Innealltóir Sinsearach Ráillí agus Struchtúir, Stáisiún na bPiarsach, Rae an Iarthair, Baile Átha Cliath 2, D02RV00 Senior Track & Structures Engineer, Pearse Station, Westland Row, Dublin 2, D02 RV00

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An Bord Pleanála Strategic Housing Unit 64 Marlborough Street Dublin 1 D01 V902

Date: 23 May 2022 Our ref: 3237/22/5 Your ref: ABP - 313361

Re: SHD planning application for the construction of a total of 415 No. residential units (252 No. houses, 135 No. apartments, and 28 No. duplex units); with 1 No. childcare facility and ancillary residential amenity facilities, a proposed Strategic Housing Development, on lands at Back Road & Kinsealy Lane, Kinsealy, Broomfield, Malahide, Co. Dublin.

Dear Sirs,

In relation to the above proposed Strategic Housing Development, I wish to advise that on behalf of the Board of Iarnród Éireann, a Prescribed Body under the Planning & Development Regulations 2006, Article 28.(1).(j & w), we would like to make the following observations:

- 1) The Railway Safety Act 2005 places an obligation on all persons carrying out any works on or near the railway to ensure that there is no increase in risk to the railway as a consequence of these works. Because of the proximity of the site to the Railway, the Developer must take into account this obligation in Design, Construction and Operation of the development. The proposed development has the potential to significantly impact the safety of the operational railway. The Applicant must engage with Iarnród Éireann seeking advice on technical requirements for mitigating impacts on railway infrastructure and operations.
- 2) The proposed development partially lies directly adjacent to and west of the Dublin - Belfast railway line over a linear length of approximately 490 metres situated between overbridge OBB26 to the North at Back Road extending southwards to Galtrim Grange residential development which is approximately 230m north of IE culvert UBB25B. The application site is circa. 12.5 hectares in total.
- 3) The site boundary shown on the plan drawings assumes that the property boundary to railway lands corresponds with OSi mapping. This approach is unreliable and does not take account of the historical drainage channels running parallel to the railway at the crest of the cutting which fall within the original land take for the railway corridor. It is therefore probable that the proposed development encroaches onto CIÉ/Iarnród Éireann lands. It is noted that the drawings provided by the applicant under the heading of Architectural Drawings do not specify a dimension between any new boundary wall and the track, or alternatively GPS coordinates for the line

- of the wall that would allow for comparison with the Railway's records for the boundary line along this section. The Applicant should engage with Iarnród Éireann and provide detailed cross sections with a view to agreeing the line of the proposed boundary treatment.
- 4) The DART+ Coastal Project (Northern Line) is underway and is currently at Phase 2 Project Concept, Feasibility & Option Selection. The works will involve track modifications to improve capacity, the installation of trackside overhead line equipment, construction of electrical substations including access roads, modifications to rail bridges, and any other modifications required to existing permanent way or railway systems infrastructure. An optioneering study to determine those works is on-going and this may determine the requirement for railway infrastructure additions or modifications in the vicinity of this proposed development. The Developer should consult with IÉ in relation to the output of this option selection study together with all other aspects of the DART+ Coastal Project.
- 5) The planning documentation makes no reference to how the proposed ground levels of the development may alter the existing ground levels and the natural drainage regime adjacent to the track boundary. Iarnród Éireann will require a detailed submission of the proposed new topography. This will need to be approved by Iarnród Éireann prior to commencement of works.
- 6) The integrity and functionality of any historical drainage channel running parallel to the railway at the crest of the cutting must not be affected by any temporary or permanent works or landscaping. Iarnród Éireann have had serious instances of slope failure in the past due to third party works at the crest of cuttings. Photo 1. below shows an example of a derailment in Co. Wicklow caused by third party works at the crest of a cutting.

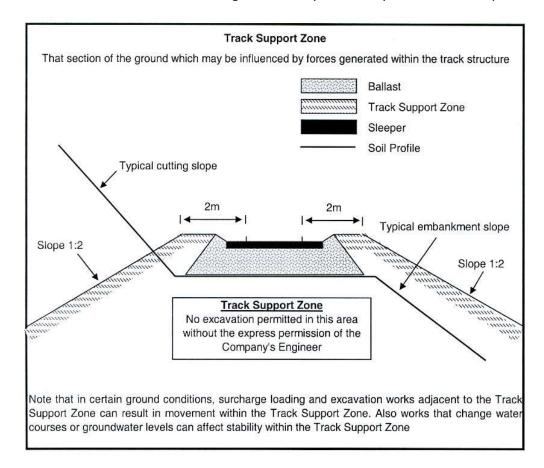


Photo 1 - Derailment in Co. Wicklow caused by third party works at the crest of a cutting.

- 7) The development may not undermine the integrity of the cutting and any cutting supporting structures adjacent to the track for which Iarnrod Eireann has a statutory obligation to maintain. It must be noted that the approach and embankments/cuttings are in full ownership of CIE. This is clearly set out in Section 46 of the Railway Clauses Consolidation Act 1845. Any works proposed to or adjacent to embankments including construction of new access roadways and infrastructure, resurfacing, landscaping, laying of ducts or services etc. will require written consent from CIE/Irish Rail.
- 8) In keeping with a residential development of this scale and density a 2.4m minimum high appropriately designed, solid block/concrete boundary wall treatment, should be erected by the applicant on the applicants' side of the boundary to the Railway. The maintenance of this boundary treatment rests with the Applicant and Successor-in-Title. It is noted that the planning documentation refers to provision of a new boundary welded mesh fence at the track interface, this however is not in keeping with the access and security issues associated with a development of this scale and type. As mentioned previously, the exact location and details of the boundary treatment are to be identified on site in co-operation with this office.
- 9) We note that extensive tree planting is proposed at the track boundary. The landscaping plan should avoid locating deciduous trees along the railway boundary. This is to reduce the risk of low rail adhesion during leaf fall season which can have a detrimental impact on the breaking performance of trains on approach to signals and station platforms. Trees placed close to the boundary can also block sight lines to signals. The Applicant must engage with Iarnród Éireann to agree on the landscaping plan for this portion of the development.
- 10) Provision must be made for maintaining the security of the railway boundary during the construction phase and the agreed permanent boundary treatment should be completed during the early stages of the development.
- 11) Access for Iarnród Éireann staff to culverts / bridges under the Railway should not be hindered.
- 12) Railway mounds and drainage ditches are to be preserved except where the written consent of Senior Track & Structures Engineer, Iarnród Eireann, Pearse Stn, Westland Row, Dublin 2, has been sought and received.
- 13) It is noted that due to the proposed increase in hardstanding areas adjacent to the track that there is an increased 'moderate' risk of overland flooding from the development site. It is noted that the proposed overland flood routing proposes overland discharge onto the track in three separate locations as indicated in Section 3.6 of the Waterman-Moylan Flood Risk

Assessment Report. Under no circumstances should any additional liquid, either surface water or effluent be discharged to, or allow to seep onto, the railway property or into railway drains / ditches.

14) Any excavations which infringe upon the Track Support Zone will require permission and approval from the Senior Track & Structures Engineer. This relates to all excavations along the railway boundary for this development.



- 15) No building shall be constructed within 4m of the Boundary Treatment on the applicants' side. This is to allow for the applicant to maintain his / her building, without the need to enter Board Property.
- 16) Should the development require the use of a crane that could swing over the railway property, then the Applicant must enter into an agreement with Iarnród Éireann / C.I.É. regarding this issue.
- 17) Any proposed services that are required to cross along, over or under the railway property must be the subject of a wayleave agreement with Iarnród Éireann / C.I.É

- 18) No overhang of any part of the development over the railway property is to be allowed.
- 19) Lights from the proposed development, either during the construction phase or when the development is completed, should not cause glint or glare or in any way impair the vision of train drivers or personnel operating on track machines. A glint and glare survey should be carried out to confirm this is the case.
- 20) The railway operates 24 hours a day with maintenance activity taking place at night and during shutdowns of passenger services. The development is in close proximity to the live railway and therefore must take account of the potential noise and vibration impact that an operational railway may have on sensitive receptors. Residential units should be designed, orientated, and located to limit the impacts of noise and vibration from transportation traffic and maintenance activities. It is recommended that the Applicant incorporates best practice principles in the design using BS8233 - Guidance on Sound Insulation and Noise Reduction for Buildings. The Applicant must refer to the local authority's Noise Action Plan regarding development adjacent railways and where appropriate carry out a noise risk assessment to inform an Acoustic Design Statement (ADS). The detail of the ADS should be commensurate with the level of risk identified in the noise risk assessment. The Applicant must take responsibility for specifying necessary mitigation measures where noise thresholds are expected to be exceeded. The noise assessment should consider a number of scenarios, including the following:
 - within the development with windows closed;
 - within the development with windows open; and
 - exterior of development within private or communal gardens.

These observations are made in the interests of safety in operation of the railway, and we recommend that the above points be made to the applicant and be a condition of planning should the planning application succeed.

Yours faithfully,

D. Gannon

Senior Track & Structures Engineer