of level crossings will affect community's ability to feel safe.
16. Need for pedestrians/cyclists to enter long/isolated tunnel/walkway will deter people from using it, and potentially increase use of cars. Added <1km distance to be walked via overpasses by elderly to/from Roselawn shopping centre from Carpenterstown will be deterrent.
17. Materials & 24/7 lighting needed to build proposed underpass & access bridges would have detrimental impact on Royal Canal pNHA & wildlife.
18. The considerable engineering works proposed, both in facilitating works and as a legacy of works, will damage surrounding environment, rich in biodiversity.
19. Proposed bridges will darken areas of Royal canal.
20. Level crossings should remain open and fitted with automatic level crossing gates / advanced signalling system to ensure short closure times.
21. Access bridges should not be built.
22. Revised capacity assessment & traffic analysis should take place to assess impact of the Covid-19 pandemic / new working-from-home legislation.
23. Should Introduce revised safety measures at level crossings, road signage, changes of roads around level crossings, traffic calming measures, e.g. cars stopped further from actual crossing when gates down, etc.

24. Consideration of level crossing closures should be under separate process only where actual frequency of trains requires it.
25. Proposed road infrastructure upgrades should proceed even with level crossings remaining open.
26. Condition should be added explicitly making IÉ responsible for future remediation of traffic issues that may result from this project.
27. Ongoing traffic analysis surveys should be completed along the route at 3-month intervals for 5 years after completion of the project.

4.56.2 Response to submission

1. Detailed responses to point 1 of this submission are provided in Section 2.2.5 and Section 2.2.8 of this report.
2. Detailed response to point 2 of this submission is provided in Section 2.2.5 of this report.
3. Detailed response to point 3 of this submission is provided in Section 2.2.5 of this report.
4. Detailed response to point 4 of this submission is provided in Section 2.2.5 of this report.
5. Detailed response to point 5 of this submission is provided in Section 2.2.8 of this report.
6. Detailed response to point 6 of this submission is provided in Section 2.2.8 of this report.
7. Detailed responses to point 7 of this submission are provided in Section 2.2.8 of this report.
8. The proposed development is considered a sustainable development and is specifically mentioned in the Climate Action Plan. The Climate Action Plan three key transport actions are considered using a 'Avoid-Shift-Improve' framework:
   - *developing services, communities, and infrastructure in such a manner as to AVOID the need to travel as much as we do today;*
   - *improving the relative attractiveness of sustainable travel modes such as Public Transport, Cycling and Walking, to SHIFT away from car use; this will facilitate increased use of lower-carbon modes and reduce the percentage of total journeys that are made by private car (modal share) from over 70% (today) to just over 50% in 2030; and*
   - *complement these measures by increasing the proportion of EVs in our car fleet to 30% by 2030, which will IMPROVE the efficiency of the national car fleet; electrification of the freight and public transport sector will also be key.*

   The proposed development is a public transport project which aims to facilitate the shift from private car use by providing more capacity and frequent services and also changes the fuel use from a fossil fuel to electricity, which can be sourced from renewable sources.

   Section 13.5.3.3 considers the carbon footprint of potentially longer car journeys in the traffic study areas and in Section 13.5.3.2 the impact of the proposed development on rail emissions is considered. While there is an impact of longer car journeys in some areas due to level crossing closures, the impact of the change from diesel to electric trains far outweighs it. It should be noted that the car fleet modelled in the EIAR is considered an "old" or "dirtier" fleet due to the modelling tool used. The model did not account for the shift to electric vehicles (including indirect emissions from charging) or newer Euro classes, which are included in the new TII Roads Emission Model (REM) published in December 2022, after the EIAR was submitted. Instead, the proportion of the fleet that has moved to less polluting models or electric vehicles were considered to remain as old" or "dirtier" fleet and therefore have higher emissions. If the operational phase traffic assessment was remodelled using the more modern fleet included in the that the impact of the car journeys would be even lower.

   An assessment of the rail line emissions indicates that the regional mass emissions of air pollutants CO_2 produced by railway operations for the proposed future operational scenario is lower than do-nothing emissions, even when the additional capacity, services, additional private car journeys are accounted for.

9. Detailed response to point 9 of this submission is provided in Section 2.4.8 of this report.
10. The new designs for junctions impacted by the re-distribution of traffic provide much more priority for pedestrians and cyclists, in particular around schools and train stations, which will significantly improve

the quality of local journeys for local communities getting around for education, medical, employment and other purposes by all modes.

11. Detailed response to point 11 of this submission is provided in Section 2.2.15 of this report.
12. The proposed pedestrian CORTEN steel bridges were agreed upon as opposed to concrete solutions to tie in with the "look and feel" of the area. Additionally, a counterpoint between the bridge and the landscape of the Canal was created that will emphasize the vegetation.
    It is pointed out that it is a maintenance-free material because corrosion is stopped at the factory, and its surface can acceptably resist hydro-washing against graffiti.
    Safety concerns related to future road users, cyclists, pedestrians and disabled people crossing the road led the designers to propose a robust image that seeks to mitigate the risk of falls and thrown objects while ensuring the adequate inclinations in the design.

    Chapter 15 Landscape and Visual Amenity of the EIAR assesses the likely effects from construction and operational phases of the proposed development on the landscape and visual amenity. The assessment included (but limited to) a review of all relevant planning policy allowing for the identification of designated and potential significant/ sensitive landscape and visual areas. An overview of the landscape planning context is presented in Section 15.4.2.2 Fingal Development Plan 2017-2023 which has been taken into consideration in the assessment.
13. Detailed responses to point 13 of this submission are provided in Section 2.2.17 and Section 2.4.9 of this report.
14. Detailed responses to point 14 of this submission are provided in Section 2.2.16 and Section 2.4.10 of this report.
15. Detailed responses to point 15 of this submission are provided in Section 2.2.17 and Section 2.4.9 of this report.
16. Detailed response to point 16 of this submission is provided in Section 2.2.1 of this report.
17. Detailed response to point 17 of this submission is provided in Section 2.4.11 of this report.
18. Detailed response to point 18 of this submission is provided in Section 2.4.11 of this report.
19. Detailed response to point 19 of this submission is provided in Section 2.2.17 of this report.
20. Detailed response to point 20 of this submission is provided in Section 2.2.5 of this report.
21. Detailed response to point 21 of this submission is provided in Section 2.2.5 of this report.
22. Detailed response to point 22 of this submission is provided in Section 2.2.8 of this report.
23. Safety measures at the level crossings and the junction upgrade works are embedded into the design of the proposed development.
24. Detailed responses to point 24 of this submission are provided in Section 2.2.8 and Section 2.2.15 of this report.
25. Detailed response to point 25 of this submission is provided in Section 2.2.5 of this report.
26. A detailed traffic impact assessment has been carried out for the project and is reported in EIAR Volume 2 Chapter 6. During the construction phase it concludes neutral to slight negative effects due to the project and recommends mitigation measures scheduled in Table 6-24 to Chapter 6. The assessment of the operational phase concluded that the overall impact is neutral to slight negative. Long term maintenance and management of the road network is not the role of IÉ.
27. Monitoring measures proposed in Section 6.7 of EIAR Chapter 6 Traffic and Transportation will be implemented at operation phase of the proposed development.

4.57 Ref. No.58 – Env61 – Mark Allen & Josephine Reilly

Representative – Not Applicable

4.57.1 Submission, Location – Coolmine

1. Coolmine pedestrian/cycle bridge visually unattractive.
2. Coolmine pedestrian/cycle bridge beside Royal Canal pNHA. Bridge & increased lighting will impact on wildlife.

3. Coolmine pedestrian/cycle bridge extremely long and no lifts planned for Coolmine Station - only way that elderly/mobility impaired/anyone with a buggy will be able to cross over the railway line.
4. Potential for anti-social behaviour where level crossing closure will create a quiet cul-de-sac. Issue with dumping in this area.
5. Closure of Coolmine level crossing will double time to access Carpenterstown for emergency services. Appropriate measures can be adopted to improve waiting times & safety at level crossings.
6. Increased traffic congestion due to closure of level crossing at Coolmine on already congested bridges, through housing estates or along busy Clonsilla Road.
7. Undertake capacity assessment on Maynooth line after electrification before final decision on future of level crossing at Coolmine.
8. Improve signalling to reduce waiting times at Coolmine level crossing.
9. In conjunction with FCC, introduce appropriate safety measures along Coolmine & Carpenterstown Road and the approach to the level crossing.

4.57.2 Response to submission

1. Chapter 15 Landscape and Visual Amenity of the EIAR assesses the likely effects from construction and operational phases of the proposed development on the landscape and visual amenity. The assessment included (but limited to) a review of all relevant planning policy allowing for the identification of designated and potential significant/ sensitive landscape and visual areas. An overview of the landscape planning context is presented in Section 15.4.2.2 Fingal Development Plan 2017-2023 which has been taken into consideration in the assessment.
2. Detailed response to point 2 of this submission is provided in Section 2.2.6 of this report.
3. Detailed responses to point 3 of this submission are provided in Section 2.2.1 and Section 2.2.7 of this report.
4. Detailed responses to point 4 of this submission are provided in Section 2.2.17 and Section 2.4.9 of this report.
5. Detailed response to point 5 of this submission is provided in Section 2.4.8 of this report.
6. Detailed response to point 6 of this submission is provided in Section 2.4.8 of this report.
7. Detailed response to point 7 of this submission is provided in Section 2.2.8 of this report.
8. Detailed response to point 7 of this submission is provided in Section 2.2.5 of this report.
9. In conjunction with FCC, introduce appropriate safety measures along Coolmine & Carpenterstown Road and the approach to the level crossing.
10. The proposed design for junction upgrade works incorporates safety measures for all road users.

4.58 Ref. No.59 – Env62 – AZRA Property Company Limited

Representative – Not Applicable

4.58.1 Submission, Location – Coolmine

No points to be addressed.

4.59 Ref. No.60 – Env64 – Brian Conlan

Representative – Not Applicable

4.59.1 Submission, Location – Cope - Glendale

1. Roads, Bridges and Biodiversity

- Impact of new wall, embankment and hedging and cycle lane/pathway will have significant impact on existing green space used for recreational activities and on fauna and flora (particularly mature trees that residents have grown).
- Not clear if the possibility of keeping the existing boundary and hedgerow and add the cycle lane/pathway running along the existing green space, has been considered.
- No clear plan for further development of Cycle lane/Pathway as it ends abruptly.
- Question the need for a cycle/lane pathway on both sides of the road when there is a similar cycle lane/pathway on the opposite side of the road/bridge.
- The use of one side only, the current train station side would have the least impact. Residents question consideration of this.
- Not clear the level of maturity will plants and trees be planted and trees can take years to grow. Currently mature boundary screens off heavy traffic from view.

2. Compound:
   - Location of compound will impact green space used by residents for recreation, and impact negatively on the natural fauna, flora and mature trees.
   - Noise pollution as a result of the compound.
   - Compound, Visual Impact, traffic and congestion, alternative locations, size of substation, loss of greenspace will be an eyesore.
   - Compound: Increase of traffic and congestion and safety risk to children, and affect current access to train station.
   - Question if consideration for alternative location of the compound on the field opposite the train station on the far side of the canal was given.
3. Substation:
   - loss of green area used for recreational purposes and has been maintained by residents for years.
   - Landscape: Size and scale of the substation will be an eyesore.
   - Question if CIÉ land further down the tracks was considered.
   - Residents have not been able to get clarity on the function of the substation or its necessity.
   - Access road to the substation will have significant impact on loss of green space used for recreational purposes.
   - Traffic congestion as a result of the substation access.
4. Timeframe of construction for Cope Bridge.
5. No clear pedestrian crossing planned at the entrance to Glendale Estate across the main road to the public amenities.
6. With the planned improvements to the train service, residents have not been able to observe a clear plan to manage parking for train users.

4.59.2 Response to submission

1. Detailed responses to points 1 to 4 of this submission are provided in Sections 2.6.1 to 2.6.4 of this report.
2. Two pedestrian/cycle crossings are planned across the main road at either end of the new footbridges. On the south side, a crossing is planned from Glendale green to the access road to the station (drawing MAY-MDC-SET-RS12-DR-Z-003-D). Likewise, on the north side, another crossing is located in front of the access to the GAA Confey Club.
3. DART+ West is an infrastructure capacity project to facilitate the expansion of the DART. Alterations to existing stations, except where required to facilitate the DART+ West project, are not within the scope of the project. Where alterations to stations are being implemented to facilitate the DART+, increased cycle parking has been included in the Project (Spencer Dock, Connolly Station, Ashtown and Coolmine).

   The objectives of the DART+ West project is to increase capacity and electrify the line. Additional car parking facilities are not within the scope of the DART+ West project. However, Iarnród Éireann's Network Enhancement Division and the National Transport Authority's Park & Ride Development

Office are working on other projects to deliver enhanced parking at stations, for cars and bicycles in parallel to DART+ West.

Separate to the DART+ West project and outside this DART+ West draft Railway Order, Iarnród Éireann are progressing a number of projects including a Multimodal Interchange Project. The multimodal project will assess all stations throughout the network with a view of implementing these strategies at stations where there is need for modifications that will have an impact on multimodal travel and station access. This project will assess a variety of multimodal options at stations including but not limited to the provision of secure bicycle parking and shared mobility services. Iarnród Éireann are working to progress and finalise the Multimodal Interchange Strategy before the end of Q4 2023 with a view to developing an Implementation Plan subject to funding constraints.

4.60 Ref. No.61 – Env65a – Stephen Gartland (Residents of Glendale)

Representative – Not Applicable

4.60.1 Submission, Location – Cope - Glendale

1. Roads, Bridges and Biodiversity
   - Impact of new wall, embankment and hedging and cycle lane/pathway will have significant impact on existing green space used for recreational activities and on fauna and flora (particularly mature trees that residents have grown).
   - Not clear if the possibility of keeping the existing boundary and hedgerow and add the cycle lane/pathway running along the existing green space, has been considered.
   - No clear plan for further development of Cycle lane/Pathway as it ends abruptly.
   - Question the need for a cycle/lane pathway on both sides of the road when there is a similar cycle lane/pathway on the opposite side of the road/bridge.
   - The use of one side only, the current train station side would have the least impact. Residents question consideration of this.
   - Not clear the level of maturity will plants and trees be planted and trees can take years to grow. Currently mature boundary screens off heavy traffic from view.
2. Compound:
   - Location of compound will impact green space used by residents for recreation, and impact negatively on the natural fauna, flora and mature trees.
   - Noise pollution as a result of the compound.
   - Compound, Visual Impact, traffic and congestion, alternative locations, size of substation, loss of greenspace will be an eyesore.
   - Compound: Increase of traffic and congestion and safety risk to children, and affect current access to train station.
   - Question if consideration for alternative location of the compound on the field opposite the train station on the far side of the canal was given.
3. Substation:
   - Loss of green area used for recreational purposes and has been maintained by residents for years.
   - Landscape: Size and scale of the substation will be an eyesore.
   - Question if CIÉ land further down the tracks was considered.
   - Residents have not been able to get clarity on the function of the substation or its necessity.
   - Access road to the substation will have significant impact on loss of green space used for recreational purposes.
   - Traffic congestion as a result of the substation access.
4. Timeframe of construction for Cope Bridge
5. No clear pedestrian crossing planned at the entrance to Glendale Estate across the main road to the public amenities.

6. With the planned improvements to the train service, residents have not been able to observe a clear plan to manage parking for train users.

4.60.2 Response to submission

1. Detailed responses to points 1 to 4 of this submission are provided in Sections 2.6.1 to 2.6.4 of this report.
2. Two pedestrian/cycle crossings are planned across the main road at either end of the new footbridges. On the south side, a crossing is planned from Glendale green to the access road to the station (drawing MAY-MDC-SET-RS12-DR-Z-003-D). Likewise, on the north side, another crossing is located in front of the access to the GAA Confey Club.
3. DART+ West is an infrastructure capacity project to facilitate the expansion of the DART. Alterations to existing stations, except where required to facilitate the DART+ West project, are not within the scope of the project. Where alterations to stations are being implemented to facilitate the DART, increased cycle parking has been included in the Project (Spencer Dock, Connolly Station, Ashtown and Coolmine) but no new provision of car parking has been provided.
   Separate to DART+ West Iarnród Éireann's Network Enhancement Division and the National Transport Authority's Park & Ride Development Office are working on other projects to deliver enhanced parking at stations, for cars and bicycles in parallel to DART+ West.

   Separate to the DART+ West project and outside this DART+ West draft Railway Order, Iarnród Éireann are progressing a number of projects including a Multimodal Interchange Project. The multimodal project will assess all stations throughout the network with a view of implementing these strategies at stations where there is need for modifications that will have an impact on multimodal travel and station access. This project will assess a variety of multimodal options at stations including but not limited to the provision of secure bicycle parking and shared mobility services. Iarnród Éireann are working to progress and finalise the Multimodal Interchange Strategy before the end of Q4 2023 with a view to developing an Implementation Plan subject to funding constraints.

4.61 Ref. No.62 – Env65b – Theresa Tallon (Residents of Glendale)

Queries and responses as per Ref. No.61 – Env65a above.

4.62 Ref. No.63 – Env65c – Mary Barry (Residents of Glendale)

Queries and responses as per Ref. No.61 – Env65a above.

4.63 Ref. No.64 – Env65d – John Kane (Residents of Glendale)

Queries and responses as per Ref. No.61 – Env65a above.

4.64 Ref. No.65 – Env65e – Stephanie Rock (Residents of Glendale)

Queries and responses as per Ref. No.61 – Env65a above.

4.65 Ref. No.66 – Env65f – Sean Quigley (Residents of Glendale)

Queries and responses as per Ref. No.61 – Env65a above.

4.66 Ref. No.67 – Env65g – John O'Sullivan (Residents of Glendale)

Queries and responses as per Ref. No.61 – Env65a above.

4.67 Ref. No.68 – Env65h – Stephanie Gartland (Residents of Glendale)

Queries and responses as per Ref. No.61 – Env65a above.

4.68 Ref. No.69 – Env67 – Monica & Sean Quigley

Queries and responses as per Ref. No.61 – Env65a above.

4.69 Ref. No.70 – Env70 – Michael O'Connor & Áine O'Connor

Representative – Not Applicable

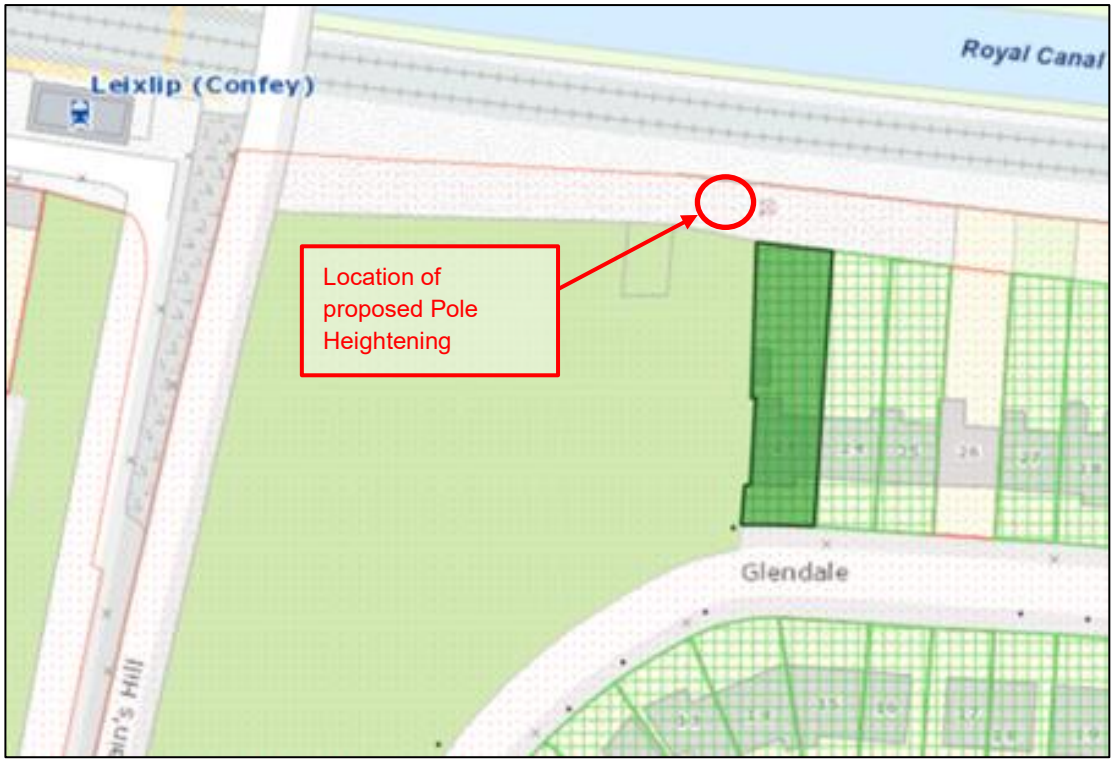
4.69.1 Submission, Location – Cope - Glendale

1. On application drawings, there is a power cable beneath their property. Require clarification on whether this cable is being upgraded. State that they are not listed as persons whose property may be taken. If cable upgrading or replacing is required, it would have a significant impact on their property.
2. The proposed construction works, industrial buildings, power station and industrial road are not compatible on resident's green area. State that it's an important recreational area / living space for all people as designated by the local authority.
3. Construction stage impacts at green and estate
4. Location of Compounds and Sub-Station
5. Noise issues
6. Public consultation

4.69.2 Response to submission

1. There is a power cable and pole beyond the rear of the property that is to be raised as part of the project to increase the clearance over the rail line. Clearance of trees to undertake this work are not proposed directly to the rear of the property or under the existing lines however some localised clearance of vegetation and undergrowth at the existing poles may be required for access to undertake this work.

   Note that the extent of the registered property does not extend to the rail boundary and that the pole as shown on the plan is shown beyond the registered extents of the property boundary shown as shown on the PRAI records.



Proposed pole heightening relative to property boundary (PRAI)

2. The proposed substation is located on an existing 'green' open space area adjacent to a residential estate which is zoned in the Leixlip Local Area Plan (LAP) 2020 – 2023 as 'B: Existing /infill Residential - 'to protect and enhance the amenity of established residential communities and promote sustainable intensification." The substation and the associated access is located in a discrete location of the open space area within this zoning designation. The substation has a relatively small footprint therefore it is considered that it will not significantly affect the functionality of the overall zoning designations of the area and indeed will promote sustainable transportation services to residential communities. Chapter 7 Population Section 5.4.6.1 Land Use Change has assessed the potential effect on the land use zoning as negative, slight and permanent.
3. Detailed responses to this point of this submission is provided in Section 2.6.4 of this report.
4. Detailed responses to this point of this submission is provided in Section 2.6.1 of this report.
5. Detailed responses to this point of this submission is provided in Section 2.2.12 of this report.
6. Detailed responses to this point of this submission is provided in Section 2.2.2 of this report.

4.70 Ref. No.71 – Env71 – Stephanie Rock - Cope Bridge

Queries and responses as per Ref. No.61 – Env65e above.

4.71 Ref. No.72 – Env72 – Kay & John Brennan

Representative – Not Applicable

4.71.1 Submission, Location – Cope - Glendale

1. Roads, Bridges and Biodiversity
2. Compound
3. Substation

4. Timeframe of construction for Cope Bridge
5. No clear pedestrian crossing planned at the entrance to Glendale Estate across the main road to the public amenities.
6. With the planned improvements to the train service, residents have not been able to observe a clear plan to manage parking for train users.
7. In what condition will the green be left and who will maintain it.
8. Suggest alternative working hours.

4.71.2 Response to submission

1. Detailed responses to points 1 to 4 of this submission are provided in Sections 2.6.1 to 2.6.4 of this report.
2. Two pedestrian/cycle crossings are planned across the main road at either end of the new footbridges. On the south side, a crossing is planned from Glendale green to the access road to the station (drawing MAY-MDC-SET-RS12-DR-Z-003-D). Likewise, on the north side, another crossing is located in front of the access to the GAA Confey Club.
3. Parking control in adjacent housing estates is a matter for the local authority. It is proposed that parking patterns will be monitored before and immediately following closure of the level crossing. IÉ will engage with the local authority, providing them with the relevant information to facilitate control measures it may elect to put in place.
4. The green area will be cleared, topsoiled, grassed and planted in accordance with proposed the landscaping mitigation measures.
5. The EIAR Volume 2, Chapter 5, Section 5.2.1 sets out the following daytime working hours for the project:
   - Monday to Friday: 12 hours. From 07:00 to 19:00.
   - Saturday: 6 hours. From 07:00 to 13:00.
   - Sunday/Bank Holidays: none except were agreed in advance with the local authority and CIÉ or as part of a possession/closure.

   The EIAR stated that the times listed above are indicative and proposed working hours will be finalised at detailed design and construction planning stage.

4.72 Ref. No.73 – Env73 – Sonja Brennan

Representative – Not Applicable

4.72.1 Submission, Location – Cope - Glendale

1. Roads, Bridges and Biodiversity
2. Compound
3. Substation
4. Timeframe of construction for Cope Bridge
5. No clear pedestrian crossing planned at the entrance to Glendale Estate across the main road to the public amenities.
6. With the planned improvements to the train service, residents have not been able to observe a clear plan to manage parking for train users.
7. In what condition will the green be left and who will maintain it.
8. Suggest alternative working hours.

4.72.2 Response to submission

1. Detailed responses to points 1 to 4 of this submission are provided in Sections 2.6.1 to 2.6.4 of this report.
2. Two pedestrian/cycle crossings are planned across the main road at either end of the new footbridges. On the south side, a crossing is planned from Glendale green to the access road to the station (drawing

MAY-MDC-SET-RS12-DR-Z-003-D). Likewise, on the north side, another crossing is located in front of the access to the GAA Confey Club.

3. Parking control in adjacent housing estates is a matter for the local authority. It is proposed that parking patterns will be monitored before and immediately following closure of the level crossing. IÉ will engage with the local authority, providing them with the relevant information to facilitate control measures it may elect to put in place.
4. The green area will be cleared, topsoiled, grassed and planted in accordance with proposed the landscaping mitigation measures.
5. The EIAR Volume 2, Chapter 5, Section 5.2.1 sets out the following daytime working hours for the project:
   - Monday to Friday: 12 hours. From 07:00 to 19:00.
   - Saturday: 6 hours. From 07:00 to 13:00.
   - Sunday/Bank Holidays: none except were agreed in advance with the local authority and CIÉ or as part of a possession/closure.

   The EIAR stated that the times listed above are indicative and proposed working hours will be finalised at detailed design and construction planning stage.

4.73 Ref. No.74 – Env74 – John Kane

Representative – Not Applicable

4.73.1 Submission, Location – Cope - Glendale

1. Roads, Bridges and Biodiversity
2. Compound
3. Substation
4. Timeframe of construction for Cope Bridge

4.73.2 Response to submission

1. Detailed responses to points 1 to 4 of this submission are provided in Sections 2.6.1 to 2.6.4 of this report.

4.74 Ref. No.75 – Env75 – Karl Pawley & Alana Pawley

Representative – Not Applicable

4.74.1 Submission, Location – Cope - Glendale

1. Roads, Bridges and Biodiversity
2. Compound
3. Substation
4. Timeframe of construction for Cope Bridge
5. No clear pedestrian crossing planned at the entrance to Glendale Estate across the main road to the public amenities.
6. With the planned improvements to the train service, residents have not been able to observe a clear plan to manage parking for train users.
7. In what condition will the green be left and who will maintain it.
8. Suggest alternative working hours.

4.74.2 Response to submission

1. Detailed responses to points 1 to 4 of this submission are provided in Sections 2.6.1 to 2.6.4 of this report.
2. Two pedestrian/cycle crossings are planned across the main road at either end of the new footbridges. On the south side, a crossing is planned from Glendale green to the access road to the station (drawing MAY-MDC-SET-RS12-DR-Z-003-D). Likewise, on the north side, another crossing is located in front of the access to the GAA Confey Club.
3. Parking control in adjacent housing estates is a matter for the local authority. It is proposed that parking patterns will be monitored before and immediately following closure of the level crossing. IÉ will engage with the local authority, providing them with the relevant information to facilitate control measures it may elect to put in place.
4. The green area will be cleared, topsoiled, grassed and planted in accordance with proposed the landscaping mitigation measures.
5. The EIAR Volume 2, Chapter 5, Section 5.2.1 sets out the following daytime working hours for the project:
   - Monday to Friday: 12 hours. From 07:00 to 19:00.
   - Saturday: 6 hours. From 07:00 to 13:00.
   - Sunday/Bank Holidays: none except were agreed in advance with the local authority and CIÉ or as part of a possession/closure.

   The EIAR stated that the times listed above are indicative and proposed working hours will be finalised at detailed design and construction planning stage.

4.75 Ref. No.76 – Env76 – Stella Barrett

Representative – Not Applicable

4.75.1 Submission, Location – Cope - Glendale

1. Construction stage impacts at green and estate
2. Change is use of green area
3. Location of Compounds and Sub-Station

4.75.2 Response to submission

1. Detailed responses to this point of this submission is provided in Section 2.6.4 of this report.
2. The proposed substation is located on an existing ‘green’ open space area adjacent to a residential estate which is zoned in the Leixlip Local Area Plan (LAP) 2020 – 2023 as ‘B: Existing /infill Residential - ‘to protect and enhance the amenity of established residential communities and promote sustainable intensification.” The substation and the associated access is located in a discrete location of the open space area within this zoning designation. The substation has a relatively small footprint therefore it is considered that it will not significantly affect the functionality of the overall zoning designations of the area and indeed will promote sustainable transportation services to residential communities. Chapter 7 Population Section 5.4.6.1 Land Use Change has assessed the potential effect on the land use zoning as negative, slight and permanent.
3. Detailed responses to this point of this submission is provided in Section 2.6.1 of this report.

4.76 Ref. No.77 – Env66 – Andy Grehan, David Slattery & Eoghan O'Connell (EXCAPE)

Representative – Not Applicable

4.76.1 Submission, Location – Cope - GAA

Issues raised in submission are addressed with their responses below.

4.76.2 Response to submission

1. Summary of issue raised - Inadequate drainage details have been provided, potential for negative consequences.

   Response to issue raised

   Drainage from the works will discharge to the road drainage system, this will discharge away from the landowner's property. This drainage design will be further detailed during the detailed design stage and comply with all relevant standard and guidance.

2. Summary of issue raised - Inadequate information provided regarding mitigation measures for noise pollution.

   Response to issue raised

   Chapter 14 of the EIAR assesses the noise impact at a number of locations along the proposed development. The nearest location to Confey GAA club is N31 which is located at Glendale Meadows directly opposite the train line from Confey GAA Club and is therefore the closest representative assessment location. At this location a slight noise impact of 1dB is reported in Table 14.43, therefore no specific mitigation measures are required at this location as the scheme does not change the noise environment significantly.

3. Summary of issue raised - Lack of clarity in relation to access during/post construction, specifically new bridge works and footpaths/cycleways.

   Response to issue raised

   The new pedestrian and cycle bridges will be built before the reconstruction of the Cope Bridge, therefore always guaranteeing the passage of pedestrians/cycles during construction works.

4. Summary of issue raised - More clarity relating to pedestrian access across the bridge to the club during road closures.

   Response to issue raised

   The new pedestrian and cycle bridges will be constructed prior to the reconstruction of Cope Bridge, thus always maintaining pedestrian/cycle connectivity

   The timing of new footbridges and the bridge reconstruction is described in section 5.8.3.2. of the Chapter 05 Construction Strategy, included in Volume 2 Main Text of the EIAR.

5. Summary of issue raised - Health and safety issues for cyclists. Where will they go after they cross the bridge and arrive at first house on the east / club side?

   Response to issue raised

   Cycleways and footpaths beyond what is shown is outside the scope of DART + West project. Signage to advise the end of the cycleway will be provided.

6. Summary of issue raised - Lack of clarity around timeframe of works at Confey GAA club location.

Response to issue raised

EIAR Chapter 05 Construction Methodology shows an indicative Construction Programme for the entire project of approximately 47 months, with the structural works near Confey commencing approximately a year after the award of the contract.

Chapter 05, section "5.8.3 OBG14 Cope Bridge deck reconstruction and widening", details the construction duration: 46 weeks for the two pedestrian bridges and 40 weeks for the road bridge reconstruction (to be done after footbridges construction).

As explained in section “5.3.8.1.1.4 Construction duration”, a total road closure is required of 15 weeks. A partial closure (one lane open) is required for 19 weeks.

7. Summary of issue raised - Direct Specific Impacts - works will impact the club’s ability to play and train on the pitches. Severe pressure already exists regarding training space. Works will also impact on Bar and Sports Hall, which are a source of revenue for club.

Response to issue raised

Section 17.6 of the EIAR outlines measures to mitigate the impact of the proposed development on property. These include the reinstatement of temporarily acquired lands, the replacement of property boundaries on a like for like basis and the maintenance of access during construction and operation phase. Accommodation works which may involve the provision of boundary treatment and other works to mitigate the impacts on the property will be agreed after the confirmation of the Railway Order. Draft accommodation works and other details can be discussed with Irish Rail in advance of this.

The Railway Order for the DART+ West project will involve total land take of 0.2073ha comprising of 0.0.0633ha permanent lands, 0.1030ha temporary lands and 0.0410ha public road.

The impact of the proposed development on this property has been assessed in the EIAR and the significance of this impact is deemed to be ‘Significant’. This assessment has considered the area of temporary and permanent land take, the direct impact on sports pitches, the existing property boundary, footpaths and a right of way.

The ‘Significant’ impact results from the area of land being acquired, which is of such a scale that the mitigation required to continue operations are considered as significant.

Summary of issue raised - What entity is responsible for works being carried out at club location (i.e., Kildare CC, Irish Rail). On completion which entity will own the acquired land?

Response to issue raised

On completion the permanently acquired lands will belong to CIÉ / Irish Rail, while the temporarily acquired lands will revert back to the current owners. The maintenance of the road, footpaths and cycle path will become the responsibility of Kildare County Council.

8. Summary of issue raised - Lack of clarity regarding hedging, screening and boundary treatment.

Response to issue raised

Section 15.6.3 of the EIAR states the following - *“17. At Confey GAA Club the existing pitch will be adjusted, safety net reinstated and the permanent boundary established at the new boundary line.”*

Hedging, screening, walls and other details can be agreed as part of the overall accommodation works.

9. Summary of issue raised - Lack of detail in relation to finished road levels.

Response to issue raised

Drawings showing the proposed and existing road levels are provided in the Draft Railway Order Book 3: Structures Plan, showing the details for the road works at Leixlip Confey. The proposed road levels will be similar to the existing road levels north of the rail and canal.

10. Summary of issue raised - Lack of detail provided re. new lighting along scheme works.

Response to issue raised

Lighting is already provided along the existing carriageway. New and replacement lighting will be provided to light the existing road and new pedestrian and cycle facilities. Lighting and other details will be designed and agreed with Kildare County Council during the detailed design phase once the scheme has received approval.

4.77 Ref. No.78 – Env77 – Stephen Collins & Gail Collins

Representative – Not Applicable

4.77.1 Submission, Location – depot

Issues Raised

1. Equine impacts
2. Noise
3. Flooding
4. Impact on water supply

4.77.2 Response to submission

1. Detailed responses to points 1 to 3 of this submission are provided in Section 2.7.10, 2.7.6 and 2.7.2 of this report.
2. Impacts on wells in the vicinity of the depot are not anticipated. In the development of the design of the proposed depot, embedded mitigation has been incorporated in the design, which is detailed in the EIAR, Chapter 11, Hydrogeology, Section 11.5.3.6. This mitigation includes ponds, pollution containment systems and establishment of wetland habitats in the design of flood compensatory storage areas, to limit the risk to groundwater. In advance of the construction contract, during construction and post construction, monitoring of boreholes and wells will be undertaken in the vicinity of the depot to monitor water quality.

4.78 Ref. No.79 – Env78 – Peter Joseph Fallon & Eimer Fallon

Representative – Not Applicable

4.78.1 Submission, Location – depot

Issues Raised

1. Equine impacts
2. Public Consultation
3. Noise
4. Construction Impacts Dust and Water Pollution

4.78.2 Response to submission

1. The lands in question are located in proximity to the M4 motorway. The equine expert notes that during his site survey of the area there was constant background noise of traffic from the M4 motorway, approximately 450 metres from the western end of the lane. The farm has a short northern boundary with the proposed rail depot and a long boundary on the western side with the proposed flood relief zone. These boundaries are covered with significant natural screening. The proposed location for the building is approximately 370 metres from the southern boundary of the proposed development, which will consist of a screened roadway servicing the site.

2. Further, detailed responses to points 1 to 4 of this submission are provided in Section, 2.7.10, 2.2.2, 2.7.6 and 2.7.13 of this report.

4.79 Ref. No.80 – Env79 – Patrick Fallon

Representative – Not Applicable

4.79.1 Submission, Location – depot

Issues Raised

1. Access and Road at Ballycurraghan
2. Equine impacts
3. Noise
4. Drainage and Flooding
5. Impact on Wells

4.79.2 Response to submission

1. Detailed responses to points 1 to 4 of this submission are provided in Section 2.7.3, 2.7.10, 2.7.6 and 2.7.2 of this report.
2. Impacts on wells in the vicinity of the depot are not anticipated. In the development of the design of the proposed depot, embedded mitigation has been incorporated in the design, which is detailed in the EIAR, Chapter 11, Hydrogeology, Section 11.5.3.6. This mitigation includes ponds, pollution containment systems and establishment of wetland habitats in the design of flood compensatory storage areas, to limit the risk to groundwater. In advance of the construction contract, during construction and post construction, monitoring of boreholes and wells will be undertaken in the vicinity of the depot to monitor water quality.

4.80 Ref. No.81 – Env80 – Paudie Galvin (Gheel Autism Services CLG)

Representative – Not Applicable

4.80.1 Submission, Location – depot

1. Access and Road at Ballycurraghan
2. Drainage and Flooding
3. Noise - autistic people supported in Ballycurraghan have heightened sensory needs and this development will cause them distress during construction. Following its completion, there will be ongoing noise with trains movements meaning that their service will not be suitable to provide support to autistic people in the future, rendering the property unsuitable.
4. Activity along the lane with its access to the new depot will be vast and cause their resident's unacceptable distress while the people that they support required road access to attend hospital, medical appointments, social activities etc., and this will be severely curtailed by the sheer volume of activity accessing the site.

4.80.2 Response to submission

1. Detailed responses to points 1 to 2 of this submission are provided in Section 2.7.3 and 2.7.10 of this report.
2. The site-specific flood risk assessment undertaken for the scheme considered both the existing flood regime and the impact of the proposed development on flooding and the associated risk. The flood maps are shown in Appendix 12 of the SSFRA. As described in the SSFRA the primary cause of

flooding between Maynooth and Kilcock appears to be insufficient capacity in the existing railway/canal culvert conveying the Lyreen and historic modifications to the Ballycaghan stream. As depicted in the existing floodplain of the Ballycaghan stream, the post development flood extents are effectively unchanged from the existing scenario. The scheme hydraulic modelling indicates that the Gheel Autism centre lands are currently at risk of flooding in the 1 in 100 year flood and more severe events. Flood risk to the site will remain irrespective of the proposed development.

3. The noise assessment contained in Chapter 14 of the EIAR is based on published guidance and criteria to protect the environment from noise emissions. It is acknowledged that the guidance in that regard does not take into account the potential impact on more sensitive groups. Notwithstanding this with respect to this particular location baseline noise readings have been carried out and referred to in Table 14-18 at location N56 which is immediately adjacent to Gheel Autism. The result of this indicates that existing ambient noise levels are of the order of 48dB(A) during the day and 44dB(A) at night.

   Section 14.5.4.6.8 of the EIAR details the assessment of noise from the depot once it is in operation. This is based on measurements taken from existing IÉ depot operations and concludes that at Gheel Autism the noise level is less than 45dB(A). This indicates a low risk of significant changes to the noise environment in future,

4. Access to the depot will not be on the existing lane serving the house which will remain as an access lane serving the properties along it. Access to the depot will be from the realigned R148 to the north and the realigned L5041 from the south. Access to the property will continue along the existing lane which will be connect to the realigned L5041.

4.81 Ref. No.82 – Env81 – Gary Harpur

Representative – Not Applicable

4.81.1 Submission, Location – depot

1. Public Consultation
2. Access and Road at Ballycurraghan
3. Depot Location
4. Noise
5. Construction Impacts Dust and Water Pollution
6. Security
7. Habitat and Biodiversity
8. Insufficient details of depot on drawings
9. Drainage and Flooding
10. Flooding of property - Gheel Autism Services CLG
11. Noise impacts at property of Gheel Autism Services CLG

4.81.2 Response to submission

1. Detailed responses to points 1 to 9 of this submission are provided in Section 2 of this report.
2. Response to Point 10 as per Ref. No.81 – Env80 Response No 3.
3. Response to Point 11 as per Ref. No.81 – Env80 Response No 4.

4.82 Ref. No.83 – Env82 – Patrick Comerford

Representative – Not Applicable

4.82.1 Submission, Location – depot

1. Public Consultation
2. Access and Road at Ballycurraghan
3. Depot Location
4. Noise
5. Construction Impacts Dust and Water Pollution
6. Security
7. Habitat and Biodiversity
8. Insufficient details of depot on drawings
9. Drainage and Flooding
10. Flooding of property - Gheel Autism Services CLG
11. Noise impacts at property of Gheel Autism Services CLG
12. Insufficient Archaeological assessment of depot site

4.82.2 Response to submission

1. Detailed responses to points 1 to 9 of this submission are provided in Section 2 of this report.
2. Response to Point 10 as per Ref. No.81 – Env80 Response No 3.
3. Response to Point 11 as per Ref. No.81 – Env80 Response No 4.
4. The depot site, as with the whole scheme, has been subject to a full archaeological assessment in terms of the analysis of all relevant baseline resources and field inspections. Approximately half the site was available for geophysical survey, whilst access to the reminder was not granted by the landowner. The additional geophysical survey, followed by a programme of archaeological testing, will be carried out prior to any construction works commencing (AAP27 mitigation measures Table 20-35 of the EIAR).

4.83 Ref. No.84 – Env83 – Cathleen Herbert

Representative – Not Applicable

4.83.1 Submission, Location – depot

1. Public Consultation
2. Access and Road at Ballycurraghan
3. Depot Location
4. Noise
5. Construction Impacts Dust and Water Pollution
6. Security
7. Habitat and Biodiversity
8. Insufficient details of depot on drawings
9. Drainage and Flooding
10. Flooding of property - Gheel Autism Services CLG
11. Noise impacts at property of Gheel Autism Services CLG
12. Insufficient Archaeological assessment of depot site

4.83.2 Response to submission

1. Detailed responses to points 1 to 9 of this submission are provided in Section 2 of this report.
2. Response to Point 10 as per Ref. No.81 – Env80 Response No 3.
3. Response to Point 11 as per Ref. No.81 – Env80 Response No 4.

4. Response to Point 12 as per Ref. No.83 – Env82 Response No 4.

4.84 Ref. No.85 – Env84 – Una Phillips (Maynooth Community Council)

Representative – Not Applicable

4.84.1 Submission, Location – depot

1. Closing of Jackson's Bridge to vehicular traffic and diverting the L5041 over the new bridge at the depot will increase journey times significantly and compound the misery for those commuting from west of the town.
2. The new bridge for the DART+ and the bridge for the proposed ring road are very close together along the canal and serve essentially the same purpose. Feel that with more coordination between the authorities a better and more cost-effective solution could be found.
3. The proposed road layout will force depot traffic through Maynooth or Kilcock. States that it would make more sense to have a new M4 interchange to give direct access to the motorway, thus avoiding the need to go through either town.
4. Where trees and vegetation have to be removed, that new planting with native species replace them.
5. Requests that Maynooth station be made fully accessible including the bridge and all other access points.
6. Pike Bridge: ask for a railing more in keeping.
7. If the DART+ is not extended to Kilcock, more commuters will drive to Maynooth to join the train. This will increase the pressure on parking and further exacerbate the traffic situation in an already seriously congested town.
8. Closing the Blakestown level crossing for pedestrians and cyclists is against all the principles of active travel. The draft Kildare CDP includes Objective TM 026 regarding this crossing. Asks for IÉ and KCC to combine and resolve this issue.
9. Draft Kildare CDP refers to a park and ride facility "sited to the west of Maynooth". States that the park and ride facility need to be provided in conjunction with the DART+ as the project will attract more out-of-town commuters to drive to Maynooth.

4.84.2 Response to submission

1. The realignment of the local road L5041 is not projected to impact on volume of vehicular traffic on that road. The traffic generated by the depot was identified in the EIAR as having minimal impact as majority of trips to and from the new depot will be made outside of rush hour due to shifts etc and will be made mainly off the R148. The diversion of the realigned L5041 will increase the journey by a maximum of 3 minutes.
2. As identified in the Maynooth Local Area Plan 2013-2019 (Amendment No.1). the location of map based Road Objective (i) – (vii) on Map 1 which cumulatively form the Maynooth Outer Orbital Road (MOOR) are 'indicative only'. At the time of preparation of the Railway Order application for the DART+ West project, the planning stage of the MOOR did not commence. The project team on MOOR will therefore need to be cognisant of the DART+ West project proposals, and incorporate the design of the project, where appropriate.
3. The traffic volumes generated by the depot and the construction thereof do not necessitate the need for a new junction on the M4, however the layout of the proposed access roads to the depot could connect to a future Junction on M4 between Kilcock and Maynooth.
4. The planting proposed is a mix of local species integrated into the local environment, limiting the visual impact of the depot facilities. The EIAR Volume 2 Chapter 5 Landscape and Visual Amenity proposes establishment of new native tree (including fastigiate trees), shrub and hedgerow planting.
5. The accessibility of Maynooth station will form part of the scope of other projects currently being progressed by Irish Rail and is outside the scope of the DART+ West project. An accessibility project is currently underway examining access to the pedestrian bridge at Maynooth station.

6. The proposed parapet modifications have been developed taking into account the necessary engineering and heritage requirements.
7. Parking control in Maynooth town is a matter for the local authority.IÉ will engage with the local authority, providing them with the relevant information to facilitate control measures it may elect to put in place
8. As part of the Leixlip LAP 2020 -2023, lands to the east of the level crossing are zoned as the 'Collinstown Strategic Employment Lands' which will be subject to a Masterplan (Objective COL 1.1) Kildare CDP 2017- 2023. This Masterplan will include a study of the required transportation provisions to be developed to accommodate the future growth of the area and will be considered as part of those plans.
9. DART+ West project does not preclude the development of said infrastructure and it is outside of the scope of this project to consider such proposals at this time. CIÉ and IÉ will continue to work with all local authorities as appropriate.

4.85 Ref. No.86 – Env85 – William J. Smyth

Representative – Not Applicable

4.85.1 Submission, Location – depot

1. Depot Site Selection
2. Light and noise pollution impacts
3. Impacts on Ecology and Biodiversity
4. Depot proposal at variance with Kildare County Development Plan
5. Impacts on the Royal Canal Greenway
6. Impacts on the Residential area 500m to the west of the depot in Kilcock

4.85.2 Response to submission

1. Detailed responses to points 1 to 3 of this submission are provided respectively in Section 2.7.1, 2.7.6 and 2.2.6 of this report.
2. With regard to planning, the proposed depot is located on agricultural lands outside the development boundary of Kilcock Local Area Plan and the Maynooth Local Area Plan. The Kildare County Development Plan (CDP) 2017 – 2023 was consulted and these lands are unzoned. There are no land use zoning objectives identified for this area or unzoned agricultural lands.

   At the time of writing, the draft Kildare County Development Plan 2023 – 2029 was prepared and published for public display on 14th of March 2022. The main policies and objectives relevant to the DART+ Programme are as follows: TM P1: Promote sustainable development through facilitating movement to, from, and within the County that is accessible to all and prioritises walking, cycling and public transport. TM P3: Promote the sustainable development of the county by supporting and guiding national agencies in delivering major improvements to the public transport network and to encourage a shift from car-based travel to public transport that is accessible for all, regardless of age, physical mobility, or social disadvantage. TM O9: Facilitate and secure the delivery/implementation of the public transport projects that relate to County Kildare as identified within the Integrated Implementation Plan (2019-2024), (or any superseding document), including the DART+ programme (Including DART+ West and DART+ South West), BusConnects and the light rail investments. TM O44: support the electrification of intercity routes

3. The Royal Canal Greenway at this location runs parallel to and to the north of the Royal Canal and rail line. The EIAR indicates the impacts during the Construction Phase in Chapter 15, Section 15.6.2.1 and the Operational Phase under Section 15.6.3.1. In both cases the level of magnitude of impact is assessed as high and recognises the long-term impact of the depot on the landscape in this area. In the EIAR under Section 15.6.3.1, Specific Mitigation Measures, measures to screen the depot and related infrastructure are covered under points 18, 19 and 20.

4. The new residential area to the west of the depot along with the existing houses adjacent to them were assessed as part of the EIAR as part of the noise and visual assessments. No specific mitigation for noise was identified while mitigation for screening the depot is provided Chapter 15, Section 15.6.2.1.

4.86 Ref. No.87 – Env86 – Brian O'Hara & Anne Marie O'Hara

Representative – Not Applicable

4.86.1 Submission, Location – depot

Issues raised in submission are addressed with their responses below.

4.86.2 Response to submission

1. Summary of issue raised - The depot would considerably alter the environs of their home to the detriment of their residential amenity and the construction of an industrial site of this nature would completely alter the landscape.

   Response to issue raised

   The landscape and visual impact assessment acknowledges that the proposed development will result in a significant change in the existing landscape, including in the vicinity of Doondara House. However, while the proposed access road is adjacent to the house, the proposed depot is located over 400m east of Doondara House and considerable areas of planting is proposed along the access road and along the western side of the main depot area. Specific screen planting is also proposed to the east and south of the house.

2. Summary of issue raised - the depot could have a significant impact on their long-term health and well-being depending on noise levels at construction and during future use.

   Response to issue raised

   The noise assessment contained in Chapter 14 of the EIAR is based on published guidance and criteria to protect the environment from noise emissions. This takes into account the impact on health. Noise emissions from the construction and operation of the depot are not predicted to be of a level that would be associated with significant noise impacts.

3. Summary of issue raised - Measures should be taken to ensure adequate drainage to reduce the risk of flooding into their garden.

   Response to issue raised

   Detailed response to this issue is provided in Section 2.7.2

4. Summary of issue raised - Would prefer trees of lesser height and submit that a formal agreement with IÉ is required to ensure that light to their property is not blocked unnecessarily into the future.

   Response to issue raised

   Noted that the owners would prefer a lower height of screen planting which can be provided in agreement with them.

5. Summary of issue raised - the EIAR has not taken into account the proximity of the test track to their home in terms of potential noise or light pollution, or the potential safety risks in the event of derailment. Consider locating the test track and platform further east on the site.

Response to issue raised

The test track will be used during the day once trains have been serviced to check and confirm that they are working to specification. Train movements at the western extent of the test track will be slow moving, compared to the faster movement of trains on the adjacent Dublin Sligo rail line, therefore the noise impact of the test track when in operation is expected to be equivalent to or lower than the existing rail line adjacent to this property.

During testing the trains will approach the western platform at speeds of 5-10 km/h to commence their tests. From here they will head in towards eastern platform undertaking their test runs accelerating to a maximum speed of 90 km/h before braking to stop at the eastern platform.

This is a crucial task for checking the safety of the train fleet and will not interfere with the remainder of the depot operations and it is not anticipated to be a daily operation.

In terms of lighting, it has the same as the railway yard area (10 lux, Uo=0.4)

To ensure safe operation, speeds will be limited to lower levels when travelling in a western direction while buffer stops will be placed at both ends of the track.

Relocation of the test track within the site without disturbing other operating requirements is not feasible. The test track itself is 1.24 km length and has been placed on the west of the main railway access to depot to take account of the remainder of the depot layout.

6. Summary of issue raised - Figure 4-240 in Chapter 4 of the EIAR does not show the location of the SEB / PSP buildings and therefore it appears that they were not considered in the EIA.

   Response to issue raised

   The location of SEB / PSP buildings and buildings dimensions are shown in the Book 3 Structures Plans / Specific Locations / 20 Depot pages 9, 10 and 11 drawings as SET Technical Buildings Millerstown.

7. Summary of issue raised - SEB/PSP buildings not shown during consultation stage and not considered in EIAR. States that there is no need for electrical installations of this nature (SEB and PSP buildings) to be located in close proximity to their home, and have concerns in respect of the safety aspects of such building at the proposed location.

   Response to issue raised

   There are two adjacent buildings (SEB and PSP). The PSP needs to be close to the SEB to provide power supply. The SEB is a signalling building. The SEB building is located at the western end of the depot, as its function is to provide the signalling interface with the line to Sligo on the western end of the depot.

   This SEB building, although located inside the depot boundaries, belongs functionally to the mainline. Alternative locations outside the depot, to the west and close to the tracks were considered but no others reasonably sized areas could be identified that met these criteria while also providing for a future potential western connection to the depot. Having a mainline building (maintained by IÉ-SET, maintainers of the mainline) inside a depot (maintained by IÉ-CME) requires the creation of security/organizational boundaries with independent access, something that can only be met in the practice, if the building is in one side, not in the middle of the depot, and for the reasons mentioned above, the optimal place is in the west part of the depot. The access to the buildings is double fenced (depot external fence and additional fence for the SEB+PSP set). The SEB hosts signalling equipment and the PSP provides low-voltage power to the SEB.

   The options considered for the location of the substations and subsequent technical buildings were presented during Public Consultation No.2 along with the Option Selection Report available at Option Selection Report - Volume 2: Technical Report (dartplus.ie)

8. Summary of issue raised - Fencing is insufficient to ensure all boundaries remain intact at all times and inaccessible to children. Recommend/request a boundary wall to the south and east of property.

Construction of a boundary wall to the south and east of their property running up to the emergency entrance, preferably in the early stages of the development. Also require adequate space to be left between their hedge and the wall so that they have continued access for hedge maintenance purposes. The responsibility for maintenance and monitoring the perimeter should rest with CIÉ.

Response to issue raised

CIÉ will continue to engage affected stakeholders to ensure a solution is reached that is agreeable to all parties and to agree sequence and appropriate boundary treatment.

9. Summary of issue raised - Objects to the location of the emergency exit route so close to their property given the vast amount of space available on site and the current problems with road layout. Notwithstanding their objective, any entrance in the vicinity should be in keeping with the local landscape and should be secure but minimal in stature.

   Response to issue raised

   The proposed access is only for emergency service access and will not be us for general access or during the construction period other than for the construction of the access itself.

10. Summary of issue raised - Objects to the location of the emergency exit route so close to their property given the vast amount of space available on site and the current problems with road layout. Notwithstanding their objective, any entrance in the vicinity should be in keeping with the local landscape and should be secure but minimal in stature.

    Response to issue raised

    The proposed access is only for emergency service access and will not be us for general access or during the construction period other than for the construction of the access itself.

11. Summary of issue raised - The EIAR makes no reference to the potential impact of noise or vibration at the location of their home. They are particularly concerned by the noise levels which would arise from the location of the proposed rail access to the depot, the test track and the emergency access road.

    Response to issue raised

    Section 14.5.4.6.8 of the EIAR details the assessment of noise from the depot once it is in operation. This is based on measurements taken from existing IÉ depot operations and concludes that beyond the boundary of the depot the noise level is less than 45dB(A). This indicates a low risk of significant changes to the noise environment in future.

    Train movements at the western extent of the test track will be slow moving, compared to the faster movement of trains on the adjacent Dublin Sligo rail line. Therefore the noise impact of the test track when in operation is expected to be equivalent to or lower than the existing rail line adjacent to this property

12. Summary of issue raised - Concerned about the noise during the construction phase of the project, and ask that restrictions are placed on the hours of construction in the immediate vicinity of their home.

    Response to issue raised

    Section 14.5.3 assesses the construction phase impact of the project. The majority of the construction work associated with the depot is not expected to generate sudden loud noises and will instead be characterised by engine noise from construction machinery. However, some activity is identified as having a potentially significant impact for short periods of time. Mitigation measures are outlined in Section 14.6.1 to reduce these impacts. Depot construction hours will be during daytime hours for all works not adjacent to the existing rail track. The EIAR Volume 2, Chapter 5, Section 5.2.1 sets out the following daytime working hours for the project:

    - Monday to Friday: 12 hours. From 07:00 to 19:00.

- Saturday: 6 hours. From 07:00 to 13:00.
- Sunday/Bank Holidays: none except were agreed in advance with the local authority and CIÉ or as part of a possession/closure.

The EIAR stated that the times listed above are indicative and proposed working hours will be finalised at detailed design and construction planning stage.

13. Summary of issue raised – The EIAR Ch 15 refer to the introduction of night-time lighting. Unclear if such lighting will border their property and state that this should be clarified by IÉ and light pollution kept to an absolute minimum.

Response to issue raised

Information on lighting is provided in in the EIAR Volume 2 Chapter 4 Section 4.11.12.10 External lighting. In addition, within the EIAR Volume 3B Photomontages, Part 5 View Locations 35 to 46, sheet 90 to104 include views showing night-time conditions at the depot area. Lighting levels over the emergency access road and in the vicinity of the property will be at 10 lux, Uo=0.4.

4.87 Ref. No.88 – Env63 – Catherine Day & Alan Rudden

Representative – Not Applicable

4.87.1 Submission, Location – Holly Cottage Westmanstown

1. Noise
2. Impacts on Biodiversity
3. Construction stage impacts

4.87.2 Response to submission

1. Detailed response to point 1 of this submission is provided in Section 2.2.12.
2. Detailed response to point 2 of this submission is provided in Section 2.2.6.
3. During construction, the contractor will be required to prepare a Construction Environmental Management Plan (Appendix 5.1 of Volume 5 of the EIAR) which presents the proposed approach and application of environmental management and mitigation for the construction of the proposed development. It aims to ensure that negative effects from the construction phase of the proposed development, on the environment and the local communities, are avoided, reduced and mitigated. The implementation of the requirements of the CEMP will ensure that the construction phase of the project is carried out in accordance with the commitments made by CIE/IÉ in the Railway Order application process for the proposed development, and as required under the railway order.

   A liaison officer will be available to allow members of the public or interested parties to participate in advance of works and make observations over issues during the construction period.

4.88 Ref. No.89– Env69 – Padraic Lennon & Carmel Lennon (Blakestown Residents)

Representative – Not Applicable

4.88.1 Submission, Location – Blakestown

1. The project officials never informed the residents and general users of the Blakestown level crossing of the DART + West project before consultation no.1 ended. The level of communication between IÉ

and the public in relation to this project is very unsatisfactory. Residents in this area were not made aware of the initial consultation process and therefore were unable to make any submissions.

2. It's their understanding that any proposed alterations to public access ways are to be notified to the public and despite their communications to the project team there is still no notice (within the vicinity of the site) of the intention to close Blakestown Level crossing.
3. Traffic survey in 2018 almost 5 years ago - this is totally out of date as many new developments have since been opened in the greater Leixlip area, while some land use designations have been assigned to lands south of the rail line.
4. The lane (L81206) has served the community of Kilmacredock, Barrogstown and the surrounding area for generations and if closed will cause untold disruption, inconvenience, cost and may also lead to potential Health and Safety issues (cul-de-sac – anti-social behaviour, dumping etc.)
5. Should this crossing be permanently closed the community will be cut off from using Public Transport.
6. Retain Level Crossing or provide a suitable alternative.

4.88.2 Response to submission

1. Detailed response to point 1 of this submission is provided in Section 2.2.2.
2. Due to the safety critical nature of level crossings for road users, there is statutory signage that must be displayed on the approach to level crossings to alert the road user, this includes signage, flashing lights and sounds. It is not recommended from a safety perspective to place any other signage at level crossings. Details of the proposed closure of Blakestown Level Crossing was included in documents published for public consultations number one and two as well as the draft Railway Order Application that was submitted to An Bord Pleanála.
3. Traffic and Pedestrian / cyclist counts were undertaken at the Blakestown level crossing in February 2019. Some supplementary traffic counts were also carried out in November 2021.The Base year analysis is comparable with 2022 as traffic levels have recovered since the travel restrictions caused by pandemic.
4. Chapter 7 Population Section 7.5.4.6.4 states that the level crossing is located in a rural area with low volumes of traffic utilising the crossing. The potential impact on community severance particularly for residential, agricultural properties either side of the level crossing is *negative, significant and permanent.* As part of the Leixlip LAP 2020 -2023, lands to the east of the level crossing are zoned as the 'Collinstown Strategic Employment Lands' which will be subject to a Masterplan (Objective COL 1.1) Kildare CDP 2017-2023. This Masterplan will include a study of the required transportation provisions to be developed to accommodate the future growth of the area and will be considered as part of those plans. Mitigation measures have been included in Chapter 7 and Chapter 23 Human Health, Section 23.6.2 Operation Stage Mitigation. Whereby, detailed design will integrate public safety design measures to reduce opportunities of anti-social behaviour. As far as practicable these measures shall include the use of active and passive surveillance measures while CIÉ shall consult with An Garda Síochána and Kildare County Council at the detailed design stage to determine the most appropriate measures.
5. Detailed response to point 1 of this submission is provided in Section 2.6.5.
6. Detailed response to point 1 of this submission is provided in Section 2.2.5.

4.89 Ref. No.90 – Env14 – Cyclist.ie

Representative – Not Applicable

4.89.1 Submission, Location – Scheme Wide

Issues raised in submission are addressed with their responses below.

4.89.2 Response to submission

1. Summary of issue raised - Careful design and inclusivity for cycle parking at railway stations, particularly at Spencer Dock.

   Response to issue raised

   Currently, there is a covered parking area for 60 bicycles at Spencer Dock to the south of the Luas station. The inclusion of the DART+ station in the area will increase the demand for bicycle parking in the area. The enlargement of the existing parking is contemplated in the DART+ West project with the addition of 120 new parking spaces resulting in a covered bicycle parking of 180 spaces.

2. Summary of issue raised - Improvement at the junctions modified as part of the Order.

   Response to issue raised

   The proposed junctions are designed to current NTA standards to improve cyclists and pedestrian safety as much as possible within the constraints of the roadway.

3. Summary of issue raised - Replacement of the inadequate extended ramp designs at overpasses with wide, shallow and well-lit underpasses.

   Response to issue raised

   The proposed preferred design has been determined through multi criteria assessment and multiple public consultations.

   The provision of underpasses for cyclists and pedestrians, in the majority of instances, was deemed not viable due to the level of the canal adjacent the railway line. Long descending approach ramps would be required. In most instances, the spatial constraints precluded this option.

4. Summary of issue raised - The lengthy ramps with hairpin bends at Ashtown, Coolmine and Clonsilla Stations and at Porterstown Road (Kennan Bridge replacement) offer a very poor quality of service for people using bikes. They must be omitted and replaced with underpasses of less than 5% gradient and lane width that allows two people on bikes to travel side-by-side. Artificial lighting must ensure a higher lux level than surrounding areas, to discourage anti-social behaviour.

   Response to issue raised

   The proposed preferred design has been determined through multi criteria assessment and multiple public consultations.

   The provision of underpasses for cyclists and pedestrians, in the majority of instances, was deemed not viable due to the level of the canal adjacent the railway line. Long descending approach ramps would be required. In most instances, the spatial constraints precluded this option.

   The hairpins are provided at radius that cyclists can navigate at reasonable speed. As these overbridges are shared pedestrian and cyclist bridges, the hairpins will also reduce cyclist speeds, providing a safer environment for pedestrians.

5. Summary of issue raised - At Barberstown and other underpass locations, separate underpasses with minimal level changes, or revisions to the underpass designs, must be required by ABP.

   Response to issue raised

   All gradients provided in the proposed designs are within current standards and guidelines.

6. Summary of issue raised - At Navan Road Parkway, an underpass should be constructed allowing users of the Royal Canal Greenway to access the station from either side.

   Response to issue raised

   This is outside the scope and funding of the DART+ West project.

7. Summary of issue raised - The Clonsilla Road/ Diswellstown Road junction and Porterstown Link Road/ Diswellstown Road - the junction designs appear to synchronise straight-ahead cycling traffic with left-turning motor traffic, which offers real and significant risks. The junction of Luttrelstown Road with Porterstown Link Road a safe method of turning right onto Porterstown Link Road (e.g. 'left-hook box' and cycle-specific right-turning signal) should be included.

   Response to issue raised

   The design will be reviewed at later design stages to improve cyclist safety.

8. Summary of issue raised – Further proposals
   - The existing extended ramp arrangement at Hansfield Station is inadequate and should be improved as part of the Order.
   - At Dunboyne Station the opportunity should be taken to provide cycle infrastructure people on bikes to cross a narrow road of this nature offers an inadequate level of service.
   - Permanent physical segregation of cycle lanes should be included at the R148 at Leixlip Louisa Bridge.
   - Connections between the rail and Royal Canal Greenway at Maynooth Station are rudimentary and the opportunity should be taken to improve them.

   Response to issue raised

   These proposals are outside the scope and funding of the DART+ West project.

4.90 Ref. No.91 – Env15 – Denis M-Baker (IWAI)

Representative – Not Applicable

4.90.1 Submission, Location – Scheme Wide

Issues raised in submission are addressed with their responses below.

4.90.2 Response to submission

1. Summary of issue raised - Newcomen lifting Bridge, located below Lock 1 at west end of Spencer Dock, blocks entry to canal by boats unless manually lifted.

   Response to issue raised

   The operation of the Newcomen lifting bridge is not altered/modified by the DART + West project.

2. Summary of issue raised - First submission includes description of Bridge and suggests replacement options (lifting bridge, swinging bridge, drop lock).

   Response to issue raised

   This is outside the scope of the DART+ West project

3. Summary of issue raised - Currently this bridge obstructs passage of boats through canal, and is only lifted by apt.

   Response to issue raised

   The operation of the Newcomen lifting bridge is not altered/modified by the DART + West project.

4. Summary of issue raised - IWAI Royal Canal opposed to proposed elevated walk/cycleways. Monstrous edifices will completely overshadow the canal and it's environs which is a proposed Natural Heritage Area (pNHA). Appear to be a cheap solution where pedestrian bridges and improved lifts would suffice

Response to issue raised

Chapter 15 Landscape and Visual Amenity of the EIAR assesses the likely effects from construction and operational phases of the proposed bridges on landscape and visual amenity. The assessment included (but limited to) a review of all relevant planning policy allowing for the identification of designated and potential significant/ sensitive landscape and visual areas. An overview of the landscape planning context is presented in Section 15.4.2.2 Fingal Development Plan 2017-2023 which has been taken into consideration in the assessment.

Impact on Royal Canal pNHA & wildlife are addressed under Section 2.2.6 of this report.

5. Summary of issue raised - IWAI Royal Canal opposed to palisade fencing atop railway bridges.

Response to issue raised

The Irish Rail standards for parapets over electrified lines requires that parapets as a minimum are opaque, a vertical obstacle, 1.20m high, supplemented with an element up to 1.80m with a maximum mesh opening of 12mm. Palisade fences are not proposed over the railway bridge as is does not meet these requirements particularly with regard to limiting direct contact.

4.91 Ref. No.92 – Env16 – Dublin Commuter Coalition

Representative – Not Applicable

4.91.1 Submission, Location – Scheme Wide

Issues raised in submission are addressed with their responses below.

4.91.2 Response to submission

1. Summary of issue raised - Despite need for improved transport link, no new stations are being built aside from Spencer Dock.

Response to issue raised

The provision of additional new stations is outside the scope of the DART+ West project.

2. Summary of issue raised - Accessibility on current DART network is poor. Dublin Commuter Coalition (DCC) would like to see provision being made for step free access from platform to train.

Response to issue raised

Accessibility of DART carriages are outside the scope of the DART+ West project. The new DART+ Fleet is being procured as part of a separate project but one of the primary objectives of the design of the DART+ Fleet is to provide improved accessibility for train users. Low level flooring and entrance doors reduce the stepping height for passengers and improve access for persons with reduced mobility. The new carriages will prioritise independent access, with each of the low-height doorway thresholds being equipped with an automatic retractable step and offering the potential for unassisted level access from suitable platforms, aligned with platform enhancements.

3. Summary of issue raised - Several stations proposed in scheme currently have no lifts- unacceptable.

Response to issue raised

The provision of lifts across the IÉ network is outside the scope of the DART+ West project. Furthermore, During the public consultations, there was significant negative feedback received in relation to the reliability and availability of lifts for a public thoroughfare. Therefore, in the subsequent design development of the overbridges, it was required to incorporate a bridge with stairs and ramps,

to ensure full accessibility for pedestrians, vulnerable users, and cyclists. During detailed development aesthetic refinement can be carried out to soften the appearance of the bridge.

4. Summary of issue raised - Current AV system needs to be replaced in line with RTP info system.

   Response to issue raised

   The provision of AV systems is outside the scope of the DART+ West project.

5. Summary of issue raised - Secure bicycle parking at all stations.

   Response to issue raised

   DART+ West is an infrastructure capacity project to facilitate the expansion of the DART. Alterations to existing stations, except where required to facilitate the DART+ West project, are not within the scope of the project. Where alterations to stations are being implemented to facilitate the DART, increased cycle parking has been included in the Project.

   Separate to the DART+ West project and outside this DART+ West draft Railway Order, Iarnród Éireann are progressing a number of projects including a Multimodal Interchange Project. The multimodal project will assess all stations throughout the network with a view of implementing strategies at stations where there is need for modifications that will have an impact on multimodal travel and station access. This project will assess a variety of multimodal options at stations including but not limited to the provision of secure bicycle parking and shared mobility services. Iarnród Éireann are working to progress and finalise the Multimodal Interchange Strategy before the end of Q4 2023 with a view to developing an Implementation Plan subject to funding constraints.

6. Summary of issue raised - IÉ must ensure proper tactile paving, safe crossings and dished paving is provided at all stations.

   Response to issue raised

   All upgrades to public roads and spaces have been designed with the provision of tactile paving and general DMURs design principles. A Road Safety Audit Stage 1 has been undertaken on road designs, where appropriate at this stage. In future design stages, IÉ will continue to liaise with the relevant stakeholders and undertake further Road Safety Audits and Road User Audits as the detailed design is developed.

   Within the stations, tactile paving surfaces will be in compliance with the Irish Building Regulations TGD- Part M Access and Use. Summary of issue raised - Secure bicycle parking at all stations.

7. Summary of issue raised - CIE must ensure that cycling infrastructure is fully segregated.

   Response to issue raised

   Cycling infrastructure provided as part of DART+ West has been provided as segregated cycle tracks as much as practicable. The majority of interventions on the public roadway have been provided as segregated cycle tracks with the exception of a number of short sections of shared areas at, for example, junctions.

8. Summary of issue raised - CIE must ensure that works carried out deliver the highest possible quality safe walking and cycling infrastructure.

   Response to issue raised

   The details of the walking and cycling finishes and textiles will be developed during the detailed design phase of the project. These will be in compliance with the relevant standards including the National Cycle Manual, DMURS and relevant Local Authority standards. A Road Safety Audit Stage 1 has been undertaken on road designs, where appropriate at this stage. In future design stages, CIÉ will continue to liaise with the relevant stakeholders and undertake further Road Safety Audits and Road User Audits as the detailed design is developed.

9. Summary of issue raised - Would like to see Royal Canal Greenway be fully complete, with increased permeability to allow greater numbers to access the DART.

   Response to issue raised

   While the Royal Canal Urban Greenway (RCUG)Project is being progressed by Fingal County Council and not within the scope of DART+ West, the IÉ design team have had extensive consultations with the RCUG design team and will continue to do so through the future design stages to ensure that both projects complement each other. It should be noted that DART+ West intends to provide a shared cyclist and pedestrian ramp linking the RCUG to road level at the Canal Bridge at Clonsilla Station. This will be a significant improvement on the stepped access which is currently the only access/egress point to the tow path in the vicinity of Clonsilla Train Station.

10. Summary of issue raised - IÉ should consider the importance of creating visually + aesthetically pleasing stations and platforms, which create feeling of safety.

    Response to issue raised

    The proposed new station at Spencer Dock, the station enhancements at Connolly and replacement station interventions at Ashtown an Coolmine have all considered the visual and aesthetic considerations and are presented within the EIAR. Further visual details and finishes will be developed during the detailed design phase of the project. These finishes will comply with the Irish Building Regulations TGD- Part M Access and Use.

11. Summary of issue raised - Opposed to replacing the Bridge at Broombridge with modern bridge and believe stone bridge should be used to maintain vernacular style.

    Response to issue raised

    The initial preferred option was to re-use the original facing stone, but as the design was developed it became clear that this would not be feasible due to the technical constraints of the new construction. This resulted from the string course, which is an essential element of the existing composition. By the increasing the height of the arch this would distort its connection to the string course over the canal.

    The precast arch construction would reduce the existing voussoirs to cladding stones and the facing stone of the spandrels would also become cladding stones tied back to the concrete structure behind. The combination of all these factors made it very difficult to design or build stonework that would integrate with the original fabric on each side.

    After careful assessment it was decided to proceed with a concrete finish as this will sit most comfortably with the remaining original stonework. By providing a suitable colour and finish to the concrete, this will complement, not dominate the original structure.

    It is acknowledged that this precast arch deck option impacts on the protected railway bridge (NIAH reference 50060126), however engagement with a Grade 1 Conservation Architect has taken place to ensure that the reconstruction is done sympathetically and in keeping with the historic canal structure that sits alongside it.

12. Summary of issue raised - Spencer Dock is a good place to build modern cycle parking garage, as seen in Utrecht.

    Response to issue raised

    Currently, there is a covered parking area for 60 bicycles at Spencer Dock to the south of the Luas station. The inclusion of the DART+ station in the area will increase the demand for bicycle parking in the area therefore 120 additional new parking spaces will be provided.

13. Summary of issue raised - Opposed to lowering both road and pedestrian/cycling facility to the same level at Ashtown, stating the pedestrian /cycling facility need only be lowered as required, avoiding large unnecessary hill for pedestrians/cyclists.

Response to issue raised

It is understood the submission proposes that pedestrians and cyclists should be taken through the proposed underbridge along a separate corridor raised above road level by approximately 2.5m. It is considered this proposal would not be appropriate as access to Ashton house is required for vehicles, pedestrians and cyclists. A crossing of the road is therefore necessary at a common level.

14. Summary of issue raised - Recognise restrictions in extending DART + West to Kilcock, however they believe provision should be made as much as possible to allow future upgrade of station, including aesthetic upgrade.

    Response to issue raised

    A detailed response to this is provided in Section 2.2.14 of this report.

15. Summary of issue raised - Proposal to close level crossing at Clonsilla is welcome, however it is not clear if significant upgrade to the Clonsilla station will take place. Access for drivers must be provided to make up for closing of level crossing. furthermore, station should be made to look more attractive to users.

    Response to issue raised

    The upgrade of the Clonsilla station is outside of the current DART+ West scope.

16. Summary of issue raised - Highlights the need for North inner-city stations. New stations are suggested in Ballybough and Croke Park.

    Response to issue raised

    A detailed response to this is provided in Section 2.2.13 of this report.

4.92 Ref. No.92 – Env17 – Richard Dixon

Representative – Not Applicable

4.92.1 Submission, Location – Coolmine

All concerns raised are common issues dealt with in Section 2.

4.93 Ref. No.93 – Env18 – Conor O'Malley

Representative – Not Applicable

4.93.1 Submission, Location – Lucan

Submission relates to the provision of a new Lucan North Railway Station - the provision of which at this location is outside the scope of the DART+ West project.

4.94 Ref. No.94 – Env01 – An Tánaiste Leo Varadkar T.D

Representative – Not Applicable

4.94.1 Submission, Elected Representative

Request that the project should be conditional on minimal disruption, in as much as is possible, to home-owners, businesses and also the Ashtown Stable.

Response to issue raised

Noted, the EIAR sets out a suite of mitigation measures to avoid, reduce or mitigate impacts where possible.

4.95 Ref. No.95 – Env02 – Richard Boyd Barrett T.D Dublin

Representative – Not Applicable

4.95.1 Submission, Elected Representative

Issues raised in submission are addressed with their responses below.

4.95.2 Response to submission

1. Summary of issue raised - Connolly Station - Preston Street entrance needs to be a condition to any consent granted.

   Response to issue raised

   The provision of a new entrance to Connolly Station at Preston St. Forms part of the Railway Order Application, which was submitted to An Bord Pleanála.

2. Summary of issue raised - Croke Park - urged that An Bord Pleanála require Irish Rail to develop a station at this location as a condition to any consent granting upgrading of the Royal Canal line to DART standard. Phibsborough / Cross Guns Bridge (Glasnevin) - As with Croke Park, there is an obvious need to open a station without delay for social inclusion, systemic benefit, and to maximise return on state investment).

   Response to issue raised

   A detailed response to this is provided in Section 2.2.13 of this report.

3. Summary of issue raised - Kilcock It is strongly recommended that a station be opened in the town to serve this population - or failing that, a public passenger station should be opened at the depot nearby.

   Response to issue raised

   A detailed response to this is provided in Section 2.2.14 of this report.

4. Summary of issue raised - Docklands – Docklands be upgraded.

   Response to issue raised

   As part of the DART+ West project, Docklands Stations is being relocated approximately 200 metres to the southeast to Spencer Dock. This will enable the more frequent electrified DART service, improve connectivity with the Luas red line services and pedestrian access to the south city Docklands area.

5. Summary of issue raised - Dublin Ferry Port - extra inter city services to connect with the ferry.

Response to issue raised

Dublin Port is currently connected by rail for freight services only. As above any change to the status of this line would be a matter for the NTA. Spencer Dock Station, is within walking distance of the port and interchange from Intercity services for example, Maynooth, would make connection to the port possible.

6. Summary of issue raised - Spencer Dock / New Docklands Station – Due to Costs and risks these elements of the scheme should be deferred - and that this capital instead be spent on stations that need to be opened, such as at Croke Park, Phibsborough etc.

   Response to issue raised

   Relocation of Docklands Station is necessary to facilitate the projected increase in services that DART+ West will deliver. It will also promote better multimodal connectivity and active travel, which are key deliverables of the NTA's public transport strategy.

7. Summary of issue raised - Relationship of the DART West project to DART Southwest, and the lack of stations along the DART Southwest route - These two applications essentially relate to contiguous infrastructure belonging to the same company where services are to meet and will possibly overlap. Hence it is not understood why the proposal to electrify all Irish Rail lines in the Dublin region was split into two separate project applications.

   Response to issue raised

   DART+ West and DART+ South West deal with two different rail lines and two different geographical areas. They are both significant infrastructure projects of national importance, therefore it is appropriate that they are taken forward as separate projects. From a planning and construction point of view, if they were to run concurrently, it would be challenging to ensure that adequate resourcing is in place and also from an operational perspective it would have major impact on the services that we currently operate on both lines.

4.96 Ref. No.96 – Env03 – Paul Donnelly T.D Dublin West

Representative – Not Applicable

4.96.1 Submission, Elected Representative

Issues raised in submission are addressed with their responses below.

4.96.2 Response to submission

1. Summary of issue raised - Closure of the level crossing - It would make no sense whatsoever to close the level crossings when there would a very limited off-peak train service with no service throughout the night. It may also be possible that there will be advances in technology that would enable some of the more critically important level crossings to remain in situ into the future.

   Response to issue raised

   A detailed response to this is provided in Section 2.2.5 of this report.

2. Summary of issue raised - Ashtown - I would like to support the Martin Savage Park residents and the comments and recommendations made in their submission, especially in relation to the green space at the adjacent the estate in relation to the potential flooding issues and access of services vehicles.

Response to issue raised

Information contained within the SSFRA was collated from various sources including the OPW's record of historic flood events and consultations with Dublin City Council drainage division. No indication of flooding at Martin Savage Park was presented in the consulted sources.

The flooding appears to be derived from deficiencies in the surface water drainage network within Martin Savage Park. Irish Rail will liaise with Dublin City Council during the detailed design stage to confirm cause of flooding and facilitate remedial measures by Dublin City Council.

3. Summary of issue raised – Ashtown - Tunnel/underpass safety issues, I think this could be resolved with the installation of CCTV on the under pass.

Response to issue raised

It is intended that CCTV surveillance will be provided in the underpass. The IÉ Project Team will discuss with the Local Authority in relation to the provision of CCTV.

4. Summary of issue raised - Ashtown Riding centre and stables - lands that are to be used are returned to the owners as quickly as possible and that a timeline is agreed for the return of any lands to the Ashtown stables and Riding school.

Response to issue raised

Every effort will be made to engage constructively with Ashtown Stables to minimise disruption.

5. Summary of issue raised - Coolmine - I believe that the best option is a "drop lock" system. Rather puzzlingly, this was not put forward as a preferred option, this was rejected was ongoing costs. I believe that this would be a small price to pay.

Response to issue raised

The preferred design was determined by a multi criteria assessment. Full details of the multi criteria assessment can be found in Section 8.4.3.3 of the Option Selection Report; Volume 2: Technical Report, July 2021.

6. Summary of issue raised - Coolmine - Why is there no proposal to work with Fingal CC to install a new pedestrian or cycle way across the Granard bridge?

Response to issue raised

This is outside of the scope of the DART+ West project.

7. Summary of issue raised - Porterstown - essential that this level crossing is not closed or removed until the Kellystown road and Barnwell bridge are built.

Response to issue raised

The Kellystown Road project is in early design stages with no firm timeline for when construction will commence and out of the control of IÉ. IÉ intend to complete the new overbridge at Barberstown and junction upgrades prior to closure of Porterstown Level Crossing.

8. Summary of issue raised - Clonsilla - there must be a condition that this level crossing is not removed or closed until it is proven that the proposed roads and bridges are in place and that the upgrades of the junctions have been working for a period.

Response to issue raised

CIÉ intend to construct the Barberstown overbridge and junction upgrades in the vicinity prior to closure of the level crossing. Only once this infrastructure is in place will the level crossings be closed.

The traffic modelling presented in the EIAR, Volume 2, Chapter14, undertaken as part of the project development includes the modal shift, increase in rail passengers and subsequent reduction in

vehicular traffic on the road network. The full benefits of DART+ West and junction upgrades may not be seen until the DART is fully operational.

9. Summary of issue raised - Royal Canal - concerns expressed into the potential effects of the construction works along the Royal Canal where the railway and the Canal come within metres of each other.

   Response to issue raised

   A detailed response to this is provided in Section 2.2.6 of this report.

4.97 Ref. No.97 – Env04 – Catherine Murphy T.D Kildare

Representative – Not Applicable

4.97.1 Submission, Elected Representative

Issues raised in submission are addressed with their responses below

4.97.2 Response to submission

1. Summary of issue raised - A significant frustration that DART services will come all the way to Kilcock, but no service will be provided as part of this phase of development. At the very least car parking and platform services should be provided in proximity to the Railway Sheds.

   Response to issue raised

   The scope of DART+ West does not extend to Kilcock Station. As the line is single track beyond Maynooth, significant infrastructure upgrade would be required as well as property acquisition. The depot will be an operational engineering building, from a safety and security perspective, having customers in the proximity of the depot would be inappropriate. Strategy for the provision of rail infrastructure in Ireland is a matter for the NTA and any extension to the project, would have to be taken forward as a separate planning application.

2. Summary of issue raised - Potential for flooding in areas with historical instances of same at Jacksons Bridge / Ballycurraghan. A review of flood projections should be undertaken in these areas and their surrounds.

   Response to issue raised

   The site specific flood risk assessment for the scheme has considered flood risk within the subject area including the areas between Jackson's Bridge and Kilcock. The assessment has concluded that flooding can be appropriately managed at these locations. A detailed response to the flooding issues is provided in Section 2.7.2 of this report.

3. Summary of issue raised - Blakestown Level Crossing - Access to the Royal Canal together with permeability of the area will be lost if the level crossing is closed and no alternative pedestrian option is provided.

   Response to issue raised

   A detailed response to the is provided in Section 2.6.5 of this report.

4. Summary of issue raised – Glendale / Cope Bridge, Location of Substation, construction stage impacts, traffic management

   Response to issue raised

   Responses to these issues are provided in Sections 2.6.1,2.6.2,26.3 and 2.6.4 of this report.

5. Summary of issue raised - Glendale - Pedestrian Crossing - It is not clear what provision for pedestrians crossing from Glendale will be provided.

   Response to issue raised

   Two pedestrian/cycle crossings are planned at either end of the new footbridges. On the south side, a crossing is planned from Glendale green to the access road to the station (drawing MAY-MDC-SET-RS12-DR-Z-003-D). Likewise, on the north side, another crossing is located in front of the access to the Confey GAA Club.

6. Summary of issue raised - Glendale - Car and Bus Parking - Currently there is insufficient car parking at the station, and this results in car parking within the neighbouring housing estates. There are times when bin trucks and even emergency vehicles are restricted. The expectation is that car parking will be provided in conjunction with the project. In addition, a bus terminus needs to be provided together with a turning circle.

   Response to issue raised

   Parking control in adjacent housing estates is a matter for the local authority. It is proposed that parking patterns will be monitored before and immediately following closure of the level crossing. IÉ will engage with the local authority, providing them with the relevant information to facilitate control measures it may elect to put in place.

4.98 Ref. No.98 – Env05 – Bernard J. Durkan T.D Kildare

Representative – Not Applicable

4.98.1 Submission, Elected Representative

1. Strongly urges that the DART be extended to Enfield, or Kilcock at least and that the ancillary requirements could be located equidistant from Kilcock, Enfield and even Edenderry. This would provide a much better and wider service to a vastly greater population and eliminate the need for concentration of such services in the already densely populated areas.
2. Reservations about many of the proposals particularly where the use of green open space, recreational areas are to be encroached upon, used as compounds or in any way impacted. Instead of impeding, interfering with or reducing recreational areas, public open spaces or the quality of life of residents, efforts should be made to augment the existing facilities rather than a diminution.
3. Of the opinion that the creation of cul-de-sacs, dead ends and for what of a better description, “hang about” places should be avoided at all costs.

4.98.2 Response to submission

1. Detailed responses to points 1 to 2 of this submission are provided in Section 2.2.3 and 2.6.4 of this report.
2. Mitigation measures have been included in Chapter 23 Human Health, Section 23.6.2 Operation Stage Mitigation. Whereby, detailed design will integrate public safety design measures to reduce opportunities of anti-social behaviour. As far as practicable these measures shall include the use of active and passive surveillance measures while CIÉ shall consult with An Garda Síochána and Kildare County Council at the detailed design stage to determine the most appropriate measures.

4.99 Ref. No.99 – Env06 – Senator Emer Currie - Fingal

Representative – Not Applicable

4.99.1 Submission, Elected Representative

1. The permanent closure of level crossings and the splitting up of communities is a heavy price to pay for local communities like Ashtown, Coolmine and Clonsilla. Keeping the level crossings open, even at off-peak times, could mean that essential local links are maintained.

   We understand why closure is the preferred option from a railway engineering point of view, but as per our previous submissions, we are not convinced it is necessary, even after three different consultation processes with Irish Rail. We would urge you to consider the wide range of submissions you will have received that ask logical questions such as why level crossings can work in other European cities, the difference that an upgrade of the signalling would make, and whether we will have the frequency of trains necessary to permanently close the level crossings immediately.
2. There is also grave concern that closure will make the traffic pressure on Granard Bridge and Dr Troy Bridge in Dublin 15 unsustainable. For instance, traffic on Granard Bridge is expected to increase by 40% in the AM peak in year one 2028.
3. Across all stations there is widespread concern at the size, scale and attractiveness of the pedestrian and cycleway crossings. There is a strong preference for both lifts and ramps at Coolmine, Clonsilla and Ashtown to ensure accessibility given the length of the ramps.
4. At Porterstown, the proposed bridge cuts off access to St. Mochta's Football Club taking up two-thirds of their car park, encroaching onto their main football pitch. The development of this bridge would close down the club including its 30 teams and 600 members. In our view the bridge could be situated on the other side of the road. Dialogue is essential with the Club itself on finding the best solution. Up until recently there had been no engagement and the Club itself had to initiate contact themselves.
5. Communication with Ashtown Stables, a family business, has also been incredibly poor. During this project, over 6,000 submissions were received by Irish Rail in relation to the impact of proposed road changes on the stables. While some issues have been addressed, there remain significant concerns. The viability of their business during and post construction must be maintained. Their submission outlines the impact of the new cycle lane on Mill Lane as well as road changes.

4.99.2 Response to submission

1. Detailed response to this point is provided in Section 2.2.5
2. Detailed response to this point is provided in Section 2.4.8
3. Detailed response to this point is provided in Section 2.2.7
4. St. Mochta's Football Club and the property owners were consulted a number of times during the development of the design and the IÉ Project Team will continue to do so. Detailed reposes to the Clubs' queries are addressed under Section 3.26 of this report.
5. Every effort has been made by the Project Team to engage with the owners of Ashtown Stables. Following on from the strong feedback that was received in Public Consultation Number two, The Project team re- examined the preferred option at Ashtown and a third local consultation was held on a new preferred option, which greatly lessened the impact of the project on Ashtown Stables. On an individual level, from the initial launch of this project, right through the non-statutory consultations and the statutory consultation the Project Team attempted to engage proactively with this landowner. The DART+ West project team were available to meet in person, when public health restrictions allowed or virtually when they did not to discuss any concerns that this landowner may have. During the local Ashtown Public Consultation, members of the project team were at the in-person consultation and were very happy to engage. Members of the Reid family attended this consultation but declined to engage. The Landowner agreed to two meetings throughout the whole project design period, both of which our CEO attended. All other offers to engage were declined. Separate to this, there was prolific email communication from this landowner both to the community Liaison Team, the CEO's office and the FOI office. All emails and FOI requests were always responded to.

4.100 Ref. No.100 – Env07 – Cllr Ted Leddy - Fingal

Representative – Not Applicable

4.100.1 Submission, Elected Representative

The closure of the Coolmine Level crossing will divert huge amounts of traffic to Granard Bridge in Castleknock, and the Dr Troy Bridge in Carpenterstown. These Bridges already experience significant traffic problems. The DART + proposal provides very little detail on how it would "upgrade" the junctions in the vicinity of Troy and Granard Bridges. There is simply not enough detail on the upgrade of the two crucial junctions. If these upgrades are not sufficient, it could have a catastrophic effect on congestion in Dublin 15.

4.100.2 Response to submission

The traffic impact of the level crossing closure and junction upgrades are discussed in detail in the EIAR, Volume 2, Chapter 6 – Traffic and Transportation.

4.101 Ref. No.101 – Env08 – Cllr Natalie Treacy - Fingal

Representative – Not Applicable

4.101.1 Submission, Elected Representative

1. An upgrade is to be made to all level crossings.
2. No level crossings should be closed until upgrades are carried out and are used for a trial period. A capacity assessment of the Maynooth line after the electrification should take place before any level crossing is closed.
3. Irish Rail needs to work with Fingal County Council to put a road safety plan together for Coolmine, Clonsilla and surrounding areas before any level crossings are considered for closure.
4. The proposal does not take into consideration the increased traffic volumes that will occur when Kellystown is developed.
5. The views of the residents during the public consultation needs to be considered. It is clear that they were not listened to.

4.101.2 Response to submission

1. An Option Selection Process was undertaken for all of the level crossing replacements to determine the preferred option at each location, details of the process are outlined in Chapter 4 of the EIAR and detailed in the Option Selection Report the Option Selection Report available at Option Selection Report - Volume 2: Technical Report (dartplus.ie)
2. This is not proposed as part of the draft Railway Order application.
3. Junction upgrades and alternative road improvement infrastructure will be in place prior to closure of the level crossing. CIÉ will continue to liaise with Fingal County Council over these proposals.
4. The traffic modelling detailed in the EIAR, Volume 2, Chapter 6 – Traffic and Transportation includes the proposed development of Kellystown.
5. Detailed response to this point is provided in Section 2.2.2.

4.102 Ref. No.102 – Env09 – Cllr Tania Doyle - Fingal

Representative – Not Applicable

4.102.1 Submission, Elected Representative

1. Insufficient consultation

2. Within the community it is not accepted that the closing of the Clonsilla and Coolmine level crossing is a prerequisite for the electrification of the line. The case has been made that the DART line as it stands has several level crossings along Its length and this has not prevented the DART service from thriving and even being extended.
3. The pedestrian and cyclist overbridge is completely out of character for the area within which it is proposed to be placed. Plans to erect new bridges through green space, play areas, and parkland near both Clonsilla and Coolmine will have an enormous impact on local residential communities.
4. Lack of parking in the proposals will need to be addressed. As it stands parking is at a premium in the mornings and with the envisaged increased schedule this will increase.
5. The traffic survey data was collected in January 2019. The data can no longer be accepted as valid. Since then, a number of Developments adjacent and within the vicinity of Clonsilla Station have come online. In the medium term Kellystown and Barnhill will come online, and I do not believe the Development has been factored into any calculations. The data was captured in 2019, it is reasonable to suggest that it has not been factored in. A proposed alternate routing will result in a traffic choke point causing traffic congestion for the communities within Clonsilla.

4.102.2 Response to submission

1. Detailed response to this point is provided in Section 2.2.2.
2. Detailed response to this point is provided in Section 2.2.5.
3. The pedestrian bridges at Clonsilla and Coolmine have been developed to avoid impacts on amenities such as the Royal Canal Greenway, playgrounds and greenspace. In both of these cases consultation has taken place with the design team for the Royal Canal Greenway and Fingal County Council. No play areas are impacted by either of these proposals and although both proposed bridges impact vegetated areas neither impact open greenspace areas currently used by the public.
4. Separate to the DART+ West project and outside this railway order, Iarnród Éireann are progressing a number of projects including a Multimodal Interchange Project, DART Station Enhancement Project and Carparks Programme. The aforementioned projects will assess all stations throughout the network with a view of implementing these strategies at stations where there is need for modifications that will have an impact on multimodal travel and station access. These projects will assess a variety of multimodal options at stations including but not limited to the provision of secure bicycle parking and shared mobility services. Iarnród Éireann are working to progress and finalise the Multimodal Interchange Strategy before the end of Q4 2023 with a view to developing an Implementation Plan subject to funding constraints.
5. The traffic modelling detailed in the EIAR, Volume 2, Chapter 6 – Traffic and Transportation includes the proposed development of Kellystown and Barnhill.

4.103 Ref. No.103 – Env10 – Cllr John Walsh - Fingal

Representative – Not Applicable

4.103.1 Submission, Elected Representative

Issues raised in submission are addressed with their responses below.

4.103.2 Response to submission

1. Summary of issue raised - There are no plans for lifts in stations along the Maynooth line, even where stations such as Coolmine and Ashtown are being fully reconstructed. The removal of lifts from Coolmine and Ashtown stations is a mistake which creates a barrier to access for wheelchair users and people with mobility difficulties. An Bord Pleanála should impose a condition that lifts be provided in all stations along the route where existing crossings are being closed or replaced.

Response to issue raised

Detailed response to this point is provided in Section 2.2.7

2. Summary of issue raised - New pedestrian-cycle bridge at Ashtown station is necessary but does not achieve universal access for wheelchair users or people with mobility issues.

   Response to issue raised

   The proposed bridge has been designed to provide universal access for pedestrians, vulnerable users and cyclists at Ashtown Station.

3. Summary of issue raised - The bridges at Porterstown and Clonsilla should be redesigned to reduce their footprint as much as possible, by restricting the construction and reducing the impact on the Royal Canal and surrounding residential estates. The Board should impose a condition that all of these concrete structures should be replaced by slender, minimalist structures in keeping with the sensitive ecological area and protected landscape of the Royal Canal.

   Response to issue raised

   Detailed response to this point is provided in Section 2.2.1

4. Summary of issue raised - It should be a condition of the Railway Order that the proposed pedestrian/cycle bridges be treated with anti-graffiti coating and maintenance of these bridges must be the responsibility of Irish Rail.

   Response to issue raised

   The proposed pedestrian/cycle bridges will be maintained by IÉ. Details of bridge finishes will be finalised at detailed design stage.

5. Summary of issue raised - Ashtown underbridge/tunnel increases the risk of anti-social behaviour and criminality, as such underbridges or underpasses in suburban Dublin have had a long history of anti-social behaviour and frequently more serious criminal activity.

   Response to issue raised

   Detailed response to this point is provided in Section 2.4.5

6. Summary of issue raised - Impact on Ashtown Stables.

   Response to issue raised

   Detailed response to this point is provided in Section 2.4.3

7. Summary of issue raised - An Taisce has argued that the 'proposed Ashtown tunnel is disproportionate in terms of the advantages of carrying out such a massive civil engineering project in a lightly trafficked suburb of Dublin.

   Response to issue raised

   Issues in relation to the Ashtown Level Crossing are addressed under Sections 2.2 and 2.4 of this report.

8. Summary of issue raised - The proposed route is likely to have a damaging impact on neighbouring estates such as Martin Savage Park where the removal of trees is disappointing and should be avoided.

   Response to issue raised

   Due to the limited amount of land available at Ashtown station for construction, the removal of trees is unavoidable. Details with regard to mitigation is provided in Section 2.2.3 of this report.

9. Summary of issue raised - The works will also have a very damaging impact on commercial properties, particularly Burke Brothers whose business will effectively be unable to operate for the duration of the project.

   Response to issue raised

   Reponses to issues raised by Burke Brothers is addressed under Section 3.18 of this report.

10. Summary of issue raised - The Board should require a revised capacity assessment by Irish Rail in advance of any move to close level crossings at Coolmine and Clonsilla, taking account of the impact of Covid-19 on revised working patterns.

    Response to issue raised

    Detailed response to this point is provided in Section 2.2.8.

11. Summary of issue raised - Very significant safety issues also arise with diversion of an even higher volume of traffic across the Porterstown viaduct/Dr Troy bridge. This will lead to increased volumes of vehicles moving directly past the entrances to Scoil Choilm Community National School and Luttrellstown Community College on the Luttrellstown Education Campus.

    Response to issue raised

    Detailed responses to these issues are provided in Section 2.4.8 and 2.4.12 of this report.

12. Summary of issue raised - It is important that a condition be included that Irish Rail and Fingal Council in conjunction with residents in relevant estates draw up an agreed parking management plan before any level crossings are closed.

    Response to issue raised

    Parking control in adjacent housing estates is a matter for the local authority. It is proposed that parking patterns will be monitored before and immediately following closure of the level crossing. IÉ will engage with the local authority, providing them with the relevant information to facilitate control measures it may elect to put in place.

4.104 Ref. No.104 – Env11 – Cllr Joe Neville - Kildare

Representative – Not Applicable

4.104.1 Submission, Elected Representative

1. Issues raised in relation to Glendale Estate and Cope Bridge
2. Blakestown crossing. This level crossing needs to be retained as without it a community and indeed a whole town is being cut off. At minimum Irish rail need to find a solution that allows people to access this area. A significant number of people will be impacted on a daily basis and I know Kildare County Council want this access kept. Please do not close this crossing.
3. Blakestown - Hundreds of submissions have gone into the DART+ scheme but the public are not being listened to. Can you reverse this decision so local people can benefit from the greenway, bus services and overall access in the area.
4. Kilcock. Ensure that DART+ is brought there in this phase as it should have been planned for.

4.104.2 Response to submission

1. Detailed responses to the issues surrounding Glendale Estate and Cope Bridge area are addressed in Section 2.6.1 – 2.6.4 of this report.
2. Detailed response to this point is provided in Section 2.6.5
3. Detailed response to this point is provided in Section 2.2.2
4. Detailed response to this point is provided in Section 2.2.14

4.105 Ref. No.105 – Env12 – Cllr Tim Durkan - Kildare

Representative – Not Applicable

4.105.1 Submission, Elected Representative

1. Seeking line extended to Kilcock. C
2. Intention to acquire a number of rights of way, I would hope that no person or entity will suffer negatively in term of access to their homes, businesses and or agricultural land, the protection of such access is set out in our constitution.
3. Concerned over potential impacts on Jackson's Bridge.
4. New access bridge to unwarranted give the roads objective map from the Maynooth Local Area Plan 2013-2019 clearly show the provision of a bridge to the east of Jackson's Bridge to serve the Maynooth Orbital Route which crosses the same rail line and the Royal Canal, surely one bridge could serve both purposes located to the east of Jackson Bridge and also to connect into the proposed new M4 Motorway Junction west of the current M4 interchange.
5. Concerns over temporary land acquisition particularly that these lands are to be used for access to the construction site through estates, those noted include:
    - Castledawson Maynooth
    - Newtown Hall Maynooth
    - Castle Bridge Maynooth
    - Parklands Maynooth
    - Glendale Meadows Leixlip
    - Branganstown Kilcock "Townland"

6. This application will have a negative impact on traffic in the towns of Leixlip, Maynooth and Kilcock for an extended period of time during construction. The traffic management plan must cater for local traffic accessing their homes and businesses.

4.105.2 Response to submission

1. Detailed response to this point is provided in Section 2.2.14
2. Were rights of way are proposed to be acquired these are highlighted within the railway order drawings and schedules with the proposed alternative access within the design where applicable. Where rights of way are proposed to be acquired over private lands and if the Railway Order is confirmed, compensation will be addressed in accordance with statute and Compulsory Purchase practice and procedure as and when statutory notices are served.
3. There are no proposed alterations to Jackson's Bridge.
4. As identified in the Maynooth Local Area Plan 2013-2019 (Amendment No.1). the location of map based Road Objective (i) – (vii) on Map 1 which cumulatively form the Maynooth Outer Orbital Road (MOOR) are 'indicative only'. At the time of preparation of the Railway Order application for the DART+ West project, the planning stage of the MOOR had not commenced. The project team on MOOR will therefore need to be cognisant of the DART+ West project proposals, and incorporate the design of the project, where appropriate.
5. At the following locations the temporary lands here are being acquired access and working space to raise ESB overhead lines to provide electrical clearances over the rail line:
    - Castledawson Maynooth
    - Newtown Hall Maynooth
    - Castle Bridge Maynooth
    - Parklands Maynooth

    The impact is proposed to be of a short duration – approximately a week with no construction compounds are proposed at these locations.

    At Glendale Meadows Leixlip, a new substation, road realignment and two new pedestrian and cycle bridges are required. To facilitate this construction compounds and access via the existing estate is

required. Detailed construction and traffic management plans will need to be prepared by the contractor and agreed with Irish Rail and Kildare County Council in advance of the construction

At Branganstown Kilcock "Townland" - There will be significant works in and around this area with the construction of the proposed Depot. Access to the local road network will be limited to the advanced works to construct the overbridge connection to the depot with construction traffic using the R148 once the bridge is in place.

6. The EIAR, Volume 4 Appendices, Chapter 6, Appendix A6.2, Traffic Impacts Assessment, describes the traffic impacts during the construction phase. Section 8.2 Construction Traffic Management Plan" explains that as with any construction project, "the contractor will be required to a prepare a comprehensive traffic management plan for the construction phase" and "It will be the project contractor's responsibility to prepare a Traffic Management Plan for the approval of local authorities".

4.106 Ref. No.106 – Env13 – Cllr Nuala Killeen - Kildare

Representative – Not Applicable

4.106.1 Submission, Elected Representative

Issues raised in submission are addressed with their responses below.

4.106.2 Response to submission

1. Summary of issue raised - Access to DART+ West stations - There is a deficiency of capacity for car parking at Confey Train station leading to issues with parking in local housing estates, an improvement to this current situation needs to be considered as part of the rail order.

   Response to issue raised

   Parking control in adjacent housing estates is a matter for the local authority. It is proposed that parking patterns will be monitored before and immediately following closure of the level crossing. IÉ will engage with the local authority, providing them with the relevant information to facilitate control measures it may elect to put in place.

2. Summary of issue raised - Compounds - consideration needs to be given for access to utility vehicles, emergency vehicles and for the residents to have peaceful enjoyment of their estate.

   Response to issue raised

   As part of the construction phase, the appointed contractor will be required to submit a traffic management plan. Within this plan there will be provisions to ensure that measures are in place to ensure the least disruption to the resident and that access for emergency services, utility providers and residents is maintained.

3. Summary of issue raised - Glendale Estate - Cope Bridge issues in particular impacts on green area, substation and compound.

   Response to issue raised

   Detailed responses to the issues surrounding Glendale Estate and Cope Bridge area are addressed in Section 2.6.1 – 2.6.4 of this report.

4. Summary of issue raised - Cycling Infrastructure - It is really important the at each station there needs to be infrastructure for cyclists. To encourage more people to use active travel methods to travel to the stations. Proper facilities must be in place.

Response to issue raised

DART+ West is an infrastructure capacity project to facilitate the expansion of the DART. Alterations to existing stations, except where required to facilitate the DART+ West project, are not within the scope of the project. Where alterations to stations are being implemented to facilitate the DART, increased cycle parking has been included in the Project.

Separate to the DART+ West project and outside this DART+ West draft Railway Order, Iarnród Éireann are progressing a number of projects including a Multimodal Interchange Project. The multimodal project will assess all stations throughout the network with a view of implementing strategies at stations where there is need for modifications that will have an impact on multimodal travel and station access. This project will assess a variety of multimodal options at stations including but not limited to the provision of secure bicycle parking and shared mobility services. Iarnród Éireann are working to progress and finalise the Multimodal Interchange Strategy before the end of Q4 2023 with a view to developing an Implementation Plan subject to funding constraints.

5. Summary of issue raised - Kilcock Services - seeking station, even temporary station to serve Kilcock.

Response to issue raised

Detailed response to this point is provided in Section 2.2.14

6. Summary of issue raised - Water Issues - The railway order should ensure that no damage is done to the canal during the works and seek to leave the area better than when started.

Response to issue raised

Likely impacts to the water quality and flows within the Royal Canal have been considered in the EIAR Hydrology and Hydrogeology Chapters. This includes an assessment with regard to requirements under the Water Framework Directive. It should be noted that a key benefit of the scheme is the reduction of potential sources of pollution (diesel locomotives). The scheme assessments concluded that “impacts to water quality and hydromorphology of the Royal Canal are neutral, imperceptible permanent. The proposed development will not hinder implementation of measures outlined in the 2nd Cycle RBMP. The proposed works will have a negligible effect on the Royal Canals significant pressures and will not prevent the attainment of Good Ecological Potential.”

7. Summary of issue raised – Assessment of areas prone to flooding should be carefully considered as some historical incidences are recorded, specially at Jacksons Bridge and the wider area there in Kilcock.

Response to issue raised

The site specific flood risk assessment for the scheme has considered flood risk within the subject area including the areas between Jackson’s Bridge and Kilcock. The assessment has concluded that flooding can be appropriately managed at these locations.

5. RESPONSE TO PRESCRIBED BODIES ON THE PROPOSED SCHEME

5.1 Ref. No.1 – PB01 – Matthew McAleese - Fingal County Council

Representative – Not Applicable

5.1.1 Submission, Location – Fingal

1. Summary of issue raised – IÉ should continue to liaise with the relevant stakeholders and communities in Fingal County Council communities towards the optimum design solutions whilst meeting FDP objectives.

   Response to issue raised

   IÉ commit to continued liaison with the relevant stakeholders in Fingal County Council and communities throughout the detailed design, construction and operational stages.

2. Summary of issue raised – Inclusion of bus priority measures in Dublin 15.

   Response to issue raised

   DART + West proposals impact directly on one current and one future Bus route (at Clonsilla level crossing), while the changes in travel patterns around Blanchardstown area will alter following the implementation of the proposed scheme, the proposed changes to existing junctions as part of DART West have been designed to minimise impact on both traffic and ped/cyclists and in many cases implemented/reinstated the right vehicular traffic vs ped/cycle balance and priority. This change will have an impact on vehicular traffic, which has been assessed in the TIA.

   At Castleknock Road junction, a section of bus lane has been provided heading south to link with the existing bus lane south of Castleknock Bridge and further south on Castleknock Road.

   Junctions upgraded to traffic signal-controlled junctions and new ITS equipment will provide increased control over traffic flows and allow implementation of bus priority if required.

   IÉ will continue to liaise with the local authority and the NTA throughout the detailed design and construction stages of the scheme.

3. Summary of issue raised – Diswellstown Road/ Porterstown Link Road- pedestrian crossing times, right turn filter lane into Porterstown Lane excessive.

   Response to issue raised

   The proposed road design has been developed with cognisance of the future development of Kellystown LAP. The design at this junction provides for right turn lane into the Porterstown Lane from Diswellstown Road southbound.

   IÉ will review the junction operation with a view to optimising signal staging during detailed design in consultation with FCC (Fingal County Council).

4. Summary of issue raised – Clonsilla/Diswellstown Road/Blanchardstown Road South - design for traffic signals.

   Response to issue raised

   IÉ have liaised with FCC throughout the design process and commit to continue to liaise at later design stages to ensure all junctions designs provided as part of the DART+ West project are optimal and provide the level of service expected by FCC.

5. Summary of issue raised – Castleknock Rd/Park Lodge - future proof cycle and pedestrian facilities at Castleknock Bridge.

Response to issue raised

As noted in the submission, the IÉ team has previously discussed cycle and pedestrian facilities at Castleknock Bridge with FCC and stated that the provision of facilities on the bridge is outside the scope of works of the DART+ West project. The pedestrian and cyclist facilities on approach to the bridge have been designed to future proof any future Phoenix Park Cycle Route, depending on its location and design.

The proposed structure is designed with the same current width, 9.15 m between parapets, like the protected Granard Bridge crossing the Royal Canal.

6. Summary of issue raised – Royal Canal Urban Greenway- need for continued liaison between projects.

Response to issue raised

IÉ commit to continued liaison with FCC throughout the project development and construction with a view to facilitating the development of the Royal Canal Urban Greenway.

Furthermore, the Royal Canal Urban Greenway has been considered in the assessment of Cumulative Effects with the proposed DART+ West project (Chapter 26, Table 26-10). As part of the mitigation measures proposed, IÉ commit to consultation with the respective NTA project teams during construction stages to avoid, reduce and mitigate potential negative cumulative impacts.

7. Summary of issue raised – Kellystown Road - continued consideration between teams.

Response to issue raised

IÉ commit to continued liaison with FCC throughout the Project development and construction with a view to facilitating the development of the Kellystown Road.

Furthermore, the Kellystown Road project has been considered in the assessment of Cumulative Effects with the proposed DART+ West project (Chapter 26, Table 26-10). As part of the mitigation measures proposed, CIÉ commit to consultation with the respective NTA project teams during construction stages to avoid, reduce and mitigate potential negative cumulative impacts.

8. Summary of issue raised – Ashtown - dedicated active travel link on Ashtown Road. Current DART proposal prevents such link. Proposed set down area is excessive.

Response to issue raised

Active Travel link -

Following closure of the level crossing vehicular access along Ashtown Road is required to provide access to Ashtown Stables, CIÉ Maintenance Yard, the level crossing itself for maintenance purposes and the Ashtown Train Station including emergency vehicles. Ashtown Stables is a private business which requires customers to access the premises via the Ashtown Road. It would be extremely difficult to retain access for Ashtown Stables customers while restricting general traffic from using the road to drop off passengers for the train station which would result in an unsafe environment for all users. The design team was cognisant of this and the decision was made that it was more appropriate to allow drop off with a managed arrangement that provides safety for all users including cyclists. In addition, without providing a drop off, it was likely that vehicles would enter the residential area of Martin Savage Park to drop off, which is undesirable or stop on the proposed new Ashtown Road close to the underpass creating a road safety issue.

Removal of vegetation/In line parking -

A section of existing vegetation is to be removed to facilitate the creation of disabled parking and drop off set down. Indented parking and set down was deemed more desirable than in line as the proposed design makes provision for buildouts that create a give way traffic arrangement. This will act as a traffic calming measure and reduce vehicle speeds resulting in a safer environment for cyclists who are required to share the roadway with vehicles. If the set down area was inline this may result in blocking vehicles travelling south out of Ashtown Road which would subsequently congest the give way system.

The Project Team will investigate, in future design phases, in consultation with FCC whether the set down area can be reconfigured to reduce impact on the existing vegetation. Chapter 8 Biodiversity of the EIAR has assessed the removal of the treeline, additionally under section 15.6.3 of the EIAR Volume 2, Chapter 15, Landscape and Visual Amenity, the following mitigation has been provided:

Where existing trees, hedges, and/or plantings are removed, new planting will be provided in replacement of those removed. In general, unless not feasible or practicable, new plant species will match those removed. Replacement plant sizes will be those that are readily available and therefore, are unlikely to match the maturity of plants removed (especially in the case of trees or larger plants). However, being of the same or similar species, maturity similar to that of the existing can be achieved in time.

9. Summary of issue raised – Cycle Parking- lack of parking at other stations along the route.

   Response to issue raised

   Refer to Section 2.2.4 of this report.

10. Summary of issue raised – Construction Phase - Castleknock Rd closure. The programme details that Castleknock Road will be closed for a period of 15 weeks and reduced to shuttle traffic flow for 19 weeks to reconstruct the bridge over the railway. This closure will have to be minimised and carried out at a time of year with reduced traffic flow. While this closure is in place other works on diversion routes which would affect traffic flow should be minimised.) and coordination with NTA (Blanchardstown bus corridor).

    Response to issue raised

    The DART+ West project Team will liaise closely with FCC and NTA to ensure the works are undertaken in a sequence and at a time which aims to minimise traffic disruption.

    During construction the existing level crossings will remain open until such time as the junction modifications and new bridges and roads for the level crossing replacements have been constructed. A Construction Traffic Management Plan will be in place for the duration of the construction works.

    Furthermore, the BusConnects Blanchardstown to City Centre Core Bus Corridor No.5 has been considered in the assessment of Cumulative Effects with the proposed DART+ West project (Chapter 26, Table 26-10). As part of the mitigation measures proposed, CIÉ commit to consultation with the respective NTA project teams during construction stages to avoid, reduce and mitigate potential negative cumulative impacts.

11. Summary of issue raised – Natural and built environment, architectural heritage- project to avoid directly impacting on natural, architectural, archaeological and designed landscape as per Chp 8,9,10 of FDP2017-2023.

    Response to issue raised

    Biodiversity

    The proposed development has been designed and assessed in accordance with best practice guidelines for ecological surveying and assessment. The residual effects on the Key Ecological Receptors are presented in Volume 2 Chapter 8: Biodiversity, Table 8-10. The Key Ecological Receptors include the Royal Canal pNHA and the Railway Ecological Corridor. Following the implementation of the mitigation measures presented in the EIAR, no significant impacts on Biodiversity are anticipated.

    Architectural heritage

    Every effort has been made to avoid direct impacts on architectural heritage, though it is not possible to avoid all impacts while achieving the object of the proposal, to electrify the railway line. Safety requirements necessitate the raising of parapets on bridges and clearance for the OHLE beneath bridges is also necessary to achieve this goal. In the latter case, it has proven possible to achieve the necessary clearance without any significant impact on many of the railway bridges, but this has not

been possible in every case. Chapter 21 of the EIAR shows the measures adopted in order to avoid direct impacts and indicates those instances where this is not possible.

The principal impacts on architectural heritage at Ashtown relate to the demesne of Ashton House, the gate lodge at Ashton House, Ashtown Mill and the Royal Canal. There is also a positive impact on Longford Bridge through the removal of traffic from the bridge. There will be a profound effect on the gateway to Ashton House and part of the demesne wall due to the alignment of the proposed new road and a construction compound is to be located within the grounds. This will also have an impact on the setting of the gate lodge. This impact will be mitigated as far as is possible through the careful dismantling of the wall and gateway and their reconstruction in accordance with best conservation practice. The residual impact will, however, be very significant.

The cutting for the proposed underpass beneath the canal at Ashtown will pass close to the disused oil mill at Ashtown and will cut through the site of the former millpond, now backfilled and in use as a car park. This will have a very significant effect on the site of the millpond and the new road will also have a moderate effect on the setting of the rear of the mill.

The construction of the proposed road will necessitate the closure of a section of the Royal Canal at Ashtown with a very significant impact on the canal during construction. The canal will be fully reinstated resulting in a moderate negative impact.

Landscape Visual

Aspects of the natural, built and architectural heritage environment relevant to the landscape and visual environment are set out in Section 15.4.2 and Table 15.4.3 of Chapter 15 of the EIAR. This includes aspects as set out in Chapters 8, 9 and 10 of FCDP 2017-2023 and notes that there is no significant change to these in the Draft FDP 2023-2029. The nature of the proposed development and of the receiving environment means that impacts on such features cannot be avoided. The description of landscape and visual impacts, including impacts on such features is provided at Section 15.5 and in Tables 15.6 and 15.7 of the EIAR. Measures for the avoidance, reduction and remediation of impacts on landscape and visual aspects, including of these features, are set out at Section 15.6 and in Tables 15.8 and 15.9 of the EIAR, with residual impacts set out at Section 15.7 and in Table 15.10 of the IAR.

Continued engagement with FCC heritage and biodiversity departments during detailed design phase will take place.

12. Summary of issue raised –Conservation architecture- bridge alterations need further exploration, requirements of DCC Conservation office (Section 21.3.4.1 of EIAR) should be applied for whole route (Fingal).

Response to issue raised

Extensive investigations have been undertaken as part of the design process to establish means of meeting all of the criteria necessary for the electrification of the lines, including the provision of OHLE and ensuring that the live cables cannot be reached from the bridges. The proposals and the issues were discussed on a number of occasions with all local authorities along the route and the designs of new bridges and raised parapets were put developed by the project team which consists of project architects and heritage specialists, including a Grade 1 Conservation Architect.

Engagement with the Local Authority conservation architects and the Department will continue throughout the Detailed Design and construction phases.

13. Summary of issue raised – Overbridge designs- consideration of architectural heritage, design to be agreed with FCC Conservation Office.

Response to issue raised

The design of these footbridges will be subject to further development and refinement at detailed design stage and the FCC Conservation Office will be consulted throughout this process.

14. Summary of issue raised – Requests to remove the proposed parapet alterations to OBG13 Collins Bridge, a 19th century history masonry rail bridge.

Response to issue raised

Parapet heightening is proposed to protect the public from coming in contact with the electrified cables. This is a requirement regardless of lowering of the line. The raised parapets also mitigate risks of falls or objects being thrown on the line.

Consultation has been undertaken with all local authority conservation architects in relation to the parapet designs and the feedback has influenced the designs.

As outlined in EIAR Chapter 4, Section 4.5.15.5.2, the proposal in Collins Bridge OBG13 is to place the heightened parapet on top of the historic stone parapet with a structural support inserted through the stone parapet and founded in the deck at 2 m spacing. There will then be intermediate supports every 400 mm that will sit on top of the existing stone parapet. The support joints will be welded together, and the solid metal panel required up to a height of 1.2 m will also be welded to the upright supports. IP2X mesh will then be installed up to the required height of 1.8 m.

Engagement with the conservation architects and the Department will continue at Detailed Design stage.

15. Summary of issue raised – An alternative site for the proposed compound at Ashtown should be identified that is less impactful on Ashton House.

Response to issue raised

Ashtown is suburban in nature with limited land available to facilitate a construction compound. The proposed works at Ashtown are complex and will require adjoining land to facilitate construction. The project team has liaised with the owner of Ashton House where the location has been agreed and furthermore, the compound has been assessed in the EIAR (including specifically Chapter 8 Biodiversity, Chapter 15 Landscape and Visual Amenity and Chapter 21 Architectural Heritage.

During detailed design and construction stage, efforts will be made to reduce the size and the scale of operations within the compound in the grounds of Ashton House.

16. Summary of issue raised – DU03-018 ring barrow should have appropriate protection measures.

Response to issue raised

Table 20-35 of the EIAR states the following in terms of mitigation for this site: *"This site will be preserved in-situ within a fenced off buffer area. Surrounding construction will result in a short-term low impact on the setting of the monument." … "The buffer on site will be actively managed to ensure its efficiency. No mitigation required for the indirect impact as the construction is temporary and the site will be returned to greenfield following decommissioning of the compound."*

The DART+ West project Team will liaise closely with FCC and relevant stakeholders to ensure that adequate requirements and restrictions are in place during construction to ensure the integrity of the historic site is maintained.

Summary of issue raised – Visual impact of Substations (Coolmine and Hansfield). Detailed drawings to be provided.

Response to issue raised

The sizing of these substations has been optimised to meet ESB and IÉ SET requirements. The description of the landscape and visual impact of the proposed development, including the proposed substations, at Coolmine and Hansfield, are provided in Chapter 15 of the EIAR, Sections 15.5.1.1, 15.5.1.2, 15.5.2.1, 15.5.2.2 and in Tables 15.6 and 15.7.

Landscape planting and screening is provided where these substations have potential to have an adverse landscape and visual impact on the public such as at (Glasnevin, Ashtown, Coolmine, Clonsilla, Confey, etc.). See photomontage from Volume 3B – sample below:

17. Summary of issue raised – Visual impacts on Ashton House. Additional photomontages required.

    Response to issue raised

    The impacts on Ashton House and the property as a whole are described under Section 15.5.1 and 15.5.2 of Chapter 15 of the EIAR and in Tables 15.6 and 15.7 of the EIAR. Mitigation measures, both general, and specific to Ashton House, are set out at Section 15.7 and Tables 15.8 and 15.9 of Chapter 15 the EIAR.

    Photomontages of the proposed development and its potential impact on Ashton House are included at Volume 3B of the EIAR.(View 14, 15 and 16)

    Summary of issue raised – The impact to the Mill Complex & Mill Pond at Ashtown Mill is also difficult to consider in the absence of suitable documentation by the applicant.

    Response to issue raised

    Please note that the mill pond is not an extant feature. It is listed as CH042 as being within the proposed development area. It is marked on the first edition OS map and the 1909 25-inch OS map. It is visible within a 1952 aerial photograph of the overall area (Britain from above). Today, the site of the pond is covered by tarmac and hardstanding associated with a car park to the north of a warehouse. Within Chapter 20 Archaeology and Cultural Heritage of the EIAR, the site of the pond has been assigned a medium baseline rating, and as per Table 20-35 in EIAR Chapter 20, the impact will be significant, direct and negative. This is due to the construction of the underpass, which will be cut and cover.

    Landscape and Visual

    The description of the landscape and visual impact of the proposed development on the Mill complex is provided in Sections 15.5.1.1, 15.5.1.2, 15.5.2.1, 15.5.2.2 and in Tables 15.6 and 15.7 of Chapter 15 of the EIAR.

18. Summary of issue raised – Hedgerow townland boundaries to be identified on plans. Quantity and quality of loss. No nett loss.

Response to issue raised

The majority of townland boundaries cross the railway / canal corridor in a perpendicular manner and have been severed historically by the railway / canal. Sections of impacted townland boundary hedgerows will be replaced so as to have no net loss wherever possible.

With regards to hedgerow and treeline loss and biodiversity, the loss of these habitats is described in Volume 2 of the EIAR, Chapter 8 (Biodiversity), Section 8.8.2.1. Mitigation measures relating to habitat loss are presented in Volume 2 of the EIAR, Chapter 8 (Biodiversity), Section 8.9.2.2. Habitat enhancement measures have been incorporated into the proposed development, and are presented in Volume 3A of the EIAR, Drawing MAY-MDC-ENV-ROUT-DR-V-81000-D. There is no recognised process for establishing whether a proposed development achieves no net loss in Ireland.

The areas where vegetation will be removed are shown in Volume 3A of the EIAR (Chapter 5), Drawings: MAY-MDC-LMA-SC00-DR-Y-001-D; MAY-MDC-LMA-SC05-DR-Y-001-D; MAY-MDC-LMA-SC08-DR-Y-001-D and MAY-MDC-LMA-SC06-DR-Y-001-D.

Chapter 15 Landscape and Visual Amenity has included the following mitigation measures:

"Where existing trees, hedges, and/or plantings are removed, new planting will be provided in replacement of those removed. In general, unless not feasible or practicable, new plant species will match those removed. Replacement plant sizes will be those that are readily available and therefore, are unlikely to match the maturity of plants removed (especially in the case of trees or larger plants). However, being of the same or similar species, maturity similar to that of the existing can be achieved in time. The proposed development will provide for the planting of new trees and shrubs both for mitigation of tree removal and for overall enhancement of the environment. Where proposals intrude on public space there shall be ample provision of bands of screening trees and other vegetation. Species selected shall be appropriate to the characteristics of the specific location."

19. Summary of issue raised – Screening of OHLE / associated structures/substations. Landscape plans and visual impact assessments.

    Response to issue raised

    Screening has been provided where appropriate and feasible, including at sub-stations and other structures / features. However, it is not always possible or necessary to provide for screening of more elevated OHLE / associated structures and of pedestrian walkways / bridges, which are increasingly common features along railway corridors.

20. Summary of issue raised – Laurel Lodge substation consideration.

    Response to issue raised

    During the detailed the design, the incorporation of the Laurel Lodge substation into the park environment will be fully considered to ensure reduction of impact on the park and will involve consultation with the relevant departments in FCC.

5.2 Ref. No.2 – PB02 – Waterways Ireland

Representative – Mervyn Hamilton

5.2.1 Submission, Location – Scheme Wide

1. Short-term licensing and longer-term property arrangements will be necessary to be put in place - requires Departmental and North South Ministerial Council approvals.
2. Royal Canal pNHA - no new stormwater discharges permitted, all legal environmental procedures followed to protect otters and other protected species.
3. Changes to Royal Canal should account for legal protections on canal and associated protected structures.

4. The proposed changes within the canal environs will require further landscape character assessment.
5. Pedestrian/cycle corridors and boat/recreational use access to be adequately accommodated and maintained throughout works and permanently.
6. Works must take measures to minimise/eliminate flood risks.
7. Train frequency impact on Newcomen Lifting Bridge - further investigation on restrictive arrangements for canal navigation.
8. All future property, operational, environmental and legal issues for construction stage will have to be addressed in advance of any works taking place on Waterways Ireland property.

5.2.2 Response to submission

1. All licensing and property arrangements will be finalised at later design phases subject to planning approval.
2. Mitigation measures to avoid and reduce impacts on the Royal Canal pNHA, Otter and other protected species are presented in Volume 2, Chapter 8: Biodiversity, Section 8.9. It has been recommended that these mitigation measures be included as planning conditions should the Railway Order be granted.
3. Section 38(2) of the 2001 Act provides *inter alia* that Part IV of the Planning and Development Act, 2000 (as amended), which regulates the procedures in relation to protected structures, does not apply where the works involved are authorised by a Railway Order. Section 38(1) provides that the development is deemed to be exempted development.
   IÉ has nevertheless been conscious of the heritage significance of canal structures and bridges when designing the proposed development. There has been consultation with the Conservation Officers of the local authorities. A Grade 1 Conservation Architect has been engaged in the design of the three bridge reconstructions and the approach to parapet heightening. Works relating to the detailed design and construction of these three bridges will be overseen by a Grade 1 Conservation Architect.
4. The existing amenity, designated, historic, landscape and visual importance of the Royal Canal is recognised and stated throughout Chapter 15 of the EIAR and specifically in Table 15-5 of that chapter.

   Likewise, the likely impacts of proposed changes on the canal, including on its character, are set out in Section 15.5.1 and Table 15-6; in Section 15.5.2 and Table 15-7; in Tables 15-8 & 15-9; and in Section 15-7 and Table 15-10 of Chapter 15 of the EIAR. Proposed measures to mitigate impacts are set out at Section 15.6.2 (Construction Phase) and Section 15.6.3 (Operational Phase) of Chapter 15 of the EIAR.

5. It is the intention that boating/pedestrian/cyclist use of the towpath greenway will be accommodated at all times during daytime hours. Where temporary closures of the towpath are required such as at Ashtown, diversions will be agreed with Waterways Ireland and will be coordinated with Waterway Ireland to keep any impacts to a minimum or during period of reduced public use. For context, and as indicated in EIAR Chapter 5, Table 5 – 1, the working schedules are:
   - Structures: The reconstruction/lift of overbridge decks will mean a localised impact on rail traffic for the works located on the railway. These tasks will be carried out during night-time or weekend track possessions.
   - Bridges - Construction works are scheduled for daytime working hours over 5.5 days per week. Bridge works over tracks to be performed during night-time/weekend possessions. Full line closures are required at some locations.

6. A Site Specific Flood Risk Assessment (SFRA) has been prepared for the proposed scheme which addresses flood risk including those relating to the Royal Canal and proposed mitigation measures where necessary. Section 27.7 of the Construction Environmental management Plan (CEMP) details specifically with “Mitigation and Monitoring for Water (including Hydrology & Flood Risk)”
7. The DART+ West project does not have any operational impact on the Newcomen Chord route and thus there will be no impacts on the train traffic on Newcomen Lifting Bridge. Furthermore, these works will have no impact on the Royal Canal

8. All property, operational, environmental and legal issues will be agreed prior to construction on Waterways Ireland property.

5.3 Ref. No.3 – PB03 –Meath County Council

Representative – Des Foley.

5.3.1 Submission, Location – Meath

1. Summary of issue raised – Works do not undermine base foundations and structural integrity of Dunboyne Railway Bridge. If adverse impacts identified, remedial/reductive measures should be considered.

   Response to issue raised

   The EIAR includes mitigation specifying that excavations to lower the track bed at Dunboyne Railway Bridge are to be designed and carried out in accordance with a method statement prepared by the Grade 1 conservation architect to ensure that the foundations of the bridge are not undermined.

   The existing overbridge foundations have been determined from the results of wall cores and trial pits undertaken in June 2021 as part of the DART+ WEST ground investigation. (Final Factual Report - DART+ Dunboyne).

   The structural team assessment proposes a soil improvement around the existing foundations before any excavation work on the track. The Detailed Design to confirm and detail the proposal.

2. Summary of issue raised – Noise/vibration impacts on residents along rail line during construction & operation phases.

   Response to issue raised

   Section 14.5.3 of the EIAR assesses the construction phase noise and vibration impact of the project. To assess the impact of noise during construction Table 14-22 of the EIAR outlines noise significance ratings. The level of significance is a function of the absolute construction noise level and how that compares to the pre-existing baseline noise level. Where baseline levels are high construction noise impacts are likely to be less significant and conversely where baseline levels are low construction noise can have a greater impact. In addition to the construction noise thresholds, the duration of the work is also considered. According to the methodology, construction works that extend to a duration of ten or more days/nights in any 15 consecutive days/nights or that total 40 days/nights in any six consecutive months are more likely to generate moderate or major impacts.

   Vibration during construction is assessed primarily to ensure that no damage, not even cosmetic damage, occurs to buildings during the works. The criteria adopted depend on several factors including the source of vibration, for example transient or continuous, and the building type. Structurally vulnerable buildings or vulnerable structures such as older buildings will need vibration

   levels to be controlled to a lower threshold to avoid the risk of damage. Human response to construction vibration is also discussed, however, given the very low threshold of perception of humans to vibration it is not practical to implement vibration limits low enough to avoid any vibration being perceptible. However, good communication to building occupants by the contractor ahead of any vibration intensive works is best practice to control this impact as perceptible vibration levels are more tolerable when the source and duration of the works is known.

   Table 14-26 of the EIAR outlines the assessment procedures used to determine the construction noise and vibration impacts as a result of the Project. A variety of methods have been implemented, ranging from computer models of the works to comparison of the work to historical measurement data for similar activity. Construction traffic has been assessed in terms of the likely change in noise level due

to the additional traffic volume on the road network, a greater increase in noise is an indication of a higher significance of impact.

Section 14.6.1 of the EIAR specifies mitigation measures during construction to minimise the impacts. Noise and vibration monitoring during construction is included within the EIAR as part of the mitigation measures. Furthermore, it is a requirement that the contractor employs a designated noise liaison officer to consult with residents during the works. Vibration limits are specified to ensure that no damage, even cosmetic, occurs to properties. Lower values are specified for any sensitive buildings such as those with no or minimal foundations if that is the case here.

As outlined in Section 14.6.1 of the EIAR, during the course of construction the procedures outlined in Iarnród Éireann operation procedure CCE-QMS-008-002 Noise Management – CCE Activities will be implemented. This document outlines the following noise mitigation measures:

1. The Community Liaison Officer (or other nominated person) will notify affected residents in advance of any planned works commencing with a letter drop in the relevant area.
2. Where planned work occurs over a 72hr weekend shutdown there will be a noise management plan submitted to the local authority.
3. All attempts to avoid, prevent or reduce the harmful effects of exposure to environmental noise arising from work activities must be practical and appropriately risk assessed before implementation.
4. The following measures should be implemented where feasible during construction activities:
    a. Carry out as much preparatory work in daylight as possible (sawing or drilling rails).
    b. Inspect the worksite in daylight if possible and look for the best location to position generators.
    c. Position generators and lighting away from residential dwellings.
    d. Take advantage of natural barriers such as vegetation, walls or embankments that can offer noise screening to adjacent neighbours.
    e. Where necessary, use noise attenuation screens. The screens must be located as close to the receiver or source as possible.
    f. Consider using additional supply cables and structures so that the generators can be positioned as far away from housing as practicable.
    g. Where possible, use low-noise plant. Any unsuitable plant should be replaced by higher quality low noise plant, or contained by the use of mufflers/silencers.
    h. Do not leave equipment or vehicles running/idling unnecessarily.
    i. Do not shout work instructions when working in residential areas at night unless absolutely necessary.
    j. Plan effectively to ensure timely deliveries of materials.

Section 14.5.3.5.1 of the EIAR discusses the noise impact of temporary construction compounds and also the impact of construction traffic. Construction traffic impacts have not been found to be significant and Section 14.6.1 of the EIAR details the noise mitigation measures that will be implemented to minimise the impact of temporary compounds noise impact on surrounding residential areas.

3. Summary of issue raised – Additional noise barriers in Dunboyne - no noise assessment for lands zoned for residential south of Dunboyne Station and between Dunboyne and M3 Parkway.

Response to issue raised

The requirement for noise mitigation due to the operational phase of the project is assessed in Section 14.5.4.6 of the EIAR. The methodology is to first assess the absolute level of noise against the criteria adopted and where these levels are exceeded to then compare the noise environment in the Do Nothing and Do Something scenarios to determine the change in noise level.

For Zone D the assessment concentrates on existing residential development and concludes that the noise impact of the project will in this part of the scheme be slightly positive due to the quieter operation of electric DART vs diesel Commuter units.

This positive impact will extend to other lands zoned residential, however, future developments on zoned land will need to take into account the noise environment as part of their design. This is the case for all such development land adjacent to infrastructure including road and rail.

4. Summary of issue raised – Developer appoint Environmental Manager to ensure mitigation measures are implemented.

   Response to issue raised

   A Construction Environmental Management Plan (CEMP) has been prepared presenting the approach and application of environmental management and mitigation for the construction of the proposed project. (Appendix A5.1. in Volume 4 of the EIAR). Key staff have been identified including an Environmental Manager (Section 3.3.3) '*In order to ensure the successful development, implementation and maintenance of the EOP, the Contractor will be required to appoint an independent site Environmental Manager to provide independently verifiable audit reports.*'

5. Summary of issue raised – Submit Waste Management Plan, treat as a live document and communicate to relevant personnel.

   Response to issue raised

   A Construction and Demolition Waste Management Plan (CDWMP) is included as Appendix E to the CEMP (Appendix A5.1 in Volume 4 of this EIAR). It sets out the Contractor's proposals regarding the treatment, storage and disposal of waste including demolition waste. The plan will be a live document that will be amended and updated to reflect current conditions on-site as the project progresses. The obligation to develop, maintain and operate a CDWMP will form part of the contract documents for the project.

   Copies of the CDWMP will be made available to all personnel on-site. The CDWMP shall also be included in site induction training and toolbox talks, where required.

6. Summary of issue raised – Submit updated Construction and Environment Management Plan and treat as a live document. Include: dust, refuelling, bunded area, spill kits, burning.

   Response to issue raised

   The implementation of the requirements of the CEMP will ensure that the construction phase of the project is carried out in accordance with the commitments made by CIE/IÉ in the Railway Order application process for the proposed development, and as required under the railway order. Once commenced, the CEMP is considered a living document that will be updated according to changing circumstances on the project and to reflect current construction activities. The CEMP will be reviewed on an ongoing basis during the construction process and will include information on the review procedures.

7. Summary of issue raised – Noise levels at sensitive locations shall not exceed stated levels. MCC suggest a planning condition as follows: '3. During construction phase noise levels at noise sensitive locations shall not exceed 70dB(A) between 0700 to 1900 hours Monday to Friday and 0800 to 1400 hours Saturday and 45dB(A) at any other time. Noise exceedance activities must be agreed in writing with MCC prior to the activity taking place'

   Response to issue raised

   This condition is not appropriate for construction works on the DART+ West project which necessitates construction works take place during night-time periods in order to maintain the rail service in operation. It is therefore recommended that ABP instead adopt the approach outlined in the EIAR where thresholds of significance for construction noise are identified and mitigation measures provided in the event these thresholds may be exceeded.

   Note that the EIAR thresholds of significance are not numerical limits that apply to construction noise. It is not proposed in the EIAR to adopt an absolute limit for construction noise. Instead, construction works are assessed against thresholds of significance and mitigation is provided where significant

impacts may occur. It is not appropriate to set absolute limits as some works take place in close proximity to sensitive locations for a short period and it would be impossible stay within a fixed limit. It is also worth considering that often in an effort to promote a construction method that is slightly less noisy it comes at the expense of the activity occurring over a longer duration. In many locations the works required are transient and will move along the length of the Project, for example OHLE installation. In the context of works being directly adjacent to a specific property adopting a construction method which may be fast, but noisier is potentially less disruptive than a slower and marginally quieter method.

Proposed construction working hours are provided within the EIAR, Volume 2, Chapter 5, Section 5.2.1.

8. Summary of issue raised – Waste disposed at authorised site.

   Response to issue raised

   A Construction and Demolition Waste Management Plan (CDWMP) is included as Appendix E to the CEMP (Appendix A5.1 in Volume 4 of this EIAR). The Construction CDWMP has been developed to ensure that waste arising on-site during the construction and demolition phase of the DART+ West will be managed and disposed of in a way that ensures the provisions of the Waste Management Acts, 1996-2011 and associated Regulations (1996-2011).

   The EIAR also assessed licensed landfill and waste facilities located in the Eastern-Midlands Waste Region for management of waste from the construction industry as well as municipal sources.

9. Summary of issue raised – New pedestrian access at Dunboyne train station from the western platform to the adjacent residential development.

   Response to issue raised

   Access from the existing residential development to the west of the station is not proposed as part of the DART+ West project and has not been assessed terms of traffic impacts, accessibility or as part of discussions with neighbouring residents, the public or council as part of the development of the DART + West Project. Provision of an access at this location could be considered as part of future station capacity enhancement projects.

   Summary of issue raised – Surface water drainage work comply with Greater Dublin Regional Code of Practice for Drainage Works Volume 6.

   Response to issue raised

   The drainage design for the project has been carried out in compliance, among others, with the Greater Dublin Regional Code of Practice for Drainage Works and the Greater Dublin Strategic Drainage Study, GDSDS. Regional Drainage Policies, Vol. 2, 2005.

   The Detail Design of the project will continue to comply with these regulations.

10. Summary of issue raised – Certificate of Registration or Waste Facility Permit required to import soil/stone/topsoil.

    Response to issue raised

    Material will be required to comply with an appropriate specification for earthworks such as the TII Specification for Road Works Series 600 – Earthworks (TII 2013) and specification for concrete such as the Specification for Road Works Series 1700 – Structural Concrete (TII 2017). Furthermore, the CEMP (Appendix A5.1 in Volume 4 of this EIAR) Section 2.2.11 Sourcing of materials, stipulates that only those quarries that are authorised will be used in the construction phase.

    If the material is deemed to be a waste, removal and reuse/recycling/recovery/disposal of the material will be carried out in accordance with the Waste Management Act 1996 (as amended), the Waste Management (Collection Permit) Regulations 2007 (as amended) and the Waste Management (Facility Permit & Registration) Regulations 2007 (as amended). The volume of waste requiring

recovery/disposal will dictate whether a Certificate of Registration (COR), permit or licence is required by the receiving facility.

11. Summary of issue raised – Road opening licenses required for works on public roads.

    Response to issue raised

    Any required road opening licences will be sought prior to construction works on public roads.

5.4 Ref. No.4 – PB04 - TII

Representative – Cliona Ryan

5.4.1 Submission, Location – Scheme Wide

Issues raised in submission are addressed with their responses below.

5.4.2 Response to submission

1. Summary of issue raised – Compliance with TII Publications, standards, departure applications and constructions monitoring and approval procedures.

   Response to issue raised

   All required consultation, requirements and protocols will be adhered to during the construction phase.

2. Summary of issue raised - All structures on haul route checked prior to development to confirm capacity to accommodate possible abnormal loads, incl. abnormal weight loads.

   Response to issue raised

   A Construction Traffic Management Plan (CTMP) will be required to be developed and implemented by the Contractor(s) to address all modes of transport and routes during the construction stage. This will also include structural surveys that will be undertaken to ensure the defined routes are compliant. The CTMP will be agreed with Iarnród Éireann and the respective local authority prior to the commencement of the construction phase.

3. Summary of issue raised - Revision of EIAR and associated documentation - 5.3.1 Surveys and licences needs to identify TII Publications for construction & operation phases. Chapter 05 / Appendix 5.1 / Chapter 27 should record details of works at national road network structures & proposed mitigation.

   Response to issue raised

   The contract documents for the construction will refence the appropriate TII Standards and publications relevant to the interfaces with TII infrastructure.

4. Summary of issue raised - Prior to commencement, CEMP (incl. services access) should be submitted for written agreement of planning authority, subject to written agreement of TII. Should incl. mitigation measures to protect operational Luas infrastructure.

   Response to issue raised

   A Construction Environmental Management Plan (CEMP) will be prepared by the Contractor(s). All relevant interfaces will be discussed with TII.

5. Summary of issue raised - Prior to commencement, CTMP (incl. services access) should be submitted for written agreement of planning authority, subject to written agreement of TII. CTMP will: (a)

demonstrate consultation with MMaRC Network A & M3 PPP Contractors, via TII & relevant road authorities and, (b) incl. detail on traffic management (incl. static &VMS signage).

Response to issue raised

A Construction Traffic Management Plan (CTMP) will be required to be developed and implemented by the Contractor(s) to address all modes of transport during the construction stage and will be agreed with Iarnród Éireann and the respective local authority prior to the commencement of the construction phase.

6. Summary of issue raised - Prior to commencement, plans/details should be submitted for written agreement of planning authority, subject to TII written agreement, of: (a) OCS pole protection & safety distances and/or, (b) existing/temporary/subsequent permanent fixings. Removal / temporary & final installation of Luas Infrastructure undertaken outside Luas operational hours, under system shutdown and OCS isolation, with prior agreement with TII & Luas Operator as required. Luas operator / TII require 24hr access to Luas infrastructure - prior to commencement, developer should enter into access & maintenance agreement with TII.
Developer/contractor required to apply for works permit from Luas operator by virtue of the Light Railway (Regulation of Works) Bye laws 2004 (S.I. number 101 of 2004). Developer liable for TII's removal/reinstatement of Luas-related building fixings & infrastructure costs. Permit application requires prior consultation, facilitated by the Luas operator.

   Response to issue raised

   Delivery of the DART+ West. If there are works in close proximity to any LUAS infrastructure IÉ will update TII & Luas operators accordingly, although this is envisioned to be minimal.

   Prior to commencement on site all required arrangements will be agreed with TII & Luas operator.

7. Summary of issue raised - CEMP will: (a) identify all Luas alignment interfaces, (b) contain risk assessment for works on interfaces (incl. electrification fault scenarios) and, (c) contain mitigation measures for unacceptably high risks (incl. EMI/vibration/settlement monitoring regime if necessary).

   Response to issue raised

   As a contractor has not yet been appointed, the Construction Environmental Management Plan (CEMP) has not been formally adopted and further development and commitment to the CEMP will be undertaken following selection of Contractors and before commencement of site works.

   IÉ commits to ensuring that the CEMP will be in compliance with TII Publications (Standards) in accordance with relevant TII Publications (Technical).

8. Summary of issue raised - With the exception of Embedded mitigation specific to Intel (section 22.6.1), there are no specific mitigation measures set out In Section 22.6 Mitigation Measures of the submitted EIAR with suggested mitigation measures listed “should any Impacts manifest themselves during operation.” At Section 22.7 Monitoring of the submitted EIAR, no monitoring is proposed.

   Response to issue raised

   The reference to Section 22.6 is correct. There are no additional mitigations proposed with respect to EMI as no significant effects are predicted. There are inherent mitigations as a result of the design and obligations to meet the various European Directives which are already referenced in the chapter. However, there are no additional project specific mitigations as a result of identifying at risk sites as part of the EIAR investigation.

   The second part of the statement is also correct (reference to 22.7), no future monitoring is proposed with respect to electromagnetic emissions. Stray current impacts are intended to be limited through operational monitoring of the return currents in the rails. This type of monitoring however is not specifically monitoring of impacts on receptors and more part of the systems operational and maintenance procedures.

9. Summary of issue raised - Chapter 14 Noise and Vibration of the submitted EIAR states “As some construction works will take place close to the Luas tracks It Is appropriate to set vibration criteria during construction work at the Luas line“ and Includes reference to the vibration thresholds set out in TIITs Code of engineering practice for works on, near, or adjacent the Luas light rail system at Table 14-25. No proposed vibration and settlement monitoring locations are set out in this Chapter of the EIAR and the recording of commitment to undertaking vibration monitoring for Luas Is not recorded at Chapter 27 Mitigation and Monitoring Measures of the submitted EIAR.

   Response to issue raised

   Chapter 14 of the EIAR outlines noise and vibration levels above which a significant impact may occur during construction of the project. Section 14.6.1 specifies mitigation measures during construction to minimise the impacts. Noise and vibration monitoring during construction is included within the EIAR as part of the mitigation measures. The specific locations of monitoring will be determined by the contractor as part of the detailed design of the works, however, the monitors used must meet the specification outlined in the EIAR. Specific to works adjacent to the LUAS tracks it would be expected that monitoring will be implemented at this location in order to secure agreement with TII for the works in accordance with the TII’s Code of Engineering Practice for Works on, near, or Adjacent the Luas light rail system.

5.5 Ref. No.5 – PB05 - National Transport Authority

Representative – Hugh Creegan

5.5.1 Submission, Location – Scheme Wide

The National Transport Authority (the 'NTA'), as the agency responsible for the strategic planning of Transport Infrastructure in the Greater Dublin Area, has reviewed this draft Railway Order application and recommends that An Bord Pleanála grant planning consent to Córas Iompair Éireann for the reasons and considerations set out in their submission.

5.6 Ref. No.6 – PB06 - An Taisce

Representative – Ian Lumley

5.6.1 Submission, Location – Scheme Wide

Issues raised in submission are addressed with their responses below.

5.6.2 Response to submission

1. Summary of issue raised – Boundary treatments - palisade fencing inappropriate around Royal Canal. Proposed boundary treatment - painted steel railings. Fencing around Royal Canal - dark Paladin fencing.

   Response to issue raised

   Generally, there is no proposed fencing along the Royal Canal. There are some localised locations where fencing is required for security measures. These are outlined in the EIAR Chapter 4, Section 4.5.10:

   (a) Spencer Dock Station area,
   (b) SET buildings (Substation, TER; SEB, others),
   (c) Depot at Maynooth,

(d) New double track from Maynooth to the depot,
(e) Closed level crossings,
(f) New permanent compounds,
(g) Fencing which requires reinstatement due to the impact of the construction works.

Palisade fencing: 2.4 m or 2.65 m palisade fencing shall be placed along railway boundaries, around substations, at level crossing closures, around the depot area and at other locations to prevent trespass.

Open mesh steel panel fencing for general purpose: open mesh steel panel fencing BS 1722-14:2006 category 1 shall be placed in urban areas to prevent trespass or electrocution. It is used in urban areas where palisade fencing is not required.

2. Summary of issue raised – Reconstruction of Broombridge Rail Bridge - undesirable as raising roadway height will steepen max. falls of roadway/pathway - not acceptable for cyclists/pedestrians/wheelchair users. Proposed alternative: track lowering & reduced height OHLE (used by National Rail in UK).

Response to issue raised

Roadway Gradients

In the current situation topographic survey results have found that many of the gradients are above the 6% maximum acceptable value, with the highest current gradient at 15.2% across a 5.2m length. As part of this reconstruction, we are not proposing to further impact on these gradients.

OHLE

A reduced height OHLE solution wasn't deemed feasible due to the current clearance from the top of the rail (TOR) to the bridge soffit. The current TOR to soffit clearance of the structure (as per available data) is 4360 mm. This clearance does not allow any reduced height OHLE solution intervention. The special reduced height of 4200mm is only possible by requesting a Signalling, Electricity and Telecommunications (SET) standard derogation as per SET-AMS-12. No reduced height OHLE solution was identified that was acceptable to IÉ SET and CCE departments.

Track Lowering

To achieve the required minimum 4400 mm contact wire height, a track lowering option was considered. This potential solution would require the vertical lowering of the tracks below Broombridge OBG5, which would result in lowering works for a length of approximately 600 m. Whilst this is a technically feasible solution, some substantial issues were identified.

Broombridge station

(a) Lowering the tracks requires extensive modifications to the existing station infrastructure, including platforms, accesses, footbridge, utilities, and fences. This impact is the most problematic issue related to track lowering at OBG5 in the proximity of Broombridge Station. It would require, in effect, platform and surroundings reconstruction. These works would severely impact station functionality during the extensive construction period required.

Structural interventions

(a) The existing access ramp to OBG5(Broombridge) between the Canal and the track would need to be rebuilt
(b) The platform structures on both sides of the track would need to be demolished and rebuilt
(c) The existing OBG4A footbridge wood need to be demolished and rebuilt to current standards

Flooding Issues

(a) If the track lowering was to be implemented at OBG5, the tracks need to be lowered by 528mm below OBG5. The level of the Royal Canal at this point is 35.18m. After the lowering, the track levels (Top of Rail) would be 35.23, which (considering the depths of the rail and the sleepers,

160mm and 200mm, respectively) would locate the top of the ballast layout at level 34.87, which is below the canal water level.

(b) Site-Specific Flood Risk Assessment determined that the flooding in this area have been caused by extreme rainfall in combination with a series of blockages in the surface water drainage network and Royal Canal.

(c) The change from diesel (DMU's) to electrically powered trains (EMU's) will reduce the vertical allowance from the distance between the rolling stock and the water surface by approximately 200mm; meaning accepted flood levels would be an additional 200mm lower than they currently are.

(d) Overall track lowering would increase the risk of flooding at this location and the tracks would require the implementation of a pumped drainage system in order to mitigate against this increased risk. In case of failure of the pumping system, or blockages, flooding may occur, which in turn would cause an operation closure. All of these factors would put the operational railway at increased risk

Drainage issues

(a) Implementing a gravity drainage system from OBG5 towards UBG5A as a result of the track lowering is not feasible, therefore a pumped drainage system would be required, and it has been considered and costed. This option would introduce increased operational costs and operational safety risks to the operator as a result of the regular maintenance required. Pumped drainage also has the possibility of failure and so if this failure coincided with a flood event, this would cause the railway to close.

The conclusion of the assessment is that bridge reconstruction is the preferred option. Notwithstanding the potential flooding issues and impacts to operations, this option limits the disruption to the station and railway users/operators during construction. It has a shorter construction programme, reducing the impacts on residents and does not increase the track flooding risk in this location. It is also the most economical option. It is acknowledged that this option significantly impacts on the protected railway bridge (NIAH reference 50060126). However, engagement of a Grade 1 Conservation Architect has taken place to ensure that the reconstruction is done sympathetically and in keeping with the historic canal structure that sits alongside it. Road diversions are required for this option during construction, but traffic assessments have been completed, and the impact is deemed minimal.

3. Summary of issue raised – Bridge rebuilding - high-quality, durable, transparent/translucent balustrades used to raise bridge parapet heights.

Response to issue raised

The proposal for the parapets heightening on bridges is explained in the EIAR Chapter 4 Description of the proposed Development, section "4.5.15.5 Parapets heightening."

The proposal was developed in collaboration with a Grade 1 Conservation Architect to find a solution that can be implemented on each different type of bridge but following the same general procedure each time. In this way, all the affected bridges will be seen as a single intervention.

The proposal in the specific location of Broombridge OBG5 is adopting a steel mesh to the required protection height of 1.8m. The design proposal was also presented to each of the Local Authority Conservation Architects to ensure their feedback was considered. Further engagement will continue at detailed design stage.

The proposal is also adaptable to historical bridges with significant cultural importance.

Summary of issue raised – Demolition/rebuilding of Castleknock Rail Bridge - proposed alternative: track lowering & reduced height OHLE.

Response to issue raised

OHLE

No reduced height OHLE solution was deemed feasible due to the existing clearance from top of rail (TOR) to bridge soffit, so any potential special arrangement would need to be combined with another infrastructure intervention. For this reason, this option was not considered acceptable. The special reduced height of 4200mm is only possible by requesting a Signalling, Electricity and Telecommunications (SET) standard derogation as per SET-AMS-12. No reduced height OHLE solution was identified that was acceptable to IÉ SET and CCE departments.

Track Lowering

To achieve the required minimum 4400 mm contact wire height, a track lowering option was considered. This potential solution would require the vertical lowering of the tracks below Castleknock OBG11, which would result in lowering works for a length of approximately 700 m. Whilst this is a technically feasible solution, some substantial issues were identified.

Castleknock station

(a) Lowering the tracks requires extensive modifications to the existing station infrastructure, including platforms, accesses, footbridge, utilities, and fences. This impact is the most problematic issue related to track lowering at OBG11 in the proximity of Castleknock Station. It would require, in effect, platform and surroundings reconstruction. These works would severely impact station functionality during the extensive construction period required.

Structural interventions

(a) New retaining walls are required both along the up and down track to mitigate the impact on the Royal Canal and its towpath and adjacent residential buildings
(b) The platform structures on both sides of the track need to be demolished and rebuilt
(c) The existing OBG11A footbridge needs to be demolished and rebuilt to current standards
(d) Station building to be dismantled and reassembled.

Flooding Issues

(a) There are no known existing flooding issues identified at Castleknock station as per the Stage 3 Site-Specific Flood Risk Assessment. However, the new longitudinal profile places the tracks at Castleknock Station 1 m below Royal Canal water level which may result in future flooding issued. To potentially mitigate a new retaining wall would need to be designed to ensure this minimises the risk of water ingress from the Royal Canal.

Drainage issues

(a) It is deemed feasible to install lineside gravity drainage from the track lowering low point to an outfall at UBG10, located circa 270 m from OBG11 however construction of the drainage next to the live railway will require the works to be completed at night/weekend possessions. There is a hotel and residential properties at this location that would be affected by the out of hours works, adding to disruption.

Regarding track lowering, while this option minimises the impact on the historic railway bridge and does not require road diversions, the disruption to railway users and operations is significant during construction. In addition, the cost and programme impact of the construction work at the station was greater for this option. The track lowering requires significant retaining walls structures, impacting the boundaries of the residential area of Castleknock Wood Rd and Castleknock View Rd and requiring temporary/permanent land acquisition. A gravity drainage solution could be installed to mitigate the risk of the track flooding due to the new track level, 1 m below the Royal Canal level, but the risk of the tracks flooding remains a concern.

A Bridge deck reconstruction (precast arch deck) option limits the disruptions to station and railway users/operators significantly during construction. It has a shorter construction programme, reducing

the impacts on residents during construction and is a more economic option. It is acknowledged that this option impacts significantly on the historic railway bridge, however engagement with a Grade 1 Conservation Architect will ensure that the reconstruction is done sympathetically and in keeping with the historic canal structure. Road diversions are also required, but traffic assessments have been completed and the impact is deemed minimal.

4. Summary of issue raised – Demolition/rebuilding of Leixlip Confey Station Rail Bridge - proposed alternative: track lowering & reduced eight OH

Response to issue raised

OHLE

In order for the reduced height OHLE solution to be implemented at OBG14, a special reduced Contact Wire Height of 4200mm would need to be implemented. According to I-ETR-4004 Clearance Requirements for DC 1500V Electrified Lines, the minimum Contact Wire Height shall be 4400mm. The special reduced height of 4200mm is only possible by requesting a Signalling, Electricity and Telecommunications (SET) standard derogation as per SET-AMS-12. No reduced height OHLE solution was identified that was acceptable to IÉ SET and CCE department.

Track Lowering

To install the OHLE equipment beneath OBG14 and achieve the required 4700 mm contact wire height, a track lowering was considered. This potential solution would require the vertical lowering of the tracks by approximately 580 mm directly below OBG14, which would result in lowering works for a length of approximately 600 m along the tracks. Whilst this is a technically feasible solution, some substantial issues were identified, as identified below.

Leixlip Confey station

The option to lower the tracks requires extensive modifications to existing station infrastructure at Leixlip Confey station (platforms, accesses, footbridge, utilities, fences, etc.) due to the close proximity of the OBG14 bridge to the station. This impact is the most problematic issue related to track lowering at OBG14. It would require, in effect, a station reconstruction. These works would have a significant cost implication and would severely impact station functionality during the extensive construction period required.

Structural interventions

(a) For the proposed track lowering solution a maximum track lowering of 0.92m is required at the west end of the access ramp, hence the platform structures must be modified to adapt to this new longitudinal alignment. This in turn impacts the footbridge and the retaining wall structures. Therefore, The existing OBG14A footbridge must be demolished and rebuilt, the platform structures on both sides of the track need to be either partially (down platform) or completely (up platform) demolished and rebuilt and the existing retaining wall between the Canal and the track needs to be modified

Flooding Issues

(a) If the track lowering was to be implemented at OBG14, the tracks need to be lowered by 0.58m below OBG14. The level of the Royal Canal at this point is 56.25m. After the lowering, the track levels (Top of Rail) would be 56.22m, which (considering the depths of the rail and the sleepers, 160mm and 200mm, respectively) would locate the top of the ballast layout at level 56.19m, which is below the canal water level.

(b) The change from diesel (DMU's) to electrically powered trains (EMU's) will reduce the vertical allowance from the distance between the rolling stock and the water surface by approximately 200mm; meaning accepted flood levels would be an additional 200mm lower than they currently are.

(c) Overall track lowering would increase the risk of flooding at this location and the tracks would require the implementation of a pumped drainage system in order to mitigate against this

increased risk. In case of failure of the pumping system, or blockages, flooding may occur, which in turn would cause an operation closure. All of these factors would put the operational railway at increased risk

Drainage issues

(a) Gravity drainage option - At UBG13A the track level is 57.74m so to construct the drainage at track level does not provide for a sufficient slope. The drainage would need to be constructed by a counter slope for the 300m between OBG14 and UBG13A, requiring excavations higher than 3 m before out falling to the culvert running adjacent to the live running lines. Construction of a 3m deep excavation directly adjacent to the railway line introduces increased risks during construction and requires extensive temporary works and monitoring of the existing tracks to ensure the live railway is not affected. It is proposed that this work would be done at the same time as the closure of the down track to improve safety of the workforce. If this is not possible, these works would need to be completed during night-time and weekend possessions. In addition, there are a number of properties which have gardens backing onto this drainage route as shown below in red. Doing these works right outside of these houses would be very disruptive and has been considered during evaluation of this option. Given the depth of this gravity drainage and the proposed outfall point it will be difficult to maintain and hence may be more prone to blockages. If the gravity drainage was to block and a flood event occurred, the railway would be forced to shut until this was resolved.

(b) Alternatively a pumped drainage option could be considered in order to minimise the risk of the tracks flooding. This would require the installation of a pump and drainage system in the vicinity of the tracks. This option would introduce increased operational costs and operational safety risks to the operator as a result of the regular maintenance required. Pumped drainage also has the possibility of failure and so if this failure coincided with a flood event, this would cause the railway to close. For this reason, gravity drainage has been considered in terms of evaluating the track lowering option.

The conclusion of the assessment is that bridge reconstruction is the preferred option. This option limits the disruption to the station and railway users/operators and does not require the closure of the Royal Canal. It has a shorter construction programme, reducing the impacts on residents during construction and does not increase the track flooding risk in this location. It is also an economically advantageous option. It is acknowledged that this option significantly impacts the historic railway bridge. However, engagement with a Grade 1 Conservation Architect ensures that the reconstruction is done sympathetically and in keeping with the historic canal structure.

5. Summary of issue raised – Coolmine level crossing - proposed: realign and/or flip ramping and vertical supports to retain as many mature trees as possible & provide accessible lifts.

Response to issue raised

The proposed design was determined by a multi criteria assessment and multiple public consultations. Detailed information on the options assessed can be found in Chapter 3, Section 3.6.4.4.3. The existing footpath close to the canal will be reinstated, while as many existing trees as possible will be retained. EIAR Chapter 15, Sections 15.6.3 which sets out the operation phase mitigation measures at Coolmine station and surrounds. Section 2.2.7 of this reports sets out the issues regarding the provision of lifts.

6. Summary of issue raised – Porterstown level crossing - proposed: realign ramping to preserve banking to old Schoolhouse, retain 2 California Pine trees (adjacent to bridge) & 1 European Beech tree (adjacent to Porterstown Road, and use COR-TEN clad lightweight steel structure.

Response to issue raised

The proposed design was determined by a multi criteria assessment and multiple public consultations. Detailed information on the options assessed can be found in Chapter 3, Section 3.6.4.4.4. The MCA assessed Do-Nothing, Do-Minimum and 4 other options. All 4 other options Option 1 to 4 were

determined to have similar environmental constraints and impacts. Under Biodiversity sub criterion, the do-nothing and do-minimum options were preferable but scored lower on other criterion assessed. Option 4 provided the approach ramp on the east of the Porterstown Road but would have impacted on a larger number of trees that the preferred option, Option 2 presented. The accommodation works necessary to maintain access within the lands to be retained are subject to agreement between the landowner and CIE.

7. Summary of issue raised – Clonsilla Bridge - reconsider construction detailing to avoid vertical supports cutting into Royal Canal & towpath, use lightweight steel structure (as above) and provide accessible lifts.

   Response to issue raised

   Due to spatial constraints the proposed northern approach is required to be constructed adjacent to the canal and roadway. The proposed DART+ West Bridge interfaces with the Royal Canal Urban Greenway (RCUG) along this section. DART+ West consulted and agreed the proposed design with Fingal Co.Co. (FCC), FCC RCUG design team and Waterways Ireland. The proposed design intrudes into the canal over a relatively short length immediately after the existing narrowing of the canal under the canal bridge. The design is an extension of the existing quay wall and does not negatively impact the navigable section of the canal or navigable sight lines. The proposed provides a comparable tow path width as is existing, in addition to a ramped access up to the public street as opposed to the stepped access currently provided. This will provide an accessible route for wheelchair and mobility impaired users and an enhancement as a recreational and commuting cycle route.

8. Summary of issue raised – Ashtown level crossing - Ashtown tunnel disproportionate / unjustified for lightly trafficked suburb as it is well connected, same considerations for pedestrians/ cyclists / wheelchair users recommended as above.

   Response to issue raised

   Issues in relation to the Ashtown Level Crossing are addressed under Sections 2.2 and 2.4 of this report.

5.7 Ref. No.7 – PB07 – National Disability Authority (NDA)

Representative – Not Applicable

5.7.1 Submission, Location – Scheme Wide

1. Ashtown station - design has barriers for people with disabilities / older people / people with luggage and/or prams (similar to Pelletstown). Rise of ramps are greater than 2000mm [BS8300 & IS EN17210] so alternative access for wheelchair users should be provided (lifts).
2. Irish Rail should adopt Universal Design approach for every aspect of project. User testing, incorporated with feedback from Pelletstown station, incl. temporary infrastructure.
3. Clear commitment Irish Rail will have sustained engagement process with diverse range of users by establishing advisory committee.
4. Electronic ticketing / check-in machines & informational terminals complying with European Accessibility Act. Design & procurement of products/services must comply with EU Directive 2019/882 and I.S EN17161:2019 implemented when designing.
5. Use of Code of Practice on the Accessibility of Public Services and Information provided by Public Bodies.

5.7.2 Response to submission

1. The Bridge design is not based in British Standards guidelines specifically. Below outlines the list of standards adhered to (EIAR Chapter 4, Section 4.8.5.1) that demonstrate compliance:

(a) Building Regulation 2010 – Technical Guidance Documents.
(b) Design Criteria for Footbridges (DN-STR-03005-02).
(c) Requirements for Track and Structures Clearances, I-PWY-1101 (IÉ).
(d) National Cycle Manual (National Transport Authority).
(e) Network Rail-Station Capacity Planning Guidance 2016.

2. The works have been designed at with accessibility service in mind ensuring compliance throughout. The works have been designed in accordance with:
   (a) Building Regulation 2010 – Technical Guidance Documents.
   (b) Design Criteria for Footbridges (DN-STR-03005-02).
   (c) Requirements for Track and Structures Clearances, I-PWY-1101 (IÉ).
   (d) National Cycle Manual (National Transport Authority).
   (e) Network Rail-Station Capacity Planning Guidance 2016.
   (f) Building for Everyone (ADA-The National Disability Authority).

   Additionally, Irish Rail has a Disability User Group made up of members with a range of disabilities which are consulted regularly in accordance with the provisions of the Disability Act 2005. Clear commitment Irish Rail will have sustained engagement process with diverse range of users by establishing advisory committee.
3. Irish Rail has a Disability User Group made up of members with a range of disabilities which are consulted regularly in accordance with the provisions of the Disability Act 2005. Use of Code of Practice on the Accessibility of Public Services and Information provided by Public Bodies.
4. CIÉ is working towards compliance with EC13/71 which regulates the availability of ticketing for passengers.
5. CIÉ is aware of its obligations under the EU directive and is the process of continually improving accessibility of its services to all passengers.

5.8 Ref. No.8 – PB08 - Inland Fisheries Ireland

Representative – Not Applicable

5.8.1 Submission, Location – Scheme Wide

Issues raised in submission are addressed with their responses below.

5.8.2 Response to submission

1. Summary of issue raised – Comprehensive approach to estuary/river protection during construction/operation in environmental construction management planning, riparian habitat disturbance minimised, undisturbed buffer between development and river maximised.

   Response to issue raised

   The mitigation measures included in Volume 2 Chapter 8: Biodiversity, Section 8.9 include the requirement for a Construction Environmental Management Plan to be prepared by the successful Contractor(s) prior to any works and, measures to protect watercourses during the construction and operation of the proposed development. The design of the two new bridges over the Lyreen River have incorporated a riparian corridor into their design.

2. Summary of issue raised – CEMP for Spencer Dock station (large ground works near R. Liffey), Coolmine, Porterstown, Clonsilla crossings. Waterways Ireland to be consulted on works impacting on canals.

Response to issue raised

A Construction Environmental Management Plan (CEMP) will be finalised prior to commencement of all site works for the DART+ West project. The CEMP will include all mitigation and monitoring measures developed in the EIAR, NIS and any environmental commitments specified in the Statutory Planning Consent for this project. As per the Environmental Operating Plan (EOP) included in the CEMP (see Volume 4 Appendix A5.1), some environmental control measures are generally implemented across all works. However, some construction works may present a risk of environment damage for which, relevant environmental control measures are required to be incorporated into site-specific method statements. A site-specific method statement will be prepared for Spencer Dock station, as well as Coolmine, Porterstown, and Clonsilla level crossing works identifying the specific mitigation and monitoring measures to be implemented prior to construction.

3. Summary of issue raised – Detailed design & agreed method statement for in-stream works at watercourse crossings. Works between 1st Jul. & 30th Sept.

Response to issue raised

For works during this period, Inland Fisheries Ireland will be consulted.

4. Summary of issue raised – The Utility diversions crossing watercourses done with directional drilling and the planned 400m realignment Ballycaghan Stream will be subject to agreed detailed design & method statement with IFI.

Response to issue raised

IFI will be consulted during detailed design stage and prior to commencement on site.

5. Summary of issue raised – Adequate attenuation measures & silt/petrol interceptors for drainage works. Constructed wetlands & swales applied where appropriate.

Response to issue raised

The CEMP to be finalised prior to the commencement of all site works for the DART+ West project will include appropriate mitigation and monitoring measures related to drainage (and others) works.

6. Summary of issue raised – Ongoing aquatic ecological monitoring during construction/operation implemented.

Response to issue raised

A Site Environmental Manager (SEM) will be appointed prior to the commencement of works. This person shall be responsible for carrying out environmental monitoring of the works and ensuring that the mitigation measures proposed in the EIAR (as well as the approved CEMP and Site-Specific Method Statements) are adhered to. It is highly unlikely that any water quality impacts would arise during the operational phase, however, should any water quality impacts arising from the project be brought to the attention of Irish Rail as part of routine testing carried out by the EPA or Waterways Ireland, they would act accordingly in compliance with their statutory obligations.

5.9 Ref. No.9 – PB09 - Irish Water

Representative – Yvonne Harris

5.9.1 Submission, Location – Scheme Wide

1. Separation distances between ex. IW assets and proposed structures/other services/trees/etc. in accordance with IW Codes of Practice & Standard Details.

2. No impact IW Drinking Water Source / waters for abstraction of drinking water, no deterioration in quality during construction/operation. Engage with IW to agree mitigation measures to protect drinking water sources / abstractions prior to commencement.
3. Ensure access to IW's Spencer Dock Waste Water Pumping Station, and roadway to west, maintained for IW employees/contractors during construction/operation.
4. Development carried out in compliance with IW Standards Codes & Practices, diversion Agreement with IW prior to works commencing for diversions of IW network. Connection Agreement with IW prior to works commencing for new connections to IW network.

5.9.2 Response to submission

1. Diversions have been discussed and agreed with IW throughout the design process to date. IÉ will continue to consult with IW throughout the design phases and construction to ensure proposed diversions etc. are agreed with IW.
2. No impact to IW Drinking Water Source / abstraction points is envisaged. Nonetheless, IÉ to engage with Irish Water prior to construction regarding measures to protect drinking water sources / abstractions.
3. Access to the Spencer Dock Waste Water Pumping Station to be maintained at all times
4. Works will be carried out in accordance with Irish Water's Standards and connection and diversion agreements in place prior to undertaking the works

5.10 Ref. No.10 – PB10 - Department of Housing, Local Government and Heritage

Representative – Michael Murphy

5.10.1 Submission, Location – Scheme Wide

Issues raised in submission are addressed with their responses below.

5.10.2 Response to submission

1. Summary of issue raised - Unresolved issues of concern: distance from the known edge of Monument DU013-018 to nearest construction groundworks not specified in EIAR- undetermined if setback distance from the monument is adequate. Not clear if Chapter 20 has fully accounted for the substantial footprint of the compound in assessing the likely impacts to DU013-018

   Response to issue raised

   In Chapter 20 (AH04, Table 20.35) it is stated that the recorded monument will be preserved in-situ within a fenced off buffer area, which will be actively managed to ensure the ongoing use of the surrounding area during its use as a construction compound. The buffer zone is circa 32 metres by 35 metres.

2. Summary of issue raised - CEMP to identify/highlight location of all archaeological / cultural heritage constraints close to works. CEMP to describe all identified likely archaeological impacts, direct & indirect, all mitigation measures employed to protect the archaeological /cultural heritage environment during all phases of works.

   Response to issue raised

   This information will be included during the further development of the CEMP included in Volume 4 Appendix A5.1 of the EIAR, following the selection of contractors and before commencement of site works.

3. Summary of issue raised - Project Archaeologist appointed to oversee/advise on all aspects of scheme.

Response to issue raised

A project archaeologist will be appointed in the scheme in line with the EIAR Vol 4 Ch. 05 Section 3.3.11.

4. Summary of issue raised - Prior to commencement, suitably qualified archaeologist engaged to carry out Archaeological Geophysical Survey at AAP05, AAP07, AAP09, AAP14, AAP15, AAP18, AAP19, AAP20, AAP21, AAP25, APP26 & AAP29, in addition to mitigation measures in EIAR. (a) Archaeological Geophysical Survey carried out under licence from National Monuments Service and in accordance with approved method statement. (b) After works, archaeologist submits report to Department and planning authority describing results of geophysical survey. Where archaeological material is present, further mitigation measures required; may include test excavation, redesign, excavation/monitoring. No works to commence until after report.

   Response to issue raised

   Regarding AAP18, 19, 20, 21, 25, 26 and 29 – this is acknowledged, although these are all relatively small areas and as such archaeological testing (as recommended in the EIAR chapter 20) is a suitable method to identify previously unrecorded archaeological remains.

   Geophysical survey was not detailed as a mitigation measure in Chapter 20 within regards to the below AAPS due to the following reasons:

   (a) AAP05 – low baseline rating due to the fact that this area is landscaped as a park, has an overall small footprint of 0.25ha and the landscaping disturbance would not render the site suitable for geophysical survey due to the magnetic disturbance.
   (b) AAP09 – Medium baseline rating due to the presence of a landscaped park and a small area measuring 0.5ha in size. If further archaeological investigations are deemed necessary archaeological testing would be more appropriate as geophysical survey is likely to be affected by magnetic disturbance.
   (c) AAP14 (part of the compound containing AH04) is small in size, hence the recommendation in the EIAR for archaeological testing. In addition the recorded monument AH04 does not require geophysical survey as its extents have already been defined during archaeological testing.
   (d) AAP15 – Medium baseline rating due to the small area measuring 0.2ha in size. If further archaeological investigations are deemed necessary archaeological testing would be more appropriate due to the small size of the site.

5. Summary of issue raised - Prior to commencement, Management Plan for RMP DU013-018— prepared/implemented after consultation/approval of Department and planning authority. (a) Plan provides for management of RMP DU013-018—. (b) Plan agreed before commencement. (c) Plan informed by Archaeological Geophysical Survey of AAP14. (d) Plan define Exclusion Zones for DU013-018—. Exclusion Zones fenced off for duration of works in vicinity. No groundworks (incl. advance geotechnical site investigations) & no machinery / storage of materials / other activity within Exclusion Zones.

   Response to issue raised

   These items will be prepared and submitted prior to the commencement of works and subject to oversight from the Project Archaeologist.

6. Summary of issue raised - Planning authority & Department to receive final archaeological report with results of archaeological monitoring/investigative work/excavation required, after completion of archaeological work and post-excavation specialist analysis. All costs borne by developer.

   Response to issue raised

   Final archaeological report will be made available to planning authority & Department of Housing, Local Government and Heritage

7. Summary of issue raised - Prior to commencement, finalised CEMP incorporating measures set out in NIS, to avoid pollutants in surface water run-off, submitted to planning authority for agreement.

   Response to issue raised

   The mitigation and monitoring measures developed in the NIS will be included in the finalised CEMP prior to commencement of site works.

8. Summary of issue raised - Mitigation measures set out in NIS to avoid injury / disturbance to light-bellied brent geese during the construction/operation implemented in full.

   Response to issue raised

   The mitigation measures in the NIS are recommended to be included as a planning condition, should permission for the proposed development be granted.

9. Summary of issue raised - Clearance of woody vegetation to facilitate works only undertaken from Sept. to Feb. inclusive (outside main bird breeding season).

   Response to issue raised

   This is included as a mitigation measure in the EIAR Vol 2 Chapter 8 Biodiversity, Section 8.9.3.7.

10. Summary of issue raised - Survey of trees to be removed to facilitate works for features which could be used for roosting by bat species, submitted to the NPWS at least 3 months prior to felling of trees - carry out by licensed bat workers and use endoscopes to examine roost features.

    Response to issue raised

    Emergence surveys of tree with bat potential and are proposed to be removed as part of the proposed development were carried out at the mature treelines in the area of the proposed depot. The trees that are proposed to be removed to accommodate the new level crossing arrangements at Ashtown, Coolmine, Porterstown and Clonsilla were assessed has having either negligible or low potential, and therefore, surveys were not undertaken. The mitigation measures listed in the EIAR Vol 2 Chapter 8 Biodiversity, Section 8.9.3.5, include a preconstruction survey of trees with Low, Moderate and High suitability.

11. Summary of issue raised - Finalised lighting design signed off on by a bat specialist, incorporating measures to minimise light spill pollution, submitted to the planning authority for agreement prior to commencement. Lighting design to be implemented in full.

    Response to issue raised

    This will be undertaken as part of the lighting design.

12. Summary of issue raised - Boat-based otter survey carried out over winter of 2022-2023 of Royal Canal from Blanchardstown to Kilcock. Survey work to include collection of otter spraint on Royal Canal from Liffey to Kilcock and DNA analysis of spraint; results of survey work submitted to NPWS as soon as available. Surveys repeated 3 months ahead of commencement and results submitted to NPWS.

    Response to issue raised

    Irish Rail welcomes the suggested condition for a preconstruction Otter survey, which is included as a mitigation measure in the EIAR Vol 2 Chapter 8 Biodiversity, Section 8.9.3.4. IÉ commit to engaging with NPWS in relation to the requested survey.

    Dublin City Council, on behalf of the NTA, are in the process of procuring a boat-based Otter survey along the Royal Canal between the Liffey and Kilcock. This will include spraint collection and subsequent DNA analysis. The survey will be undertaken annually from winter 2023/24, initially for four years. The data collected will be made available to all transportation projects in the vicinity of the Royal Canal, including BusConnects, the Royal Canal Greenway, Metrolink and DART+ West.

13. Summary of issue raised - Ashtown Dewatering Otter Bypass Plan submitted to planning authority for agreement before dewatering of Royal Canal. Plan to provide for passage of otters past dewatered sections of canal during nocturnal hours and, as far as possible, at other times.

    Response to issue raised

    This plan will developed and submitted as requested

14. Summary of issue raised - Badger Site Conservation Management Plans submitted for agreement of relevant planning authorities before commencement for sites where works require removal/ temporary closure of a badger sett. Plans to provide for exclusion of badgers from the setts concerned and timetable for same.

    Response to issue raised

    This plan will developed and submitted as requested

15. Summary of issue raised - Wildflower seed (incl. wild grass species) not to be introduced from outside immediate vicinity of development without the prior permission of planning authority.

    Response to issue raised

    The proposal is to plant trees, shrubs, climbers and herbaceous species as part of the landscaping plan, particularly for screening and biodiversity enhancements and around the stations and level crossings. Areas where the ground is stripped will be allowed to revegetate naturally or by seeding with locally sourced green hay, as stated in the EIAR Vol 2 Chapter 8 Biodiversity, Section 8.9.2.2.

16. Summary of issue raised - The type of bird deflectors is not provided in the EIAR. The Department advised the type of deflector must be effective in heavy fog and low light conditions. The effectiveness of such mitigation measures must be demonstrated before the project is approved. The Department recommends that monitoring of the mitigation measures is carried out and that the monitoring regime is agreed with the local Authorities.

    Response to issue raised

    It is intended that the type of bird deflectors used will be determined by availability at the time they are being procured, and that their effectiveness will have been demonstrated by research, such as Barrientos et al (2011), the meta-analysis referenced in the EIAR Vol 2 Chapter 8 Biodiversity, Section 8.9.3.7. Monitoring the effectiveness of deflectors is very difficult, as the locations are spread out across the proposed development (c. 40km), and any birds that collide with the overhead lines despite the deflectors are likely to be remove by predators (foxes) or sink in the canal. Instead, it is intended to rely on the existing research into the effectiveness of deflectors at reducing bird collision.

17. Summary of issue raised - Given the railway corridor and Royal Canal pNHA status' as KERs, Irish Rail should implement a formal protocol for monitoring collisions with wildlife, particularly badger, otter, geese and swans.

    Response to issue raised

    Wildlife collisions are recorded by train drivers and collated in a central database. Irish Rail intend to undertake a review of collision data and identify hotspots, and to provide mitigation, if practicable to avoid future collisions in these areas.

5.11 Ref. No.11 – PB11 - Geological Survey Ireland

Representative – Dr Clare Glanville, Trish Smullen

5.11.1 Submission, Location – Scheme Wide

1. The EIAR, Chapter 9, Section 9.4.5 mentions 'Louisa Bridge Cold Spring CGS', but not 'Louisa Bridge Warm Spring CGS' in same spring complex
2. If significant bedrock cuttings created, they should be designed to remain visible as rock exposure, rather than cover with soil/vegetation in accordance with safety guidelines / engineering constraints.

5.11.2 Response to submission

1. Although not refenced it is however contained within the same designated footprint as shown on the mapping. Both appear to be in disrepair and in need of attention.
2. It is unlikely that any new significant rock cuttings will be created. This will be reviewed at detailed design stage.

5.12 Ref. No.12 – PB12 - Dublin City Council

Representative – John O'Hara

5.12.1 Submission, Location – Dublin City

Issues raised in submission are addressed with their responses below.

5.12.2 Response to submission

1. Summary of issue raised - Alignment of new/altered roads designed to ensure all longitudinal gradients & cross falls on carriageways/islands/buildouts/footways are in accordance with 'Construction Standard for Road and Street...' unless otherwise agreed with DCC.

   Response to issue raised

   All works as part of DART+ West will be in accordance with best practice and standards or agreed with DCC. IÉ agree to liaise with DCC on final designs.

2. Summary of issue raised - Road Safety Audits carried out for new roads & ex. public roads modified as part of works, at appropriate stages throughout design of each individual scheme.

   Response to issue raised

   RSA Stage 1 has been completed and agreed. Further RSA's will be undertaken at the appropriate design stages.

3. Summary of issue raised - Prior to commencement, IÉ to consult with Roads Design and Construction Division of DCC on works that impact bridges within DCC's jurisdiction. All works to bridges to align with best practices as set out in TII Publications (Standards & Technical).

   Response to issue raised

   All works as part of DART+ West will be in accordance with best practice and TII guidance where applicable. IÉ agree to liaise with DCC on final designs prior to commencement on site.

4. Summary of issue raised - Detailed drawings prepared & forwarded to DCC, setting out proposed construction details for works to public realm, incl. proposed materials & construction details. Proposed public realm design for Preston Street agreed with relevant departments in DCC.

Response to issue raised

IÉ will liaise with the relevant DCC Departments during detailed design and preparation of construction documents subject to planning approval.

5. Summary of issue raised - Independent industrial heritage expert engaged to assess and report on impact of scheme on industrial heritage features.

   Response to issue raised

   IÉ commit to the continued engagement of an Independent industrial heritage expert as part of the ongoing project development.

6. Summary of issue raised - NTA appoints a competent project archaeologist to design team to oversee delivery of archaeological strategy outlined in EIAR, with responsibility for management of archaeological aspects of contract.

   Response to issue raised

   A Project Archaeologist will be appointed to monitor the construction phase in line with mitigation measure 20.6 of Chapter 27. “Mitigation of impacts on the archaeological and cultural heritage resource that would occur during the construction phase of the proposed development will be a staged approach that will be carried out during the pre-construction, enabling and main infrastructure works phases. The mitigation measures will be managed and overseen by a Project Archaeologist appointed by Iarnród Éireann.”

7. Summary of issue raised - Grade 1 Conservation Architect with proven & appropriate expertise employed to design/manage/monitor/implement works to protected structures & historic structures to ensure adequate protection of retained/historic fabric during works. All works designed to cause min. interference to historic structure/fabric.
   (a) IÉ & Grade 1 Conservation Architect requested to engage with Conservation Section of DCC throughout design/tender/construction process.
   (b) Raising of historic parapets/ walls, dismantling & reconstruction of bridges/walls are of concern from conservation standpoint for significant impact on architectural character of historic fabric & special architectural character of areas around railway line, further clarity required by IÉ. Design & detail of proposed alteration to built heritage fabric agreed with Conservation Section of DCC in advance.
   (c) IÉ to ensure project impacts continuously monitored by design team to inform design & mitigate against adverse impacts on architectural heritage during (not after) design process, whether structure protected or not.

   Response to issue raised

   IÉ commit to engaging a Grade 1 Conservation Architect to advise on the design of heritage structures. IÉ will also engage with DCC Conservation Section on the design and detail of these heritage features. A suitably qualified site supervision team will be employed to monitor all construction works and the Conservation Architect will input on the heritage features where required.

8. Summary of issue raised - Development carried out in accordance with:
   (a) Works to protected structures / historic fabric: best conservation practice & Architectural Heritage Protection Guidelines for Planning Authorities & Advice Series (DHLGH). Any repair works to retain the max. amount of surviving historic fabric in-situ; items removed for repair off-site recorded/catalogued/numbered to allow authentic reinstatement.
   (b) All ex. original features near works protected during works.
   (c) Repair of original fabric schedule/carried out by appropriately experienced conservators of historic fabric, particularly master stone masonry skills.
   (d) Architectural detailing & materials in new work to be executed to highest standards to complement setting of protected structures & historic area.

Response to issue raised

During the construction stage, works will be sympathetically implemented using best conservation practices. In relation to Sheriff Street bridge, in the cases of the piers which are not affected, these will be preserved and maintained to keep the existing appearance as much as possible. Due to the alterations to the spans during the bridge works it would not be deemed possible to preserve all the materials whilst still ensuring structural integrity.

In relation to the parapets, the fabric used for this increase in height as presented in the EIAR will continue to be developed in consultation with the Conservation Section within DCC.

Regarding the water tower, this is not impacted by the Spencer Dock station/tracks works.

9. Summary of issue raised - Section/location of artworks along route as part of the Percent for Art strategy reviewed/agreed with local authority Arts Office and submitted to / agreed with planning authority prior to commencement.

Response to issue raised

CIÉ will liaise with the relevant DCC Departments during detailed design and preparation of construction documents.

10. Summary of issue raised - Where DCC land impacted by project:
    (a) DCC compensated for its lands utilised for project, permanent/temporary take (incl. compounds), incl. tenanted/leased properties, whether title is/is not taken, in accordance with Acquisition of Land (Assessment of Compensation Act 1919).
    (b) If title to DCC land is transferred to IÉ/another, the Council, in addition to compensation, should retain air-rights for development purposes.
    (c) Appropriate accommodation works provided at DCC properties affected by project.
    (d) Where alterations proposed to road network / alternative access & parking arrangements are sought, IÉ to clearly identify which lands affected are private/public.

Response to issue raised

(a) If the Railway Order is confirmed compensation will be addressed in accordance with statute and Compulsory Purchase practice and procedure as and when statutory notices are served.
(b) Where and if air- rights can be maintained this will be agreed with CIE.
(c) Appropriate accommodation works are to be addressed as part of the overall compensation agreements.
(d) The current landownership of affected lands is included within the Railway Order. In general, new and altered public roads will remain or become public roads.

5.13 Ref. No.13 – PB13 - Kildare County Council

Representative – Caroline Talbot, Sonya Kavanagh

5.13.1 Submission, Location – Kildare

Issues raised in submission are addressed with their responses below

5.13.2 Response to submission

1. Summary of issue raised - Due to location of depot and the flood compensatory storage areas adjacent to the rail line, potential site of 2nd train station restricted. Applicant to engage with stakeholders, incl. KCC, NTA, affected landowners, to provide clarity on new train station's location.

Response to issue raised

See 2.7.14 of this report in relation to the second train station for Maynooth.

2. Summary of issue raised - Works at the existing Maynooth train station relate solely to delivery of DART services and, unlike works at Connolly/Spencer Dock stations, no proposals to enhance public realm / better integrate station with surroundings. Canal Harbour regeneration area in RSES. Incorporate public realm improvements into final approved scheme.

   Response to issue raised

   The works at Connolly and Spencer Dock are necessary to provide additional capacity for extra services. There is no such operational requirement at Maynooth, therefore upgrades to the station are not required. This is a rail capacity enhancement scheme, therefore improvements to non-rail related infrastructure are not provided.

3. Summary of issue raised - Progress delivery of new train station in Leixlip in tandem with scheme, incl. park & ride facility.

   Response to issue raised

   The provision of additional stations and the strategy on deciding their location is a matter for the National Transport Authority (NTA). Any additional stations would have to be brought forward as a separate planning application.

   However, it should be noted that the community in Leixlip are well served with stations at Louisa Bridge and Confey. The community will further benefit from increased levels of service, once DART+ West is complete.

4. Summary of issue raised - Leixlip LAP - Incorporate infrastructure to enable north-south permeability (i.e. 2 additional footbridges over Royal Canal) to facilitate active travel measures.

   Response to issue raised

   The DART+ West project is a capacity enhancement project and the provision of any infrastructure to provide access to zoned lands is outside the scope of the DART+ West project.

5. Summary of issue raised - Include condition requiring IÉ/agents to carry out appropriate qualitative improvements to public open space within Glendale as compensatory measure for loss of open space in Glendale estate. IÉ required to provide evidence of liaison with residents of Glendale to determine appropriate works & location.

   Response to issue raised

   Landscape mitigation measures are proposed as per EIAR Volume 3A Chapter 15 mitigation sheet 28. View 32 in Volume 3B of the EIAR also presents a photomontage to graphically illustrate the proposed landscape planting proposed at this location.

   CIÉ have met with the representatives from Glendale Estate and will continue to engage with affected stakeholders during the detailed design and construction stages should planning approval be granted.

6. Summary of issue raised - Full details of landscaping to screen substation to be submitted to the planning authority. IÉ responsible for maintenance of landscaped area, replacing any failures.

   Response to issue raised

   Landscape mitigation measures are proposed as per EIAR Volume 3A Chapter 15 mitigation sheet 28. View 32 in Volume 3B of the EIAR also presents a photomontage to graphically illustrate the proposed landscape planting proposed at this location.

   Subject to planning approval this will be further developed and fully detailed. CIÉ will liaise with the relevant KCC Departments during detailed design and preparation of construction documents.

   CIÉ is not seeking in the RO application to permanently acquire the lands on which the proposed mitigation works would be installed and will not therefore be in a position to maintain them.

7. Summary of issue raised - Full details of finishings, incl. colour of substation, agreed with KCC prior to installation.

   Response to issue raised

   CIÉ will liaise with the relevant local authority departments during detailed design and preparation of construction documents. Infrastructure will be provided in line with Railway Order application.

8. Summary of issue raised - Works in & around Cope bridge to be overseen by conservation architect, regardless of protected structure status.

   Response to issue raised

   Works will be overseen by conservation architect.

9. Summary of issue raised - New underpass 4mx2.5m, part of Royal Canal Greenway Scheme, constructed before/during Cope bridge works (NTA funding both).

   Response to issue raised

   The underpass to be provided as part of the Royal Greenway Scheme has been considered in the design of the DART+ West project. An indication of this can be seen in EIAR Chapter 4, Section 4.10.4, Figure 4-194, however this is not for delivery by the DART+ West project.

   Co-ordination for the construction of this underpass can be undertaken under the agreement that delivery of the underpass by others does not affect or impact the delivery of the DART+ West project.

10. Summary of issue raised - Signalised junction installed at railway station entrance to include toucan crossing for pedestrians/cyclists.

    Response to issue raised

    Provisions have been made for a pedestrian / cyclist crossing at the entrance to the station. The design detail of this junction will be further developed at detailed design stage and will be subject to engagement with KCC and a Stage 2 Road Safety Audit.

11. Summary of issue raised - Crossing facility north of Cope bridge to have proper site visibility, both directions, & design details agreed before commencement.

    Response to issue raised

    The design at this location is in compliance to current design standards and a Stage 2 RSA will be carried out during the detailed design stage to ensure compliance and safety during the design development. IÉ will continue to liaise with KCC during the design development.

12. Summary of issue raised - Sight visibility at railway stations entrance to comply with DMURS standards.

    Response to issue raised

    The design at this location is in compliance to current design standards (DMURS) and a Stage 2 RSA will be carried out during the detailed design stage to ensure compliance and safety during the design development. IÉ will continue to liaise with KCC during the design development.

13. Summary of issue raised - New public lighting to comply with KCC standards.

    Response to issue raised

    New public lighting will comply with KCC standards as far as is possible however, due to OBG14 being a heritage structure, consultation with the KCC conservation architect will also be required.

14. Summary of issue raised - Road Safety Audit Stage 1/2 carried out on proposed design and Road Safety Audit Stage 3 carried out on completed works by independent Road Safety Auditor.

Response to issue raised

RSA stage 1 has been completed and agreed between IÉ and the audit team. RSA Stage 2 and Stage 3 will be carried out during the detailed design stage of the project and following substantial completion respectively.

15. Summary of issue raised - Appropriate hydrologist/ecologist expertise to provide input to completion of assessment of project and submitted NIS.

Response to issue raised

It is the role of ABP to undertake the EIA and AA for the proposed project.

16. Summary of issue raised - Full details of proposed parapet height increase on Louisa bridge, prepared by / in cooperation with a suitably qualified conservation architect, submitted for agreement of planning authority.

Response to issue raised

The parapet height designs proposed in the Railway Order have been developed in consultation with the Grade 1 Conservation Architect. As outlined in EIAR Chapter 4, Section 4.5.15.5.1, the proposal in the specific location of Louisa Bridge OBG16 is adopting a steel mesh to the required protection height of 1.8m. The design proposal was also presented to each of the Local Authority Conservation Architects to ensure their feedback was captured. Further engagement will continue at detailed design stage.

17. Summary of issue raised - The confirmed RO should provide infrastructure to enable north-south permeability at Blakestown to facilitate active travel measures into final approved design in accordance with Objective MT1.7 and Map 1 of the Leixlip LAP 2020-2023 (now 2026).

Response to issue raised

During the option selection process each of the level crossing replacements was assessed for the requirement for replacement infrastructure. Where existing usage patterns of the level crossings exhibit significant activity, alternative equivalent access is proposed in the form of bridges and roadworks. At Blakestown level crossing the levels of pedestrian and vehicular traffic do not justify provision of replacement infrastructure. A comprehensive multi criteria assessment was undertaken to determine the preferred option at the Blakestown level crossing.

Details of the assessment can be found in Chapter 3 of the EIAR which summarises the information presented in the Option Selection Report.

18. Summary of issue raised - Full structural survey, incl. plans & elevations, of Pike bridge prepared by structural engineer with conservation expertise submitted for record.

Response to issue raised

CIÉ will liaise with KCC departments during the detailed design and construction stage as to the required surveys.

19. Summary of issue raised - Details of proposed parapet height increase on Pike bridge, prepared by / in cooperation with suitably qualified conservation architect, submitted for agreement of planning authority.

Response to issue raised

The parapet height designs proposed in the Railway Order have been developed in consultation with the Grade 1 Conservation Architect. As outlined in EIAR Chapter 4, Section 4.5.15.5.2, Pike Bridge OBG18, the parapet is to be placed on top of the historic stone parapet with a structural support inserted through the stone parapet and founded in the deck at 2 m spacing. There will then be intermediate supports every 400 mm that will sit on top of the existing stone parapet. The support joints

will be welded together, and the solid metal panel required up to a height of 1.2 m will also be welded to the upright supports. IP2X mesh will then be installed up to the required height of 1.8 m.

The design proposal was also presented to each of the Local Authority Conservation Architects to ensure their feedback was captured. Further engagement will continue at detailed design stage.

20. Summary of issue raised - Capacity of 2 proposed roundabouts at Jacksons bridge submitted & designed to ensure they're sufficient for future traffic requirements at this development & location.

    Response to issue raised

    The proposed roundabout providing access to the depot on the realigned L5041 will cater for light traffic well under the design capacity of the proposed roundabout. The second proposed roundabout on the realigned R148 Kilcock Rd provides similar capacity to two nearby existing roundabouts on the R148 some 2 km north-west and 2 km east of the proposed location, therefore the junction proposed is in line with similar junctions along this road and does not create a bottleneck for congestion.

    CIÉ will provide junction capacity assessment results to KCC as requested as part of the design development.

21. Summary of issue raised - Consider over-bridge for pedestrians/cyclists at Jacksons bridge, rather than underpass.

    Response to issue raised

    At the Jackson's Bridge area, the tracks will be raised on an embanked section to protect against flooding. A footbridge over the tracks would have a very negative visual impact on the wider area including Jackson's Bridge. The pedestrian bridge over the new tracks would have a negative visual impact by as it would much higher than the current Jackson's Bridge elevation.

    In this area, the tracks are designed around the 62.60 mOD elevation. Considering the clearance requirements as part of the IÉ standards (minimum 5.3 m vertical clearance between the tracks and new structures), the lower part of this footbridge would be around the 67.90 mOD. This elevation is about 3 meters above Jackson's Bridge road highest point elevation (64.8 mOD).

    In addition, this solution would require long ramps and 1.80 m high parapets crossing the tracks, further accentuating the negative impact on the protected Jackson's Bridge.

22. Summary of issue raised - Detailed design to facilitate continued local access to Jacksons bridge, with provision for road carriageway on bridge to be retained.

    Response to issue raised

    As outlined in EIAR Chapter 4.11.11.2, Jackson bridge will be reverted to pedestrian and cycle bridge due to the realignment of L5041 and R148 which will involve the construction of a new traffic bridge OBG23a.

23. Summary of issue raised - Detailed design to include proposals for presentation of disused railway line under Jacksons bridge. Maintenance arrangement required to ensure railway line doesn't become overgrown at this point.

    Response to issue raised

    The EIAR states as follows in Chapter 8 - 8.9.3.1 The railway line that is being decommissioned at Jackson’s Bridge (91+200- 92+440) will be allowed to revegetate naturally. Native trees will also be planted in this area, outside of the flood compensatory storage areas.

24. Summary of issue raised - Disused/realigned section of railway represents opportunity for linear amenity parkway; significant residual planning gain, consistent with sustainable transport objectives. RO should require proposals for residual use to be agreed & implemented.

Response to issue raised

The EIAR states as follows in Chapter 8 - 8.9.3.1 The railway line that is being decommissioned at Jackson's Bridge (91+200- 92+440) will be allowed to revegetate naturally. Native trees will also be planted in this area, outside of the flood compensatory storage areas.

25. Summary of issue raised - Aesthetics/visual character of new bridge west of Jacksons bridge doesn't respond to highly scenic receiving environment of the Royal Canal. Details submitted of bridge limited and suggest concrete flyover. If constructed, would have significant avoidable & negative visual impact on important historic/recreational amenity. Scope to reduce impact with high quality design; appropriate detailed design required.

Response to issue raised

CIÉ will liaise with the KCC during the detailed design phase to provide detail on the bridge design and consideration of aesthetics.

26. Summary of issue raised - Detailed design & proposed finish of railway depot buildings submitted for agreement with planning authority prior to commencement.

Response to issue raised

The EIAR Volume 2 Section 4.11.12 depot, provides details of the finishes and dimensions of the buildings to be provided as part of the depot design.

IÉ will continue to liaise with the relevant KCC Departments during detailed design and preparation of construction documents.

27. Summary of issue raised - Lighting design at depot to ensure overspill limited and doesn't impact on nearby sensitive receptors, primarily dwellings. Review report to be given to planning authority after 6 months of operation.

Response to issue raised

IÉ will liaise with the relevant KCC Departments during detailed design and preparation of construction documents. Review report shall also be given to planning authority after 6 months of operation.

Information given in Section 4.11.12.10 External lighting of the EIAR.

Outdoor lighting shall be LED type, with the following features:

(a) Glare and lighting pollution control according to CIÉ 126-1997 and 150-2003: luminaires will be pole or wall-mounted with the suitable optic and no tilt. Uplighting will be forbidden.
(b) High energy efficiency (whole luminaire over 120 lm/W).
(c) Minimum service life of 50,000 hrs (L80/B10) at = 25 degrees C.
(d) Suitable dust and waterproofing: IP65.
(e) The BMS (building management system) will control external lighting: It will be automatically turned off during daylight hours; work and inspection areas may be dimmed or turned off and turned on at a whole level when a worker is detected.

According to applicable standards (CIBSE) and best practices, the minimum lighting levels shall be the following (horizontal illuminance unless otherwise stated) This is also presented in table 4-29.

(a) Tracks, railway yards and marshalling area; Illuminance = 10 lux, U0 = 0.4
(b) Stabling (walking, floor); Illuminance = 10 lux, U0 = 0.4
(c) Stabling (train servicing, floor); Illuminance = 20 lux, U0 =0.4
(d) Stabling (train vertical side); Illuminance = 20 lux, U0 =0.25
(e) Storage areas; Illuminance = 20 lux, U0 =0.25
(f) Car road and walkways; Illuminance = 15 lux, U0 =0.4
(g) Car parking; Illuminance = 10 lux, U0 =0.25

In addition, photomontages have been created for night-time at the depot area which are included in the EIAR Volume 3B Photomontages, Part 5 View Locations 35 to 46, sheet 90 to104.

28. Summary of issue raised - Involvement of RIAI Grade 1 Conservation Architect continued throughout detailed design & construction phase.

    Response to issue raised

    A Grade 1 conservation architect will be appointed to the scheme in line with the mitigation measures set out in the EIAR.

29. Summary of issue raised - Detailed design proposals for proposed parapet alterations to Louisa bridge and Pike bridge be submitted for review & agreement with KCC. Detailed parapet designs to take account of particular context of both bridges & regard for intact rural surroundings of Pike bridge. Fixing details for these parapet installations and maintenance regime required to maintain proposed parapets in good visual condition to be described fully.

    Response to issue raised

    Detailed design proposals for proposed parapet alterations to Louisa bridge & Pike bridge to be submitted for review & agreement with KCC. Detailed parapet designs to take account of particular context of both bridges & regard for intact rural surroundings of Pike bridge. Fixing details for these parapet installations and maintenance regime required to maintain proposed parapets in good visual condition to be described fully.

    The electrification of DART lines introduces the risk of electric shock to users of structures along the route (bridges and footbridges over the railway and walkways next to walls adjacent to the railway). Where isolation distances do not meet the minimum requirements then physical barriers that prevent accidental contact with the power line are required. The standards require that the minimum height of parapets must be 1.80 m, where the minimum height of solid infill shall be 1.2 m. The 600 mm difference in height between 1.2 m and 1.8 m must be supplemented with either a solid or mesh type element with a maximum opening of 12.5 mm (IP2X). The standards also require the top of the parapets to be capped such that walking on top of them will not be possible.

    As outlined in EIAR Chapter 4, Section 4.5.15.5.1, the proposal in the specific location of Louisa Bridge OBG16 is adopting a steel mesh to the required protection height of 1.8m.

    As outlined in EIAR Chapter 4, Section 4.5.15.5.2, the proposal in the specific location of Pike Bridge OBG18 is places the parapet on top of the historic stone parapet with a structural support inserted through the stone parapet and founded in the deck at 2 m spacing. There will then be intermediate supports every 400 mm that will sit on top of the existing stone parapet. The support joints will be welded together, and the solid metal panel required up to a height of 1.2 m will also be welded to the upright supports. IP2X mesh will then be installed up to the required height of 1.8 m.

    The design proposal was also presented to each of the Local Authority Conservation Architects to ensure their feedback was captured. Further engagement will continue at detailed design stage.

30. Summary of issue raised - No works to create increased flood risk on lands outside the control of developer/landowner.

    Response to issue raised

    Proposed flood risk management measures ensure that there is no increase in flood risk up to the 1 in 1000 year (+ Climate change) event as a result of the proposed development.

31. Summary of issue raised - Developer to clarify proposals regarding incorporation of Nature Based SuDS into proposed surface water management plans, for rail works and proposed compounds, in terms of: swales, porous paving (roads & pathways), tree pits, rain gardens, roof gardens, etc.

Response to issue raised

SuDS are incorporated within the design, design development of these measures to be submitted at detailed design stage to KCC.

32. Summary of issue raised - Proposed surface & flood retention areas not to prejudice delivery of Maynooth Outer Orbital Route.

Response to issue raised

At the time of preparation of the design, no route for the orbital route had been confirmed. CIÉ have liaised with KCC throughout the design process to date.

33. Summary of issue raised - Need to prepare preliminary Construction Stage Surface Water Protection Plan in accordance with 2016 IFI Guidelines, and ensure all construction works planned & delivered in strict accordance with agreed plan.

Response to issue raised

During the detailed design a surface water management plan will be produced as part of the CEPM and will be in accordance with the 2016 IFI Guidelines. This plan will ensure all construction works are planned and delivered in accordance with the IFI guidelines.

34. Summary of issue raised - Developer to clarify intention to possibly raise ground in any significant way and, if relevant, clarify proposals to regularise this in accordance with Section 39 of Waste Management Act.

Response to issue raised

The project will comply with Section 39 of the Waste Management Act

The preliminary design submitted includes cross sections, longitudinal profiles and earthworks designs across the alignment. Full details of these are included in Section 3, Railway Order Drawings.

Additionally, EIAR chapter 5 outlines the construction phases, including the cut and fill requirements, notably at the depot location to make the most benefit for the excavated material from other areas of the project.

35. Summary of issue raised - Leixlip & Maynooth Municipal District Offices to be notified in advance of all night-time works, to assist with communication/management of complaints.

Response to issue raised

CIÉ will liaise with KCC departments during the detailed design and preparation of the procurement documents, which will require the Contractor to liaise with KCC regarding night–time works.

36. Summary of issue raised - Other than on-track night-time work, standard permitted hours of operation during construction phase and for deliveries are between 0800hrs & 1800hrs Mon.-Fri., and 0800hrs & 1400hrs Sat.

Response to issue raised

Due to the length of the scheme and the interaction with a number of Local Authorities each with differing standard construction hours, the EIAR Volume 2, Chapter 5, Section 5.2.1 sets out the following daytime working hours for the project:

- Monday to Friday: 12 hours. From 07:00 to 19:00.
- Saturday: 6 hours. From 07:00 to 13:00.
- Sunday/Bank Holidays: none except where agreed in advance with the local authority and CIÉ or as part of a possession/closure.

The EIAR stated that the times listed above are indicative and proposed working hours will be finalised at detailed design and construction planning stage.

37. Summary of issue raised - IÉ required to carry out detailed noise impact assessment along entire scheme, identify Noise Sensitive Locations, engage with householders & businesses to be affected, agree appropriate noise mitigation & reduction measures, and ensure noise levels maintained within normal construction/operation stages at all times in accordance with Section 7 of KC Development Plan.

Response to issue raised

Chapter 14 of the EIAR contains a detailed assessment of noise and vibration impacts associated with both the construction and operation of the proposed scheme. As outlined in the EIAR during the course of construction the procedures outlined in Iarnród Éireann operation procedure CCE-QMS-008-002 Noise Management – CCE Activities will be implemented. This document outlines the following noise mitigation measures:

(a) The Community Liaison Officer (or other nominated person) will notify affected residents in advance of any planned works commencing with a letter drop in the relevant area.
(b) Where planned work occurs over a 72hr weekend shutdown there will be a noise management plan submitted to the local authority.
(c) All attempts to avoid, prevent or reduce the harmful effects of exposure to environmental noise arising from work activities must be practical and appropriately risk assessed before implementation.
(d) The following measures should be implemented where feasible during construction activities:
(e) Carry out as much preparatory work in daylight as possible (sawing or drilling rails).
(f) Inspect the worksite in daylight if possible and look for the best location to position generators.
(g) Position generators and lighting away from residential dwellings.
(h) Take advantage of natural barriers such as vegetation, walls or embankments that can offer noise screening to adjacent neighbours.
(i) Where necessary, use noise attenuation screens. The screens must be located as close to the receiver or source as possible.
(j) Consider using additional supply cables and structures so that the generators can be positioned as far away from housing as practicable.
(k) Where possible, use low-noise plant. Any unsuitable plant should be replaced by higher quality low noise plant, or contained by the use of mufflers/silencers.
(l) Do not leave equipment or vehicles running/idling unnecessarily.
(m) Do not shout work instructions when working in residential areas at night unless absolutely necessary.
(n) Plan effectively to ensure timely deliveries of materials.

38. Summary of issue raised - The Planning Authority notes the information provided regarding flood relief and compensatory storage. Irish rail should demonstrate that all flood relief measures are contained entirely within lands that are currently identified in the OPW CFRAM maps as Flood Zone A.

Response to issue raised

The Ballycaghan stream adjacent to the proposed depot was not assessed as part of the CFRAMS and therefore no flood zone mapping was produced by the OPW for this floodplain. The standard of protection for the DART+ West scheme is 1 in 1000 year fluvial flood (plus 20% climate change MRFS). Therefore, the proposed level for level flood compensatory storage must ensure that there is no increased risk of flooding upstream or downstream outside of the lands acquired, in all events up to and including the 1 in 1000-year MRFS. This inevitably requires flood compensatory storage measures to be constructed outside flood zone A in accordance with the OPW Flood Risk Management Guidelines. Nonetheless these measures can readily be augmented with a future flood scheme (should one be promoted by the OPW).