

Dun Laoghaire/Rathdown County Council Longitude Festival 14th to 16th July 2017 Marlay Park, Dublin

Title: Noise Measurements Taken at Noise Sensitive locations surrounding

Marlay Park while the Concerts are being held at the park.

Reading Taken: At the noise sensitive locations (NSL's) within the vicinity of Marlay

Park.

Equipment Used: Hand Held Analyser, Bruel & Kjaer 2250 Light, Sound Level Meter

Prepared by: Noise Unit, DLRCC

Summary

The Noise Unit at Dun Laoghaire/Rathdown Co. Council has been requested to perform a noise assessment investigation for the Concerts being held at Marlay Park 2017.

This report details the equipment and measurement methods employed and presents an acoustic analysis of all data collected.

Objectives

The technical assessments were carried out:

- 1. To determine the ambient noise environment and background noise levels at the noise sensitive location(s) (NSL's) where monitoring has been carried out.
- 2. To relate the music noise level from the Marlay Parks Concerts to the noise conditions set down in the planning application and show a reasonable cause for annoyance or otherwise.
- 3. To assess if the complaints logged by local residents are justified.

Introduction

Marlay Park is located in Dun-laoghaire/Rathdown Co. Council and has been used for Longitude Festival concerts on Friday, 14th July to Sunday, 16th July 2017.

The condition relating to the event states that "The music noise level should not exceed 72dB(A) LAeq, over a fifteen-minute period, at one meter from the façade of any noise sensitive premises for events being held"

Description of the Noise Source

There is a stone wall approximately 1.5 - 2 metres high running along the park boundary between the nearest noise receptor location and the noise source. There are some tall trees and wooded areas within the park.

The primary noise nuisance is emitting from the live and recorded music featured on a single stage, with live music between approximately 14:00 and 23:00.

Description of the Noise Receiver

The closest noise sensitive area is situated on the Grange Road to the north and east of the park. Residents living in the area include young and old families.

Equipment and Measurement Set Up

The recorder used during the noise assessment was with a Hand Held Analyser, Bruel & Kjaer 2250 Light, Sound Level Meter.

Noise Equipment Specifications

Type: Class 1, 2250 Light, Hand-held analyser, Sound Level Meter (SLM)

Type: 4231 Class 1 Acoustic Calibrator

Manufacturer: Bruel & Kjaer

Weighted Setting: A-Weighting

Meter Response Time: Fast

Serial Number: 2638896

Measurement Set-Up

The sound level meter was calibrated before site visit and recordings were carried out.

Location: Outdoors in the noise sensitive location.

Orientation: Pointed towards the noise source.

Meteorological Conditions

Meteorological conditions can have a substantial influence on the propagation of sound and may provide important information for assessing noise compliance and a noise complaint. Wind speed and wind direction have the potential to affect the noise measurements. An average wind speed of less than 5m/s is the preferred limit when noise measurements are being taken.

The prevailing weather conditions at the time of measurement has been noted and recorded in the report. These occurrences may influence the final noise reading.

External Influences and limitations

Precautions were put in place to minimise outside interference. These include covering microphone with a wind shield to minimise outside interference and pausing the SLM if deemed necessary.

The Grange Road runs to the north and east of the Park. This appears to be a busy road to the north of the park with fewer vehicles using the eastern part of the road.

The M50 motorway runs approximately east to west to the south of the Park.

Road traffic noise and crowd noise were noted during the course of each monitoring session. These occurrences may influence the final noise reading.

Methodology

Noise levels were measured by a competent person for environmental noise monitoring, in accordance with EPA Environmental Noise Guidance Document and International Standard ISO 1996: Acoustics Description & Measurement of Environmental Noise.

Monitoring Position & Measurement Set Up

Parameters Used on the SLM: Ambient Noise Levels, LAeq, and Background Noise.

Location of Sound Level Meter: Free-Field

The recorder was placed at least 3.5m from any wall or large reflecting surface.

SLM: 1.2 -1.5metres in height

Windshield Used: Yes

Orientation: Pointing the microphone at the noise source.

Date & Time	Location	dB level	Duration
Sound Check 14th	Heather Drive	Laeq 62.2dB	15mins
July 12:30pm			
	Heather Lawn	Laeq 65.2dB	15mins
Concert 14th July	La Touche Court	Laeq 64.6dB	15mins
2017 7pm			

7pm	Pine valley	Laeq 62.9dB	15mins
8pm	Marlay Rise	Laeq 54.6dB	15mins
8.15pm	Marlay Lawn	Laeq 53.4dB	15mins
8.30pm	Highfield	Laeq 63.3dB	15mins
8.45pm	Grange Wood	Laeq 64.9dB	15mins
9pm	Heather Drive	Laeq 63.7dB	15mins
9.15pm	La Touche Court	Laeq 65.4db	15mins
9.15Pm	Pine Valley	Laeq 68.9db	15mins
Concert 15 th July	Marlay Lawn	Laeq 67.5dB	15mins
6pm			
6.45pm	Pine valley	Laeq 63.9dB	15mins
6pm	Heather Drive	Laeq 61.1dB	15mins
7.20pm	Grange Court	Laeq 64.4dB	15mins
7.45pm	Pine Valley	Laeq 67.8dB	15mins
8.05pm	Highfield	Laeq 65.6dB	15mins
9.35pm	Woodpark	Laeq 56.5dB	15mins
	Ballinteer Avenue		
Concert 16 th July	Grangewood	Laeq 66.7dB	15mins
6.50pm			
8pm	Heather Grove	Laeq 60.3dB	15mins
8.30pm	La touche Court	Laeq 59.8dB	15mins
9.30pm	Pinevalley	Laeq 64db	15mins

Meteorological Conditions:

Dry, warm

Approximate Temperature: 18 to 25 degrees Celsius

Discussion of Acoustic Analysis

Noise monitoring was carried out by the Noise Unit to determine compliance with the following licensed condition:

"The music noise level should not exceed 72dB(A) LAeq, over a fifteen-minute period, at one meter from the façade of any noise sensitive premises for events being held".

There was no exceedance of 72dB(A) LAeq, over a fifteen-minute period for any of the monitoring sessions carried out.

Conclusion of Acoustic Analysis

Having given careful consideration to the monitoring readings, the Noise Unit for Dun-Laoghaire/Rathdown Co. Council have concluded that the noise emitted from the Longitude concert complied with the conditions set down in the planning application.