

5900 Hollis St., Suite T1
Emeryville, CA 94608
USA

Tel: +1.510.658.6719
E-mail: solutions@rwdi.com



WILSON
IHRIG



7/9/2026

Jamie T. Hall, Esq.
Channel Law Group, LLP
8383 Wilshire Blvd., Suite 750
Beverly Hills, CA 90211

**Re: Fairview Gardens CUP – Notice of Exemption
Review and Comment on Noise
RWDI Reference No. 2606084**

Dear Mr. Hall,

Per your request, Wilson Ihrig / RWDI has reviewed various documents pertaining to the noise aspects of the subject project. Wilson Ihrig / RWDI, Acoustical Consultants, has practiced exclusively in the field of acoustics since 1966. During our nearly 60 years of operation, we have prepared hundreds of noise studies for Environmental Impact Reports and Statements. We have one of the largest technical laboratories in the acoustical consulting industry. We also utilize industry-standard acoustical programs such as Roadway Construction Noise Model (RCNM), SoundPLAN, and CadnaA. In short, we are well qualified to prepare environmental noise studies and review studies prepared by others.

The two most pertinent documents that we have reviewed are:

Acoustics Analysis: Fairview Gardens Farm

45dB Acoustics, Project No. 21065

August 19, 2021

Acoustics Analysis: Center for Urban Agriculture at Fairview Gardens

45dB Acoustics, Project No. 21065

December 18, 2024

These two documents are used to support development of the project by substantiating that there would be no noise impacts to the surrounding residences with the inclusion of mitigation measures.

While the core mission of Fairview Gardens is unquestionably admirable, the proposed project seeks to expand the use of the property from its historic *raison d'être* – farming – to become more of an event and festival space. The current plans call for up to 4 – 8 of events with 250 - 750 people and 5 events with up to 1,500 people. The larger events would require shuttle busses and off-site parking which would add a new and different noise character to the neighborhood than exists now. More concerning to the residential neighbors, however, is the amplified speech and music that will be part of the larger festivals, and that is the focus of this comment letter.

ADVERSE EFFECTS OF NOISE¹

Although the health effects of noise are not taken as seriously in the United States as they are in other countries, they are real and, in many parts of the country, pervasive.

Noise-Induced Hearing Loss. If a person is repeatedly exposed to loud noises, he or she may experience noise-induced hearing impairment or loss. In the United States, both the Occupational Health and Safety Administration (OSHA) and the National Institute for Occupational Safety and Health (NIOSH) promote standards and regulations to protect the hearing of people exposed to high levels of industrial noise.

Speech Interference. Another common problem associated with noise is speech interference. In addition to the obvious issues that may arise from misunderstandings, speech interference also leads to problems with concentration fatigue, irritation, decreased working capacity, and automatic stress reactions. For complete speech intelligibility, the sound level of the speech should be 15 to 18 dBA higher than the background noise. Typical indoor speech levels are 45 to 50 dBA at 1 meter, so any noise above 30 dBA begins to interfere with speech intelligibility. The common reaction to higher background noise levels is to raise one's voice. If this is required persistently for long periods of time, stress reactions and irritation will likely result.

Sleep Disturbance. Noise can disturb sleep by making it more difficult to fall asleep, by waking someone after they are asleep, or by altering their sleep stage, e.g., reducing the amount of rapid eye movement (REM) sleep. Noise exposure for people who are sleeping has also been linked to increased blood pressure, increased heart rate, increase in body movements, and other physiological effects. Not surprisingly, people whose sleep is disturbed by noise often experience secondary effects such as cognitive decline, increased fatigue, depressed mood, and decreased work performance.

Cardiovascular and Physiological Effects. Human's bodily reactions to noise are rooted in the "fight or flight" response that evolved when many noises signaled imminent danger. These include increased blood pressure, elevated heart rate, and vasoconstriction. Prolonged exposure to acute noises can result in permanent effects such as hypertension and heart disease.

Impaired Cognitive Performance. Studies have established that noise exposure impairs people's abilities to perform complex tasks (tasks that require attention to detail or analytical processes) and it makes reading, paying attention, solving problems, and memorizing more difficult. This is why there are standards for classroom background noise levels and why offices and libraries are designed to provide quiet work environments.

¹ More information on these and other adverse effects of noise may be found in *Guidelines for Community Noise*, eds B Berglund, T Lindvall, and D Schwela, World Health Organization, Geneva, Switzerland, 1999. (<https://iris.who.int/handle/10665/66217>)



COMMENTS ABOUT 'NOISE'

Whenever the subject of 'noise' comes up, decibels inevitably are calculated and assessed. The 45dB reports do this, and I shall do so below. However, the type of decibels that are almost ubiquitously used for noise assessments utilize the so-called 'A-weighted' decibel scale. 'A-weighting' is a frequency filter that de-emphasizes high and low frequencies in a manner similar to typical human hearing. It works very well for broadband sounds without much information content, e.g., freeway noise. It does not work so well when speech and music are of concern because they both contain information and music, in particular, often contains a low frequency, rhythmic beat. Although this beat may not register high on the A-weighted decibel scale, it is common that low-frequency noise from a neighbor's stereo is very bothersome.

In a situation like this where amplified music is being introduced into a community that has not experienced it before, the change in character of the neighborhood is every bit as part of the 'noise' issue as is the decibel level of that noise. The City of Goleta Noise Restrictions recognize this in §9.09.040 Disturbing the Peace in which many pertinent factors that apply in this situation are laid out (highlights added):

9.09.040 Disturbing the Peace.

A. Disturbing the Peace—Excessive or Unreasonable Noise. It is unlawful for any person to make, cause or suffer or permit to be made or caused, upon any premises owned, occupied or controlled by him or her in the City, any unnecessary noises or sounds which are physically annoying to persons of ordinary sensitiveness or which are so harsh or so prolonged or unnatural or unusual in their use, time or place as to occasion physical discomfort to the inhabitants of the City, or any number thereof.

B. Factors Used in Determining Whether a Violation Has Occurred. The factors which shall be considered by the City in determining whether to issue a citation for a violation and whether a violation of this section has occurred shall include, but not be limited to, the following:

1. The volume of the noise, music, or related sound;
2. The intensity of the noise, music, or related sound;
3. The continuousness or repetitive nature of the noise, music, or related sound;
4. Whether the nature of the noise, music, or related sound is unusual for the area in which it occurs;
5. Whether the origin of the noise, music, or related sound is natural or unnatural to the area in which it occurs;
6. The volume and intensity of the background noise or sound, if any;
7. The proximity of the noise, music, or related sound to residential sleeping facilities or to overnight accommodations, such as hotels and motels;
8. The proximity to offices, places of business or other areas where work is known to be carried on, of the noise, music, or related sound;
9. The nature and zoning of the area within which the noise, music, or related sound emanates;
10. The time of day or night the noise, music, or related sound occurs and the relationship of this time to the normal activities of the area in which it occurs and in relation to the other factors listed in this subsection;
11. The duration of the noise, music, or related sound;
12. Whether the noise, music, or related sound is recurrent, intermittent, or constant;
13. Whether the noise, music, or related sound is produced by a commercial or a noncommercial activity;
14. Whether the person or business responsible for the noise, music, or related sound has been previously recently warned that complaints have been received about the noise, music, or related sound and such person or business has failed to reduce it to an appropriate level. (Ord. 12-17 § 2)

BRIEF DISCUSSION OF NOISE SOURCE LOCATIONS AND LEVELS

There are three main areas that are proposed for amplified speech and music:

1. By the Retail Farm Stand near the intersection of Fairview Avenue and Stow Canyon Road. In both 45dB reports, this is called **Location #1**.
2. On the patio to the west of the historic farmhouse. In both 45dB reports, this is called **Location #3**.
3. In the Large Event Area south of the historic farmhouse. In the 2021 report, this is Location #5, whereas in the 2024 report, this is Location #4. I shall use **Location #5/4**.

Every sound/noise analysis starts with a source level. The source levels at each of these locations are not clear from the two reports.

Location #1: Page 1 of the 2021 report states, "In this area it is desired to have unamplified relatively low-level live music and / or spoken voice such as for a reception or welcome music. Estimated levels of 75 dBA @ 10 feet (3 meters) allow for conversation with some raised voices to be heard, while providing a lively "cocktail hour" music sound level." However, the document later states, "At Location #1, a source sound power of 100 dB was utilized. This equates to a sound pressure of 79 dBA at 10 feet."²

Location #3: Page 2 of the 2021 report states, "... a musical group or speaker sound level of approximately 85 dBA at 10 feet will comply with the Noise Element, though it may be audible at the property line", whereas page 10 states, "At Location #3, a source sound power of 95 dB was utilized. This equates to a sound pressure of 74 dBA at 10 feet." However, the 2024 report reiterates at page 2 that during festivals and events "... amplified concerts of approximately 85 dBA at 10 ft can work anywhere on the property with mitigation, and are anticipated to comply with the County Code."

Location #5/4: The 2021 reports states that this location will use the same source level as Location #3, which implies 74 dBA at 10 feet was used for the 2021 analysis, but that 45dB asserts that 85 dBA at 10 feet would not result in any undue disturbance to the community.

COMMENT ABOUT EXISTING AMBIENT SOUND LEVELS

The 45dB reports assert that it is adequate to estimate the existing ambient noise levels by calculation rather than by direct measurement. While it is correct that both the FHWA and

² The sound power level quantifies the total amount of acoustical energy emitted by a source. This is a fixed value that is not associated with any distance. The sound pressure level quantifies the loudness or volume of a sound at a given distance. As is common knowledge, the loudness of a source typically reduces with distance as the sound energy spreads out. For the purposes of this letter, the reader should focus on the sound pressure levels, i.e., the loudness at the given distances.

Caltrans promote that to some degree, it is highly unusual for a project proponent noise report to not anchor or calibrate a model with at least a cursory measurement. In this case, it is particularly important because of the sensitivity of neighboring residents to amplified concert noise during the late-night hours (the project description asserts that amplified music may be played until 9:00 p.m.). The calculated noise levels necessarily depend on traffic volume, mix, and speed data that is not available on an hourly basis (see pages 8 and 9 of the 2021 report to observe the crudeness of the traffic data used in the analysis).

All that said, in my discussion of noise impacts below, I will rely on the data presented in the 2021 report as the best available estimate. However, I strongly recommend that noise measurements be made should the noise analysis be revised again. The estimates and conclusions reached in the reports may underestimate impacts due to the failure to measure the ambient noise.

COMMENT ABOUT CALCULATIONS OF AMPLIFIED NOISE LEVELS AT RESIDENCES

45dB used an online calculator for the 2021 analysis. I am not familiar with the online calculator used by 45dB so cannot speak to its accuracy. However, as can be seen from Figures 8 and 9 of the 2021 report (page 17), the calculations were made using a single frequency, 500 Hz. This is improper because it completely neglects the sound energy at all other frequencies. In particular, because it is a mid-range frequency, it completely neglects the effects of the low-frequency bass notes. While it also neglects the high-frequency treble tones, that is of less importance because low-frequency noise travels farther and is harder to block with a barrier.

The calculations I have made with respect to this situation begin with a frequency spectrum for music that includes octave bands from 31.5 to 8000 Hz.³ For attenuation with distance, I use the same simple, free-field relation that 45dB does: minus 6 dB per doubling of distance. Finally, for the barrier attenuation, I use the well-regarded formula from Maekawa that takes frequency into account (low frequencies are harder to block than high frequencies) as well as the relative heights and positions of the source, receiver, and barrier (if any).⁴

After the calculations are made using the octave band levels, I then compute the A-weighted level. The details of my calculations are appended to this letter.

³ Source: *Architectural Acoustics*, M. David Egan, McGraw Hill, 1988.

⁴ As a side note, the Maekawa formula indicates that the proposed barrier – a 6-foot barrier placed 6 feet from a 5-foot high noise source – will provide 5 to 8 dB of attenuation. This is very reasonable. In contrast, the online calculator used by 45dB seems to indicate by the results in Table 4 of the 2021 report that the same barrier will provide on the order of 17 to 18 dB of attenuation. That is very unreasonable for a barrier that is only 1 foot higher than the source.



SUMMARY AND ASSESSMENT OF NOISE LEVEL CALCULATIONS

Tables 1A and 1B summarize the results of my calculations. The calculations for Table 1A use the lower source levels cited in the 2021 analysis for Locations #3 and #5/4, whereas those in Table 1B use the higher source levels mentioned in the 2021 report and reiterated in the 2024 report. I have presumed that the source level at Location #1 near the farm stand would remain at the higher level stated in the 2021 report.

TABLE 1A NOISE LEVELS AT RESIDENTIAL RECEIVERS USING LOWER SOURCE VALUES

Source Loc.	Receiver	Evening Ambient (dBA)	Source SPL @ 10' (dBA)	Distance: Source-Receive (feet)	Without 6' Barrier			With 6' Barrier		
					Avg (dBA)		Max (dBA)	Avg (dBA)		Max (dBA)
#1	5885 Via Fiori (property line)	58	79	82	61	[3]	76 [18]	53 [<]	68 [10]	
#1	5885 Via Fiori (2nd floor window)	58	79	102	59	[1]	74 [16]	54 [<]	69 [11]	
#3	467 Kings Way (2nd floor window)	47	74	204	48	[1]	63 [16]	40 [<]	55 [8]	
#3	5883 Marston (2nd floor window)	41	74	626	38	[<]	53 [12]	30 [<]	45 [4]	
#5/4	5883 Marston (2nd floor window)	41	74	511	40	[<]	55 [14]	32 [<]	47 [6]	

TABLE 1B NOISE LEVELS AT RESIDENTIAL RECEIVERS USING HIGHER SOURCE VALUES

Source Loc.	Receiver	Evening Ambient (dBA)	Source SPL @ 10' (dBA)	Distance: Source-Receive (feet)	Without 6' Barrier			With 6' Barrier		
					Avg (dBA)		Max (dBA)	Avg (dBA)		Max (dBA)
#3	467 Kings Way (2nd floor window)	47	85	204	59	[12]	74 [27]	51 [4]	66 [19]	
#3	5883 Marston (2nd floor window)	41	85	626	49	[8]	64 [23]	41 [=]	56 [15]	
#5/4	5883 Marston (2nd floor window)	41	85	511	51	[10]	66 [25]	43 [2]	58 [17]	

Each row in the tables is for a single receptor position indicated by house address. For Location #1, the first entry replicates the calculation parameters of the 45dB calculation shown in Figure 8 of the 2021 report. All other calculations are for second floor windows of the residences because that is where bedrooms are most likely located.

Shown in the appended calculation details but not in the tables, the calculations also take elevation change into account. The land in the area of Fairview Gardens is generally upward sloping from south to north. The area of the farm of most concern with is the part east of the farm house which slopes downward from the farmhouse to the neighborhoods to the east, south and north. The total distance between each source and receiver pair is shown in the tables. In all cases with barriers, the barriers are 6 feet from the source and 6 feet high as described in the 45dB reports.

The tabulated results include both the average (technically, equivalent) noise level and the maximum expected noise level. The latter is simply 15 dB higher than the average as noted at page 2 of the 45dB 2024 report.

The amount that a calculated noise level at a residence exceeds the existing ambient is shown in brackets ([]) next to each calculated noise level. For example, in Table 1B, amplified noise from Location #3 at 467 Kings Way without a barrier would be 59 dBA which is 12 dB higher than the existing ambient. Following the standard set by 45dB at page 9 of the 2021 report, if the music noise level is more than 3 dB above the existing ambient, it is shown in red typeface. If the music noise level is the same as the ambient, "[=]" is shown, and if it is less, "[<]" is shown.

As can be seen in Table 1B, at the higher source noise level of 85 dBA at 10 feet, both the average and maximum noise levels without the mitigating barriers far exceed the existing ambient. Even with the barriers, the average level at 467 Kings Way exceeds the 3 dB standard set by 45dB and the maximum levels still far exceed the existing level. This is a "significant" impact under the California Environmental Quality Act. In simple terms, this means that the louder passages of music (and, perhaps, speech) would be clearly discernable – and therefore annoying – at the residences.

The situation is clearly better if the lower source levels promoted in 2021 are adhered to. In that case, the average levels all meet the 3 dB standard. However, the maximum levels still exceed the existing ambient sound levels by substantial amounts over the 3-dB-increase standard without mitigation and by large, though lesser amounts, with the mitigation. Again, this is a significant" impact under the California Environmental Quality Act. The tolerance of people to noise varies widely, but as 24 homes are immediately adjacent to the Fairview Gardens property, it is reasonable to anticipate that the noise will be "clearly discernable" and at least some of the neighboring residents will be annoyed by the sound levels indicated in Table 1A, particularly in the late-night hours.

CONCLUSIONS AND RECOMMENDATIONS

The introduction of amplified music and speech at medium events and large festivals at Fairview Gardens will inevitably change the character of the community surrounding the historic farm. While the noise study commissioned for the project acknowledges that and proposes some mitigation measures to ameliorate the noise impact, I believe the calculations in the study are not adequately accurate because they depend on a single, mid-range frequency and the barrier insertion loss calculation seems overly optimistic. The calculations I have made take the frequency content of music into account and use a well-regarded barrier insertion loss formula that also accounts for frequency. These calculations indicate that even with the proposed barriers, the louder passages of music and, perhaps, speech will be clearly discernable at neighboring residences and will exceed the 3-dB-increase standard established by the 45dB report. As such, I believe that the Project as proposed will result in a significant impact under the California

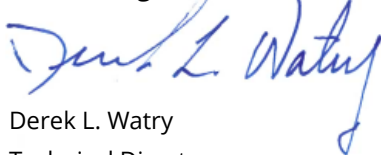
Environmental Quality Act as currently designed. In order to reduce the noise impacts from the Project, I suggest at a minimum the following conditions be imposed upon the use permit:

1. Restrict the source sound level to 74 dBA at 10 feet for all locations. As can be seen in Table 1A of this letter, this would keep the maximum noise level with the proposed 6-foot barriers to within 10 dB of the existing ambient. (Note that the source at Location #1 in Table 1A is 79 dBA at 10 feet; reducing it to 74 dBA would reduce the maximum levels by 5 dB.) Because it would be awkward, if not difficult, to measure the source level at 10 feet during a performance, a proxy level at a more convenient location or locations could be determined. For example, the "official" measurement position for Location #1 could be on the sidewalk on the far side of Stow Canyon Road.
2. Increase the height of the proposed barriers to at least 8 feet. Higher would be better. As 45dB notes in their reports, the barriers should be no more than 6 feet from the sound sources
3. Require all amplification of speech and music to cease after 7:00 p.m.
4. Third-party monitoring of noise for all events with more than 250 people in attendance and/or for all events using amplification of speech and music. The third-party monitor shall be empowered to take all appropriate actions to reduce noise as set forth above.

Please let me know if you have any questions about the information presented in this letter.

Very truly yours,

Wilson Ihrig / RWDI



Derek L. Watry
Technical Director

[illegible][illegible]

Loc #3: To 2nd floor of 467 Kings Way													
	Source height	15.0	ft	includes 10' elevation change between Loc #3 and 467 Kings Way									
	Receiver height	15.0	ft	2nd floor of home									
	Barrier height	16.0	ft	includes 10' elevation change between Loc #3 and 467 Kings Way									
	Dist: Src-Barr	6.0	ft										
	Dist Barr-Rcvr	198.0	ft										
		Dist (ft)	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Leq, dBA	Lmax, dBA
	Source level	10.0	58.6	60.0	72.0	83.0	82.0	82.0	80.0	75.0	60.0	86	
	Adj to analysis level	(12.4)											
	Adjusted		46.2	47.6	59.6	70.6	69.6	69.6	67.6	62.6	47.6	74	
	Rcvr dist / Atten	204.0	(26.2)	(26.2)	(26.2)	(26.2)	(26.2)	(26.2)	(26.2)	(26.2)	(26.2)		
	Receiver level		20.0	21.4	33.4	44.4	43.4	43.4	41.4	36.4	21.4	48	63
	Barrier IL		(5.1)	(5.2)	(5.3)	(5.7)	(6.3)	(7.3)	(8.9)	(11.2)	(13.9)		
	Mitigated level		14.9	16.3	28.1	38.8	37.2	36.2	32.5	25.3	7.5	40	55
									Effect of sound barrier:			(8)	

[illegible][illegible]

[illegible]