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June 30, 2009

Mr. Nabhan Simaan
17521 Santiago Canyon Road
Silverado, CA 92676

Subject: Assessment of Potential Community Noise Impacts from Proposed Wedding Receptions at Simaan Residence.

Dear Mr. Simaan,

As a point of history, in 2002 and 2006 we performed studies related to potential community noise impact from the hosting of wedding receptions at your residence on Santiago Canyon Road. At those times, receptions were held outside on your rear patio. The results showed compliance with the County of Orange noise criteria.

As you requested, we have recently reevaluated potential community noise impacts based upon the planned hosting of wedding receptions within the proposed room addition at the north end of your residence. Previous site noise measurements made during an actual reception when a DJ was playing recorded music showed that an average maximum level of 88 dB(A) was experienced in the immediate vicinity of the music system loudspeakers.

Sounds emanating outside an enclosure can be estimated by the following expression[1]:

$$Lp(r) = Lp(inside) + 10 \log (S) - 20 \log (r) - TL - 17$$

Where Lp(r) = the SPL at distance r
S = area in square feet of enclosure wall
r = distance in feet from the geometric center of the source
Lp(inside) = SPL measured inside near enclosure wall

The offsite residence located closest to the Simaan residence lies at a distance of about 740 feet to the east of the proposed room addition (Gertner property). Using this distance, an exterior wall area of 256 sq. feet, a sound source level of 88 dB(A), and a minimum TL of 25 dB for the all-glass facade in the above expression yields a calculated exterior noise level of 12.6 dB(A). This would be inaudible, especially considering that the lowest ambient noise level measured previously on the Gertner property was about 35 dB(A).

[1] "Secrets of Noise Control", Albert Thumann, P.E. and Richard K. Miller

I trust that this information will satisfy your requirements. Please contact us if you need any further information or if you have any questions regarding the project.

Yours truly,

Paul A. Penardi
Acoustical Consultant

July 21, 2003

Mr. Denis R. Bilodeau, Project Manager
TRC Customer-Focused Solutions
21 Technology Drive
Irvine, CA 92618

Re: Assessment of Noise Impacts to Sensitive Wildlife from Proposed Use of Residential Property for Wedding Receptions, 17521 Santiago Canyon Road, Orange County

Dear Mr. Bilodeau:

After research and literature review, personal communication with a noise expert, and an inspection of the subject property, it is my opinion that the noise generated from wedding receptions on the premises will not have a significant adverse effect on sensitive wildlife receptors inhabiting adjacent and nearby open space areas. Following is a summary of factors I took into consideration in order to formulate my opinion.

First, and most importantly, the distance between the source of the noise at issue (music broadcast through an amplifier and loudspeaker system) and the nearest habitat potentially supporting sensitive species (chaparral/scrub) is approximately 300 to 400 linear feet. In addition, the residence and source of the noise is located on a hilltop above these habitats; consequently, with the tendency of noise to travel upward, it will attenuate at a greater rate relative to distance from the source before it reaches the habitat. It should also be noted that a cliff face potentially used by breeding birds exists across a canyon from the residence and at about the same elevation. This feature is located approximately 1250 linear feet from the proposed noise source, a distance at which noise will attenuate substantially.

Second, noise naturally attenuates over distance. According to a study of the property by P.A. Pernardi & Associates (letter to Mr. Simaan, February 27, 2003) and other noise experts I contacted, noise will attenuate approximately 8 to 10 dBA for every doubling of linear distance in "soft" absorptive environments (i.e., non-hardscape areas). This means that if the noise level is 95 dBA when it leaves the patio (approximately 50 feet from the source, it will naturally attenuate to dBAs in the low 80s at approximately 100 feet, dBAs in the low 70s at approximately 200 feet, dBAs in the low 60s at approximately 400 feet, and so on. Keeping in mind that the noise level commonly used as a threshold for impacts to birds is 60 dBA, it is estimated that noise at the cliff face would at most be in the mid 40s during reception events. As a point of reference, this is a sound level that would correspond to a quiet radio. The same would be expected at the chaparral/scrub located below the residence.

Third and finally, the periods of time the noise will be generated will be infrequent and relatively short. As I understand the proposal, no more than 20 wedding events will be held at the residence per year; and, music could be played for a period of 2 to 3 hours

during each event. On the one hand, it is believed that intermittent, loud noises have a greater disturbing effect on wildlife than constant, low level noises to which they can acclimate. On the other hand, however, the noise levels will not be loud enough to presumably disturb wildlife with the added assurance that they will not be a part of the normal ambient noise environment.

It is for the reasons outlined above that I do not believe noise generated by wedding receptions at the residence will have a significant adverse effect on sensitive wildlife species potentially occurring in the vicinity. If you have any questions or comments, please do not hesitate to contact me.

Sincerely,

Steven G. Nelson
Consulting Biologist
24230 Delta Drive
Diamond Bar, CA 91765
Tel/Fax (909)396-8478

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February 27, 2002

Mr. Nabhan Simaan
17521 Santiago Canyon Road
Silverado, CA 92676

Subject: Investigation of Potential For Environmental Noise Impacts From Proposed Use Of Residential Property For Wedding Receptions.

Dear Mr. Simaan,

As you requested, we have investigated the potential for environmental noise impacts from the proposed use of your residential property for the hosting of wedding receptions. The noise-sensitive areas of concern are the residential properties located along the east side of Santiago Canyon Road (SCR).

In the attempt to emulate conditions that are expected to occur during a wedding reception, an amplifier and loudspeaker system was set up on the upper patio on the south side of the residence which is typically used for dancing. The amplifier was fed musical signals from a CD deck playing rock & roll tunes from the Huey Lewis and The News band. The acoustical level was adjusted for an average of 95 dB(A) in the middle of the patio, a level that was considered to be about the maximum a DJ might produce during a wedding celebration.

While the music was playing, sound level measurements were made at various positions on and off the property with a Bruel & Kjaer 2204 precision sound level meter. During the measurement period, the sky was overcast, the temperature was 55 F°, and the relative humidity was 70%, as measured with a sling psychrometer. The wind direction was from the south, with an average speed of 2 mph, and gusts up to 7 mph. The point of this discussion is that the atmospheric conditions at the time of the measurements were such that excess sound attenuation that might be expected from thermal gradients or low relative humidity, were minimal. In other words, conditions could be described as being near worst case with regard to sound propagation to the noise-sensitive off-site areas..

The results of the measurements are summarized in the table on the following page. The locations of the measurement positions are shown on the attached exhibit and are identified as an alphabetical character corresponding to those shown in the "Meas. Location" column of the table. Note that the Gertner property is outside the boundaries of the exhibit, directly opposite the entrance to the Simaan property.

Table 1
Results of Sound Level Measurements Made on And in The Environs
of The Simaan Property on January 15, 2002

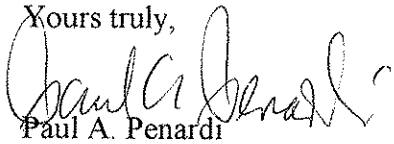
Meas. Location	Sound Level [A Weighted]	Comments
On walkway at front side of house, directly opposite patio (Pos. C on Exhibit)	38 dB (music + ambient)	Music barely audible; measurement made during absence of traffic on SCR
On walkway at front side of house, directly opposite patio (Pos. C on Exhibit)	56-58 dB, max. (music + ambient)	Noise from autos travelling on SCR; music inaudible
On walkway at front side of house, directly opposite patio (Pos. C on Exhibit)	60-62 dB, Max. (music + ambient)	Noise from heavy trucks travelling on SCR
Property line along the west side of SCR (Pos. D on Exhibit)	78 dB avg. max. during auto passbys; 30 dB ambient w/o traffic	Music inaudible
Gertner residence at 18051 Gertner Estate Rd. (east side of SCR)	55 dB, max. during truck passby; 33 dB ambient w/o traffic	Music inaudible

Another area on the property where celebrants might gather and dance is the lower patio on the rear side of the property. This patio is about 50 feet out to the southwest from the upper patio and 12 feet below it. This placement would result in even greater noise shielding from the house than that experienced from the upper patio.

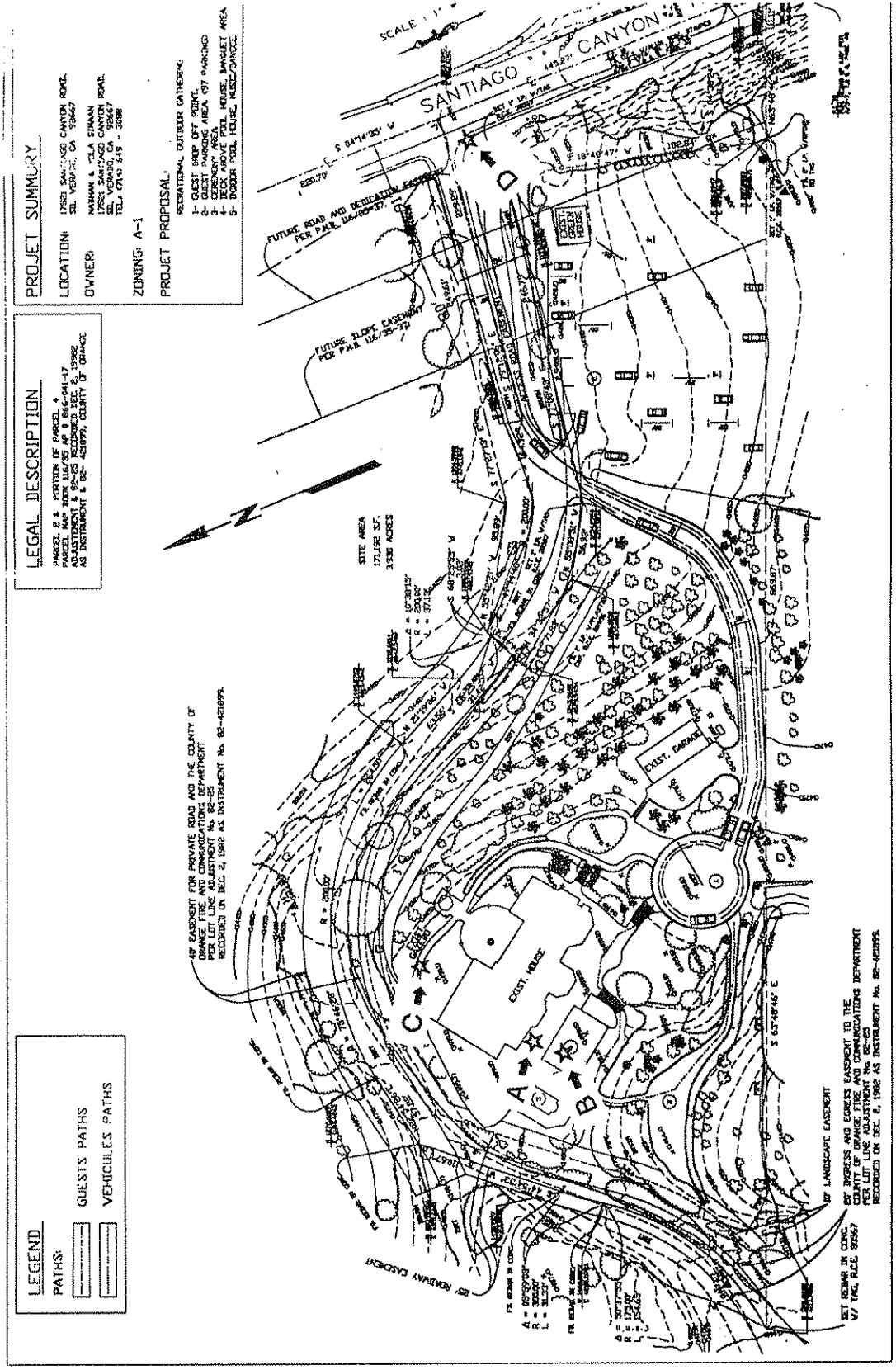
A large land form is located about 1/4 mile away from the lower patio to the southwest which conceivably could act as an acoustic reflector and redirect the sounds from music on the patio toward the residences along the east side of Santiago Canyon Road. Due to the relatively great distance from the patio, the sound levels expected to be generated during music play, and the slope of the land mass, any adverse noise impact onto the residential properties of concern along the east side of Santiago Canyon Road is not expected.

I trust that this information will satisfy your requirements. Please call me if you have any questions or if you need further information.

Yours truly,



Paul A. Penardi
Acoustical Consultant
Member INCE, Board Cert.



Key

A) Upper patio where dancing normally takes place
B) Lower patio (alternative dancing location)
C) Noise measurement position (see table)
D) Noise measurement position (see table)

Exhibit 1: Reduced Site Plan Showing Simaan Residence and Environs; locations of key features on site and noise measurement positions are identified by alphabetical characters (see key, above).