Veneklasen Associates
Consultants in Acoustics | Noise | Vibration | AV | IT

July 28, 2022

Architects Local
71013th Street, Suite 307
San Diego, CA 92101

Attention: Kai Fishman | Project Architect

Subject: **Miramar Event Center; San Clemente, California**
Property Line Noise Analysis
Veneklasen Project No. 8142-001

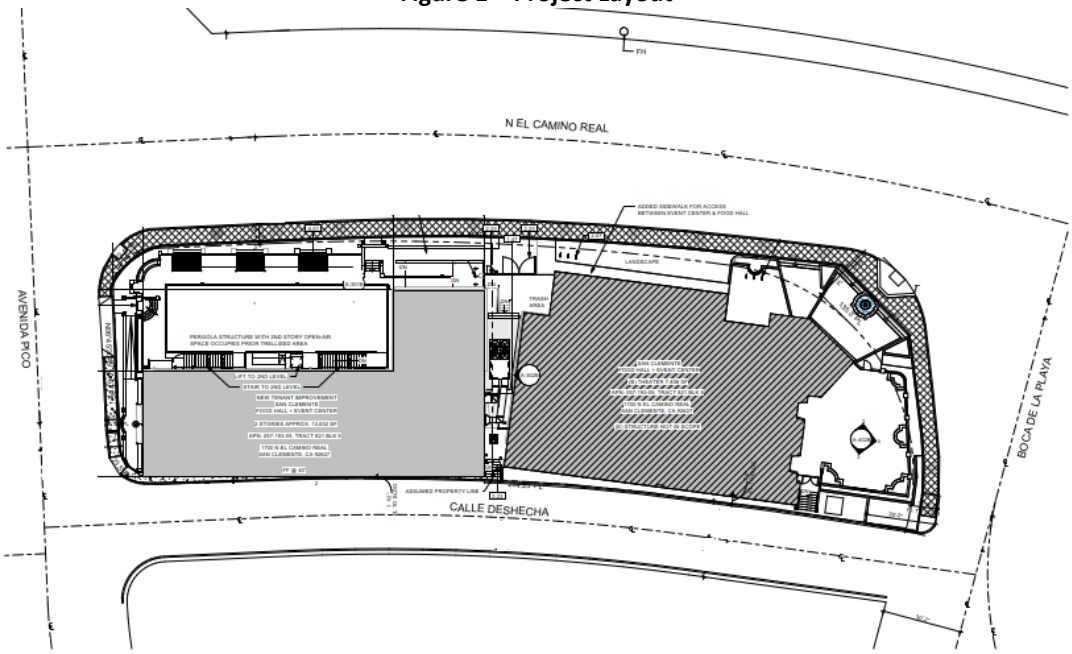
Dear Kai:

Veneklasen Associates, Inc. (Veneklasen) has completed our analysis on the addition of a roof deck pergola at the Miramar Event Center in San Clemente, and the sound propagation to adjacent properties. This report documents our assessment of the existing conditions and evaluates the proposed work with respect to the municipal code.

Project Description

The project will be a construction change to add an occupiable roof deck pergola over the proposed outdoor dining plaza to host wedding events. A layout of the property is shown below although the design for the roof deck is not yet complete. The outdoor events will occur in the afternoons and evenings.

Figure 1 – Project Layout



Noise Criteria

Title XIII of the City of San Clemente Code of Ordinances, Section 8.48.050, provides the following limits on noise generated by voice or amplification devices.

The following exterior noise standards, unless otherwise specifically indicated, shall apply to all property within the City. The Land Use category refers to the affected receiver property:

Land Use	*Allowable Exterior Noise Level*	
	7:00 a.m. to 10:00 p.m.	*10:00 p.m. to 7:00 a.m.*
Residential	*55 dB (A)*	*50 dB (A)*
Residential portions of mixed-use, or residences located on property zoned for commercial, industrial or manufacturing land use	*60 dB (A)*	*50 dB (A)*
Commercial	*65 dB (A)*	*60 dB (A)**
Industrial or manufacturing	*70 dB (A)*	*70 dB (A)**

** Standard only applies if commercial, industrial or manufacturing buildings are occupied during these hours.*

Section 8.48.070.B prohibits:

Operating, playing or permitting the operation or playing of any radio, receiving set, television set, phonograph, drum, musical instrument, or similar device which produces or reproduces sound:

3. *Between the hours of ten (10:00) p.m. and seven (7:00) a.m. in such a manner as to create a noise disturbance across a residential or commercial real property line or at any time to violate the provisions of Sections 8.48.050 and 8.48.060.*

Such restrictions shall not apply to use operating under a conditional use permit or exception as described in this chapter, provided said use is in compliance with any and all conditions imposed by the permit or exception.

Veneklasen's interpretation of the code requirements is that the noise from the project, including loudspeakers and noise from patrons and general operating activity, should not exceed the levels above during daytime. The project outdoor events will not occur at nightttime, therefore those limits do not apply.

Measurements

VA conducted noise monitoring to measure the ambient noise conditions surrounding the future establishment on Friday, July 22, 2022; the south side of N El Camino Real was emphasized for the measurements as it included quieter locations. Measured ambient levels are indicated in Table 1 and measurement locations are shown in Figure 2. The values represent the average noise level (LAeq) and minimum (LAmin) noise levels in the respective operating hours. The minimum noise levels are brief moments, not an extended condition like the average ambient noise level; the minimum levels are shown as the extreme quiet conditions.

The buildings along N El Camino Real, like the project site, are businesses. Buildings further set back are residential. The surrounding receptors are indicated as commercial or residential in Figure 2.

Table 1 – Measured Afternoon/Evening Ambient Sound Levels

Location	LAeq	LAmin
S1	57	52
S2	53	51
S3	58	52
S4	54	49
S5	53	50
S6	60	49
S7	59	52

Figure 2 - Satellite Image of Property and Measurement Locations

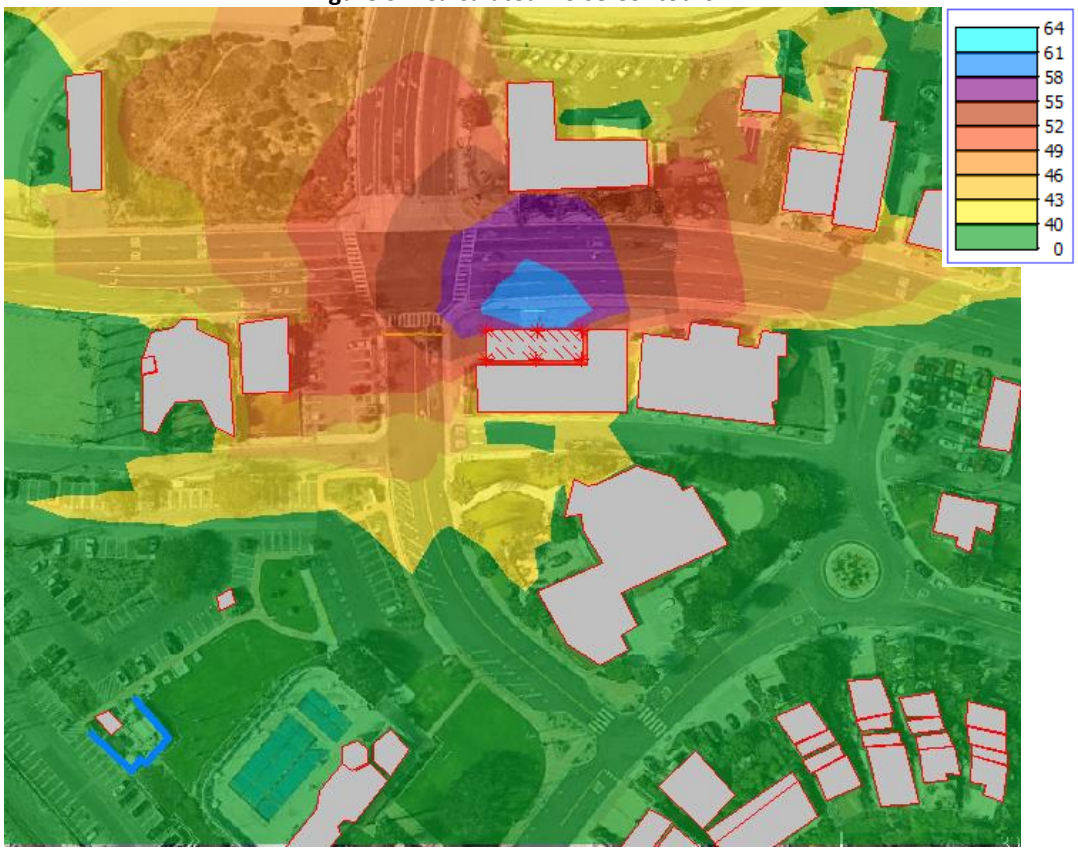
Analysis

Veneklasen used SoftNoise Predictor-LimA noise modeling software to calculate the propagation of noise from the proposed pergola outdoor area to the neighboring properties. For all receptors the noise level is below the municipal code limits without any changes. It would be possible to raise the noise level of an event and still be within municipal code limits.

Figure 3 indicates the resulting noise levels at the neighboring properties at standing ground height including the effect of terrain, buildings, and barriers; locations of the noise sources, loudspeakers and people, were assumed based on typical rooftop layouts. The loudspeaker locations are shown with red stars; they are located at a height of 5 feet and are aimed 45 degrees downward and each source and aimed inwards. Simulated people on the roof deck were modeled as an area source over the outdoor seating area. The combined sound level of the loudspeakers and people was designed as average 75 dBA as measured in the outdoor seating area.

For all receptors the noise level is below the municipal code limits without any changes. It would be possible to raise the noise level of an event and still be within municipal code limits.

Figure 3 – Calculated Noise Contours



Summary

The proposed outdoor area can achieve the municipal requirements without any changes to the design. There are no specific space layout or loudspeaker requirements to stay within municipal requirements, which allows flexibility for the events.

If you have any questions, please do not hesitate to contact us.

Sincerely,
Veneklasen Associates, Inc.

Cathleen C. Novak

Cathleen Novak
Associate