

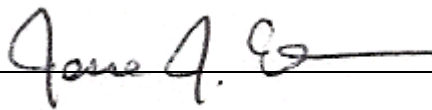


**Peer Review of Acoustic Sonic Inc. Sound Study for
Pink Taco, 1200 Ocean Drive, Miami Beach, Florida
PB 20-0345**

Prepared for:

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1 Introduction

This report documents a peer review of an acoustic study conducted for the City of Miami Beach related to an application for a Conditional Use Permit for an Outdoor Entertainment Establishment at 1200 Ocean Drive. The reviewed report, prepared by Acoustic Sonic Inc. (ASI) and dated March 27, 2020, describes acoustic testing performed at the site and recommendations for mitigating noise impacts.

2 Project Description

The existing restaurant, Pink Taco, is located on the ground floor of a three-story building at the northwest corner of Ocean Drive and 12th Street, which represent its east and south borders, respectively. Immediately to the north is The Tides South Beach Hotel at 1220 Ocean Drive. Directly above the restaurant are two floors which house 24 apartments.

The interior currently consists of the restaurant, bar, dance hall, entertainment, and alcoholic beverage uses until 5 am. The application seeks to allow amplified music on the patio facing Ocean Drive. It is believed that this use is being proposed until 5 am, although that is not confirmed. No other specifics are known about the nature of the proposed outdoor entertainment component.

3 Comments

The sound study report details an investigation of sound propagation at the restaurant. This investigation took place on the evening of Thursday, March 19, 2020 and included the measurement of ambient levels at seven locations as well as the measurement of sound levels at those same locations while music was playing on loudspeakers located on the terrace. It appears that six different sets of tests were undertaken with the loudspeakers in different orientations and set at different volume levels. While we do not find issue with the chosen methodology, we do have some comments and recommendations concerning the conclusions.

The report states that ambient sound levels (without music playing) on the balcony of apartment unit 210 were 60 dBA and 74 dBC. Ambient sound levels within that same unit were 35 dBA and 40 dBC. We have no reason to question these measured levels given the location. We also deem that this would be the most likely affected receptor and should form the basis for setting loudspeaker sound level limits which the report states should be 70 dBA on the terrace below.

The report states that a 70 dBA limit would “discourage loud, elevated speech levels from patrons, as it would be unnecessary to raise their voices in order to be heard over the music.” This is contradicted by a claim later in the report that “a sound level of 60-70 dBA is equivalent to a normal conversation.” Clearly, if amplified music on the terrace is producing a level of 70 dBA, then patrons would have to exert extra effort, above 70 dBA, to be heard across a table. This is corroborated in the literature which typically states that the sound level for most speech at a distance of 3’ is usually between the mid-50s and mid-60s (dBA). For example, the following table, excerpted from “Handbook of Acoustical Measurements and Noise Control” by Cyril Harris shows typical voice efforts in a quiet

setting and indicates that extra speech effort would be needed by patrons on the terrace. This loud speech effort would, of course, translate to other nearby locations.

Vocal effort	Male, dB(A)	Female, dB(A)
Casual	53	50
Normal	58	55
Raised	65	62
Loud	75	71
Shout	88	82

Figure 1 - Excerpt from “Handbook of Acoustical Measurements and Noise Control” by Cyril Harris

Based on the aforementioned argument, we would recommend a lower limit be set for loudspeakers on the terrace.

The aforementioned aside, we do not think that a limit in terms of dBA is the correct approach. As stated in the ASI report, “applying C-weighting to the measurement has a greater sensitivity to low frequency sounds.” In other words, the dBC metric is a more representative metric for sounds where low frequency is prevalent. Since we anticipate that any complaints would likely arise from low-frequency sound due to bass in music, we feel that a limit set in C-weighted decibels would be more likely to mitigate complaints. Thus we encourage ASI to propose a suitable dBC limit on the terrace that would be commensurate with the measured 40 dBC ambient sound level inside unit 210. We defer to ASI as the entity that performed the actual study to propose a suitable limit.

4 Conclusions

While we generally agree with the need to have a sound mitigation program focused on having sound level limiters on the installed sound system, we recommend that (1) proposed limits be reduced to allow for normal conversation without requiring extra vocal effort for patrons on the terrace and (2) that a limit in dBC, in lieu of dBA, be set that is commensurate with achieving a sound level of 40 dBC (which is the ambient sound level within unit 210) or lower within unit 210.