Submission No.	149
Organisation Name or Name of Submitter	John Conway and Orlaith McCarthy (15 Dartmouth Square West)

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Observation on a Startegic Infrastructure Development				
1	Letter introduction	3	Our names are John Conway and Orlaith McCarthy. We have been living at # 15 Dartmouth Square West for more than 40 years..... It is important to state at the outset that we are very much in favour of the Metrolink project to connect Dublin's city centre to our national airport and the broader objective of providing a modern and efficient public transport infrastructure for the people of Dublin. That is why we have a number of concerns that the current plan is not optimal and is wasteful of public money. We want to set out a number of observations for the Board regarding the proposal to locate the city centre Terminus station at Charlemont-Dartmouth. Our family home is in the midst of the community where the Terminus station is proposed to be located.	Thank you for taking the time to make a submission and your overall endorsement of the MetroLink Project. We have reviewed your submission and responded to the observations made below.
2	(a) Strategy & Policy Issues	4	1. Charlemont is NOT the correct strategic location for a Terminus hub and spoke system. It is too far out along the Luas Green Line spoke and would prejudice future options for integration of networks and services.	TII do not agree that Charlemont is the incorrect location for an interchange with the Luas Green Line or that it prejudices future options for integration with the wider transport network for the reasons set out below. The Board is required to have regard to the likely consequences for proper planning and sustainable development in the area in which it is proposed to carry out railway works (section 43(1) of the 2001 Act) and as such the following matters are relevant. The connection from St Stephens Green to Charlemont / Ranelagh is supported by the current Transport Strategy for Greater Dublin Area (2022-2042). The Transport Strategies were prepared by the National Transport Authority, scrutinised by the Joint Oireachtas Committee on Transport and approved by the Minister for Transport. It notes in section 12.3.2, "Charlemont offers the optimal location for the primary interchange with the Green Line in response to growing demand in the longer term and is an appropriate location to facilitate any potential future metro extensions to serve the south west, south or south east of the city region should sufficient demand arise." The Transport Strategy is "a consideration material to the proper planning and sustainable development of the area or areas in question." Development Plans are required to be consistent with the Transport Strategy. The Dublin City Development Plan 2022-2028 envisages this station at Charlemont in policy SMT22 "To support the expeditious delivery of key sustainable transport projects so as to provide an integrated public transport network with efficient interchange between transport modes, serving the existing and future needs of the city and region and to support the integration of existing public transport infrastructure with other transport modes. In particular the following projects subject to environmental requirements and appropriate planning consents being obtained: … MetroLink from Charlemont to Swords". Accordingly, the location of the Charlemont station was a strategic decision made at the highest levels of transport and land use planning and such is fully consistent with the proper planning and sustainable development of the area. The current Transport Strategy considers a range of options for the onward extension of MetroLink to meet the demand for travel over the period of the strategy. This includes consideration of the need for the upgrade of the Luas Green Line to metro with a metro extension to Dublin south west, south or south east. Whilst the strategy envisages that further extensions will be delivered after 2042, MetroLink which terminates at Charlemont allows for the possible extension of the metro in all any of the above directions. The proximity of the metro to the Luas line at Charlemont provides for a positive customer experience for all users with short interchange distance and due to the proximity, clear wayfinding and high visibility of the interchange. The interchange arrangements at Charlemont provide for significantly better interchange arrangements compared to an interchange at St Stephen's Green Station.

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				The detailed analysis done for the Railway Order application further confirms that the section of MetroLink route between St Stephen's Green and Charlemont Stations contributes significantly to the overall benefits of the scheme. It serves a significant area of the south city of Dublin and offers enhanced access from the local area to the city centre and a direct connection to Dublin Airport. It serves key trip attractors including residential areas and offices / workplace locations, with high passenger boarding and alighting figures in the peak hours. During the morning peak, at Charlemont station the flows include 1,800 passengers alighting, 2,300 boarding and 1,229 passengers alighting, 2,276 boarding during the evening peak. The passenger numbers contribute significantly to the overall benefits of the scheme and the effect of these benefits outweigh the additional costs that are associated with the delivery and operation of the section from St Stephen's Green to Charlemont station. The location of the interchange at Charlemont does not preclude onward extension south. An interchange at Charlemont is supported by policy including the Dublin City Development Plan 2022 - 2028 and the Transport Strategy for the Greater Dublin Area. By extending MetroLink to Charlemont it provides for future proofing of the Green Line, bypassing the capacity constrained Luas on-street running section, and ensures potential future connectivity options are enabled, either to the Green Line or for extensions of the metro. The Charlemont Station interchange provides for increased passenger utilisation of the MetroLink system, thereby increasing the benefits delivered by the Project, reflected by an improved Project Benefit Cost Ration (BCR).
3	(a) Strategy & Policy Issues	4	1. (continued) St. Stephens Green is the most appropriate location for the Terminus as it provides for interchange with bus, Luas and future DART underground. The project incorrectly dismisses St. Stephens Green West as an appropriate terminal station. It only considers St. Stephens Green East and Charlemont. Furthermore, no study has been completed by NTA/TII as part of the entire Metrolink project on the optimal location for a city centre terminus.	TII do not agree that St Stephen's Green is the most appropriate interchange location for the reasons set out by response (2) above. It is not correct to say that the Project "only considers St. Stephens Green East and Charlemont." A number of route options were considered in the process of identifying the Emerging Preferred Route (EPR). These route options included potential station locations on St. Stephen's Green West. However these options were ruled out as it was not possible to design an alignment that would also provide a MetroLink interchange with DART at Tara Street Station. A station on St Stephen's Green West is not preferred for several reasons: If a station was placed on St Stephen's Green West, the alignment between the proposed Tara Station and a station on St Stephen's Green West would result in an undesirable horizontal reverse curve and an alignment greater than a 1000m long that would necessitate an intermediate intervention shaft located somewhere between these stations to comply with the MetroLink Fire Strategy. Additional construction would be required to provide such a facility, similar in size to the proposed Albert College Park Intervention shaft. This could feasibly be situated in the Trinity College Dublin sports grounds.
				TII note that it is Government policy to provide a station and interchange with the Luas Green Line at Charlemont, as set out by the GDA Transport Strategy 2022 – 2042. Should a station be placed on St Stephen's Green West, the alignment between a station located here and the proposed Charlemont Station would also result in an undesirable horizontal reverse curve and an alignment that is greater than 1000m long, and would thus again require an intervention shaft similar to the proposed Albert College Park Intervention shaft to be provided. This would be expected to result in significant demolition and redevelopment in an existing built-up area.In both cases, compared to the proposed alignment that runs much more directly between Tara, St Stephen's Green and Charlemont, the additional length of tunnel and the addition of two intervention shafts generated by locating a station on St Stephen's Green West is uneconomic in comparison. As a potential station location, St Stephen's Green West itself is a very constrained location due to the presence of buildings, Luas and St Stephen's Green Park. Maintaining the Luas operational during station construction would be complex and challenging with significant disruption expected, whilst the impacts on St Stephen's Green Park would be greater for a station in this location compared to the proposed location on St Stephen's Green East. This would be the result of; the likely need to place more of the station in the Park compared to the proposed station on St Stephen's Green East; it would impact an area of the Park that has greater amenity value than St Stephen's Green East due to the nearby Park entrance adjacent to the southern end of Grafton Street, and there would be a risk of impacting the existing Park lake.

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				In summary, an alignment that links the proposed Tara, St Stephen's Green East and Charlemont stations is a more direct and economic alignment, does not require additional intervention infrastructure, avoids a complex engineering interface with the Luas Green Line, impacts the Park less and has less potential for disruption during the construction phase. As outlined by EIAR Chapter 3, Background to the MetroLink Project, one of the key objectives of the Project is the integration of it with the wider transport network that also includes for BusConnects and DART+ which are all included under Project Ireland 2040. Together, these projects will result in a reliable, sustainable, affordable, integrated public transport network that will support the economy, help Ireland meet its climate change targets in line with Climate Action Plan 2023 and make Dublin a more liveable and sustainable city.Arising from the decision to postpone the future upgrade of the Green Line to metro services, it is being argued that Charlemont station effectively becomes a terminus station in the short to medium term. In this regard, it is true to say that the Metrolink trains will terminate and turn back at Charlemont station, however the public transport service offering for passengers does not terminate, it transfers from Metrolink to LUAS as part of the integrated transport network. The terminus station for MetroLink is located at Estuary where all of the activities normally associated with a terminus take place. At this location the high capacity public transport offering terminates and the public transport offering transfers to a completely different mode, i.e. Bus. The environmental effects of the Metrolink terminus are accordingly assessed in the EIAR. Charlemont Station does not have the associated infrastructure and services associated with a terminus location and in fact has more in common with a "system turn back location". Charlemont Station is located within an area of high public transport accessibility, linking with the Luas Green Line which offers reasonably similar levels of services and frequency for journeys to and from the south of Dublin. As such, public transport service offering is not considered to terminate, but transfers onto the similar service offered by the Luas Green Line, forming part of a transport corridor running from Cherrywood to Estuary. The associated environmental impacts for the turnback and station at Charlemont have been fully assessed in the EIAR.
				Charlemont station itself was chosen on the basis of its interchange potential with Luas, as well as local bus services, as outlined above. The section of the line between St Stephen's Green and Charlemont generates considerable benefits for the scheme in terms of increased patronage. As noted in response item (2), during the morning peak, at Charlemont station the flows include 1,800 passengers alighting, 2,300 boarding and 1,229 passengers alighting, 2,276 boarding during the evening peak. The fact that the Charlemont Station is now being referred to and considered as a "terminus station" rather than an interchange station, does not increase the environmental impacts the station has on its local environment, in terms of passenger demand, airborne noise. vibration and other environmental effects. If a decision was taken to terminate MetroLink at St Stephen's Green, significant changes would be required to the scheme. These would include design changes at St Stephen's Green station and provision of alternative turnback facilities immediately south of the station. The proposed route alignment from Estuary to Charlemont is consistent and compliant with the GDA Transport Strategy 2022-2042 (published in January 2023) in which states that the south city terminus at Charlemont offers the optimal location for interchange with the Green Line in response to growing demand in the longer term and is an appropriate location to facilitate any potential future metro extensions to serve the south west, south or south east of the city region should sufficient demand arise.

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4	(a) Strategy & Policy Issues	4	2. Expensive Duplication of Rail infrastructure - The inclusion of an expensive and costly section between St. Stephens Green and Charlemont is strategically weak and duplicates the existing Luas Green Line services. The NTA's cost estimate for this 1 km section at €650M is an expensive duplication and significant investment that deprives other parts of Dublin that are in immediate need of rail infrastructure to support housing and urban development.	The Board is not responsible for any decisions in relation to the funding the Project. It is solely responsible for assessing whether the Project is consistent with proper planning and sustainable development and that its effects on the environment are acceptable. The responsibility for funding the Project lies with the NTA, the Government and ultimately the Oireachtas. It has received all necessary approvals, including under the Public Spending Code for the making of a Railway Order. It will undergo further scrutiny and approvals, including under the Public Spending Code, before it is funded. It is not appropriate for the Board to make findings in relation to value-for-money that are outside its statutory functions and would cut across those arrangements. Members of the public are entitled to make representations to their TDs in relation to the value-for-money of any element of the Project. In any event, TII do not agree with this statement for the reasons set out by response (2) above, noting that infrastructure is not being duplicated given the capacity of the Luas south from St. Stephen's Green is restricted due to on-street running. There is a limit to the potential of the Luas to provide additional capacity in the on-street non-segregated section of the Luas Green Line from Charlemont northwards through the city centre. The nature of this route and the fact that it currently crosses several road junctions (Adelaide Road, Harcourt Street / Hatch Street upper and Harcourt Street / St Stephen's Green south) limit the service to a maximum of 24 trams per hour per direction. The projected demand for this section would require a higher frequency of up to 30 trams per hour and this demand cannot be met with on-street systems (Luas / bus). The interchange between Luas and MetroLink proposed at Charlemont will provide the necessary capacity to address the demand on this corridor and reduce overall travel time for passengers There is also high passenger demand forecast for a Metrolink station at Charlemont, including from the Ranelagh area, which would be lost if St. Stephen's Green was the MetroLink southern interchange station. The additional fare revenues collected by the Charlemont Station interchange increase the benefits delivered by the Project, reflected by an improved Project Benefit Cost Ration (BCR). Further, to ensure that public investment delivers value for money, the Public Spending Code sets out requirements for the evaluation, planning and management of public investment. The preparation of a Business Case is a key element of meeting these requirements. The Public Spending Code requires that both the Preliminary Business Case and Final Business Case for public investment projects are published. In July 2022, the Government granted Approval in Principle to the NTA to enable the submission of a railway order application by TII to An Bord Pleanála in respect of the MetroLink project (Decision Gate 1). This approval was granted after the Preliminary Business Case (PBC) had undergone significant scrutiny and challenge by bodies that are independent of TII, including DoT and DPER review (including independent review by JASPERS and the Major Projects Advisory Group (MPAG)) of the PBC around timeline, costs and benefits that were updated to inform the Government decision. With regards the observation that "Charlemont rules out the development of the metro to parts of the South city not covered by light rail", TII do not agree and would further note that the proposed route alignment from Estuary to Charlemont is consistent and compliant with the GDA Transport Strategy 2022-2042 (published in January 2023) which states that the south city terminus at Charlemont offers the optimal location for interchange with the Green Line in response to growing demand in the longer term and is an appropriate location to facilitate any potential future metro extensions to serve the south west, south or south east of the city region should sufficient demand arise.
5	(a) Strategy & Policy Issues	4	3. The station box at Charlemont, as constructed in 2021/22 by the Developer Hines, does not have the benefit of planning permission and has not been part of the EIA undertaken for this project. Processing the current Railway Order application, which is reliant on these preliminary and now constructed works, is legally unsafe and contravenes the provisions of the EIA Directive.	The MetroLink enabling works constructed as part of the Hines development was included in the planning application for the Hines Development and has the benefit of planning permission which was granted in April 2019.

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6	(a) Strategy & Policy Issues	4	4. The station box at Charlemont will result in only one possible future tie in with the Luas Green Line to the south, which would result in an option that was previously dismissed as part of the Tie-In study from March 2017. No alternatives to the station box at Charlemont were considered as it had been fixed through the design of the overhead Hines Grand Parade commercial development. The implications of this new alignment are very significant for our wider community as it will involve top-down construction that will only be possible when many houses on Manders Terrace, Oakley Road and Charleston Road are demolished.	The station box at Charlemont allows for a future tie into the Luas Green Line should it be determined in the future that through running metro services to Sandyford is the required solution to address the public transport needs to the south of the city. It is incorrect to say that the current proposal is based on an option that was previously dismissed as part of the March 2017 Green Line tie in study. The station design is in affect a modification to the preferred Green Line Tie Option 4B which was modified as result of the postponement of the upgrade of the Green Line to metro standard. The station box location was not fixed by the Charlemont Development. The preferred route for MetroLink was published in March 2019 following a comprehensive route options study. The preferred route was based on the emerging preferred route for the scheme which included a station at Charlemont. The Charlemont Metro Enabling Works were constructed to enable the Charlemont Development to proceed whilst simultaneously ensuring there was an option available to construct a station at Charlemont that avoided unnecessary demolition, took advantage of an available site, provided infrastructure that is integrated with planned development rather than necessitating later changes and retrospective adjustments to a new development or even possible demolition of the new development, whilst providing protected provision for the future extension of the scheme south, if required. It is also important to recognise that the station location at Charlemont is influenced by available vacant land and thus avoids unnecessary demolition. The submission seeks to portray the construction of the Metro Enabling Works as prejudicial to future decisions on proper planning and sustainable development of the area. It implies that the counterfactual would have had no effect on such decisions. That is not the case. There was a planning conflict between the EPR and the Grand Parade Development at the time the latter development was proposed. There was no resolution to that conflict that was free of implications for future decisions on the proper planning and sustainable development of the area. The Board could have refused permission for the Grand Parade Development, inevitably creating a underutilised and potentially vacant and idle site in a commercial hub location. The Board could have granted permission with no provision to facilitate a station at this location, resulting in a requirement for the railway order to provide for the demolition of a new office building. The Board's actual decision was reasonable and lawful in seeking to minimise the prejudice to an important office development and a critical piece of national infrastructure. It was also not particularly restrictive of future decisions in relation to the proper planning and sustainable development of the area. Of the three options open at the date of the Grand Parade planning application, two remain open: the Board can still require changes to the station design that require the demolition of the commercial building and it can grant an order that avoids demolition by using the Metro Enabling Works. It is agreed that the short-term implications for local residents will be significant as the scheme progresses through the construction stage, however the EIAR assesses the environmental impacts of the construction phase and commits to the implementation of appropriate mitigation measures that reduce the environmental impacts to not significant. The same is true of the operations phase for the project. TII will work closely with local residents to ensure the required mitigation measures are put in place. If in the future, the metro was extended south, this does not mean that inevitably open cut construction will be required or demolition of property will be necessary. In designing an extension, the promoter will seek to reduce the requirement for demolition by looking for tunnel launch sites at the southern extent of the scheme and, if one can be identified, driving the Tunnel Boring Machine northwards ultimately connecting into the existing tunnel. In that case, even if the new alignment were under the properties identified in the submission, the tunnel underneath them would be constructed by the Tunnel Boring Machine without the need for above ground works.
7	(b) Neighbourhood & Community	4	The entire Dartmouth Square - North, South, East & West - is designated as an ACA and all of the dwellings are protected structures. We have been part of this community for more than 40 years and we have often remarked on the pride which all the neighbours take in the physical environment in which we live. We feel a responsibility to maintain and protect it and to hand it on to future generations of residents in as good or better condition as we received it.	TII recognise the importance of Dartmouth Square and its designated status as an Architectural Conservation Area (ACA). Mitigation measures for Architectural Heritage can be found in Table 26.66 of EIAR chapter 26 (Architectural Heritage). The only potential for direct impacts on the Architectural Heritage Areas (ACA) is related to the diversion of utilities on Dartmouth Square West. To minimise the impact on protected structures in Dartmouth Square such as historic granite steps, kerbing and lamp standards, works within the Dartmouth Square ACA will be overseen by the Project Conservation Architect (PCA) and carried out in accordance with a method statement prepared by PCA. This commitment is detailed in section 26.7.1 of Chapter 26 (Architectural Heritage). The impact on Architectural Heritage in Dartmouth Square has been assessed to decrease to slight following mitigation.

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8	(b) Neighbourhood & Community	5	We note that in the Dublin City Development Plan 2022 - 2028 our houses are covered by the zoning objective Z2 - 'to protect and / or improve the amenities of the residential conservation areas'. Clearly, the proposal to locate the city centre Terminus within such close proximity of our dwelling at # 15 Dartmouth Square West is blatantly inconsistent with this zoning objective.	TII do not agree that Charlemont Station is inconsistent with the zoning objective. The zoning under the Dublin City Development Plan 2022 - 2027 for the residential properties in question is "Z2 Residential Neighbourhoods (Conservation Areas)" with an objective to "protect them from unsuitable new developments or works that would have a negative impact on the amenity or architectural quality of the area (See Table 3.11 of the Planning Report). Further, Dublin City Development Plan supports the location of a station at Charlemont. As outlined in Section 4.5.18.6 of the Planning Report, the element of the project within the Z2 zoning area will affect a below ground area only and as such will not compromise the land use objective for the lands overhead. The majority of the proposed station and all above ground elements are located within the lands zoned Z5 with the objective "To provide for the creation and protection of enterprise and facilitate opportunities for employment creation". The station has been designed so that it is integrated with the proposed redevelopment of this site by a third party development, and as such, demonstrates that the proposed Project is consistent with the zoning objective.

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9	(b) Neighbourhood & Community	5	The construction phase of 9+ years will place an intolerable burden on us residents in terms of noise, vibration, subsidence, and the work compound. But matters will not improve when construction is completed, and the terminus becomes operational. Indeed, the situation will get worse in terms of noise, vibration, subsidence risk and traffic congestion. We are both in our late 60s. This project is a life sentence for us. Our property will be unsaleable throughout the 9+years of the construction phase and the position will not improve in the operational phase. We have a particular worry about the structural damage that our property could suffer as a result of subsidence and vibrations during the construction phase as the tunnelling will be within very close proximity indeed to our dwelling (well less than 50 metres).	TII have carefully assessed the environmental impacts on your property, 15 Dartmouth Square West, including noise, vibration, construction generated ground movements (subsidence) and traffic, summarised below. No profound impacts are predicted, in line with the EIAR significance ratings. <u>Construction Noise and Vibration</u> Potential impacts identified due to airborne noise & vibration are presented in EIAR Chapter 13. Proposed mitigation includes 4m high noise barriers and further proposed mitigation in line with the Airborne and Groundborne Noise Mitigation Policy. On the implementation of these measures the residual impacts are predicted to be moderate. EIAR Appendix A14.5, Groundborne Noise and Vibration and Blasting Modelling Results, 14.4 Section AZ4 Northwood to Charlemont, presents the predicted vibration levels during TBM passage for various sensitive receptors. The predicted vibration presented in this section outlines the VDV (Vibration Dose Value is a parameter that combines the magnitude of vibration and the time for which it occurs) for TBM Passage during the day and night at 15 Dartmouth Square West are 0.249ms-1.75 (VDV day) and 0.21ms-1.75 (VDV night) respectively. Both of these values are lower than the VDV Threshold Levels of 1.0ms-1.75 (VDV day) and 0.5ms-1.75 (VDV night). Levels of vibration during mechanical excavation of Charlemont Station are predicted to be 0.004ms-1.75 and 0.003ms-1.75 for day and night-time respectively. The threshold levels have been set in relation to human response to vibration, and thresholds for building damage are much higher. As the predicted levels of vibration from TBM passage and mechanical excavation are below these thresholds then no impact is expected for the building or for residents of this address. Predictions of vibration during blasting at Charlemont Station have also been made. For 15 Dartmouth Square an exceedance vibration level of 11.2mm/s PPV (Peak Particle Velocity) is predicted compared to the threshold level for this building of 8mm/s resulting in a potential significant impact. As a result, mitigation measures will be implemented to reduce the risk to buildings as outlined in EIAR Chapter 14, Section 14.5.1.2. Mitigation measures to reduce the impact of blasting will include the preparation of specific blast design at each location, minimisation of the maximum instantaneous charge weight or alternatives to blasting. With the implementation of appropriate mitigation to reduce vibration from blasting the residual impact is expected to be reduced to not-significant. The predicted level of groundborne noise during TBM passage is 49 dB LASmax, which is above the 45 dB LASmax threshold, resulting in a significant impact on the occupants of this address for the relatively short 2-week duration of TBM passage. Unfortunately there are no effective methods available to reduce groundborne noise from TBMs at source and therefore the principal mitigation measure is advance public consultation to inform residents of the anticipated timing of the TBM passing to allow building occupants to prepare for the passage of the TBM and resultant elevated noise levels. In addition to the mitigation measures outlined above, the contractor(s) will prepare a Construction Noise and Vibration Management Plan (CNVMP) for the proposed Project, which will be a live document. There are no statutory standards in Ireland relating to noise and vibration limit values for construction works. The contractor(s) will work within the noise and vibration significance threshold levels identified in the EIAR for both airborne and groundborne noise and vibration and the limits contained in the Railway Order approval. Further details on the proposed mitigation measures can be found in section 6.2. of Appendix A5.1 Outline Construction Environmental Management Plan.
				Operational Noise and Vibration - please refer to response (11) below. Construction Generated Ground Movements (risk of subsidence) The approach taken by TII for assessing the impact of construction generated ground movements reflects the industry standard three-phased ground movement impact assessment process that is undertaken on tunnelling and underground projects around the world, that includes Channel Tunnel Rail Link (CTRL), Dublin Port Tunnel, Crossrail and High Speed 2. EIAR Appendix A 5.17 Building Damage Report, covers the assessed impacts of construction generated ground movements and settlement and includes for the assessed impact on 15 Dartmouth Square West. EIAR Appendix 5.17 refers. The Phase 2 assessment of the damage for this building is "slight" (an explanation for which can be found in Table 4-4), please refer to building B-150 in table 5-2 of the appendix. As your property is a designated Protected Structure, it has been designated as “special”, and hence a further Stage 3 refined assessment, despite the impact only being assessed as ‘slight’ will be undertaken that will take account of final design and construction methodology details most likely utilising advanced numerical modelling techniques and further surveys of the building. The results of this refined assessment typically show that earlier assessments are conservative and overestimate the likely impact of construction generated ground movements.

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				Monitoring instrumentation will also be installed in the area to monitor the performance of the works and potential environmental impacts, including those discussed above to ensure that acceptable limits are not breached. The Property Owner Protection Scheme (POPS), committed to by TII, allows residential property owners to register with TII if their residential property is within thirty (30) metres of the edge of the MetroLink alignment or fifty (50) metres of station structures. The POPS comprises condition surveys of residential properties along the route of the proposed Project. The purpose of the condition surveys is to ascertain the condition of the properties before, during (if deemed necessary), and after the completion of the proposed Project to determine whether there has been any deterioration of any of the properties surveyed and whether same may be attributable to the proposed Project, and subsequently to recommend repairs as appropriate. Condition survey data gathered pre and post construction, and possibly during construction, will be used to assist the property owner and TII in swift and accurate verification of any property damage claims which may be received from property owners. The POPS is designed to cater for / address repair work which may be necessary for any damage (attributable to the proposed Project) to a qualifying residential property up to a threshold of €45,000. The POPS will be introduced by TII through public consultation and will be formally advised to eligible property owners by the Public Relations Department. Further information on POPS is available in Chapter 11 (Population & Land Use). Useful information can also be found in the MetroLink Frequently Asked Questions document which can be found online at: https://www.metrolink.ie/en/your-property/property-owners-protection-scheme/ , and this is where useful updates will be made available as the proposed Project progresses. TII also do not expect significant ground movement to continue long-term after excavation is completed. The monitoring referred to above will verify this.
				Traffic Congestion - please refer to response (13) below Regards devaluation, there is evidence to suggest that property values will in fact increase in close proximity to public transport infrastructure and that local residents will greatly benefit from having a world class Metro system providing access to the city centre, airport and north city at their doorstep. The benefits of the project for all communities along the MetroLink route are described in Chapter 3: Background to the MetroLink Project, section 3.4 MetroLink Response to Challenges.
10	(b) Neighbourhood & Community	5	We have major worries about so many aspects of the Environmental Impact Assessments (EIA) which have been undertaken - or so often not been undertaken. We set out below some specific concerns. 5. The Environmental Impact Assessment is inadequate in relation the description of development, alternatives, transport assessment, noise and the cumulative effects of the development on the Charlemont-Dartmouth Community. For a project of this size, scale, and investment to date, it is inadequate to propose a Railway Order with so many important studies and analysis missing.	TII do not agree that the Environmental Impact Assessment is deficient, inadequate or missing information. The Railway Order application comprises a very detailed environmental impact assessment that has identified and assessed the potential environmental impacts of MetroLink and proposed mitigations for these impacts where necessary. TII would also draw attention to the detailed project description, construction phase description and operational phase description provided in EIAR Chapters 4 and 5 and 6, and EIAR Chapter 7 and associated appendices that present details of alternatives considered. EIAR Chapter 9 and appendices provides a detailed analysis of transport and traffic effects, and EIAR Chapters 13 Airborne Noise & Vibration, and 14 Groundborne Noise & Vibration provide a detailed assessment of potential noise and vibration effects, while Chapter 29 outlines the assessment of interactions between various environmental aspects, and Chapter 30 covers the cumulative impacts with other projects. This assessment is carried out for the full length of the alignment including relative to potential significant effects on the Charlemont-Dartmouth Community.

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11	(b) Neighbourhood & Community	5	6. The development would result in noise and disturbance during the construction and operational phases and would result in a loss of amenities for the area.	The EIAR presents a comprehensive and detailed assessment of both groundborne and airborne noise and vibration in Chapter 13 and 14 of the EIAR. The assessments include predictive modelling in order to identify the potential impacts on all sensitive receptors during both the construction phase and the operational phase. **Noise and disturbance during construction:** No profound impacts have been identified for residents and mitigation measures proposed will be effective at reducing the impacts on these properties and in general terms impacts will be associated with the construction phase only. Significant mitigation is proposed to include 4m high noise barriers and further proposed mitigation in line with the Airborne and Groundborne Noise Mitigation Policy. On the implementation of these measures the residual impacts of airborne noise are predicted to be moderate. Chapter 14 of the EIAR assesses groundborne noise and vibration, with EIAR Appendix A14.5 Groundborne Noise and Vibration and Blasting Modelling Results presenting predicted groundborne noise and vibration levels during below ground construction. During TBM passage the predicted level of groundborne noise will be above the 45 dB LASmax threshold for a number of receptors above the runnel alignment, resulting in a significant impact on the building occupants during the relatively short 2-week duration of the TBM passage at a given location. The predicted vibration levels for TBM passage are well below human response thresholds during both day and night-time periods. Unfortunately there are no effective methods are available to reduce groundborne noise from TBMs at source. The principal mitigation measures aimed at minimising impacts are to give advance notice to residents of the timing of the TBM passage. In addition TII will accept and consider applications for additional measures on a case-by case basis, in accordance with its Noise and Vibration Mitigation Policy (see Appendix A14.6). **Noise and disturbance during operation:** No residual noise impacts are identified at this location during operation. The calculated rail noise levels across the proposed Project are not significant in terms of any widespread community disturbance and results in a not significant impact when added to the prevailing noise environment. **Loss of amenity during construction:** EIAR Chapter 11, Population & Land Use provides an assessment of effects on community amenity during construction and operation, which relates to the interaction of impacts on air quality; visual amenity; traffic and transport; and noise and vibration. At this location during construction as outlined in Section 11.5.2 of Chapter 11, no impacts are identified on the retail sector or community and social infrastructure (e.g. schools or hospitals). Any severance/disruption to transport will be limited by site mitigation measures such as alternative routes, reducing impacts to not significant.
				Loss of amenity during operation: No significant residual negative impacts are anticipated on the Population and Land Use from the operation of the proposed Project, following the incorporation of the mitigation measures into the design of the proposed Project and implementation on an ongoing basis throughout the lifecycle. The residual effects that will arise during operation will be permanent and positive as detailed in EIAR Chapter 11, section 11.1.1. The zoning under the Dublin City Development Plan 2022 - 2027 for the residential properties in question is "Z2 Residential Neighbourhoods (Conservation Areas)" with an objective to "protect them from unsuitable new developments or works that would have a negative impact on the amenity or architectural quality of the area (See Table 3.11 of the submitted Planning Report). As outlined in Section 4.5.18.6 of the Planning Report, the element of the Project within the Z2 zoning area will affect a below ground area only and as such will not compromise the land use objective for the lands overhead. The majority of the proposed Charlemont Station and all above ground elements are located within the lands zoned Z5 with the objective “To provide for the creation and protection of enterprise and facilitate opportunities for employment creation”. The Station has been designed so that it is integrated with the proposed redevelopment of this site by a third party development, and as such, demonstrates that the proposed Project is consistent with the zoning objective. The MetroLink station design does not result in any segregation of the area, with no surface barriers or walls proposed.

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12	(b) Neighbourhood & Community	5	6. (continued) The Traffic Study for the local Charlemont area is wholly inadequate as it omitted the modelling of the impact of Airport users coming to the only Dublin South Metrolink station at Charlemont. The Traffic Study uses a strategic, generalised regional model that does not take local factors into account. Extract from observation 7) - The EIA did not properly assess the impact of additional local traffic volumes. Rather they used a generalised regional model that does not take local factors into account. A Terminus at Charlemont will attract a hinge volume of passengers travelling to and from the airport. They will come from Dublin South and the greater Dublin/Leinster area via car or taxi with baggage and baby buggies for onward destination to the airport. However, there is absolutely no space for set-down at Grand Parade or in the residential area around Charlemont-Dartmouth. This neighbourhood cannot sustain the significant additional traffic volumes associated with this development.	The MetroLink forms part of an integrated public transport network. The system is designed in an integrated manner so that people travelling from the area south of Dublin to access locations north of Charlemont, such as Dublin Airport, Mater, Swords etc. will utilise public transport to interchange with the MetroLink, or will walk or cycle to access their local station. The system is not designed to encourage people to drive to stations within the City and TII actively discourage people from doing so other than the Park & Ride station at Estuary. TII therefore do not agree with the observation that there will be a "huge volume of anticipated airport users from Dublin South and greater Dublin/Leinster that will come to Charlemont via car or taxi with luggage for onward destination to the airport" as this is not borne out by our transport analysis. The Transport Assessment for MetroLink includes for people travelling to/from Dublin Airport from all areas within the extents of the GDA area, therefore it is incorrect to say "The Traffic Study for the local Charlemont area is wholly inadequate as it omitted the modelling of the impact of Airport users coming to the only Dublin South Metrolink station at Charlemont". The NTA's Eastern regional Model (ERM) incorporates a wide range of data sources, including demographic data, land use data, transportation network data, and travel survey data. The system is designed to model a variety of transportation modes, including private vehicles, public transit, walking, and cycling, and to simulate the interactions between these modes. The ERM model has been validated and calibrated using a range of localised data sources to ensure that the model can accurately represent the transport network, these include public transport and vehicle counts from the canal cordon counts. The outputs from the model have been combined with local survey data to undertake the more localised modelling, such as the pedestrian impact assessments, or the local traffic signals. This does not support the observations made "The Traffic Study uses a strategic, generalised regional model that does not take local factors into account." or "The EIA did not properly assess the impact of additional local traffic volumes, rather they used a generalised regional model that does not take local factors into account." Regards the observation there will be a "huge volume of anticipated airport users from Dublin South and greater Dublin/Leinster that will come to Charlemont via car or taxi with luggage for onward destination to the airport. Grand Parade and the residential area around Charlemont-Dartmouth cannot sustain the significant additional traffic volumes associated with this development", this is covered by response (10) below.
13	(b) Neighbourhood & Community	5	7. The development would have an adverse impact upon traffic during the construction and operational phase. The proposed Terminus provides very poor integration with other modes of transport. Pedestrian movements in and around the station would be very difficult. Grand Parade is an already heavily congested orbital route.	The MetroLink is designed to form part of an integrated public transport network with Charlemont selected as the preferred interchange location in order to maximise the potential interchange with the existing Luas Green Line. In overall terms, Charlemont Station will provide for improvements to the public transport network resulting in decreases in private car usage/trips, increases in public transport usages and will facilitate walking and cycling to the station, without significantly impacting on the operation of the road network in the area. **Construction Phase:** EIAR Appendix A9.5 Scheme Traffic Management Plan presents the analysis undertaken to assess the impact of the traffic management measures on the local road network surrounding the proposed Charlemont Station during the construction phase. At the local level the following parameters have been used to assess impacts on general traffic and on pedestrians: • Increase in walking distance/quality of service for pedestrians (through removal of footpath, reduction of quality of service, removal of a pedestrian crossing or relocation of crossing by more than 100m); • Increase in driver delays at junctions; • Changes in traffic flows on surrounding streets; and, • Additional distance travelled due to diversions.

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				The analysis undertaken at this location indicates that the increased volume of traffic on Grand Parade and Northbrook Road does not translate into any significant increase in driver delay. The largest increase in driver delay of 12 seconds is registered on the westbound approach on Grand Parade to the Ranelagh Road signalised junction. During the construction phase, pedestrians will experience a reduction in quality of pedestrian infrastructure and space. The construction site boundary will encroach upon footways in the local area, including the northern side of Dartmouth Road, and the southern side of Grand Parade. However, a temporary signalised crossing will be provided west of the Luas to maintain pedestrian access to and from the Stop. Whilst there are partial closures on Dartmouth Road and Grand Parade, pedestrian movements will be maintained on appropriately sized footways through the area. Operational Phase: A microsimulation VisWalk model has been developed for the immediate area surrounding Charlemont Station during the operational phase. The model covers the full extent of the publicly accessible station area, including the immediate vicinity of the station entrance at street level, the Luas stop and nearby junctions at Charlemont Bridge. In order to accommodate the forecast demand from the proposed Charlemont Station, a new staircase with 2.4m stair width is proposed at the south east corner of Charlemont Luas stop. An elevator will also be provided at this location. Both are sized for MetroLink to Luas, and Luas to MetroLink passenger numbers.
				In addition, it is proposed that the pedestrian crossing on R111 Grand Parade will be repositioned to the front of the building being developed by Hines. With this infrastructure in place, the model indicates that the R111 Grand Parade will have an acceptable level of service overall, with some reductions in service seen at the pedestrian crossing where pedestrians are required to wait for a green phase at the signals. Overall, it is considered that the model displays an acceptable level of network performance. The proposed pedestrian crossing on Grand Parade will have minimal impact on the traffic flow along Grand Parade and can be programmed to operate in sync with the existing signalised junction at Grand Parade /Charlemont Street to maintain the flow of traffic movements. When the Project is operational, car mode share will decrease, with a reduction of up to approximately 830 car tips to and from the zones surrounding Charlemont Station over the 12hr period in 2065. In overall terms, the Charlemont Station will provide for improvements to the public transport network resulting in decreases in private car usage/trips, increases in public transport usages and will facilitate walking and cycling to the station, without significantly impacting on the operation of the road network in the area. Furthermore, TII have deliberately designed the Station with minimum set down space (with the exception of a drop-off on Grand Parade for persons of restricted mobility only) or room for taxi ranks so that it does not encourage the Station to be used as a terminus.
14	(b) Neighbourhood & Community	6	8. The development will have an adverse impact upon property values, particularly during the construction phase. For many houses in the area there will be a long term and permanent adverse impact upon property values from noise of the operating rail infrastructure, vents, tannoy systems, escalators and large traffic volumes - vehicular and pedestrian using the station 19 hours per day. The adverse impact also extends to the loss of amenity for the wider community changing a quiet residential neighbourhood into a noisy, busy, congested major transport hub.	Responses (9) and (11) above outline the predicted environmental impacts with regards to noise and vibration, and amenity, while responses (12) and (13) summarise the assessed traffic and pedestrian impacts. TII would note that as explained by response (13) above that in overall terms Charlemont Station will provide for improvements to the public transport network resulting in decreases in private car usage/trips. Regards devaluation, there is evidence to suggest that property values will in fact increase in close proximity to public transport infrastructure and that local residents will greatly benefit from having a world class Metro system providing access to the city centre, airport and north city at their doorstep. The benefits of the project for all communities along the MetroLink route are described in Chapter 3: Background to the MetroLink Project, section 3.4 MetroLink Response to Challenges.
15	Letter conclusion	6	We believe that the logical place for the city centre Terminus is in St Stephens Green. This location would effectively provide for a hub station that can integrate with the Luas Green Line and multiple bus routes. There is also ample space for taxi and private car set-down	Please refer to responses (2) and (3) above that explain the rationale for a proposed station at Charlemont.
16	Letter conclusion	6	Importantly, this solution saves public money in the short term while at the same time it leaves open a broader range of strategic options to extend the Metro in the future such as the South West corridor.	Please refer to responses (2) and (3) above explain the rationale for a proposed station at Charlemont, whilst noting that infrastructure is not being duplicated given the capacity of the Luas south from St. Stephen's Green is restricted due to on-street running, and that as noted by the GDA Transport Strategy 2022-2042, section 12.3.2, "Charlemont offers the optimal location for the primary interchange with the Green Line in response to growing demand in the longer term and is an appropriate location to facilitate any potential future metro extensions to serve the south west, south or south east of the city region should sufficient demand arise."