

Proposal for an Application to Designate People's Park as a Quiet Area

Environmental Noise Regulations, 2018 (as amended)

Public Consultation



11th August 2025

Introduction

Access to public spaces with good sound quality (e.g. natural sounds) is of major importance for people living in cities for social and health related benefits. Sounds that we find relaxing can facilitate recovery from psychological stressors and can result in a lower degree of annoyance, contributing to physiological and psychological well-being. Urban parks with good sound quality offer many opportunities for public recreation. They are of value to their residents and people living on or nearby noisy roads affording opportunities for peaceful recreation.

Quiet Area Designation

Under Section 10(1) of the Environmental Noise Regulations, 2018, an action planning authority (Limerick City and County Council in this case) may following consultation with the Environmental Protection Agency (EPA) and with the approval of the Minister for the Department of Climate, Energy and the Environment designate Quiet Areas in agglomerations where particular requirements on exposure to environmental noise shall apply. There are currently no Quiet Areas designated within Limerick.

There is no absolute definition of what constitutes a Quiet Area in Ireland or Europe. Quiet Areas are generally regarded as publicly accessible areas where environmental noise levels are deemed to be low. However, sounds that people find pleasant and prefer do not necessarily have low sound levels (e.g. birds singing, human laughter) and people's perception of sound quality should be given consideration for a more holistic view of our sound environment.

It is important to note that the designation of a Quiet Area does not provide statutory protection to an area (i.e. it does not protect sound levels or the quality of the sound environment) but is intended to highlight and promote the benefit of sounds in an area for citizens health and well-being. It is also important to note that transient unwanted sounds (noise) might be present occasionally in Quiet Areas (e.g. park maintenance, construction works). The designation of Quiet Areas is based on the sound environment over the long-term. However, if transient unwanted sounds become permanent unwanted sounds a Quiet Area designation may not be appropriate.

Proposal for Quiet Area Designation for the People's Park

The results of the Strategic Noise Maps for 2021 (**Figure 1**) informed the Limerick Agglomeration Noise Action Plan and highlight that approximately 26% of the Limerick population living within 1 km of the People's Park is expected to be exposed to traffic noise levels that are 10 dB above the median day-time noise level in the park (an approximately doubling of the perceived loudness) (**Table 1**).

The measured sound levels at the Council's monitor in the core of the park (see **Figure 2**) exceed the expected sound level of less than 55 dB L_{den}^1 though (see L_{den} values in **Table 2**).

¹ L_{den} is a 24 hour noise indicator including penalties for evening- and night-time when noise is expected to be more annoying.

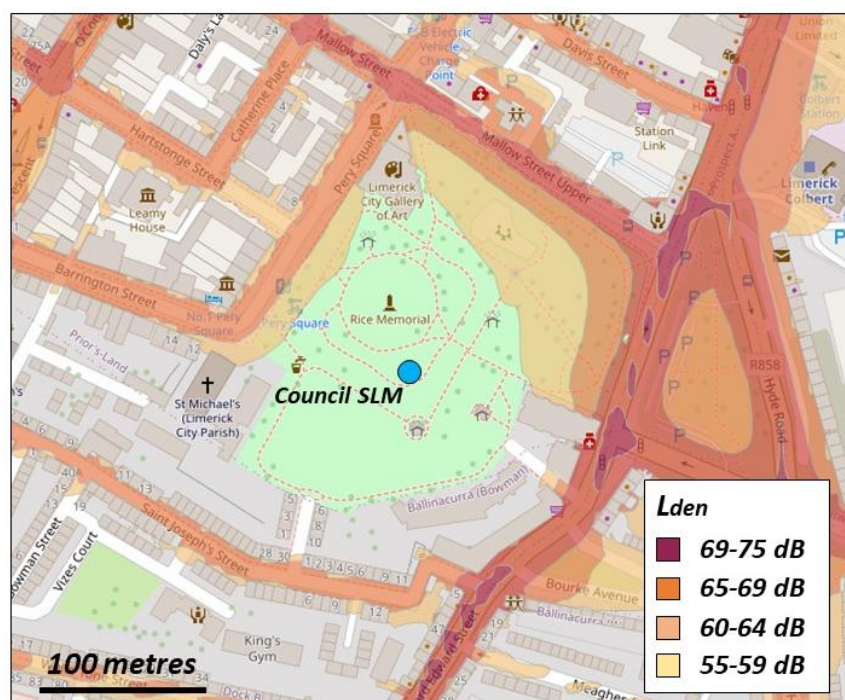


Figure 1. Strategic noise mapping (for 2021) for the People's Park and the location of the Council's sound level monitor (SLM).

Table 1. Summary of the People's Park meeting the criteria for a Candidate Quiet Area.

Area (m ²)	Approx Population within 1 km	Median Noise Level Across Park $LA_{eq,16hr}$ ²	Area (m ²) below 45 dB $LA_{eq,16hr}$	Population within 1 km exposed to 10 dB above median $LA_{eq,16hr}$
34,040	14,931	53 dB	4,021	3,885



Figure 2. Location of the Council's fixed sound level monitor (right of centre) in the People's Park.

² $LA_{eq,16hr}$ is an average day and evening-time noise indicator.

Table 2. Results of sound level monitoring at the core of the People's Park.

Year	Monitoring Results				
	<i>L_{Aeq,16hr}</i> , dB	<i>L_{den}</i> , dB	<i>L_{day}</i> , dB	<i>L_{evening}</i> , dB	<i>L_{night}</i> , dB
2019	57	58	59	52	48
2020	57	58	57	53	49
2021	57	59	57	52	52
2022	56	57	57	52	48
2023	56	58	57	52	50
2024	56	58	57	52	50

An assessment of the sound level measurements has indicated that other sounds are present in the park (nature and human activities) with a strong presence of natural sounds (bird song). Consequently, a soundscape³ approach to assessment of sound has been undertaken, collecting data on people's perceived experience of sounds in the park in combination with sound measurements.

Data was collected during soundwalks (listening walks) in the park with citizens and visitors between 2023 and 2025 based on an international standard (ISO 12913: Acoustics – Soundscapes - Parts 1 to 3) and using a questionnaire to describe participants perceived emotional responses to the sound environment at predefined listening stops and the appropriateness of those sounds (**Figure 3**).



Figure 3. Example of listening stops during a soundwalk in October 2024.

³ Where soundscape is defined as the sound environment as perceived or experienced and/or understood by a person or people, in context.

This has included rating how pleasant, vibrant, eventful, chaotic, annoying, monotonous, uneventful and calm sounds are in the park. The sound of people (movement, voices and social signals), natural elements and bird song are dominant across the park with transportation sounds more prevalent towards roads bounding the park, particularly the R858 and Upper Mallow Street. The main descriptions of the sounds in the park were that they were pleasant and relaxing, as well as being more lively towards the children's playground. The soundscape was perceived as becoming more calm away from roads and the playground (Figure 4).

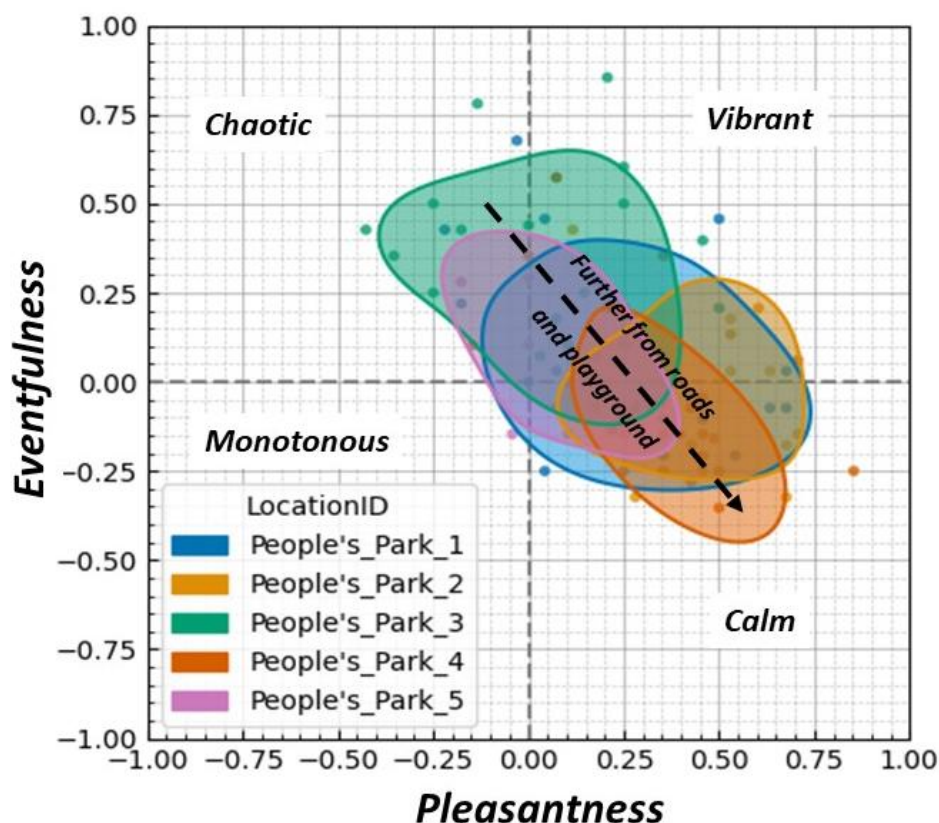


Figure 4. An example of ISO 12913 circumplex results at listening stops from a soundwalk in April 2025 - a plot of participants perceived pleasantness vs. eventfulness of the soundscape.

The measurement of the sound characteristics at the listening stops (the loudness, how the sounds fluctuate, the presence of any particular strong frequencies e.g. tones) have been correlated with the participants responses to identify areas of the People's Park which the soundscape is expected to be perceived as being pleasant and also areas expected to generate a mixed response (positive and negative) (Figure 5).

The area of the People's Park expected to provide a positive response to the sound environment is expected to be greater than the area that is expected to provide a mixed response (approximately 60 % of the park).



Figure 5. Areas expected to have a perceived positive pleasant soundscape, July 2024.

Summary

It is a policy of the Council to proactively manage environmental noise, where it may have a significant adverse impact on the health and quality of life of communities in Limerick and to support the aims of the Environmental Noise Regulations, through the development and implementation of Noise Action Plans (Policy EH P7, Limerick Development Plan 2022-2028). Limerick City is identified as a Priority Important Area in the Limerick Agglomeration Noise Action Plan 2023-2028 and citizens should have access to public spaces that provide good sound quality. There is evidence from the investigation of sound level monitoring that natural sounds and human sounds influence the sound environment in People's Park. This has been confirmed by a soundscape assessment (by soundwalks and the measurement of sound characteristics). Natural and human sounds provide a perceived pleasant soundscape across the park, being considered both calm and vibrant, particularly at the core of the park away from the R858 and Upper Mallow Street.

It is recommended based on the investigation of the sound environment that the EPA is consulted and an application is made to the Minister for the Department of Climate, Energy and the Environment designate People's Park as a Quiet Area, for the purpose of promoting the benefit of sounds in the park for citizens health and well-being.