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AN BORD PLEANÁLA

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An Bord Pleanála
(Strategic Infrastructure Division),
64 Marlborough Street,
Dublin 1,
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13th Dec 2018

Submission regarding Galway County Council N6 Galway City Ring Road project. A Submission on the EIAR Noise and Vibration.

To whom it concerns,

I live in the townland of Keeraun in Rahoon Galway (address above), and my home is approximately 200m from the proposed N6 Galway City Ring Road. I built on family owned lands, as did my siblings and their families. Included is a map of the area (Figure 1) showing our homes and the location of the proposed N6 road as it passes through the townland of Keeraun. The area marked in yellow is family owned residential land consisting of 2.67 hectares. Based on the current Galway City Development Plan, this site has the development potential for approximately 90 residential units. Overall bounded by the Ballymoneen, Rahoon and the proposed new N6 roads, there is approximately 10 hectares of land in this area which is currently undeveloped and has the potential for 370 housing units.

The purpose of this submission is to highlight concerns in relation to noise from the N6 and how that may adversely impact on the area as it is today, and how it may impact on our family's proposed development lands adjoining our properties (denoted in yellow).

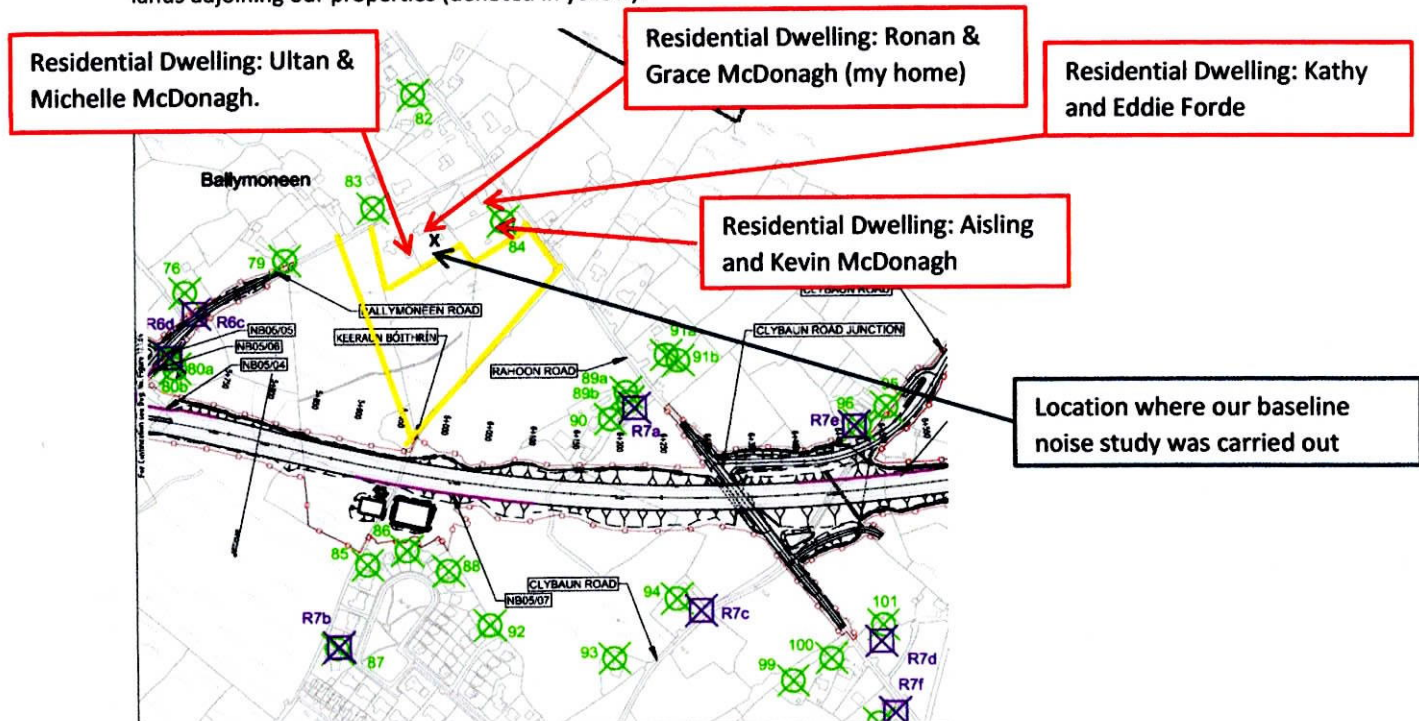


Figure 1 Map of N6 through Keeraun setting out our homes and an outline of our development lands.

There are serious concerns over the use of the Transport Infrastructure of Ireland's (TII) Guidelines for the Treatment of Noise and Vibration in National Road Schemes (Oct 2004) in relation to Keeraun specifically. Some of the concern arises from the use of the TII prescribed design goal (60dB,Lden) and the TII's prescribed methodology where the 'degree of noise impact' is not assessed in terms of its severity on the existing baseline noise climate. We would be most concerned about a number of shortfalls evident in the EIS arising from TII's prescribed methodology and the fact that the document fails to assess the degree of noise change, but instead simply assesses it against a design goal of 60dB,Lden as an absolute value used to determine if a noise barrier is warranted, combined with two other criteria. There has been no attempt to assess the degree of noise change arising, which in our view and our noise consultants view will be severe at Keeraun specifically, but instead relies on an over simplified approach which appears to have been overlooked in the EIS. Additionally on the 12th of June, 2015 at the early stages of the project I made a submission to Arups design office requesting that the guidelines use in the DMRB and Scottish PAN1/2011 guidance would be used to assess the likely degree of noise change. It would appear that this has been ignored and that the EIS simply only consider the TII's suggested approach in isolation. It would be my view that this is simply insufficient.

To help quantify this noise impact Diarmuid Keaney B.E. M.Sc. of ICAN Acoustics was commissioned to conduct a baseline noise study to accurately quantify noise climate as it is today. Diarmuid Keaney holds a M.Sc. in Applied Acoustics, a Diploma in Acoustics and Noise Control and a B.E. from the National University of Ireland. Measurements were taken continuously over a 4 day period using calibrated type 1 measurement instrumentation at the site marked in the figure 1 above.

The results of this baseline noise study are presented in Figure 2 below, and it is clear that the measured baseline noise climate at Keeraun is similar to levels that would be expected at a rural noise location. Daytime baseline noise levels are in the order of 34~40dB, LA90 daytime and were measured as low as 20dB,LA90 during night measurements. The measured Lden was 46, which is significantly lower than the proposed design goal of 60 Lden.

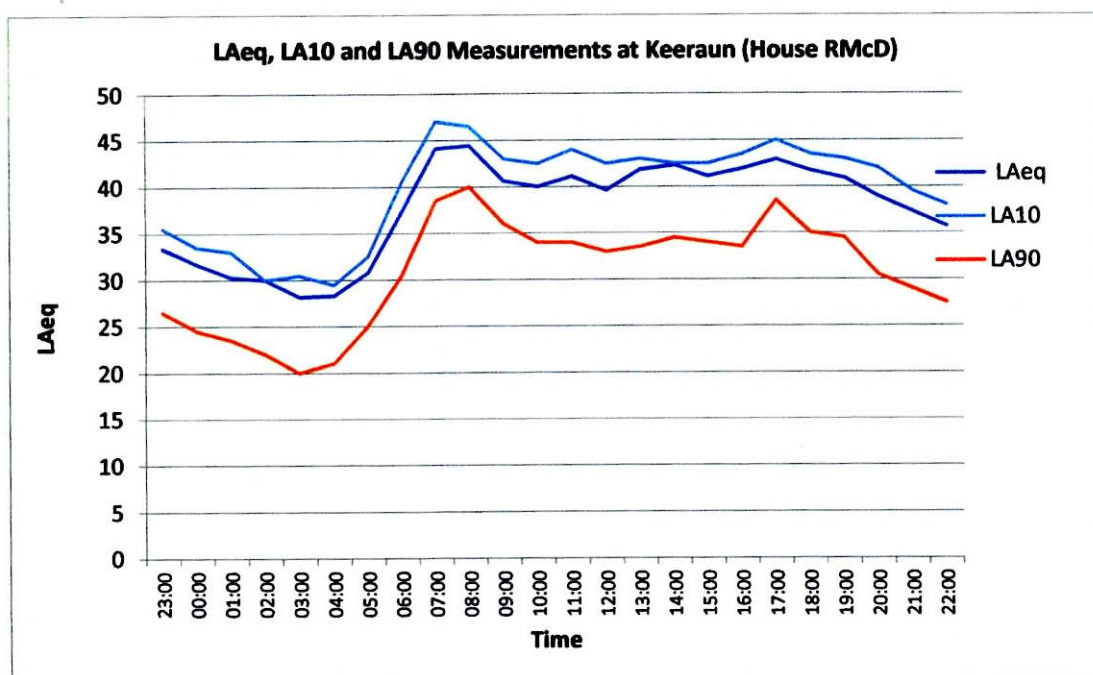


Figure 2 Baseline Noise Measurements taken at Keeraun

Worryingly, some recent guidance from the World Health Organisation (Environmental Noise Guidelines for the European Region 2018) ¹ suggests that there is strong evidence to indicate that traffic noise levels in excess of 53dB Lden, have known adverse health effects. We are unsure why the EIAR Report has ignored this guidance and why the projects consultants continue to rely on guidance issued by TII. Additionally, the guidance recommends that policy makers implement suitable measures to reduce noise exposure from road

¹ <http://www.euro.who.int/en/publications/abstracts/environmental-noise-guidelines-for-the-european-region-2018>

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traffic in the population exposed to levels above the guideline values for average and night exposure. It is deeply concerning that the TII have decided not to incorporate the latest WHO recommendations as part of this infrastructure project. In our view TII are not impartial to the process, therefore this guidance should not be relied upon in isolation and that there are a number of alternative guidance documents that could have been relied upon such as the UKs DMRB, Scottish Guidance and more recent WHO guidance.

From the EIAR report, its clear limited noise prevention measures have been put in place for Keeraun. A noise barrier has been proposed at Receiver Location Reference 86 and 88 which is at the housing estate Árd na Gaoithe (South of the N6), and another at the junction of the proposed N6 and the Ballymoneen road (Receiver Location Reference 80a 80b), all of which stemmed from what is in our view a less onerous criteria prescribe by TII/NRA and does not give any consideration to other guidance documents. Based on the TII/NRA criteria, it would appear that no mitigation measures have been considered for our own family homes nor has consideration been given to our proposed future land use (as mandated by the Galway City Development Plan).

I have a number of observations I would like to have considered as part of this N6 Ring Road project they include:

- I would request that noise mitigations measures are put in place at the time of construction of the N6 road, which would ensure that those currently living in the area are not adversely affected from a health perspective. Note the current baseline measurements for this area is 34~40dB LA90 daytime, and it is as low as 20dB LA90 during the night. The measured Lden for the area is 46dB, yet the TII suggest that a noise barrier would only be warranted if three criteria are met, one of which is a traffic noise level in excess of 60Lden. It is our view additionally that the TII prescribed methodology fails to assess 'the degree of noise change', which goes against the grain of a noise impact assessment.
- Based on this EIAR report, my home (marked in figure 1) fails to meet the criteria to warrant noise mitigation under the NRA/TII assessment criteria, yet the noise change at this location is 15 dB (the difference between the measured Lden of 46dB and the EIAR's do something measurements for receiver location reference 83 which was 61dB. The use of an absolute design goal of 60dB Lden does not consider noise change. This is not the bases of a noise impact assessment, unlike the DMRBs and Scottish Pan guidance where it assesses the degree of noise change. Also the use of a design goal of Lden, 60dB is some 7dB higher than a level which the WHO suggests suggest is harmful to health.
- Given the current local and national housing crisis, hindrances to building homes needs to be removed. It's too convenient for Transport Infrastructure of Ireland to take a position that they can't design for future building needs especially given the residential zoning of these lands as mandated through the Galway City Development plan. There is capacity to construct in excess of 370 units to the north of the N6 in Keeraun, and potentially the same to the south of the N6 in the same area. I would ask that a provision for noise mitigation (using roadside noise barriers) be put in place north and south of the N6 as it passes through Keeraun.
- If we were to develop our own family lands for housing, it is highly probable that the planners of the day would request a baseline noise impact assessment, to determine if noise mitigation needed to be put in place. My expectations, based on the findings of the EIAR report is that noise migration measures would be required. Note in the EIAR report it calls for noise barriers to be put in place at receiver location reference 86 which is the Árd na Gaoithe housing estate. Árd na Gaoithe is a similar distance from where we would propose building in Keeraun. As none of our land adjoins the proposed N6 route, to cater for noise impact from the N6 we would have to rely on at least three other land owners to allow barriers to be constructed along their land. This in effect eliminates the potential to deliver any units in the area. This poses a serious financial risk to the value of our lands and our ability to deliver housing on same. We would look to the TII to promise to build barriers in Keeraun to protect all future and planned housing projects.
- In assessing the degree of noise impact arising from the proposed N6, we would request that TII would state their position and pre-agree that they would put the necessary mitigation measures in place at the construction phase of the project to ensure that the proposed N6 would not sterilise the intended future use of our land, or adjoining lands at Keeraun. While our lands would need to go



through the Planning Process, we would need assurances that the scheme includes adequate consideration in relation to noise and that the scheme at this point should take into consideration the likelihood of the future development of our family lands in accordance with the City Development Plans guidance. It is evident that the N6 route will fundamentally impact on the noise levels at Keeraun, however we must insist that our future interests for the lands are properly considered, and that the proposed N6 would not preclude housing development in this area.

We do realise the necessity and importance of the N6, however we would suggest the applicants must consider internationally recognised standards such as the DMRB and PAN guidance as well as the recommendations from the WHO, and not rely solely on the TII/NRA guidance.

Yours respectfully



Ronan McDonagh B.E. HDip Eng

