10 APPENDICES

A. ACOUSTICALREPORTS
B. CIVIL ENGINEERING REPORTS
C. EXISTING LIGHTING PHOTOMETRIC STUDY
D. PARKING ANALYSIS & MEMORANDUM
E. TRAFFIC IMPACT ANALYSIS

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March 9, 2023

Mr. Ryan Bosworth
Highgate Hotels
7200 North Scottsdale Road
Scottsdale, AZ 85251

Subject: Scottsdale Plaza Resort – Noise Study and Recommendations, Town of Paradise, AZ – Response to Comments #1

Dear Mr. Bosworth:

1.0 Introduction

MD Acoustics, LLC (MD) has been working with Highgate Hotels on the Scottsdale Plaza Resort project as it relates to the Noise Study and Recommendations. Noise studies were prepared and submitted on 7/28/2022 and on 8/23/2022. On March 6, 2023, MD received comments regarding the aforementioned acoustical studies from the Town of Paradise Valley (Paul Michaud, Planning Manager). MD has provided the following responses.

2.0 Comments and Responses

Comment 1

As noted previously, update the noise analysis, or provide an opinion letter/addendum to address the following items as the staff/applicant response correspondence is not the documentation that will be referenced in the approval as part of the permanent record.

Response to Comment 1

This letter is provided to fulfill the requirements outlined by the town.

Comment 1a

Address ways the resort is now or will further mitigate noise through specifically physical (noise limiter and/or to increase the number, distribution of loudspeakers, constructing walls/gates at the access points on the north elevations of the main pool area building) and operational means. The added statement these will be studied to determine feasibility and applied to the project as needed provides no assurances such measures will be done. More direction could be sought at the next work session. Your last correspondence stated you will work with MD Acoustics on implementing appropriate noise limiters. What does this mean and it is not explained in the noise analysis or an addendum.

Response to Comment 1a

The Scottsdale Plaza Resort will implement a distributed house sound system, similar to what has been done at other resorts in Paradise Valley per our recommendations. The distributed audio system will include the means to limit the noise level of amplified music or speech so as not to exceed the Town noise ordinance. MD will review the proposed speaker system and assist with the calibration thereof to ensure that it meets the requirements of the Town noise ordinance.

Since 2021, MD has partnered with the Town and several resorts to find solutions that will allow the resorts to operate without violating the Town noise ordinance. This same solution (having a dedicated house sound system with centralized volume limits and controls instead of allowing DJ's to bring their own loudspeakers) has been or is being implemented at several other resorts in Paradise Valley, including The Sanctuary, the Andaz, and Mountain Shadows.

Comment 1b
Append the July 28, 2022 acoustical study to include baseline decibel data along Indian Bend Road. Your response states this information is in 3.1 of the report and in Appendix B. Looking at the 24-hour continuous noise data sheet which seems to show the baseline locations 1-5 there are no baseline locations on or near Indian Bend Road. MD Acoustics may want to explain this as it is not clear to staff.

Response to Comment 1b
The noise contours show that the noise level due to the proposed project does not exceed 45 dBA south of Indian Bend Road. The main sources of noise are located north of the project site, so the baseline data was focused on those areas. No data near Indian Bend Road was necessary to complete the noise study.

In keeping with industry standards and best practices, MD typically performs three (3) fifteen-minute or one (1) hour noise measurement at one (1) location to determine the ambient noise levels. One (1) 24-hour measurement would be considered more than enough noise data to determine the ambient noise levels. From these measurements, details about the noise levels at several locations and times can be extrapolated based on the traffic patterns, the noise from which is very predictable.

MD measured the noise levels at five (5) locations for over 48 hours at the Scottsdale Plaza Resort. Data is provided in terms of average noise levels (Leq), instantaneous maximum levels (Lmax), instantaneous minimum levels (Lmin), and the noise levels exceeded 2%, 8%, 25%, 50%, and 90% of the time (L2, L8, L25, L50, and L90, respectively).

More than sufficient data to characterize the existing noise environment of the project site has been measured and provided to the Town. As shown by the data collected in the report dated July 28, 2022, the primary source of noise at the project location is traffic noise along N Scottsdale Road which can vary throughout the day from 50-60 dBA on average. Noise along Hummingbird Lane can likewise vary from 50-60 dBA on average. It can be inferred that noise along Indian Bend Road would also vary from 50-60 dBA on average.

Comment 1c
Append the acoustical study to address point receiver data for the proposed elevated spa pool/outdoor areas and the Indian Bend Road property line. The August acoustical study includes Table 2 which indicates a 60 dB(A) noise modeling for the spa area. However, Figures 3 and 4 show this area as blank space. Your response states this information is shown in gray and not excluded. If Table 2 states that the Elevated Spa Terraces have a reference sound level of 60 decibels and the noise levels in Figure 4 assumed all outdoor pools are occupied, outdoor dining areas are occupied, outdoor spa terraces are occupied, and there is an event at the elevated patio it would seem there would be at least a 60 decibel

label and yellow shading around the spa terrace. MD Acoustics may want to explain this as it is not clear to staff.

Response to Comment 1c
The noise contours provided to staff show the noise levels at 5 ft above the ground floor level. The noise levels from the Elevated Spa Terraces are due to unamplified music and talking on the second floor; therefore, they produce no noise impact on the ground level. The noise contour shows the building in grey because there is a noise source on the second floor; however, the noise from the rooftop would not change the noise levels on the ground level.

The contour is correct: the noise sources on the Elevated Outdoor Deck were included in the model, and the Elevated Outdoor Deck does not change the noise levels on the ground level.

Comment 1d
Explain if the pickleball courts were included in the modeling. From the reports it looks like tennis. If not with pickleball, to include discussion on if the noise modeling provided changes or not with pickleball. The Planning Commission believes that the removal of the tennis courts for pickleball will create louder noise.

Response to Comment 1d
Pickleball was not included in the original studies. Pickleball noise is louder than tennis; however, the proposed pickleball courts are over 300 feet away from the nearest residences. Sound decreases at a rate of 6 dB per doubling of distance, so the pickleball noise heard at 10 ft away would be at least 30 dB quieter at 300 ft away. This is governed by the inverse square law. In addition to losses due to the inverse square law, there are buildings between the pickleball courts and the nearest residences that would further reduce the sound from the pickleball courts.

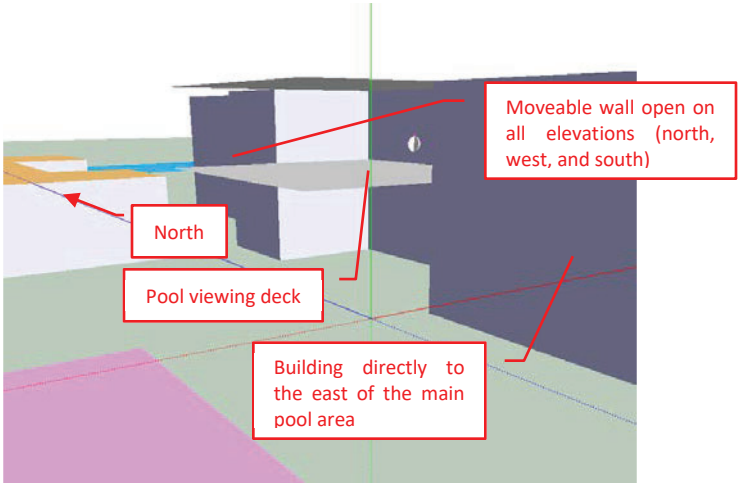
MD has measured pickleball noise and found that at about 10 ft from the court, the average noise level is about 65 dBA. The noise levels from the proposed pickleball courts will therefore be less than 35 dBA at the north property lines, and therefore, less than the Paradise Valley noise limits of 56 dBA from Mondays through Saturdays and 45 dBA on Sundays and holidays.

Comment 1e
Explain if the modeling on the pool viewing deck was based with the deck moveable walls open and if the north elevation was open or closed (solid wall).

Response to Comment 1e
The Pool viewing deck was based with the deck moveable walls completely open, including the north elevation. See the figure below.

<*Figure 1, next page*>

Figure 1: Pool Viewing Deck Model



3.0 Conclusion

MD is pleased to provide this response to comments (RTC#1). If you have any questions call our office at (602) 774-1950.

Sincerely,
MD Acoustics, LLC

Samuel Hord, INCE-USA
Acoustical Consultant

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July 28, 2022

Mr. Ryan Bosworth
Highgate Hotels
7200 North Scottsdale Road
Scottsdale, AZ 85251

Subject: Scottsdale Plaza Resort– Baseline Noise Study – Town of Paradise Valley, AZ

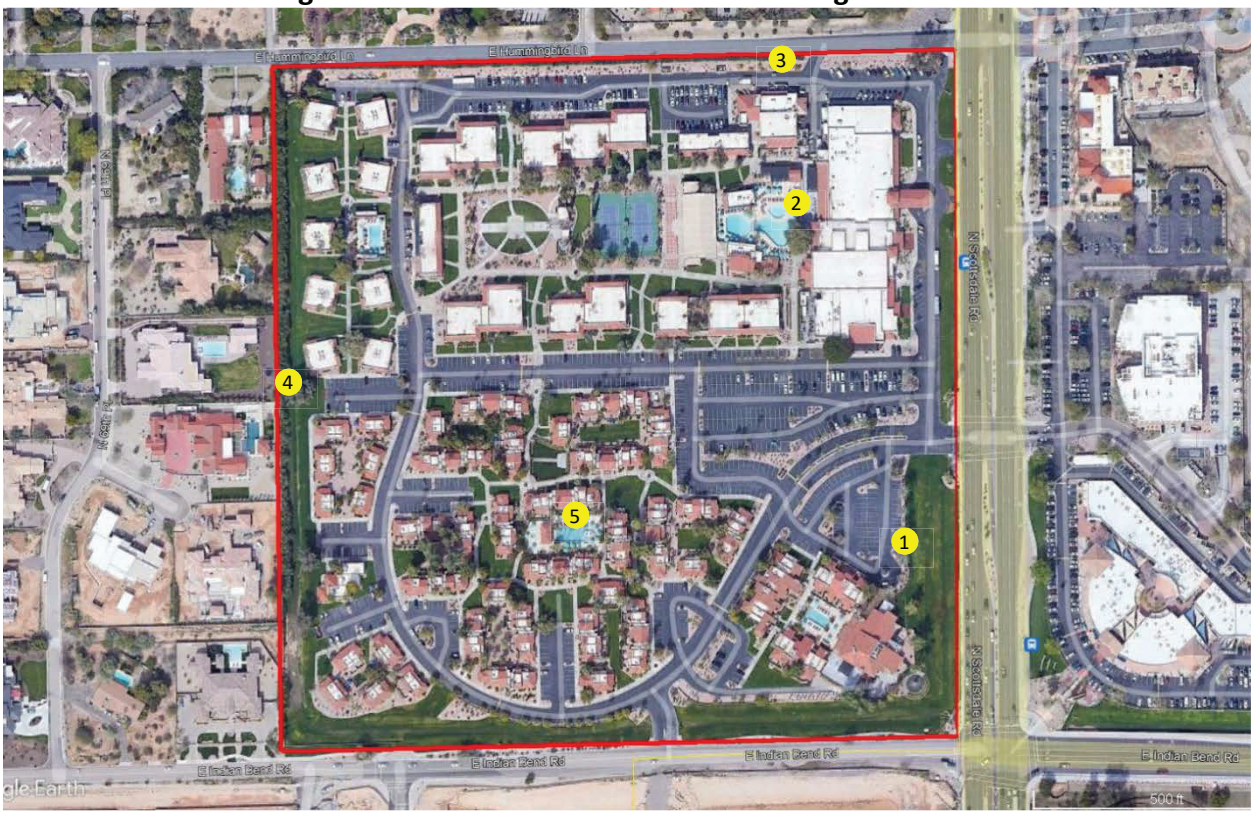
Dear Mr. Kosednar:

MD Acoustics, LLC (MD) is pleased to provide this baseline noise study and recommendations report as it relates to proposed operations and events at the Scottsdale Plaza Resort located at 7200 North Scottsdale Road, Scottsdale, AZ. This study has been prepared based on the existing project and based on proposed renovations to the project. The project was assessed with regard to potential operations and event noise, such as a DJ located at the pool area. For your reference, Appendix A contains a glossary of acoustical terms.

1.0 Assessment Overview

This assessment evaluates the Project Noise Levels from the pool areas and compares the projected noise levels to the Town's noise ordinance. Figure 1 below shows the site location, with a red box around the area under evaluation and yellow circles indicating locations where noise monitors were placed during the baseline noise evaluation.

Figure 1: Site Location and Noise Monitoring Locations



MD traveled to the project site and performed five (5) long-term noise measurements to measure the existing condition at locations around the property. Measurements were performed at the main pool during an event with a live DJ and at other locations around the property, including the North, East, and West property lines to define the existing noise condition at the site. MD utilized Type 2 sound level meters that meet ANSI S1.4 engineering standards to record minute-by-minute baseline data

Using acoustical modeling software, MD created acoustical models to show how the noise from the pool areas on the resort will propagate to the adjacent uses. The acoustical models are calibrated to the real-world measurements. The existing baseline condition and the proposed future layout were modeled.

2.0 Local Acoustical Requirements

MD compared the results of the noise assessment to Section 10-7-3 of the Town of Paradise Valley, Town Code. The Town Code states: "Table 1 sets forth the noise level limits for stationary sources, and it is unlawful to project a sound or noise, except those caused by motor vehicles, from one property into another in excess of the stated limits".

Table 1: Limiting Noise Levels for Stationary Sources

TIME	MAXIMUM ALLOWABLE NOISE LEVEL dB (A)
7:00 a.m. to 10:00 p.m.	56
10:00 p.m. to 7:00 a.m. and on all Sundays and specified legal holidays	45

Therefore, project operations must comply with the Town's noise limit of 56 dBA during daytime hours (7AM to 10PM) and 45 dBA during nighttime hours (10PM to 7AM).

3.0 Study Method and Procedure

3.1 Existing Noise Condition/Baseline

Five (5) long-term (70-hour) noise measurements were conducted at the project site from 12:00 PM, July 8, to 10:00 AM, July 11, 2022. The project site is surrounded by residential property on to the west, south, and north, and by commercial property east of Scottsdale Road. Noise data indicate that the ambient noise level (background noise due to traffic and non-event noise sources at the resort) ranged from 50 to 61 dBA at Noise Meter 1 (NM 1), from 55 to 62 dBA at NM 2, from 52 to 63 dBA at NM 3, from 43 to 58 dBA at NM 4, and from 43 to 62 dBA at NM 5. Additional field notes and photographs are provided in Appendix B.

3.2 Live Event Measurement

During the measurement period, there was a live event at the main pool which took place between 1:00 PM and 5:00 PM on July 9, 2022. The event consisted of a DJ playing music at the main pool through two (2) loudspeakers on poles. Noise measurements were taken about twenty feet (20') from the loudspeaker location (at NM 2) and a various locations around the property.

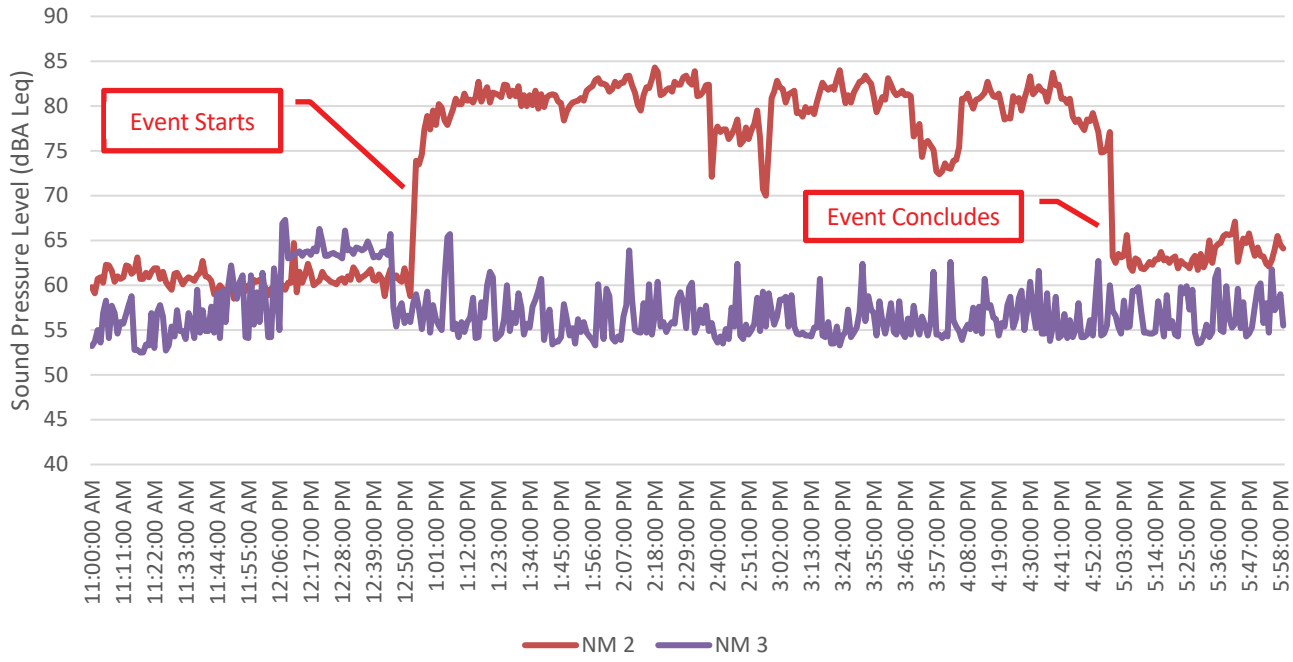
Figure 2 indicates the location of the audio equipment and the nearest measurement locations for the live event, including photos of the DJ's booth.

Figure 2: Live Event

The noise levels fluctuated from 70-84 dBA during the event at Noise Meter 2 (NM 2). There was a 20 dB increase at NM 2 compared to immediately before and after the event, and there was no noticeable difference in noise levels during the event at NM 3. The event occurred from 1 PM to 5 PM on Saturday, July 28, 2022. Figure 3 shows the noise levels at NM 2 and NM 3 from 11 AM to 6 PM on that date.

<*Figure 3, next page*>

Figure 3: Noise Levels at NM 2 and NM 3 from 11 AM to 6 PM 7/9/22



3.3 Stationary Noise Level Prediction Modeling

SoundPlan Acoustic Modeling Software (SP) was utilized to model the operational noise levels from the project site. SP acoustical modeling software is capable of evaluating stationary noise sources (e.g., loudspeakers for live events, DJs, parking lots, crowds, loading/unloading, patios, etc.) and much more. SP's software utilizes algorithms (based on inverse square law) to calculate noise level projections. The software allows the user to input specific noise sources, spectral content, sound barriers, building placement, topography, and sensitive receptor locations. In addition, SP can model the noise sources as point sources, line sources, and area sources.

The future worst-case noise level projections were modeled using measured sound level data for the stationary on-site sources. The live event noise was represented as two (2) point sources representing the loudspeakers used for the music. In addition to the live event noise at the main pool, each pool on the property (where no events are held) was modeled as an area source with a reference noise level of 60 dBA, consistent with the measurements performed on the property. The model incorporates the topography at the project site and the building heights, and it shows how sound propagates to the surrounding area. Table 2 below outlines the reference noise levels used to calibrate the models.

Table 2: Reference Sound Level Measurements for SoundPlan Model

Measurement Location[1]	Maximum Event Sound Level[2] (dBA)	Average Sound Level[3] (dBA)
NM 2	84	60

Notes:

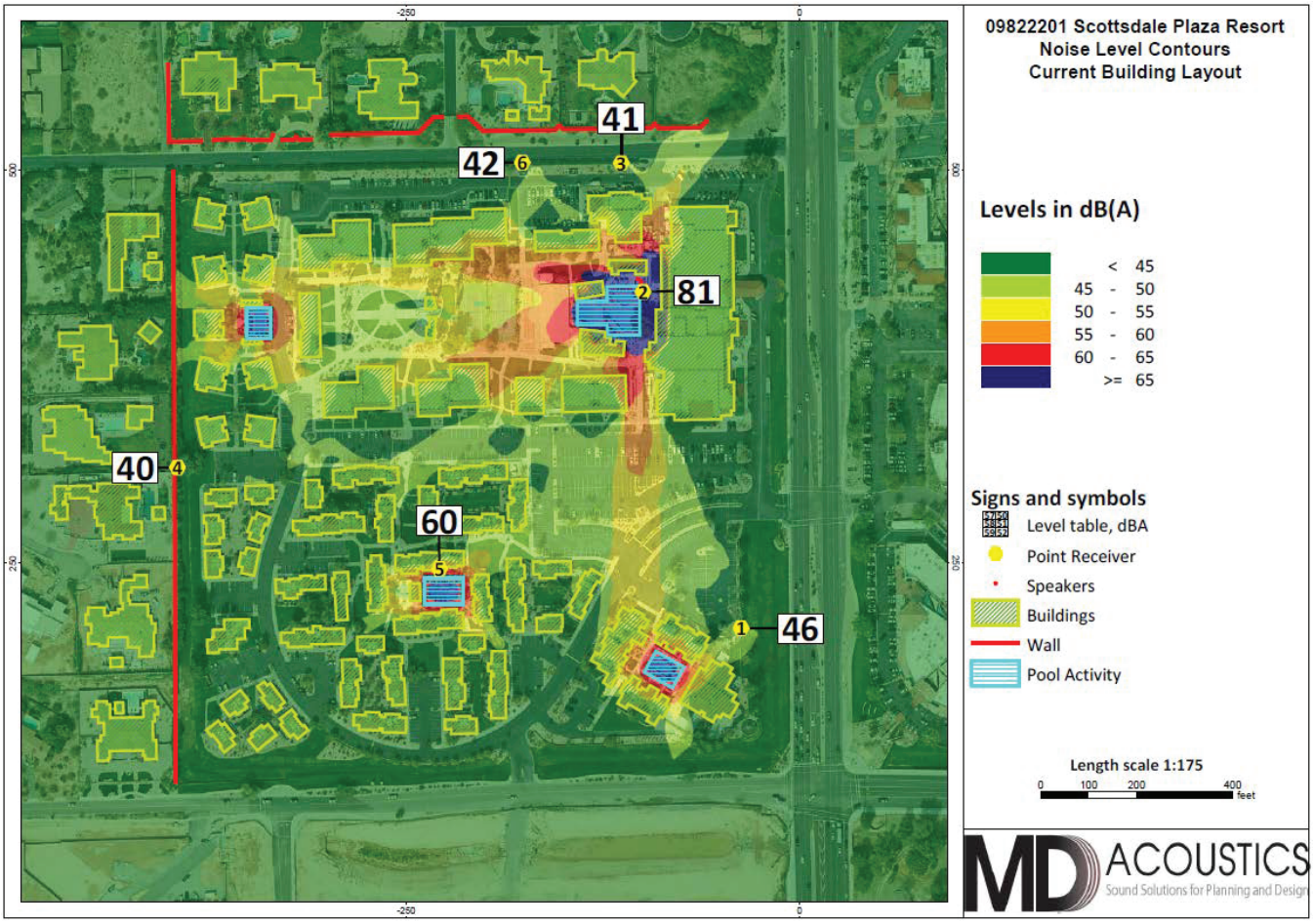
1. See Figure 1 for measurement locations.
2. The maximum 1-minute Leq during the event based on sound measurements performed at Scottsdale Plaza Resort on 7/9/2022
3. A representative 1-minute Leq based on sound measurements at the pool immediately before the event began at the main pool on 7/9/2022.

4.0 Findings and Recommendations

4.1 Baseline Condition

Figure 3 illustrates the Existing Condition/Baseline SP model. The live event noise was represented as two (2) point sources representing the loudspeakers used for the music. In addition to the live event noise at the main pool, each pool on the property (where no events are held) was modeled as an area source with a reference noise level of 60 dBA, consistent with the measurements performed on the property. The noise levels from the event do not exceed the 56 dBA limit.

Figure 3: Existing Condition/Baseline

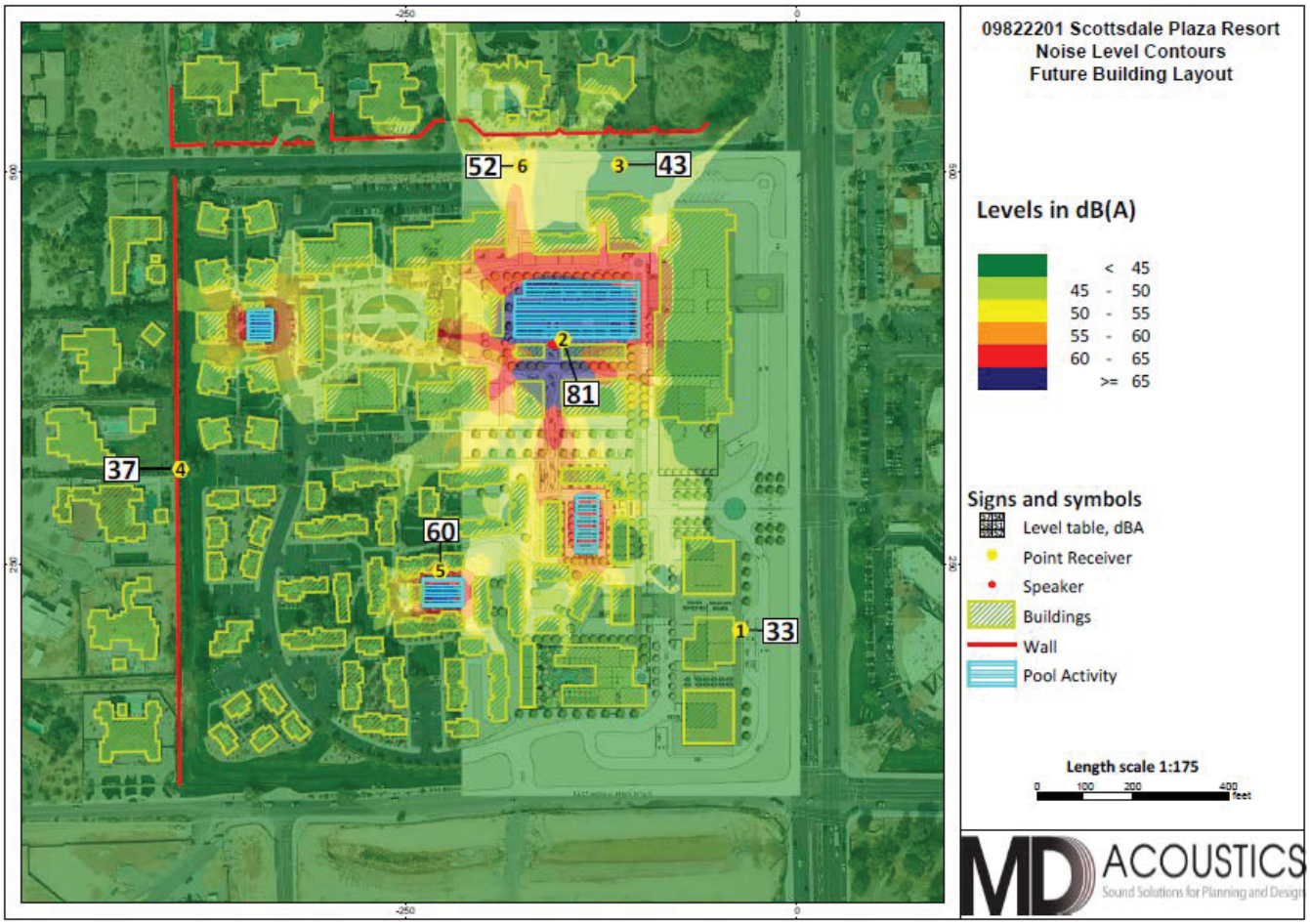


4.2 Proposed Layout

Scottsdale Plaza Resort has plans to modify the existing main pool (see Appendix C for the updated site plan); therefore, MD has evaluated the future noise condition at the project site based on the proposed site plan. The modifications include increasing the size of the main pool, removing some buildings, and adding new buildings.

As shown in Figure 4 below, a similar event with the new pool design would produce a maximum level of 52 dBA, which would not exceed the 56 dBA noise limit.

Figure 4: Proposed Layout



5.0 Conclusions

MD is pleased to provide this baseline noise study for the Scottsdale Plaza Resort. The background noise level at and around the Scottsdale Plaza Resort was measured from 7/8/22 to 7/11/2022, and an event at the main swimming pool was monitored on 7/9/2022 to provide real-world reference sound levels. The measured noise levels were used to evaluate the potential noise impact of the proposed modifications to the project site using SoundPlan Acoustical Modeling Software.

If you have any questions regarding this analysis, please call our office at (602) 774-1950.

Sincerely,
MD Acoustics, LLC

Samuel Hord, INCE
Acoustical Consultant

Drew Gibson
Acoustical Consultant

Appendix A

Glossary of Acoustical Terms

Glossary of Terms

A-Weighted Sound Level: The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear. A numerical method of rating human judgment of loudness.

Ambient Noise Level: The composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

C-Weighted Sound Level: The sound pressure level in decibels as measured on a sound level meter using the C-weighted filter network. The C-weighting filter greatly de-emphasizes very high frequency components of the sound and slightly de-emphasizes the very low frequency components. A numerical method of rating human judgment of loudness.

Community Noise Equivalent Level (CNEL): The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five (5) decibels to sound levels in the evening from 7:00 to 10:00 PM and after addition of ten (10) decibels to sound levels in the night before 7:00 AM and after 10:00 PM.

Decibel (dB): A unit for measuring the amplitude of a sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micro-pascals.

dB(A): A-weighted sound level (see definition above).

dB(C): C-weighted sound level (see definition above).

dB(Z): Z-weighted sound level (see definition of dB above).

Equivalent Sound Level (LEQ): The sound level corresponding to a steady noise level over a given sample period with the same amount of acoustic energy as the actual time varying noise level. The energy average noise level during the sample period.

Habitable Room: Any room meeting the requirements of the Uniform Building Code or other applicable regulations which is intended to be used for sleeping, living, cooking or dining purposes, excluding such enclosed spaces as closets, pantries, bath or toilet rooms, service rooms, connecting corridors, laundries, unfinished attics, foyers, storage spaces, cellars, utility rooms and similar spaces.

Human Sensitivity to Sound: In general, the healthy human ear can hear between 20 Hz to 20,000 Hz. Frequencies below 125 Hz are typically associated with low frequencies or bass. Frequencies between 125 Hz and 5,000 Hz are typically associated with mid-range tones. Finally, frequencies between 5,000 and 20,000Hz are typically associated with higher range tones.

The human ear is sensitive to changes in noise levels, depending on the frequency. Generally speaking, the healthy human ear is most sensitive to sounds between 1,000 Hz and 5,000 Hz (A-weighted scale) and perceives a sound within that range as being more intense than a sound with a higher or lower frequency with the same magnitude. At lower and higher frequencies, the ear can become less sensitive depending on a number of factors. Table 1 provides a brief summary of how humans perceive changes in noise levels.

Table 1: Change in Noise Level Characteristics[1]

Changes in Intensity Level, dBA	Changes in Apparent Loudness
1	Not perceptible
3	Just perceptible
5	Clearly noticeable
10	Twice (or half) as loud

https://www.fhwa.dot.gov/environMent/noise/regulations_and_guidance/polguide/polguide02.cfm

L(n): The A-weighted sound level exceeded during a certain percentage of the sample time. For example, L10 in the sound level exceeded 10 percent of the sample time. Similarly, L50, L90 and L99, etc.

Noise: *A*ny unwanted sound or sound which is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying. The State Noise Control Act defines noise as "...excessive undesirable sound...".

Percent Noise Levels: See L(n).

Sound Level (Noise Level): The weighted sound pressure level obtained by use of a sound level meter having a standard frequency-filter for attenuating part of the sound spectrum.

Sound Level Meter: An instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement and determination of noise and sound levels.

Single Event Noise Exposure Level (SENEL): The dB(A) level which, if it lasted for one second, would produce the same A-weighted sound energy as the actual event.

Appendix B

Long Term Noise Measurement

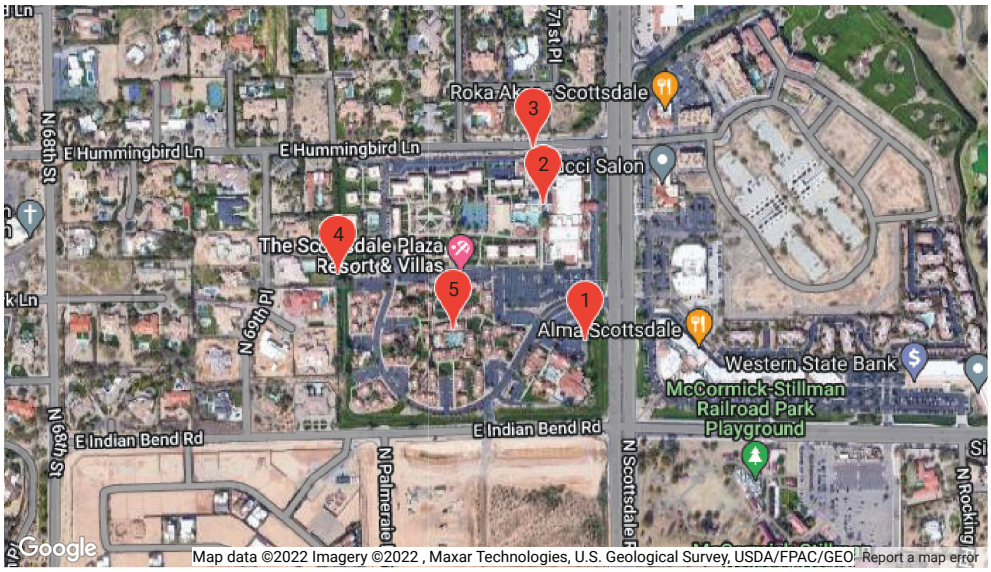
24-Hour Continuous Noise Measurement Datasheet

Project Name:	Scottsdale Plaza Resort
Project: #/Name:	0982-2022-001
Site Address/Location:	7200 N. Scottsdale Road, Scottsd
Date:	07/08/2022
Field Tech/Engineer:	Samuel Hord, Drew Gibson

Site Observations:

NM1 East property line along Scottsdale Road NM2 Main pool area, DJ event on Saturday NM3 North property line along Hummingbird Lane NM4 West property line adjacent to residential properties NM5 Secondary pool area

Sound Meter:	Piccolo 2, Soft dB	**SN:**	P0222022803
Settings:	A-weighted, slow, 1-min, 24-hour duration		
Site Id:	NM1, NM2, NM3, NM4, NM5		



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24-Hour Continuous Noise Measurement Datasheet - Cont.

Project Name: Scottsdale Plaza Resort

Site Address/Location: 7200 N. Scottsdale Road, Scottsd

Site Id: NM1, NM2, NM3, NM4, NM5

Figure 1: NM1 Location

Figure 2: NM2 Location

Figure 3: NM3 Location

Figure 4: NM 4 Location

Figure 5: NM 5 Location

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24-Hour Continuous Noise Measurement Datasheet - Cont.

Project Name:	Scottsdale Plaza Resort	**Site Topo:**	Flat overall	**Day:** 1 of 5	
Site Address/Location:	7200 N. Scottsdale Road, Scottsd	**Meteorological Cond.:**	Clear skies	**Noise Source(s) w/ Distance:**	
Site Id:	NM1	**Ground Type:**	Asphalt, Loose rock, Grass	Traffic, C/L at about 160 feet	

Table 1: Baseline Noise Measurement Summary

Date	Start	Stop	Leq	Lmax	Lmin	L2	L8	L25	L50	L90
7/8/2022	12:46 PM	1:46 PM	61.2	84.4	48.8	65.4	58.8	57.5	56	53.6
7/8/2022	1:46 PM	2:46 PM	57	70.7	49	61	59.5	58	55.9	54.2
7/8/2022	2:46 PM	3:46 PM	56.8	71.9	46.2	60.9	59.4	58	56.5	52.5
7/8/2022	3:46 PM	4:46 PM	56.6	69.3	46.7	59.5	59	58.4	56.6	51.8
7/8/2022	4:46 PM	5:46 PM	57.8	79.1	47	63.9	60.1	59.6	57.2	51.5
7/8/2022	5:46 PM	6:46 PM	56.6	70.8	45.8	60.3	59.1	58.2	56.4	51.6
7/8/2022	6:46 PM	7:46 PM	56.7	70	45.8	60.7	59.3	58.4	56.2	51.4
7/8/2022	7:46 PM	8:46 PM	56.5	69.7	45.1	60.1	58.7	58	55.9	52.3
7/8/2022	8:46 PM	9:46 PM	56.5	76.6	44.9	60.4	58.9	57.3	56.1	52.3
7/8/2022	9:46 PM	10:46 PM	56.1	73	44.8	61.1	58.3	56.6	54.9	53.5
7/8/2022	10:46 PM	11:46 PM	54	64.4	44.2	56.8	55.8	54.8	53.6	51.8
7/8/2022	11:46 PM	12:46 AM	52.4	70.3	42.9	55.4	54.4	53.2	52.3	49.6
7/9/2022	12:46 AM	1:46 AM	51.9	69.9	42.2	55.2	54.1	52.1	51.5	48.6
7/9/2022	1:46 AM	2:46 AM	53.1	64.8	42.9	56.3	55.7	54.3	52.6	48.6
7/9/2022	2:46 AM	3:46 AM	51.6	62.3	43	54.7	54.2	53	51.7	46.8
7/9/2022	3:46 AM	4:46 AM	50.4	64.8	42.7	55.1	53.2	51.7	49.4	45.9
7/9/2022	4:46 AM	5:46 AM	53.5	66.4	43.5	57.7	57	54.4	52.6	48.4
7/9/2022	5:46 AM	6:46 AM	57.1	71.6	45.4	62.4	59.4	57.2	56.6	54
7/9/2022	6:46 AM	7:46 AM	56.5	68	44.1	59.5	58.9	57.7	56	53
7/9/2022	7:46 AM	8:46 AM	58	73.2	44.7	62.2	60.6	59.2	56.9	54.4
7/9/2022	8:46 AM	9:46 AM	58.6	71.2	44.9	62.9	61	59.8	58.1	54.2
7/9/2022	9:46 AM	10:46 AM	59.9	78.5	44.5	65.2	63.3	60.3	59	55.3
7/9/2022	10:46 AM	11:46 AM	57.8	73.2	44.7	62.7	61.3	59	56.6	52.6
7/9/2022	11:46 AM	12:46 PM	56.8	69.8	44.8	60.4	59.8	58.1	55.9	53.3
7/9/2022	12:46 PM	1:46 PM	57.5	74.4	44.1	63	60.6	58.1	56.2	53.5
7/9/2022	1:46 PM	2:46 PM	55.9	69.6	44.1	59.6	58.8	57.2	55.3	51.7
7/9/2022	2:46 PM	3:46 PM	55.9	75	44.8	62	58.3	56.1	54.7	51.8
7/9/2022	3:46 PM	4:46 PM	55.9	75.1	44.3	61.7	58.8	56.5	54.3	51.9
7/9/2022	4:46 PM	5:46 PM	57.7	75.9	44.2	62.9	60.2	58.4	56.8	53.5
7/9/2022	5:46 PM	6:46 PM	58.4	75.3	44.1	62.5	61.3	59.4	57.6	54.5

7/9/2022	6:46 PM	7:46 PM	58.2	77.3	45	62.1	60.5	59.2	57.4	55
7/9/2022	7:46 PM	8:46 PM	60.5	87.9	45.2	62.9	61.7	60	58.9	56
7/9/2022	8:46 PM	9:46 PM	58.6	75.4	47.1	61.8	60.7	59.2	57.8	56.4
7/9/2022	9:46 PM	10:46 PM	57.9	74.3	45.4	61.4	60.4	58.3	57.4	55.1
7/9/2022	10:46 PM	11:46 PM	57.5	81.9	43.9	62	58.9	56.8	55.5	53.5
7/9/2022	11:46 PM	12:46 AM	54.6	71.7	44.1	57.7	56.6	55.3	53.9	52.2
7/10/2022	12:46 AM	1:46 AM	52.8	69.7	43.6	55.7	54.8	53.4	52.4	49.7
7/10/2022	1:46 AM	2:46 AM	53.5	64.4	43.4	56.5	55.7	54.7	53.3	51
7/10/2022	2:46 AM	3:46 AM	51.4	74.8	41.9	53.9	53.1	51.8	50.7	46.5
7/10/2022	3:46 AM	4:46 AM	51.2	68.7	42.5	56.6	54.1	51.7	50.2	45.9
7/10/2022	4:46 AM	5:46 AM	53.6	68.5	42.6	57.9	57.2	55.1	52.5	48.1
7/10/2022	5:46 AM	6:46 AM	55.9	75.3	43.5	61.1	59.5	56	54.8	52.1
7/10/2022	6:46 AM	7:46 AM	59.1	77.3	43.8	65.8	62.4	60.1	56.4	52.5
7/10/2022	7:46 AM	8:46 AM	59.4	76.8	43.5	63.7	62.9	60.6	58.2	53.2
7/10/2022	8:46 AM	9:46 AM	59.2	79	45.5	64	62.5	59.7	58.1	54.8
7/10/2022	9:46 AM	10:46 AM	61.2	77.8	43.9	65.3	64.5	61.8	60.2	54.8
7/10/2022	10:46 AM	11:46 AM	61.4	78.6	44.2	65.3	64.5	62	61.1	56.4
7/10/2022	11:46 AM	12:46 PM	61.4	79.2	44.4	67.6	65.2	61.9	59.5	55
7/10/2022	12:46 PM	1:46 PM	57.6	74	44.8	61.6	60.4	57.9	56.6	53.6
7/10/2022	1:46 PM	2:46 PM	58.6	77	44.8	65.6	61.8	58.5	56.8	54.2
7/10/2022	2:46 PM	3:46 PM	56.2	76.6	44.3	60.1	58.8	56.7	55.7	52.6
7/10/2022	3:46 PM	4:46 PM	58.2	77.6	45	64.6	61	58.8	56.8	53.5
7/10/2022	4:46 PM	5:46 PM	58.2	78.4	44.8	64.3	60.6	58.9	57.3	54.6
7/10/2022	5:46 PM	6:46 PM	57.6	78.1	45	60.7	59.5	58.7	56.8	53.9
7/10/2022	6:46 PM	7:46 PM	56.9	76	44.1	61.5	59.6	57.3	56	52.8
7/10/2022	7:46 PM	8:46 PM	56.8	76.6	44.8	62.6	59.6	56.7	55.1	52.4
7/10/2022	8:46 PM	9:46 PM	54.8	72.4	45.1	58.1	56.4	55	54.4	52.3
7/10/2022	9:46 PM	10:46 PM	54.7	74.8	43.3	61.4	56.8	55.1	53.4	51.3
7/10/2022	10:46 PM	11:46 PM	53	72	42.8	58.5	55.9	54	51.8	48.9
7/10/2022	11:46 PM	12:46 AM	51	70.9	42.6	55	53.1	51.5	50.1	47.3

7/11/2022	12:46 AM	1:46 AM	50.2	66.8	42.8	55.3	52.7	51.1	49.5	45.8
7/11/2022	1:46 AM	2:46 AM	50.8	61.1	44	54.5	53.2	51.8	50.8	47.9
7/11/2022	2:46 AM	3:46 AM	48.7	61.6	42.4	52.7	51.8	49.7	48.3	43.7
7/11/2022	3:46 AM	4:46 AM	50.7	73.5	42.2	56.2	53.4	50.4	48.8	44.2
7/11/2022	4:46 AM	5:46 AM	58.3	73.9	44.8	64.6	61.8	58.6	56.7	52.3
7/11/2022	5:46 AM	6:46 AM	58.3	77.4	45.7	62.5	60.8	59.2	57.6	55.3
7/11/2022	6:46 AM	7:46 AM	62.2	79	46.9	66.4	65.1	63.3	61.1	57.9
7/11/2022	7:46 AM	8:46 AM	66.9	89.3	47.2	75.4	68.9	63.3	61.4	57.5
7/11/2022	8:46 AM	9:46 AM	58.2	74.1	45.2	61.4	60.7	59.3	57.6	55.4
7/11/2022	9:46 AM	10:13 AM	61	82.3	46.8	67.3	63.8	60.3	59.1	56.3

	DNL	61.9

24-Hour Continuous Noise Measurement Datasheet - Cont.

Project Name:	Scottsdale Plaza Resort	**Site Topo:**	Flat overall	**Day:** 2 of 5
Site Address/Location:	7200 N. Scottsdale Road, Scottsd	**Meteorological Cond.:**	Clear skies	**Noise Source(s) w/ Distance:**
Site Id:	NM2	**Ground Type:**	Pool deck, concrete	Pool activity; Event music at about 20 feet

Table 2: Baseline Noise Measurement Summary

Date	Start	Stop	Leq	Lmax	Lmin	L2	L8	L25	L50	L90
7/8/2022	1:04 PM	2:04 PM	60.5	75.3	55.7	63	61.3	60.6	60.2	59.2
7/8/2022	2:04 PM	3:04 PM	61.3	76.7	56.1	63.9	62.7	61.8	60.9	59.9
7/8/2022	3:04 PM	4:04 PM	60.8	71.7	56.2	62.2	62	61.5	60.8	59.5
7/8/2022	4:04 PM	5:04 PM	60.8	75.9	56.8	62.7	61.8	61.1	60.6	59.8
7/8/2022	5:04 PM	6:04 PM	60	76.2	55.4	63.3	61.3	60.2	59.6	58.6
7/8/2022	6:04 PM	7:04 PM	59.7	72.1	55	63.9	62	60.4	58.5	57.4
7/8/2022	7:04 PM	8:04 PM	61.5	75.5	55.8	64.8	63.9	62	60.8	59.2
7/8/2022	8:04 PM	9:04 PM	59.1	71.8	55.7	60.6	60	59.7	59.2	57.9
7/8/2022	9:04 PM	10:04 PM	59.9	72.1	55.7	62.1	61.1	60.4	59.9	58.5
7/8/2022	10:04 PM	11:04 PM	58.7	72.9	54.7	61.2	60	59.2	58.6	57
7/8/2022	11:04 PM	12:04 AM	57.2	69.8	54.1	58.9	58.6	57.9	57.1	55.7
7/9/2022	12:04 AM	1:04 AM	57.1	63.6	53.7	61.6	61.2	56.1	55.7	55.3
7/9/2022	1:04 AM	2:04 AM	60.3	63.4	54	61.6	61.5	61.4	61.2	55.5
7/9/2022	2:04 AM	3:04 AM	55.2	64.4	54	57.1	55.4	55.2	55	54.8
7/9/2022	3:04 AM	4:04 AM	55.2	56.5	54.1	55.5	55.5	55.3	55.2	55
7/9/2022	4:04 AM	5:04 AM	55.3	58.9	54.4	56.1	55.5	55.4	55.3	55.1
7/9/2022	5:04 AM	6:04 AM	57.2	74.8	54.7	64.2	57.1	56	55.7	55.5
7/9/2022	6:04 AM	7:04 AM	56.9	67	54.2	58	57.5	57.2	56.8	56.4
7/9/2022	7:04 AM	8:04 AM	57.7	69.3	54.1	63.1	60.9	56.6	56.1	55.4
7/9/2022	8:04 AM	9:04 AM	58	71.6	54.9	60.8	59	58.1	57.7	56.9
7/9/2022	9:04 AM	10:04 AM	58.6	68.4	54.4	61.3	60.2	59.5	58.3	56.6
7/9/2022	10:04 AM	11:04 AM	59.8	75	54.9	62.7	60.7	60	59.6	58.8
7/9/2022	11:04 AM	12:04 PM	60.7	71.3	55.2	62.6	62.1	61.3	60.7	59.4
7/9/2022	12:04 PM	1:04 PM	70.5	84.2	55.5	79.7	77.5	61.8	60.8	60
7/9/2022	1:04 PM	2:04 PM	81.1	86.9	72.1	82.9	82.4	81.7	81.1	79.7
7/9/2022	2:04 PM	3:04 PM	81	87.3	59.7	83.9	83.3	82.4	81.6	76.3
7/9/2022	3:04 PM	4:04 PM	80.5	86.6	60.6	83.3	82.8	81.8	81.1	73.9
7/9/2022	4:04 PM	5:04 PM	80	88	58.9	83.2	82.2	81.3	80.5	74.7
7/9/2022	5:04 PM	6:04 PM	63.7	74.7	57.9	65.8	65.6	64.5	63.2	62
7/9/2022	6:04 PM	7:04 PM	61.7	74.6	56.8	65	63.7	62.4	61.3	59.7

7/9/2022	7:04 PM	8:04 PM	59.3	70.2	55.8	61.4	60.4	59.8	59.2	58.4
7/9/2022	8:04 PM	9:04 PM	59.4	73.6	55.5	61.9	61	59.9	59	58.1
7/9/2022	9:04 PM	10:04 PM	60.5	75.9	55.6	62.9	61.6	61	60.4	59.1
7/9/2022	10:04 PM	11:04 PM	57.6	74.9	55.1	60.8	59.1	57.8	56.9	56.2
7/9/2022	11:04 PM	12:04 AM	56.4	71	54.8	57.4	57.1	56.6	56.3	55.9
7/10/2022	12:04 AM	1:04 AM	56.1	61.1	54.6	57.4	56.5	56.1	56	55.8
7/10/2022	1:04 AM	2:04 AM	55.9	57.6	54.6	56.4	56.2	55.9	55.8	55.6
7/10/2022	2:04 AM	3:04 AM	57.9	65.5	54.6	64.6	62.9	56	55.8	55.6
7/10/2022	3:04 AM	4:04 AM	61.7	68.3	55.1	67.9	67.8	63.9	56	55.8
7/10/2022	4:04 AM	5:04 AM	55.9	59.6	54.5	56.2	56.1	56	55.9	55.7
7/10/2022	5:04 AM	6:04 AM	57.5	69.8	54.6	61.2	58.8	57.1	56.6	56.2
7/10/2022	6:04 AM	7:04 AM	57.7	66.5	55	59.7	59	58	57.4	56.6
7/10/2022	7:04 AM	8:04 AM	56.9	69.5	48.8	58.1	57.8	57.5	57	56.1
7/10/2022	8:04 AM	9:04 AM	61.6	81	54.4	70.1	65.4	59.4	58.6	57.4
7/10/2022	9:04 AM	10:04 AM	60.4	76.3	55.5	63.5	62.6	60.8	59.8	58.6
7/10/2022	10:04 AM	11:04 AM	62	79.5	55.8	65.8	64	62.6	61.3	59.8
7/10/2022	11:04 AM	12:04 PM	60.8	69.7	55.8	62.9	61.9	61.4	60.7	59.6
7/10/2022	12:04 PM	1:04 PM	61.9	73.8	57.2	63.9	62.9	62.4	61.9	60.8
7/10/2022	1:04 PM	2:04 PM	62.3	78.3	57.1	64	63.4	62.6	62.1	61.2
7/10/2022	2:04 PM	3:04 PM	62.4	72.1	57.4	63.7	63.4	62.7	62.3	61.4
7/10/2022	3:04 PM	4:04 PM	62	73.1	57.1	63.5	63.3	62.3	61.8	61
7/10/2022	4:04 PM	5:04 PM	62.2	73.2	57.4	64	63	62.5	62.2	61.5
7/10/2022	5:04 PM	6:04 PM	60.6	70.9	56.5	62.8	61.7	61	60.4	59.3
7/10/2022	6:04 PM	7:04 PM	59.1	70	56	60.9	60	59.4	59	58.2
7/10/2022	7:04 PM	8:04 PM	58.1	68.1	56	59.2	58.7	58.3	58.1	57.5
7/10/2022	8:04 PM	9:04 PM	58.4	68.3	56	59.8	59.1	58.8	58.3	57.4
7/10/2022	9:04 PM	10:04 PM	58	69.9	55.7	59.3	58.6	58.1	57.9	57.5
7/10/2022	10:04 PM	11:04 PM	56.8	69.3	54.8	58	57.7	57.1	56.7	56.2
7/10/2022	11:04 PM	12:04 AM	56.3	59.7	54.5	57.1	56.8	56.6	56.2	55.8
7/11/2022	12:04 AM	1:04 AM	55.9	57.5	54.6	56.6	56.5	56.1	55.8	55.6

7/11/2022	1:04 AM	2:04 AM	55.9	60.8	55	56.6	56.4	56.1	55.9	55.7
7/11/2022	2:04 AM	3:04 AM	55.9	65.7	54.8	56.5	56.1	55.9	55.8	55.6
7/11/2022	3:04 AM	4:04 AM	55.9	66.9	54.8	56.5	56	56	55.8	55.7
7/11/2022	4:04 AM	5:04 AM	56.1	67.2	54.6	56.5	56.3	56.1	55.9	55.6
7/11/2022	5:04 AM	6:04 AM	57.4	70.2	55.3	61.5	60	56.6	56.4	56.2
7/11/2022	6:04 AM	7:04 AM	58.6	75.7	55.8	61	60.5	58.8	58.1	57.5
7/11/2022	7:04 AM	8:04 AM	58.7	72.9	54.3	61.7	60.9	59.2	58.1	56.7
7/11/2022	8:04 AM	9:04 AM	58.1	69.5	54.4	59.3	59	58.3	58.1	57
7/11/2022	9:04 AM	10:04 AM	58.5	67.6	54.7	60.6	59.6	59.1	58.6	57.2
7/11/2022	10:04 AM	10:26 AM	59.3	67.8	54.5	60.5	60.3	59.7	59	58.5

	DNL	69.8

24-Hour Continuous Noise Measurement Datasheet - Cont.

Project Name:	Scottsdale Plaza Resort	**Site Topo:**	Flat overall	**Day:** 3 of 5
Site Address/Location:	7200 N. Scottsdale Road, Scottsd	**Meteorological Cond.:**	Clear skies	**Noise Source(s) w/ Distance:**
Site Id:	NM3	**Ground Type:**	Loose rocks, Asphalt	Traffic, Hummingbird C/L at 23 ft, Scottsdale C/L at ~380 ft

Table 3: Baseline Noise Measurement Summary

Date	Start	Stop	Leq	Lmax	Lmin	L2	L8	L25	L50	L90
7/8/2022	1:10 PM	2:10 PM	60.1	85.2	53.4	66.9	62.3	59.1	57.2	55.1
7/8/2022	2:10 PM	3:10 PM	59.9	87.8	52.2	64.7	61.1	58	57	54.4
7/8/2022	3:10 PM	4:10 PM	56.8	72.8	52	61.7	59.6	57.2	55.7	54.1
7/8/2022	4:10 PM	5:10 PM	57.2	71.4	52.1	60.2	59.4	58.4	56.6	54.4
7/8/2022	5:10 PM	6:10 PM	57.7	75.9	52.2	62.6	60.3	58.7	56.2	54.1
7/8/2022	6:10 PM	7:10 PM	57.6	78.2	51.5	61.2	59.7	58.3	56.2	54.1
7/8/2022	7:10 PM	8:10 PM	56.8	74.4	52	60	59.5	57.5	55.8	54.4
7/8/2022	8:10 PM	9:10 PM	55.7	73.2	51.3	58.8	57.8	56.3	54.8	53.9
7/8/2022	9:10 PM	10:10 PM	57.6	83.9	50.6	61.6	59	55.4	54.4	53.2
7/8/2022	10:10 PM	11:10 PM	56.9	74.3	50.7	63.6	60.3	55.8	54.5	53.2
7/8/2022	11:10 PM	12:10 AM	53.5	76.1	49.6	58.1	55.2	53.1	52.4	51.5
7/9/2022	12:10 AM	1:10 AM	52.2	66.7	48.3	55.9	53.9	52.5	51.5	50.2
7/9/2022	1:10 AM	2:10 AM	52	69.3	49.5	54.2	52.9	52.2	51.8	50.6
7/9/2022	2:10 AM	3:10 AM	53.4	65.1	51.1	56.7	54.2	53.4	53	52.1
7/9/2022	3:10 AM	4:10 AM	52.2	66.6	49.6	54.6	53.1	52.4	52.1	51
7/9/2022	4:10 AM	5:10 AM	53.5	74.6	48.3	60.7	53.9	53	52.3	51.4
7/9/2022	5:10 AM	6:10 AM	54.3	71.4	47.9	58.7	57.5	54.6	53.8	50.5
7/9/2022	6:10 AM	7:10 AM	58.3	78.9	49.2	66.1	61.7	58.1	55.1	52.9
7/9/2022	7:10 AM	8:10 AM	56.9	71.8	51.7	60.2	59.5	57.6	56	54.7
7/9/2022	8:10 AM	9:10 AM	57.1	74.2	53	61.4	60.1	57.2	55.9	54.7
7/9/2022	9:10 AM	10:10 AM	56.9	74.5	51.6	61	59.5	57.6	56	54.4
7/9/2022	10:10 AM	11:10 AM	56.6	75.2	51	61.3	60.4	57.6	55.1	53.6
7/9/2022	11:10 AM	12:10 PM	58.5	73.7	50.7	66.2	61.5	59.1	55.9	53.3
7/9/2022	12:10 PM	1:10 PM	62.5	77	52.9	66	65	63.8	63.3	55.5
7/9/2022	1:10 PM	2:10 PM	57.1	77.1	51.9	61.4	60	57.8	55.9	53.9
7/9/2022	2:10 PM	3:10 PM	56.9	72.7	52.1	60.4	59.4	58.2	55.6	54.4
7/9/2022	3:10 PM	4:10 PM	56.4	75.2	51.5	62.2	58.4	56.2	55.1	54.2
7/9/2022	4:10 PM	5:10 PM	57.2	73.2	52.2	61.4	59.9	58.1	56.2	54.4
7/9/2022	5:10 PM	6:10 PM	57.8	78	52.2	61.8	60.4	58.9	55.8	54.3
7/9/2022	6:10 PM	7:10 PM	56.3	72.7	51.5	59	58.6	57.3	56.1	53.8

7/9/2022	7:10 PM	8:10 PM	56.9	74.9	52.3	60.3	59	57.2	56.1	54.8
7/9/2022	8:10 PM	9:10 PM	58.1	80.4	52.4	61.4	59.3	58.3	57.1	55.7
7/9/2022	9:10 PM	10:10 PM	56.7	72.9	51.9	60	59.3	57.1	56.2	54.6
7/9/2022	10:10 PM	11:10 PM	58.8	84.2	52.5	67.3	59.5	57.1	55.7	54.6
7/9/2022	11:10 PM	12:10 AM	55.8	77.1	50.4	61.7	58.8	55	54.2	52.8
7/10/2022	12:10 AM	1:10 AM	53.8	69.8	50.3	58.5	56.1	53.7	53	52.1
7/10/2022	1:10 AM	2:10 AM	53.2	72.4	50.4	56.7	54.2	53.1	52.5	51.7
7/10/2022	2:10 AM	3:10 AM	53.3	74	50.3	56.9	55.1	53	52.5	51.7
7/10/2022	3:10 AM	4:10 AM	53	70.1	50.4	58	53.8	52.9	52.1	51.5
7/10/2022	4:10 AM	5:10 AM	54.7	76.3	49.7	58.1	55.3	53.3	52.5	51.8
7/10/2022	5:10 AM	6:10 AM	55.9	77.8	48.8	60.1	58.8	55.3	54.2	50.9
7/10/2022	6:10 AM	7:10 AM	56.2	74.3	51.3	60.3	58.7	56.5	55.4	54
7/10/2022	7:10 AM	8:10 AM	56.6	76.4	52.9	59.7	58.2	56.5	55.7	54.9
7/10/2022	8:10 AM	9:10 AM	57.6	79.4	53	63	60.5	57.3	56.2	55.1
7/10/2022	9:10 AM	10:10 AM	56.5	71.2	52.8	59.3	58.5	57.3	55.7	54.7
7/10/2022	10:10 AM	11:10 AM	58.5	84.2	51.7	61.6	60.4	58.3	56	54.5
7/10/2022	11:10 AM	12:10 PM	57.8	80	51	63.3	59.4	57.9	56.4	54.6
7/10/2022	12:10 PM	1:10 PM	57.7	75	52.6	61	60.6	58.6	56.5	55.1
7/10/2022	1:10 PM	2:10 PM	57.5	73.1	53	61.2	60.4	58.5	56.2	54.7
7/10/2022	2:10 PM	3:10 PM	57.3	73.4	52.2	62	60.1	58.1	55.9	54.5
7/10/2022	3:10 PM	4:10 PM	56.6	73.6	51.9	60.5	59.3	57.1	55.7	54.4
7/10/2022	4:10 PM	5:10 PM	57.9	80.1	53.2	61.7	60.3	58.2	56.5	55
7/10/2022	5:10 PM	6:10 PM	56.4	75.1	52.2	61.3	58.6	57.1	55.2	54.3
7/10/2022	6:10 PM	7:10 PM	57	78.9	51.5	61.3	59.6	57.2	55.3	53.6
7/10/2022	7:10 PM	8:10 PM	56.7	73.6	52.8	61.4	59.4	57.4	55.3	54.3
7/10/2022	8:10 PM	9:10 PM	55.7	77.1	50.8	59.6	58.3	55.3	54.4	53.3
7/10/2022	9:10 PM	10:10 PM	55.2	71.3	50.4	59.6	58	55.1	54.3	53.1
7/10/2022	10:10 PM	11:10 PM	55.2	73	50.1	60.2	57.1	54.6	54	53.1
7/10/2022	11:10 PM	12:10 AM	52.9	71.1	49.5	58	54.3	52.6	51.8	50.8
7/11/2022	12:10 AM	1:10 AM	51.8	67	48.1	55.9	52.9	52.1	51.5	49.7

7/11/2022	1:10 AM	2:10 AM	51.4	62.7	48.6	54.5	52.7	52	50.8	49.7
7/11/2022	2:10 AM	3:10 AM	52.3	70.4	48.8	56.9	53.5	52.4	51.9	50.5
7/11/2022	3:10 AM	4:10 AM	52	61	50.3	53.3	52.8	52.3	51.9	51.1
7/11/2022	10:19 AM	10:21 AM	54.3	55.6	52.2	55.4	55.3	54.8	54.1	52.9

	DNL	61.6

24-Hour Continuous Noise Measurement Datasheet - Cont.

Project Name:	Scottsdale Plaza Resort	**Site Topo:**	Flat overall	**Day:** 4 of 5	
Site Address/Location:	7200 N. Scottsdale Road, Scottsd	**Meteorological Cond.:**	Clear skies	**Noise Source(s) w/ Distance:**	
Site Id:	NM4	**Ground Type:**	Grass	Ambient	

Table 4: Baseline Noise Measurement Summary

Date	Start	Stop	Leq	Lmax	Lmin	L2	L8	L25	L50	L90
7/8/2022	1:14 PM	2:14 PM	46.1	62.7	40	51.5	48.8	46.5	45.2	43.2
7/8/2022	2:14 PM	3:14 PM	45.1	55.4	39	48.9	48	45.8	44.7	42
7/8/2022	3:14 PM	4:14 PM	46.1	57.2	40	50.2	49.2	46.8	45.4	43.2
7/8/2022	4:14 PM	5:14 PM	46.7	62	39.8	54.1	49.8	46.1	45	42.9
7/8/2022	5:14 PM	6:14 PM	46.1	57.8	39.3	49.9	48.2	46.8	45.6	43.2
7/8/2022	6:14 PM	7:14 PM	45.2	58.5	38	49.6	47.6	45.6	44.3	42.4
7/8/2022	7:14 PM	8:14 PM	44.5	61.5	37.2	49.3	47.1	45.3	43.6	41.2
7/8/2022	8:14 PM	9:14 PM	57.7	89.5	25.4	67.3	56.1	47.1	44.7	41.1
7/8/2022	9:14 PM	10:14 PM	41.3	43.5	41	41.7	41.6	41.4	41.3	41.1
7/8/2022	10:14 PM	11:14 PM	43.1	45.5	41.7	45.2	44.7	43.5	42.8	41.9
7/8/2022	11:14 PM	12:14 AM	51.4	57.1	45.4	56.2	54.3	52.2	50.8	46.8
7/9/2022	12:14 AM	1:14 AM	50.7	55.3	46.3	52.3	52	51.5	51.2	48.9
7/9/2022	1:14 AM	2:14 AM	47.8	51.1	43.4	49.9	49.6	48.3	47.7	45.6
7/9/2022	2:14 AM	3:14 AM	57.3	87	42.9	67.1	58.6	51.6	48.9	46.2
7/9/2022	3:14 AM	4:14 AM	48.5	57.4	43	53.3	51.4	49.6	47.3	45
7/9/2022	4:14 AM	5:14 AM	48.1	59.9	40.4	53.8	52	48.2	46.5	44.2
7/9/2022	5:14 AM	6:14 AM	47.2	59.2	40.7	50.6	49.2	47.6	46.7	45.1
7/9/2022	6:14 AM	7:14 AM	45.4	65.8	39.8	49.5	46.9	45.5	43.8	42.2
7/9/2022	7:14 AM	8:14 AM	45.9	67.9	38.7	54.7	46.9	45.3	43.2	41.3
7/9/2022	8:14 AM	9:14 AM	49	67.9	38.4	56.6	53.4	48.4	44.2	42.1
7/9/2022	9:14 AM	10:14 AM	45.2	61.4	38.5	52	47.2	45.6	44.1	41.2
7/9/2022	10:14 AM	11:14 AM	44.1	59.6	38.2	46.6	46.2	44.7	43.5	40.9
7/9/2022	11:14 AM	12:14 PM	44.5	61.7	38.4	48.4	46.8	45.3	44.3	40.4
7/9/2022	12:14 PM	1:14 PM	44.4	59.7	36.9	50	46.4	44.7	42.7	40.3
7/9/2022	1:14 PM	2:14 PM	43.4	61.5	37.1	48	45.6	43.9	42	39.5
7/9/2022	2:14 PM	3:14 PM	43.8	54.5	38.1	47.4	46.1	44.5	43.2	41
7/9/2022	3:14 PM	4:14 PM	44.2	67.1	37.8	47.9	47	44.5	43.3	40.4
7/9/2022	4:14 PM	5:14 PM	44.1	56.7	39	47.5	46.5	44.9	43.7	41.2
7/9/2022	5:14 PM	6:14 PM	44.9	57.5	39.2	47.9	47.2	45.6	44.6	42.2
7/9/2022	6:14 PM	7:14 PM	45.2	57.9	38.8	50.2	48	46.2	44.6	41.6

7/9/2022	7:14 PM	8:14 PM	48.2	66.6	38.5	56.6	51.5	47.1	45.3	41
7/9/2022	8:14 PM	9:14 PM	53.4	78.8	46.1	58.8	56.2	53.3	51	48.9
7/9/2022	9:14 PM	10:14 PM	51	64	46.3	53	52	51.7	50.9	49.5
7/9/2022	10:14 PM	11:14 PM	49.6	58.1	46.2	52	51.3	50.3	49.1	47.9
7/9/2022	11:14 PM	12:14 AM	51.7	55.9	49.6	52.5	52.3	52	51.7	51.1
7/10/2022	12:14 AM	1:14 AM	52.7	59.3	48.4	54	53.7	52.8	52.5	52.1
7/10/2022	1:14 AM	2:14 AM	51.8	54.2	45.1	53.4	53.2	52.7	52.1	47.8
7/10/2022	2:14 AM	3:14 AM	57.1	82.9	45.5	65.1	59.8	54.4	52	49.9
7/10/2022	3:14 AM	4:14 AM	48.7	60.5	41	53.3	51.5	50	47.9	44.6
7/10/2022	4:14 AM	5:14 AM	43	51.5	24.3	48.5	47	45.9	26.6	26
7/10/2022	5:14 AM	6:14 AM	26	26.6	25.5	26.5	26.1	26.1	26	25.6
7/10/2022	6:14 AM	7:14 AM	44	55.3	25.4	48.9	46.8	45.2	43.6	26.1
7/10/2022	7:14 AM	8:14 AM	44.7	64.8	38.7	50.4	46.2	45	43.7	41.3
7/10/2022	8:14 AM	9:14 AM	49.9	75.4	40.6	57.8	54.2	48.1	46.2	43.9
7/10/2022	9:14 AM	10:14 AM	47.2	62.6	41.7	51.3	49.9	47.9	46.5	44.4
7/10/2022	10:14 AM	11:14 AM	46.6	60	41	50.4	49.2	47.5	45.8	43.2
7/10/2022	11:14 AM	12:14 PM	47.8	62.5	41.5	51.8	49.7	47.4	47	46.2
7/10/2022	12:14 PM	1:14 PM	46.4	59.1	41.3	48.3	47.5	46.8	46.5	44.7
7/10/2022	1:14 PM	2:14 PM	48.2	59	42.7	50	49.5	48.9	48.1	46.6
7/10/2022	2:14 PM	3:14 PM	48.4	60	40.4	51.4	49.9	49	48.3	46
7/10/2022	3:14 PM	4:14 PM	47.7	65.3	40.2	50.3	49.8	48.5	47.3	45.7
7/10/2022	4:14 PM	5:14 PM	47.3	58.7	41.3	51.5	48.9	48	47	45
7/10/2022	5:14 PM	6:14 PM	45.8	65.7	38.7	49.7	47.9	46.4	46	42.6
7/10/2022	6:14 PM	7:14 PM	45.8	60.3	37.8	49.3	47.6	46.5	45.7	43.4
7/10/2022	7:14 PM	8:14 PM	48.9	61.7	38.7	53.7	52.8	50.8	46.9	42.9
7/10/2022	8:14 PM	9:14 PM	52	73.4	40	58.4	56.5	51.4	49.1	46.9
7/10/2022	9:14 PM	10:14 PM	52.3	60.1	46.9	54.7	54	53.2	52.2	50
7/10/2022	10:14 PM	11:14 PM	50.8	59.3	47.6	51.8	51.4	51.1	50.7	49.8
7/10/2022	11:14 PM	12:14 AM	50.3	56.7	47.3	52.1	51.5	50.9	50.5	48.7
7/11/2022	12:14 AM	1:14 AM	50.6	58.7	47.6	52.2	51.4	50.8	50.6	49.7

7/11/2022	1:14 AM	2:14 AM	51	53.1	47.5	52.5	52	51.5	51.1	49.4
7/11/2022	2:14 AM	3:14 AM	58	88	24.7	68.4	56.4	50.6	50.1	38.5
7/11/2022	3:14 AM	4:14 AM	37.8	44.2	37.2	38.4	38.2	38	37.7	37.4
7/11/2022	4:14 AM	5:14 AM	37	40.5	36.6	37.3	37.2	37.1	36.9	36.8
7/11/2022	5:14 AM	10:18 AM	38.4	55.9	36.5	42	36.8	36.7	36.7	36.6

	DNL	57.8

MD ACOUSTICS

24-Hour Continuous Noise Measurement Datasheet - Cont.

Project Name:	Scottsdale Plaza Resort	**Site Topo:**	Flat overall	**Day:** 5 of 5
Site Address/Location:	7200 N. Scottsdale Road, Scottsd	**Meteorological Cond.:**	Clear skies	**Noise Source(s) w/ Distance:**
Site Id:	NM5	**Ground Type:**	Loose rock, pool deck	Pool activity at 48 ft

Table 5: Baseline Noise Measurement Summary

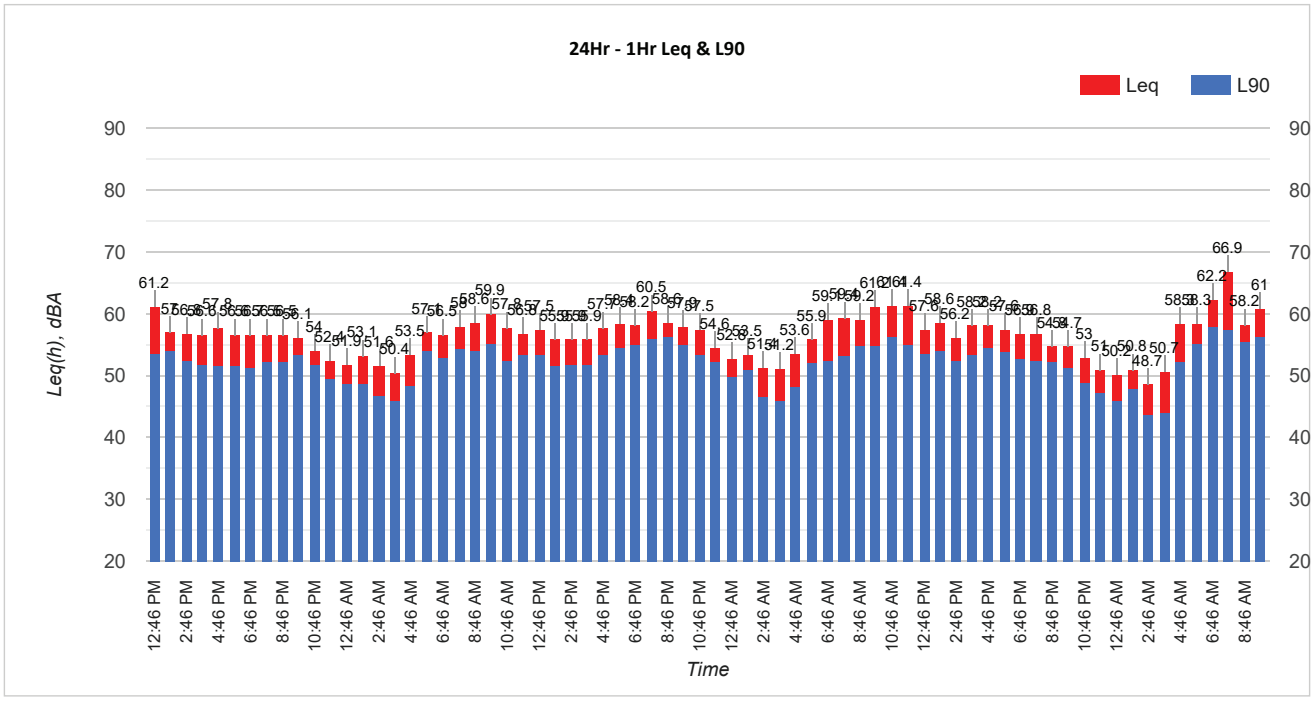
Date	Start	Stop	Leq	Lmax	Lmin	L2	L8	L25	L50	L90
7/8/2022	1:12 PM	2:12 PM	49.5	70.40923021	44.63785787	51.5	50.7	49.5	48.3	47.3
7/8/2022	2:12 PM	3:12 PM	56.2	75.66770104	44.74584641	63.2	61	56.5	53.3	48.9
7/8/2022	3:12 PM	4:12 PM	50.7	70.77414097	45.75207118	57	53.9	50.2	48.6	47.4
7/8/2022	4:12 PM	5:12 PM	50.2	63.87555634	45.77788804	54.6	52.8	51	49.3	47.5
7/8/2022	5:12 PM	6:12 PM	51.9	71.04844262	45.62874109	55.8	54.7	53	51.2	48.8
7/8/2022	6:12 PM	7:12 PM	53.9	74.23663137	45.48988237	61	57.4	53.6	52	49.3
7/8/2022	7:12 PM	8:12 PM	61	79.86403966	47.04158104	68.1	66.1	60.7	57.1	54.4
7/8/2022	8:12 PM	9:12 PM	54.4	69.4936456	45.6697535	57.9	56.8	55.4	53.8	51
7/8/2022	9:12 PM	10:12 PM	52.9	72.80199857	44.89311691	57.4	55.5	53.8	52	49
7/8/2022	10:12 PM	11:12 PM	50.3	70.76111113	42.44716415	57.6	51.9	50.2	49	45.1
7/8/2022	11:12 PM	12:12 AM	46.4	56.30526827	42.19201652	49.2	48	47	45.9	44.7
7/9/2022	12:12 AM	1:12 AM	44.3	53.90601268	41.34731408	46.1	45.1	44.5	44	43.3
7/9/2022	1:12 AM	2:12 AM	44	49.72007425	40.85639029	46	45.1	44.5	43.9	42.8
7/9/2022	2:12 AM	3:12 AM	44.5	48.99170354	41.60002111	45.7	45.4	44.9	44.5	43.7
7/9/2022	3:12 AM	4:12 AM	43.8	48.2581894	41.58734436	45	44.5	44.2	43.8	43.1
7/9/2022	4:12 AM	5:12 AM	50	76.26976989	41.39991468	61.1	50.9	45.7	44.5	43.3
7/9/2022	5:12 AM	6:12 AM	52.4	74.72724022	42.52558975	60.1	57.8	50.7	47.8	45.5
7/9/2022	6:12 AM	7:12 AM	46.1	64.34571402	42.66913896	50.1	47.1	46.3	45.7	44.4
7/9/2022	7:12 AM	8:12 AM	50.4	72.15078423	42.62067598	57.4	55.1	50.8	46.5	44.6
7/9/2022	8:12 AM	9:12 AM	48.3	64.37751667	44.42105792	51.7	50.9	48.9	47.3	46.2
7/9/2022	9:12 AM	10:12 AM	55.1	78.95457974	44.80609476	65.2	53.6	51	49.4	47.6
7/9/2022	10:12 AM	11:12 AM	61.1	78.52630388	45.16632494	66.2	65.1	62.6	60.3	49.1
7/9/2022	11:12 AM	12:12 PM	50.1	73.40839847	44.60775163	54.9	50.8	50	49.1	47.5
7/9/2022	12:12 PM	1:12 PM	56.3	73.96958519	45.20383734	60.2	59.5	57.2	55	52.4
7/9/2022	1:12 PM	2:12 PM	51.1	68.30410128	44.85949287	57.2	54.1	51.7	49.2	47.2
7/9/2022	2:12 PM	3:12 PM	49.3	62.22932965	44.40674893	52.4	51.2	49.7	48.9	47.5
7/9/2022	3:12 PM	4:12 PM	47.8	68.96405939	44.52488802	49.6	49.1	47.7	47.1	46.4
7/9/2022	4:12 PM	5:12 PM	55.1	72.98047923	45.13046127	61.8	61	53.2	51.3	47.5
7/9/2022	5:12 PM	6:12 PM	57.7	77.61667851	47.9504409	61.4	59.4	57.9	56.9	55.3
7/9/2022	6:12 PM	7:12 PM	59	72.93938176	49.23152554	62.3	61.1	59.8	58.6	56

7/9/2022	7:12 PM	8:12 PM	62.4	78.18513953	48.91719232	67.6	66.5	63	60.2	57.7
7/9/2022	8:12 PM	9:12 PM	61.3	78.15925986	48.39311812	66.7	65	62.6	60.6	54.8
7/9/2022	9:12 PM	10:12 PM	61.7	79.97359021	48.31082313	66.6	65.3	62.6	60.3	55.8
7/9/2022	10:12 PM	11:12 PM	58.1	81.08805677	44.76845084	66.6	62.8	57.8	53.7	46.7
7/9/2022	11:12 PM	12:12 AM	49.5	67.22009807	45.12251681	54.1	51.6	49.3	48.3	47.5
7/10/2022	12:12 AM	1:12 AM	46.9	56.17107676	44.59040679	49.6	47.5	47	46.6	46.1
7/10/2022	1:12 AM	2:12 AM	46.3	65.29500033	42.14045215	47.6	47.1	46.7	46.2	43.8
7/10/2022	2:12 AM	3:12 AM	44	51.13531637	41.78849912	45.4	44.8	44.4	43.9	43.3
7/10/2022	3:12 AM	4:12 AM	44.1	50.59784573	41.419859	45.7	44.7	44.4	44	43.3
7/10/2022	4:12 AM	5:12 AM	53.1	77.35563504	41.62859176	62.3	57.3	45.9	44.5	43.5
7/10/2022	5:12 AM	5:38 AM	50.8	71.87670872	42.55565946	58.2	55.6	49.9	48.3	44.6

	DNL	60.3

24-Hour Continuous Noise Measurement Datasheet - Cont.

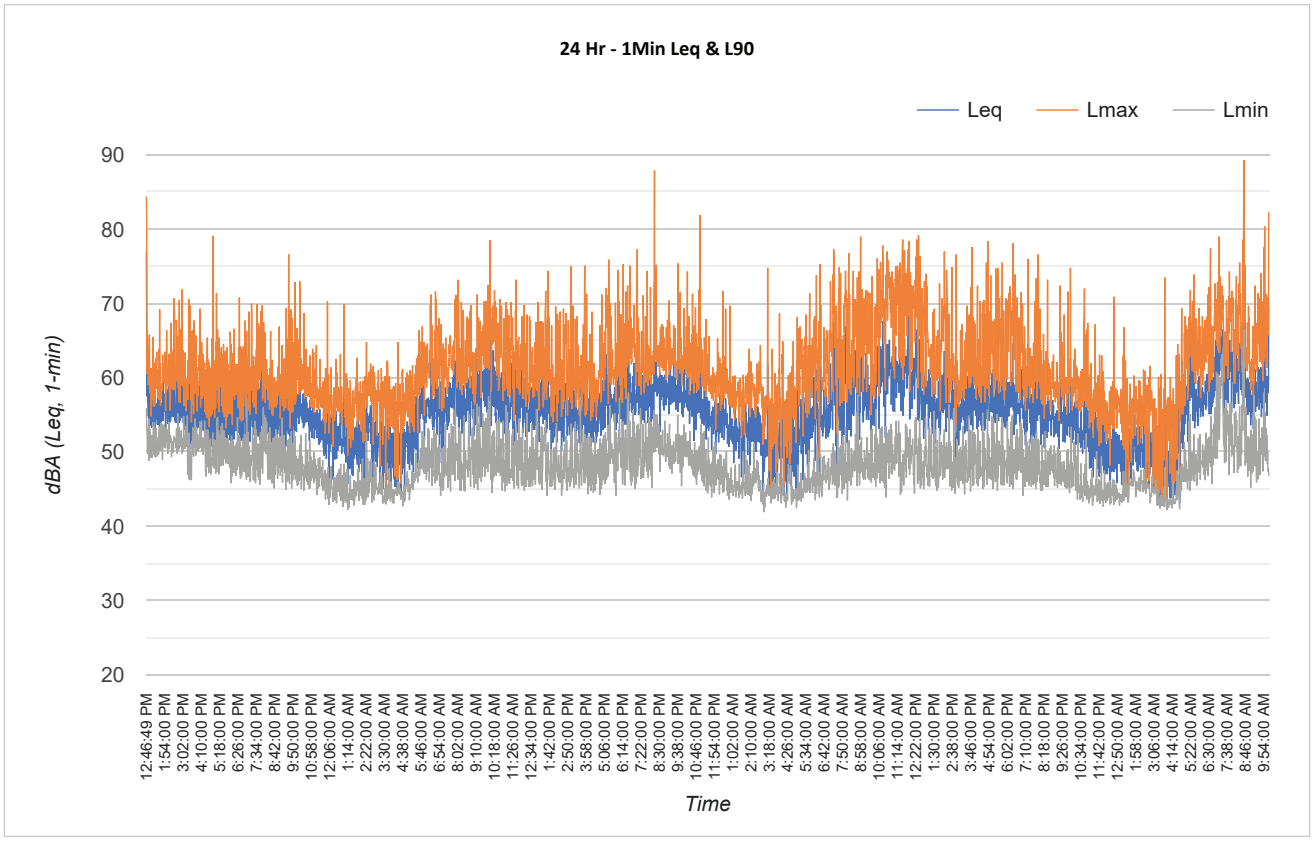
Project Name:	Scottsdale Plaza Resort	**Site Topo:**	Flat overall	**Day:** 1 of 5	
Site Address/Location:	7200 N. Scottsdale Road, Scottsd	**Meteorological Cond.:**	Clear skies	**Noise Source(s) w/ Distance:**	
Site Id:	NM1	**Ground Type:**	Asphalt, Loose rock, Grass	Traffic, C/L at about 160 feet	



MD ACOUSTICS

24-Hour Continuous Noise Measurement Datasheet - Cont.

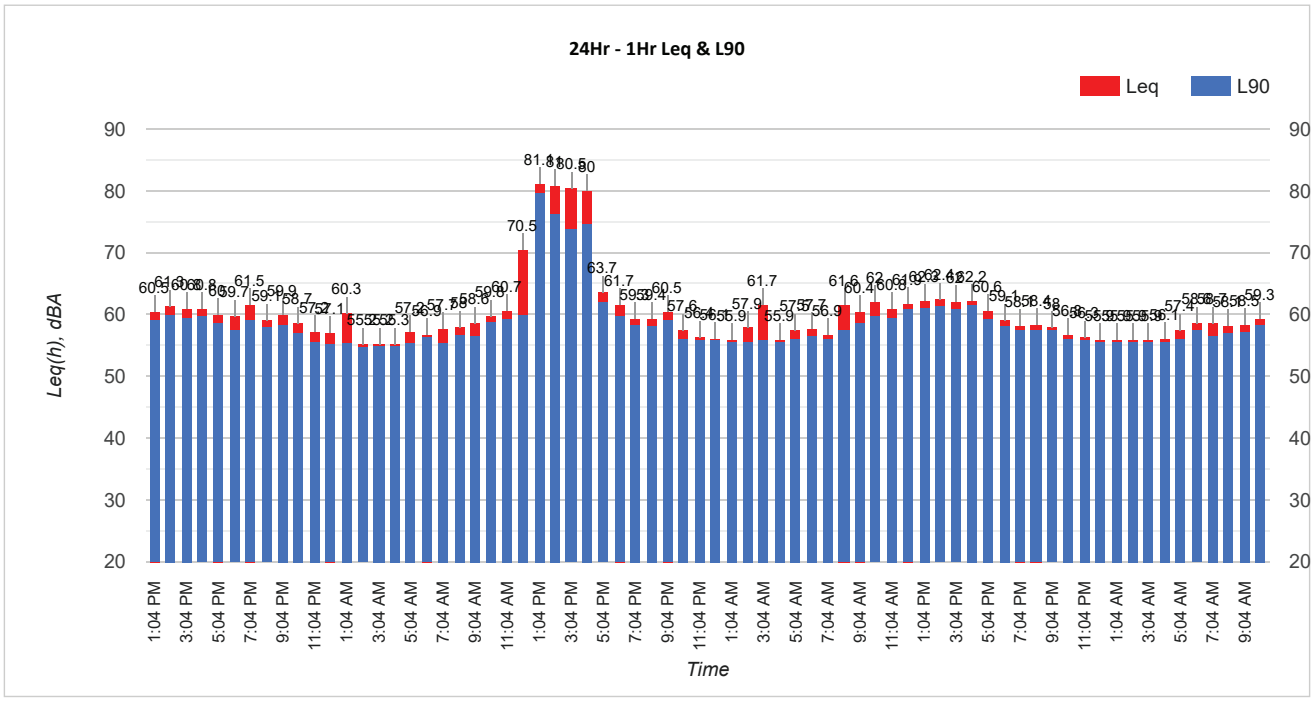
Project Name:	Scottsdale Plaza Resort	**Site Topo:**	Flat overall	**Day:** 1 of 5	
Site Address/Location:	7200 N. Scottsdale Road, Scottsd	**Meteorological Cond.:**	Clear skies	**Noise Source(s) w/ Distance:**	
Site Id:	NM1	**Ground Type:**	Asphalt, Loose rock, Grass	Traffic, C/L at about 160 feet	



MD ACOUSTICS

24-Hour Continuous Noise Measurement Datasheet - Cont.

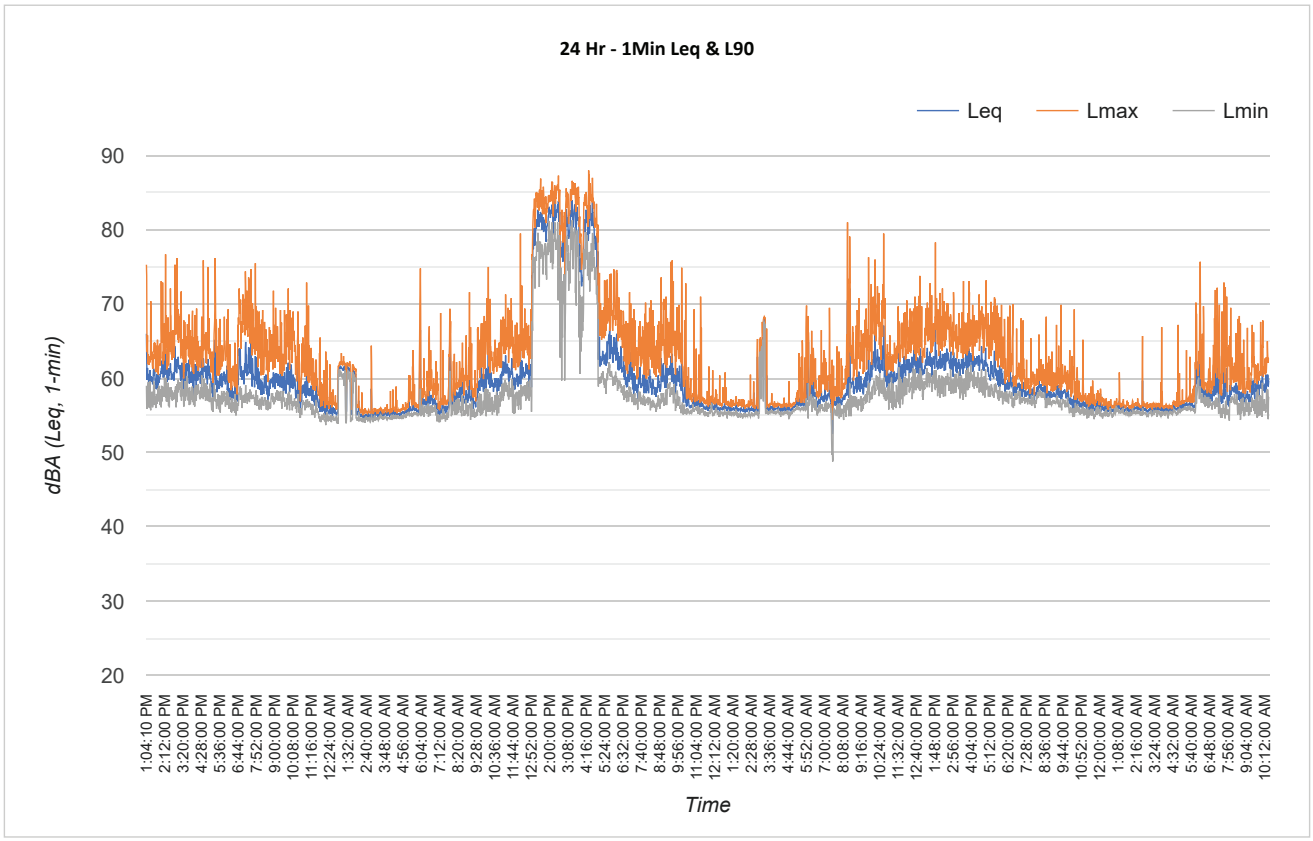
Project Name:	Scottsdale Plaza Resort	**Site Topo:**	Flat overall	**Day:** 1 of 5	
Site Address/Location:	7200 N. Scottsdale Road, Scottsd	**Meteorological Cond.:**	Clear skies	**Noise Source(s) w/ Distance:**	
Site Id:	NM2	**Ground Type:**	Pool deck, concrete	Pool activity; Event music at about 20 feet	



MD ACOUSTICS

24-Hour Continuous Noise Measurement Datasheet - Cont.

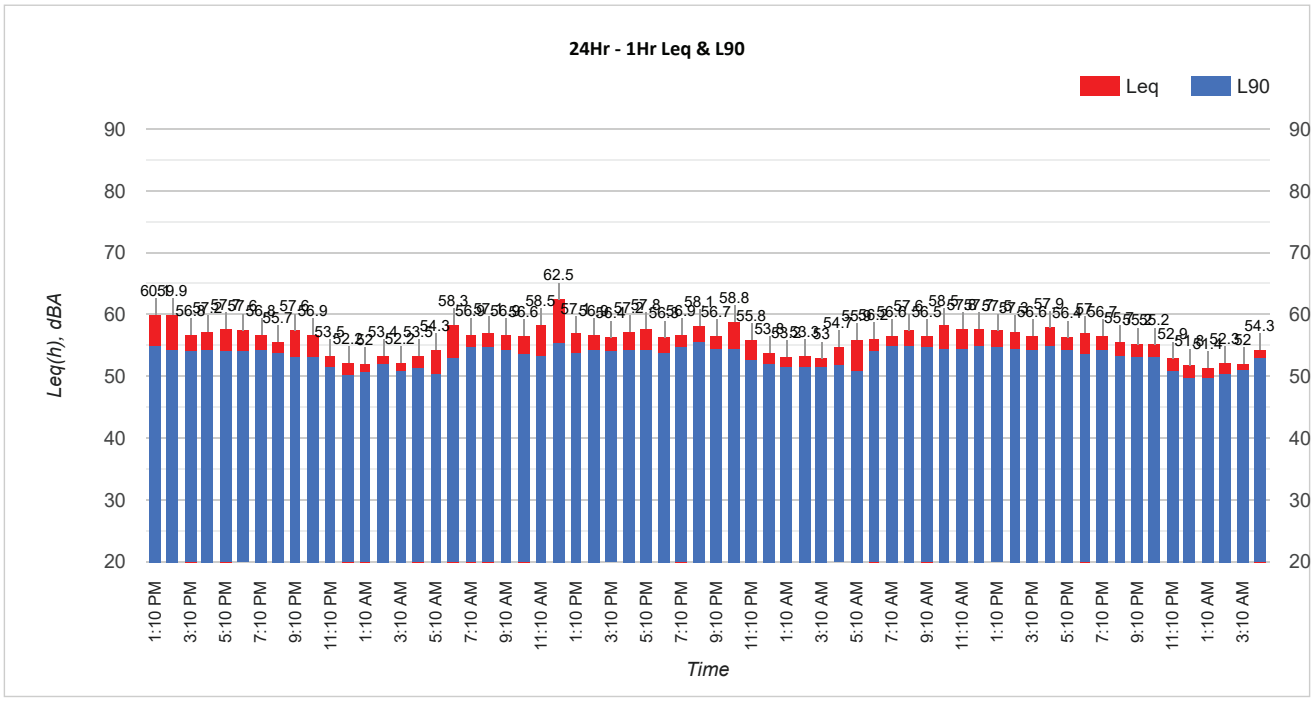
Project Name:	Scottsdale Plaza Resort	**Site Topo:**	Flat overall	**Day:** 1 of 5	
Site Address/Location:	7200 N. Scottsdale Road, Scottsd	**Meteorological Cond.:**	Clear skies	**Noise Source(s) w/ Distance:**	
Site Id:	NM2	**Ground Type:**	Pool deck, concrete	Pool activity; Event music at about 20 feet	



MD ACOUSTICS

24-Hour Continuous Noise Measurement Datasheet - Cont.

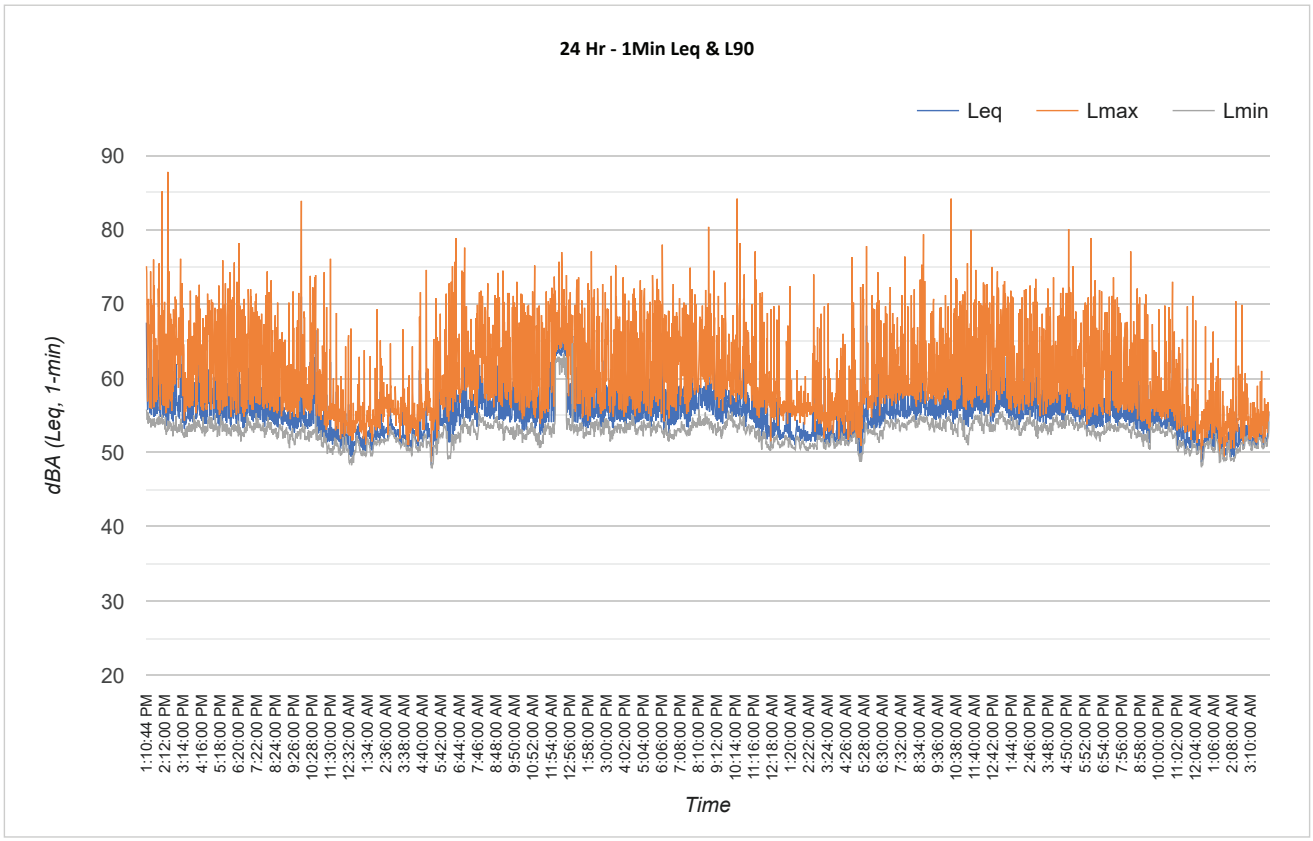
Project Name:	Scottsdale Plaza Resort	**Site Topo:**	Flat overall	**Day:** 1 of 5
Site Address/Location:	7200 N. Scottsdale Road, Scottsd	**Meteorological Cond.:**	Clear skies	**Noise Source(s) w/ Distance:**
Site Id:	NM3	**Ground Type:**	Loose rocks, Asphalt	Traffic, Hummingbird C/L at 23 ft, Scottsdale C/L at ~380 ft



MD ACOUSTICS

24-Hour Continuous Noise Measurement Datasheet - Cont.

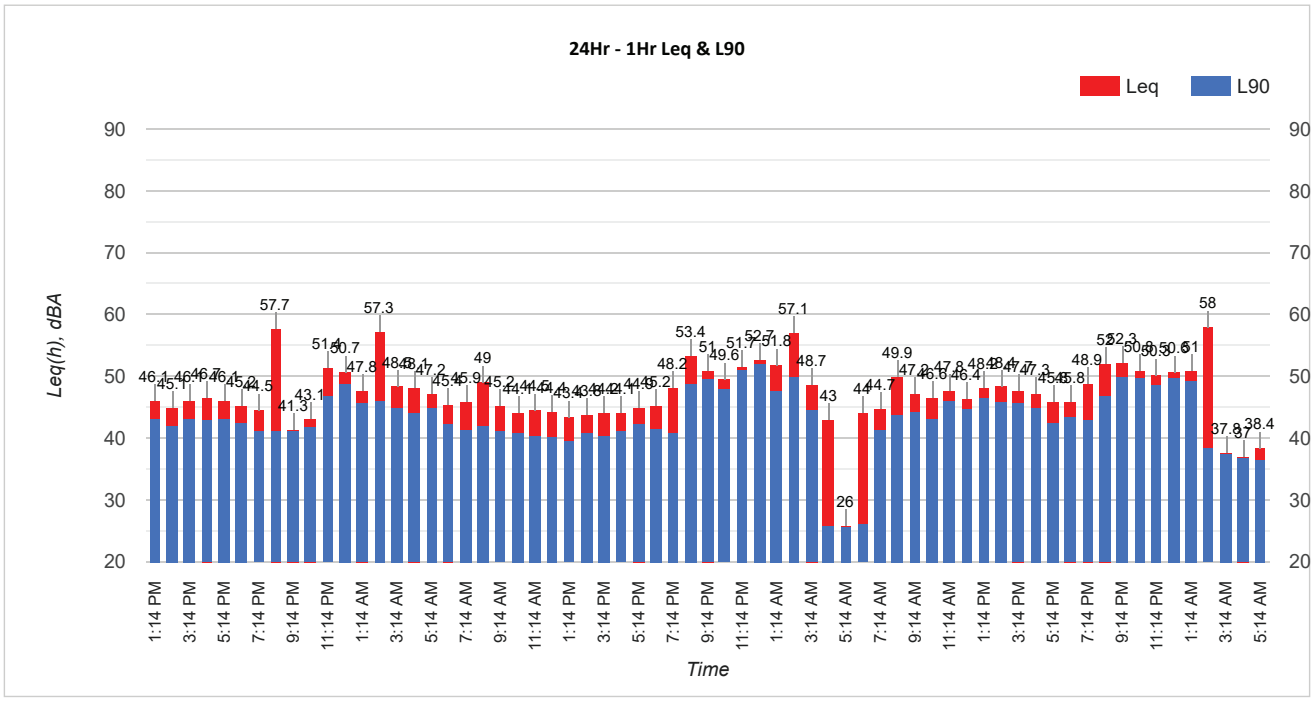
Project Name:	Scottsdale Plaza Resort	**Site Topo:**	Flat overall	**Day:** 1 of 5
Site Address/Location:	7200 N. Scottsdale Road, Scottsd	**Meteorological Cond.:**	Clear skies	**Noise Source(s) w/ Distance:**
Site Id:	NM3	**Ground Type:**	Loose rocks, Asphalt	Traffic, Hummingbird C/L at 23 ft, Scottsdale C/L at ~380 ft



MD ACOUSTICS

24-Hour Continuous Noise Measurement Datasheet - Cont.

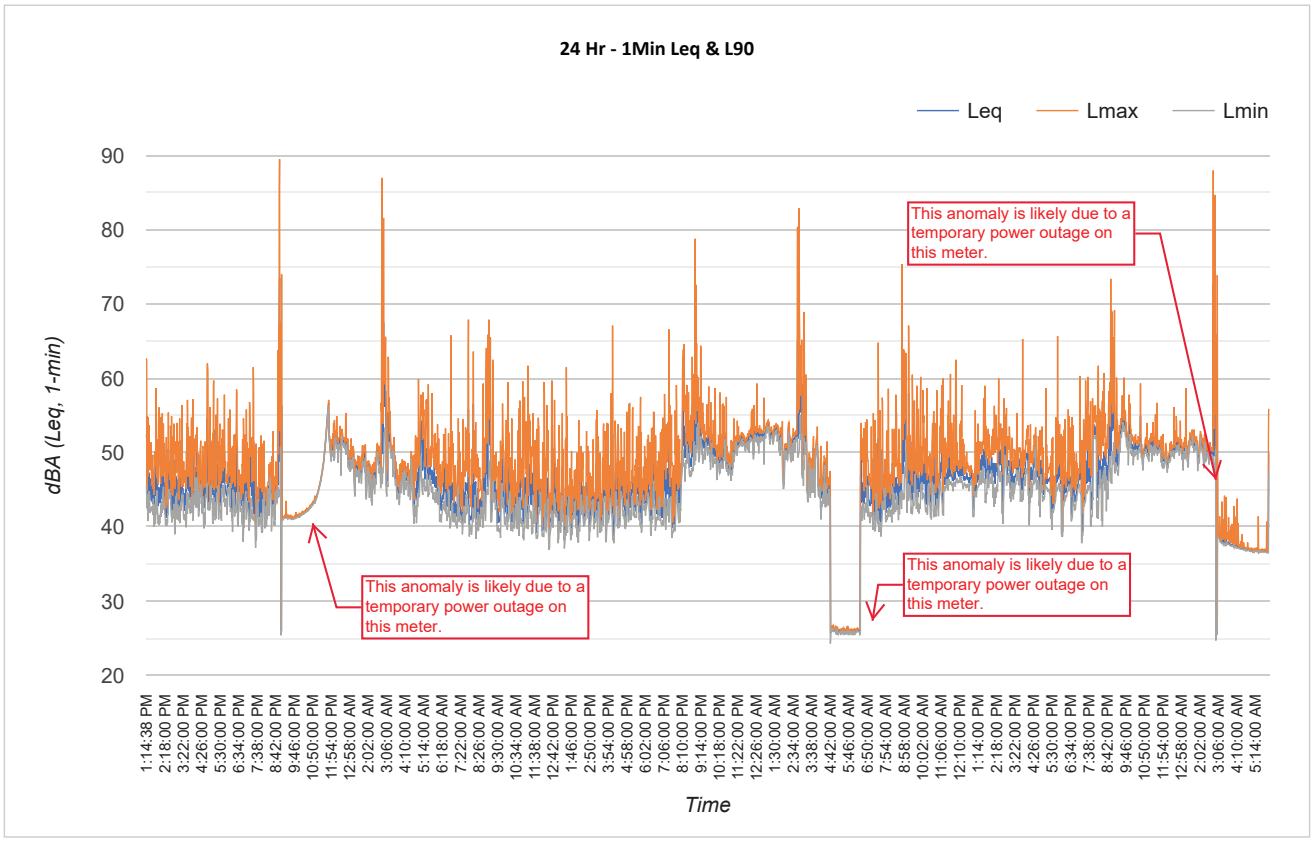
Project Name:	Scottsdale Plaza Resort	**Site Topo:**	Flat overall	**Day:** 1 of 5	
Site Address/Location:	7200 N. Scottsdale Road, Scottsd	**Meteorological Cond.:**	Clear skies	**Noise Source(s) w/ Distance:**	
Site Id:	NM4	**Ground Type:**	Grass	Ambient	



MD ACOUSTICS

24-Hour Continuous Noise Measurement Datasheet - Cont.

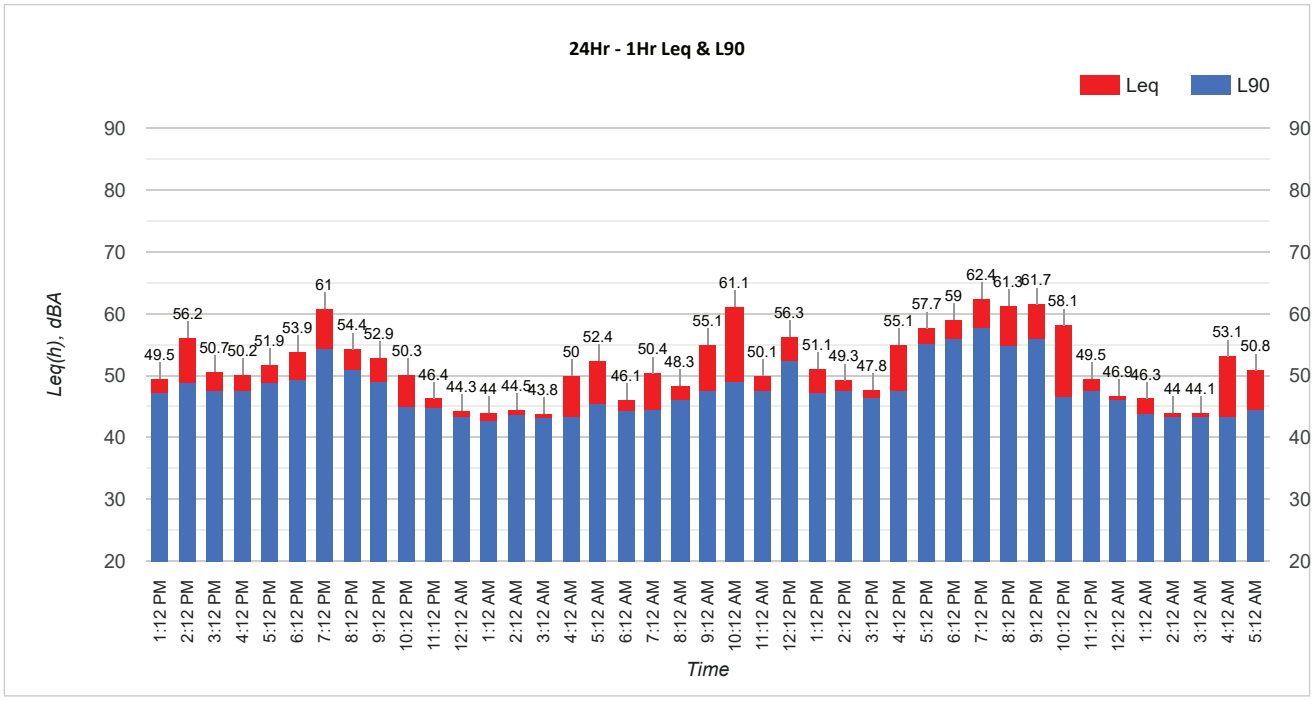
Project Name:	Scottsdale Plaza Resort	**Site Topo:**	Flat overall	**Day:** 1 of 5	
Site Address/Location:	7200 N. Scottsdale Road, Scottsd	**Meteorological Cond.:**	Clear skies	**Noise Source(s) w/ Distance:**	
Site Id:	NM4	**Ground Type:**	Grass	Ambient	



MD ACOUSTICS

24-Hour Continuous Noise Measurement Datasheet - Cont.

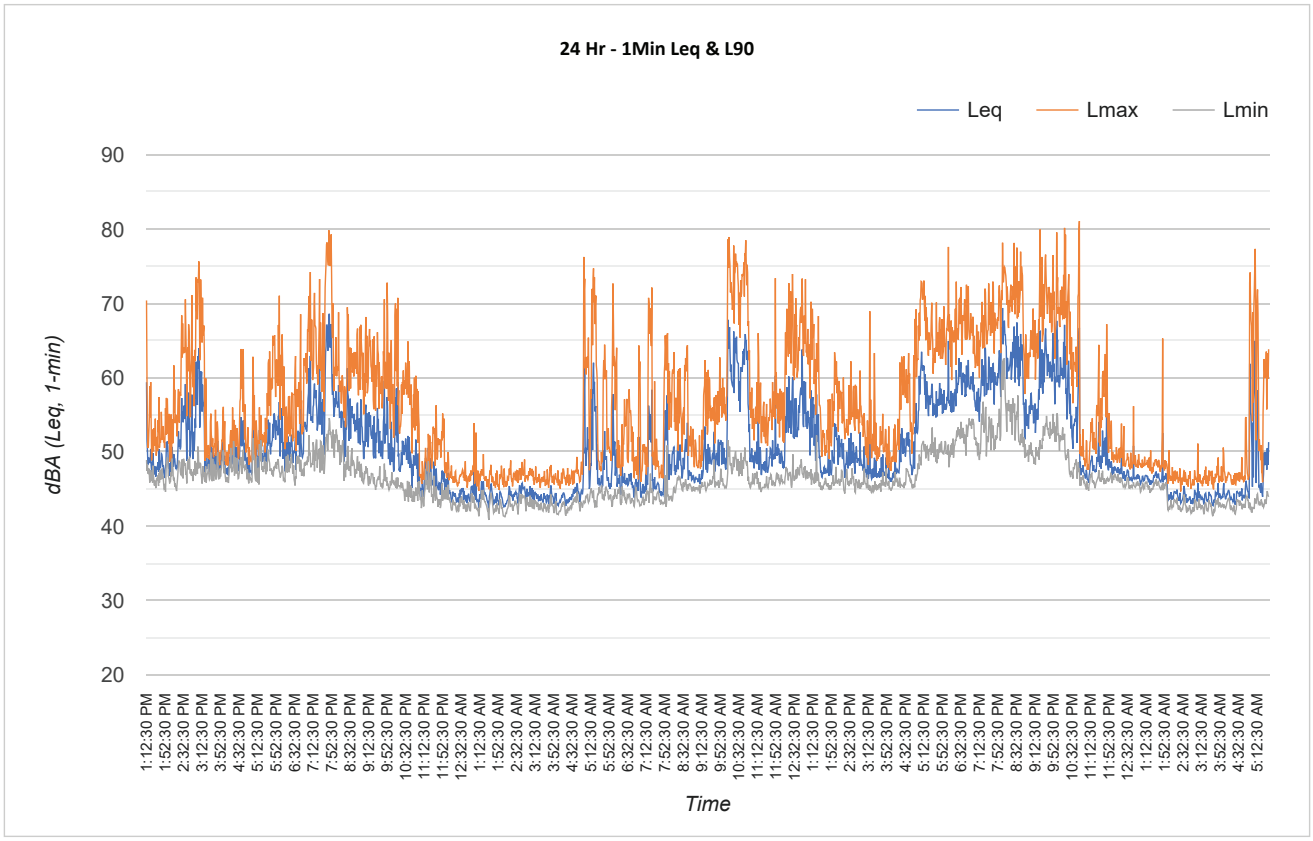
Project Name:	Scottsdale Plaza Resort	**Site Topo:**	Flat overall	**Day:** 1 of 5	
Site Address/Location:	7200 N. Scottsdale Road, Scottsd	**Meteorological Cond.:**	Clear skies	**Noise Source(s) w/ Distance:**	
Site Id:	NM5	**Ground Type:**	Loose rock, pool deck	Pool activity at 48 ft	



MD ACOUSTICS

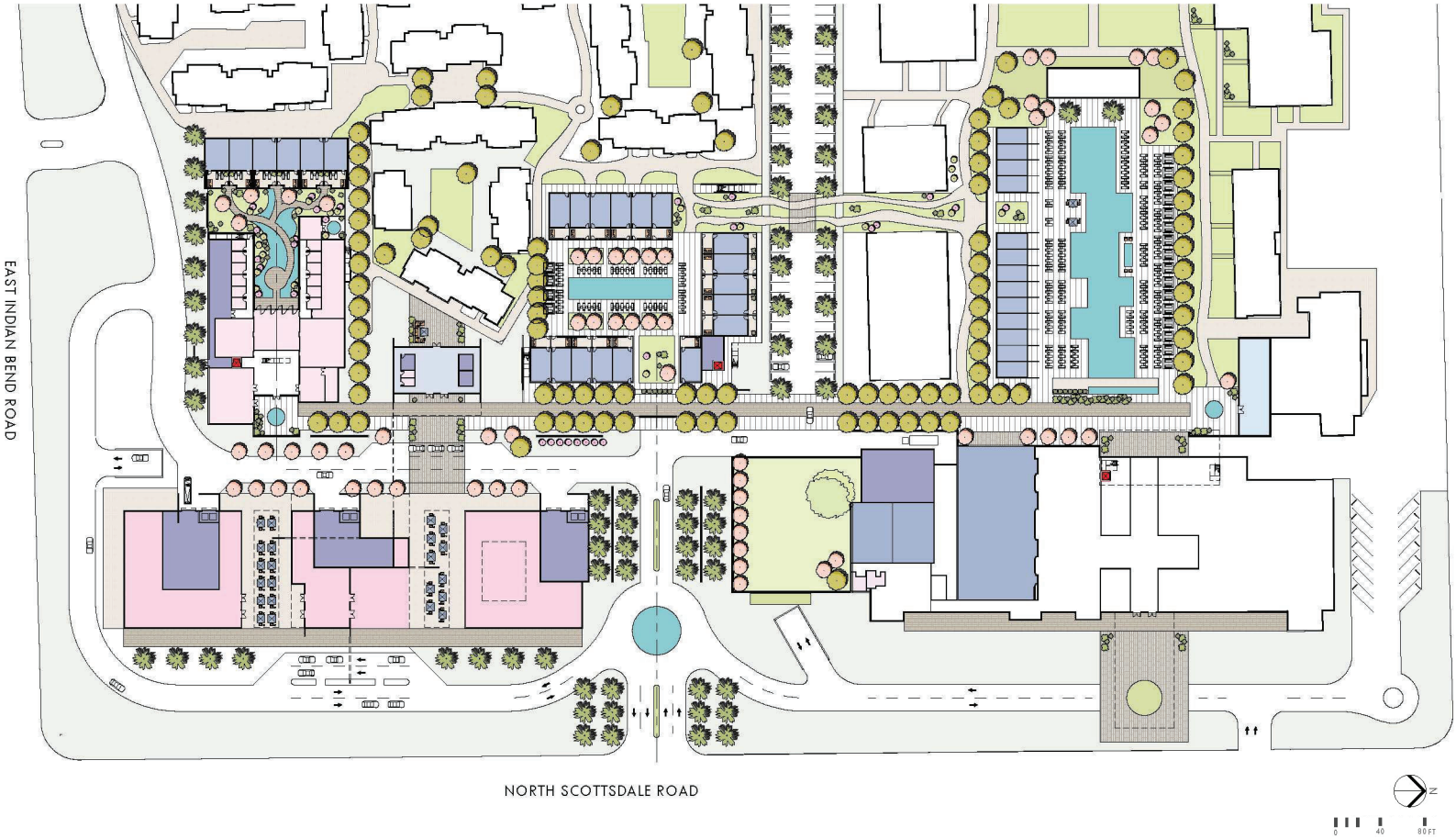
24-Hour Continuous Noise Measurement Datasheet - Cont.

Project Name:	Scottsdale Plaza Resort	**Site Topo:**	Flat overall	**Day:** 1 of 5	
Site Address/Location:	7200 N. Scottsdale Road, Scottsd	**Meteorological Cond.:**	Clear skies	**Noise Source(s) w/ Distance:**	
Site Id:	NM5	**Ground Type:**	Loose rock, pool deck	Pool activity at 48 ft	



MD ACOUSTICS

Appendix C
Updated Site Plan



HKS

2022 0505 SPR MASTERPLAN
25384.000 SCOTTSDALE, AZ

SITE PLAN REVISIONS

MD ACOUSTICS
Sound Solutions for Planning and Design

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August 23, 2022

Mr. Ryan Bosworth
Highgate Hotels
7200 North Scottsdale Road
Scottsdale, AZ 85251

Subject: Scottsdale Plaza Resort– Noise Study and Recommendations – Town of Paradise Valley, AZ

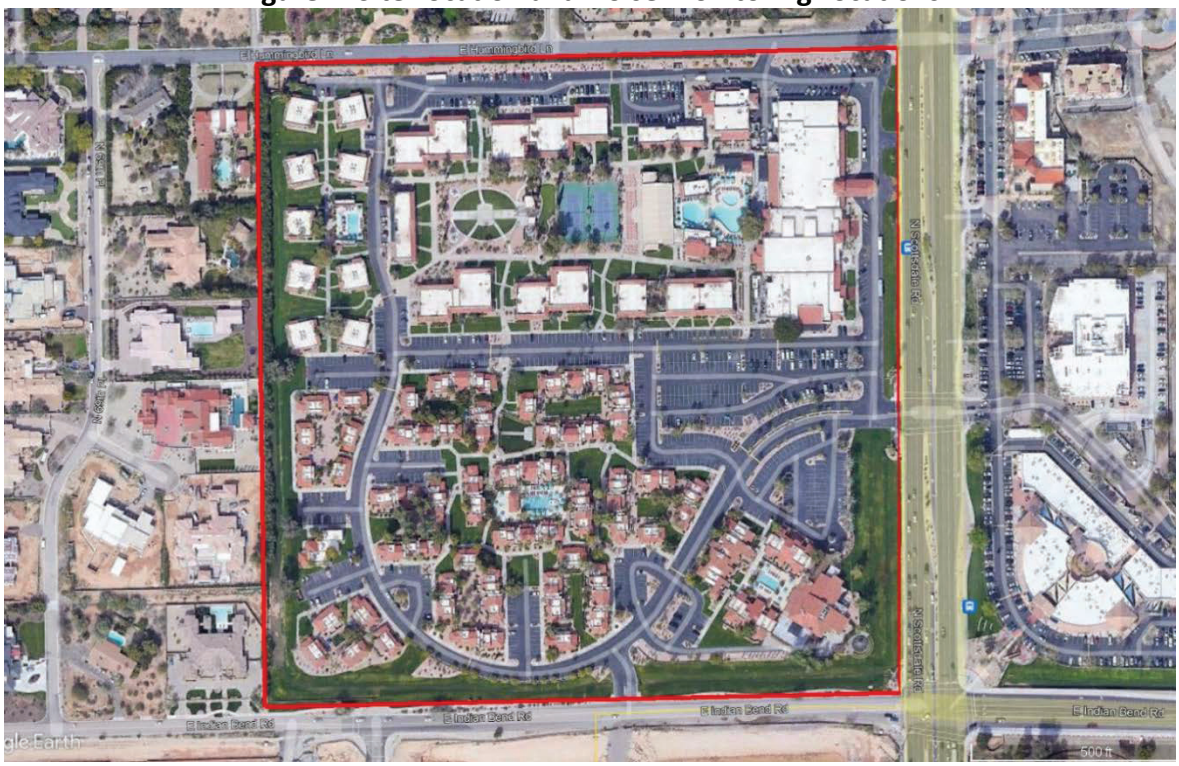
Dear Mr. Kosednar:

MD Acoustics, LLC (MD) is pleased to provide this noise study and recommendations report as it relates to proposed operations and events at the Scottsdale Plaza Resort located at 7200 North Scottsdale Road, Scottsdale, AZ. This study utilized existing baseline noise data and applied the sound data to the proposed renovations. Proposed renovations include removing and replacing some buildings, changing the size and shape of existing swimming pools, adding an additional outdoor pool, and adding an elevated event terrace near the main pool. The project noise levels were assessed at these areas. For your reference, Appendix A contains a glossary of acoustical terms.

1.0 Assessment Overview

This assessment evaluates the Project Noise Levels from the outdoor pool areas, terraces, raised patios, and restaurant areas and compares the projected noise levels to the Town's daytime noise ordinance. Figure 1 below shows the site location, with a red box around the area under evaluation.

Figure 1: Site Location and Noise Monitoring Locations



Using acoustical modeling software, MD created acoustical models to show how the noise from the resort will propagate to the adjacent uses. The acoustical models are calibrated to real-world measurements.

2.0 Local Acoustical Requirements

MD compared the results of the noise assessment to Section 10-7-3 of the Town of Paradise Valley, Town Code. The Town Code states: "Table 1 sets forth the noise level limits for stationary sources, and it is unlawful to project a sound or noise, except those caused by motor vehicles, from one property into another in excess of the stated limits".

Table 1: Limiting Noise Levels for Stationary Sources

TIME	MAXIMUM ALLOWABLE NOISE LEVEL dB (A)
7:00 a.m. to 10:00 p.m.	56
10:00 p.m. to 7:00 a.m. and on all Sundays and specified legal holidays	45

Therefore, project operations must comply with the Town's noise limit of 56 dBA during daytime hours (7AM to 10PM) and 45 dBA during nighttime hours (10PM to 7AM).

3.0 Study Method and Procedure

SoundPlan Acoustic Modeling Software (SP) was utilized to model the operational noise levels from the project site. SP acoustical modeling software is capable of evaluating stationary noise sources (e.g., loudspeakers for live events, DJs, parking lots, crowds, loading/unloading, patios, etc.) and much more. SP's software utilizes algorithms (based on inverse square law) to calculate noise level projections. The software allows the user to input specific noise sources, spectral content, sound barriers, building placement, topography, and sensitive receptor locations. In addition, SP can model the noise sources as point sources, line sources, and area sources. The model incorporates the topography at the project site and the building heights, and it shows how sound propagates to the surrounding area.

Exhibit A shows the proposed renovations planned for the project, and Exhibit B highlights specific areas of acoustical concern highlighted in this report. The future worst-case noise level projections were modeled using area sources for the stationary on-site sources, including the noise from outdoor dining areas and associated with patrons using outdoor swimming pools. In addition, MD modeled two (2) scenarios with amplified live event noise at the project, using point sources to represent loudspeakers used to play music. The two (2) scenarios include a live event at the main pool and a live event at the elevated event terrace just east of the main pool.

Exhibit A: Partial Site Plan

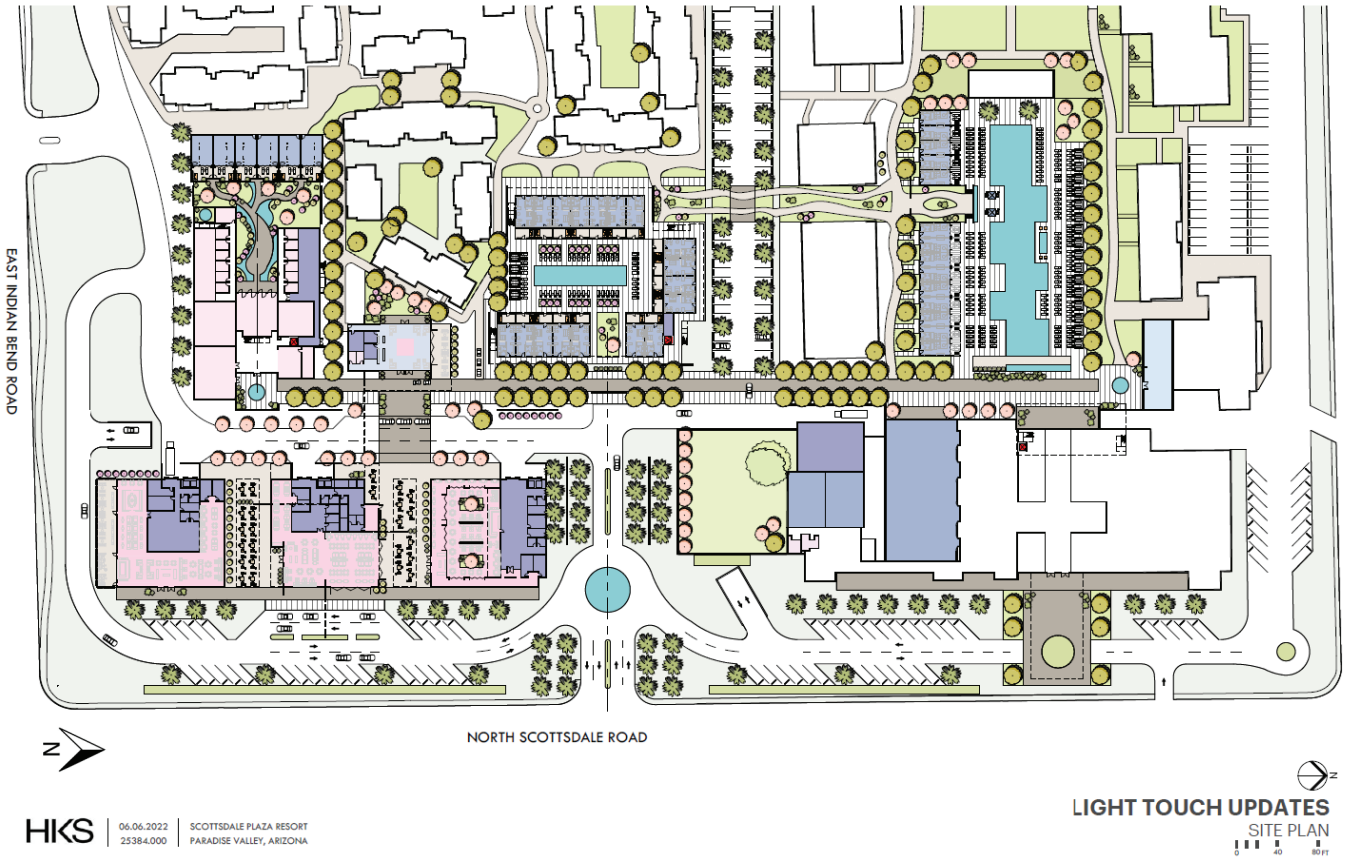


Exhibit B: Acoustical Areas Highlighted

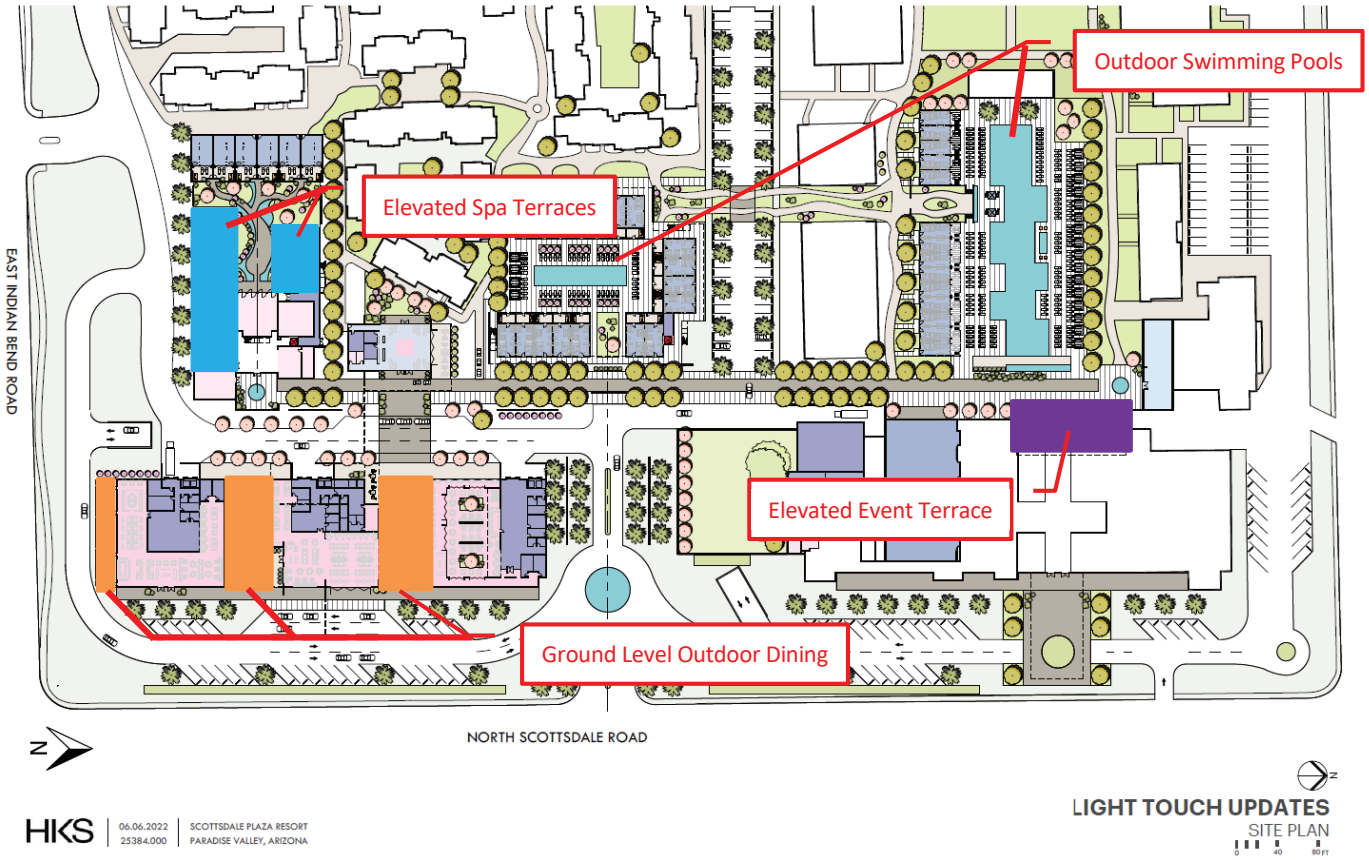


Table 2 below outlines the reference noise levels used to calibrate the models.

Table 2: Reference Sound Level Measurements for SoundPlan Model

Source[1]	Source Type	Reference Level (dBA)	Distance (ft)
Outdoor Pools	Area Source	65	1
Outdoor Dining	Area Source	65	1
Elevated Spa Terraces	Area Source	60	1
Pool Event Noise	Point Source	95	3
Terrace Event Noise	Point Source	90	3

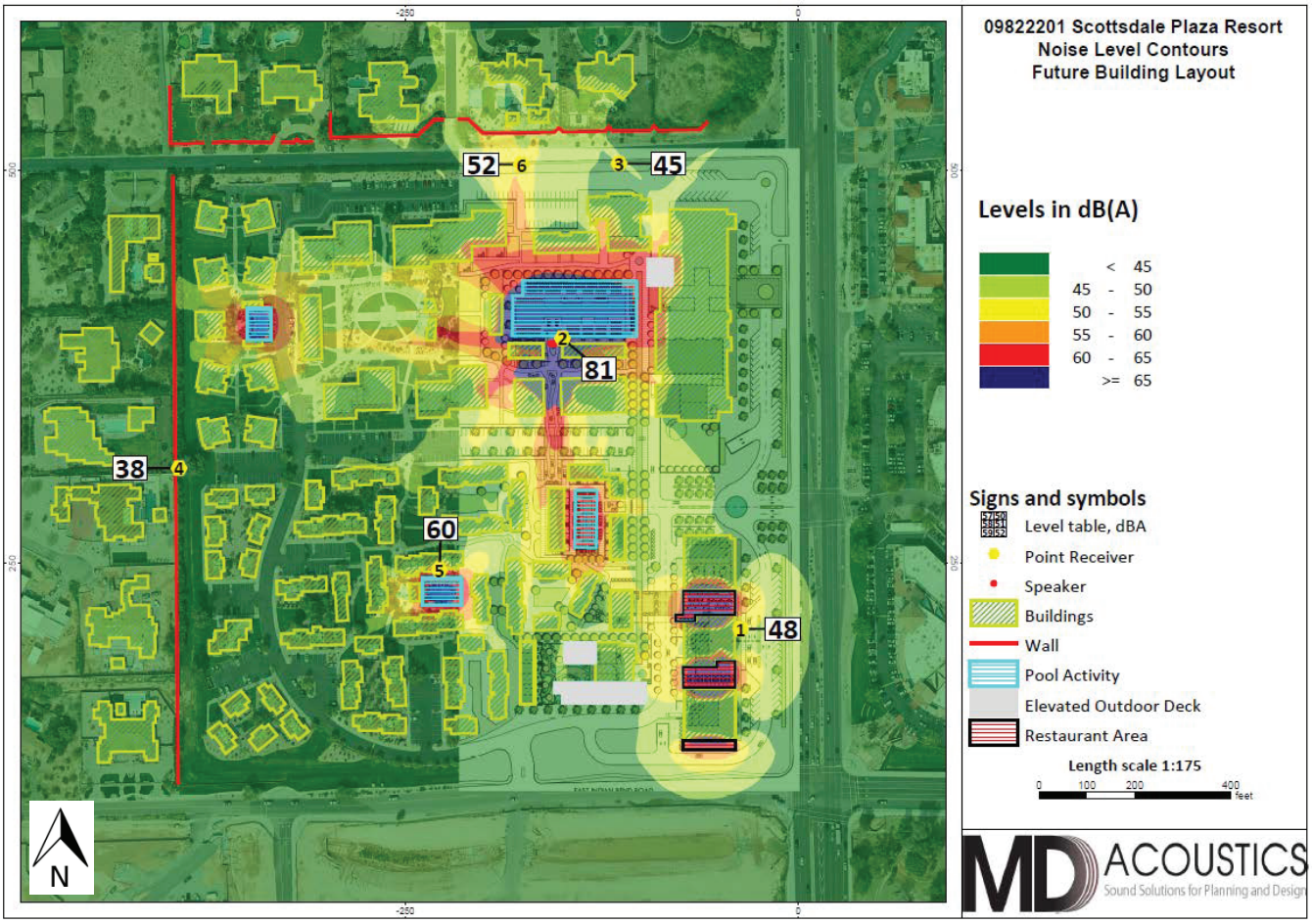
1. The noise levels for the outdoor pools and event noise levels are based on real-world measurements conducted at Scottsdale Plaza Resort July 2022. The noise levels for the outdoor dining areas and spa terraces are based on assumptions of nonamplified noise levels of restaurant or spa patrons, respectively.

4.0 Findings and Recommendations

4.1 Main Pool Event

Figure 3 shows the noise level contours for the scenario in which there is an event with amplified music at the main pool. See Appendix B for an enlarged image.

Figure 3: Main Pool Event



MD has evaluated the noise levels shown in Figure 3 based on the following assumptions:

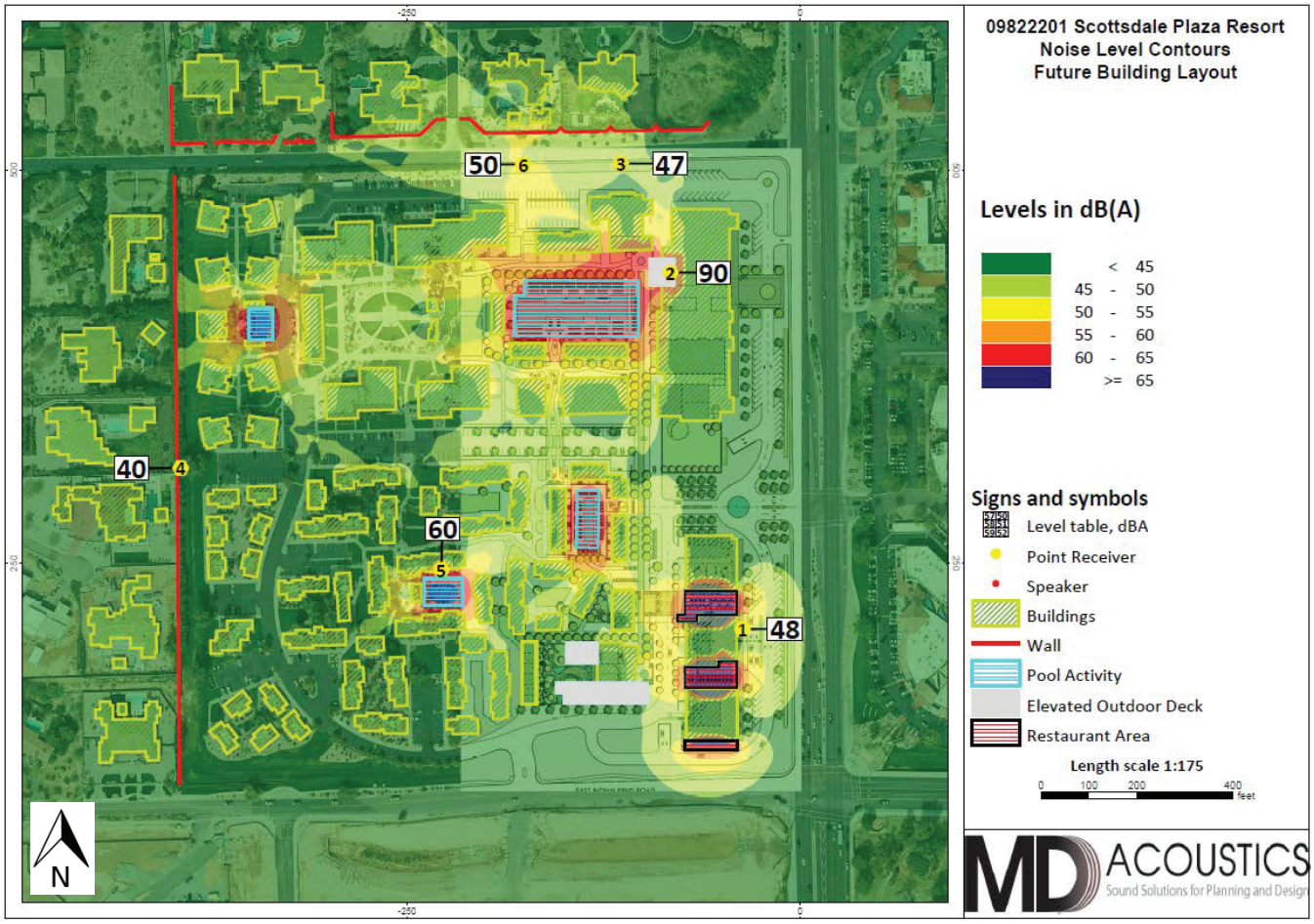
1. All the outdoor pools are occupied
2. All the outdoor dining areas are fully occupied
3. The outdoor spa terraces are occupied
4. There is an event with amplified music at the main pool.

As shown in Figure 3, the noise levels do not exceed the Town's daytime 56 dBA noise limit. Noise from the spa terraces is contained by the spa buildings, and noise from the outdoor dining areas is well below the existing ambient noise level due to traffic along Scottsdale Road. The amplified music from the main pool (located near Receptor 2) is screened and scattered by the proposed buildings such that it does not exceed the Town's daytime 56 dBA limit.

4.2 Elevated Terrace Event

Figure 4 shows the noise level contours for the scenario in which there is an event with amplified music at the elevated terrace. See Appendix B for an enlarged image.

Figure 4: Elevated Terrace Event



MD has evaluated the noise levels shown in Figure 4 based on the following assumptions:

1. All the outdoor pools are occupied
2. All the outdoor dining areas are fully occupied
3. The outdoor spa terraces are occupied
4. There is an event with amplified music at the elevated event patio.

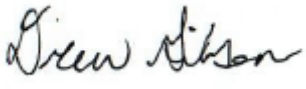
As shown in Figure 4, the noise levels do not exceed the Town's daytime 56 dBA noise limit. Noise from the spa terraces is contained by the spa buildings, and noise from the outdoor dining areas is well below the existing ambient noise level due to traffic along Scottsdale Road. The amplified music from the elevated event terrace (located near Receptor 2) is screened and scattered by the proposed buildings such that it does not exceed the Town's daytime 56 dBA limit.

5.0 Conclusions

MD is pleased to provide this noise study for the Scottsdale Plaza Resort. The potential noise impact of the proposed modifications to the project site were evaluated using SoundPlan Acoustical Modeling Software. The project will not exceed the Town of Paradise Valley noise limits.

If you have any questions regarding this analysis, please call our office at (602) 774-1950.

Sincerely,
MD Acoustics, LLC



Samuel Hord, INCE
Acoustical Consultant

Drew Gibson
Acoustical Consultant

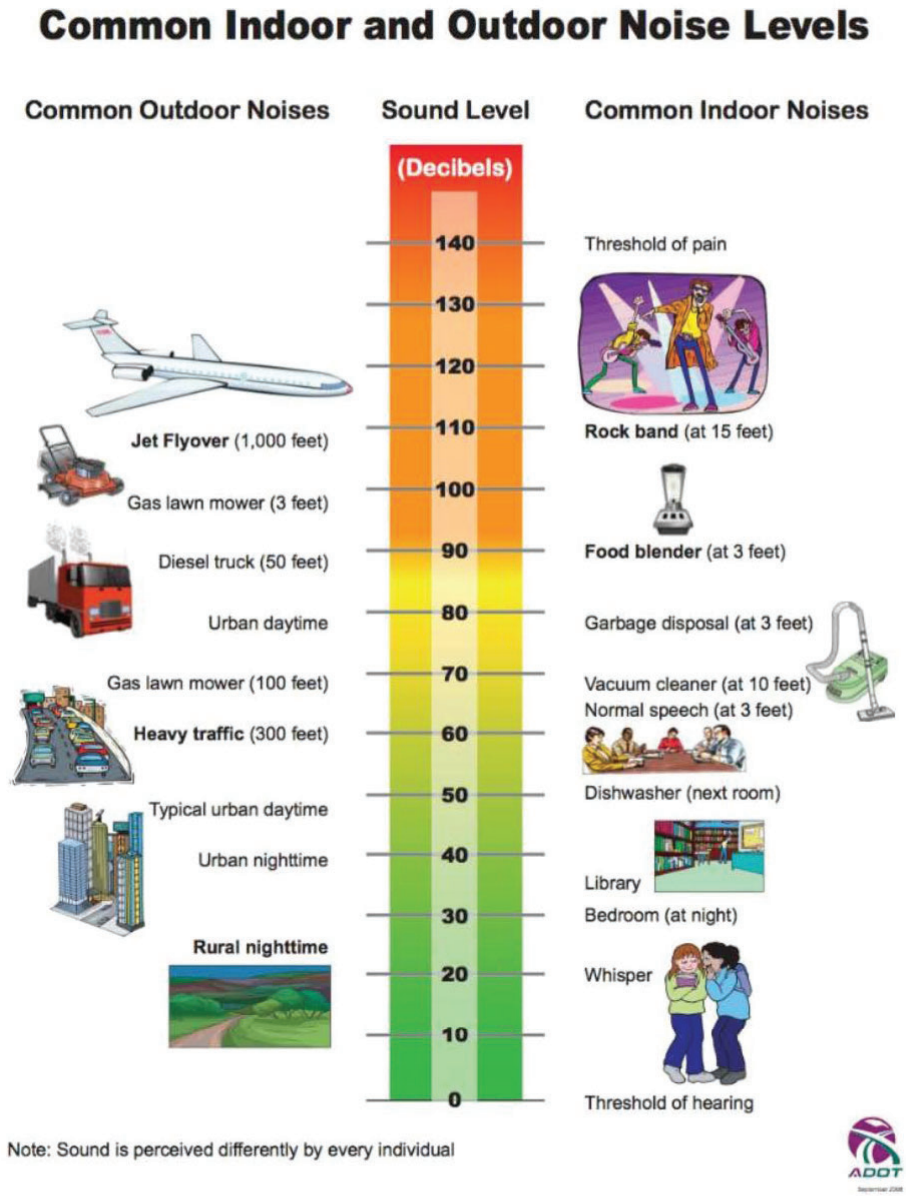
Appendix A

Glossary of Acoustical Terms

Glossary of Terms

A-Weighted Sound Level: The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear. A numerical method of rating human judgment of loudness.

Ambient Noise Level: The composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.



C-Weighted Sound Level: The sound pressure level in decibels as measured on a sound level meter using the C-weighted filter network. The C-weighting filter greatly de-emphasizes very high frequency components of the sound and slightly de-emphasizes the very low frequency components. A numerical method of rating human judgment of loudness.

Community Noise Equivalent Level (CNEL): The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five (5) decibels to sound levels in the evening from 7:00 to 10:00 PM and after addition of ten (10) decibels to sound levels in the night before 7:00 AM and after 10:00 PM.

Decibel (dB): A unit for measuring the amplitude of a sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micro-pascals.

dB(A): A-weighted sound level (see definition above).

dB(C): C-weighted sound level (see definition above).

dB(Z): Z-weighted sound level (see definition of dB above).

Equivalent Sound Level (LEQ): The sound level corresponding to a steady noise level over a given sample period with the same amount of acoustic energy as the actual time varying noise level. The energy average noise level during the sample period.

Habitable Room: Any room meeting the requirements of the Uniform Building Code or other applicable regulations which is intended to be used for sleeping, living, cooking or dining purposes, excluding such enclosed spaces as closets, pantries, bath or toilet rooms, service rooms, connecting corridors, laundries, unfinished attics, foyers, storage spaces, cellars, utility rooms and similar spaces.

Human Sensitivity to Sound: In general, the healthy human ear can hear between 20 Hz to 20,000 Hz. Frequencies below 125 Hz are typically associated with low frequencies or bass. Frequencies between 125 Hz and 5,000 Hz are typically associated with mid-range tones. Finally, frequencies between 5,000 and 20,000Hz are typically associated with higher range tones.

The human ear is sensitive to changes in noise levels, depending on the frequency. Generally speaking, the healthy human ear is most sensitive to sounds between 1,000 Hz and 5,000 Hz (A-weighted scale) and perceives a sound within that range as being more intense than a sound with a higher or lower frequency with the same magnitude. At lower and higher frequencies, the ear can become less sensitive depending on a number of factors. Table 1 provides a brief summary of how humans perceive changes in noise levels.

Table 1: Change in Noise Level Characteristics[1]

Changes in Intensity Level, dBA	Changes in Apparent Loudness
1	Not perceptible
3	Just perceptible
5	Clearly noticeable
10	Twice (or half) as loud

https://www.fhwa.dot.gov/environMent/noise/regulations_and_guidance/polguide/polguide02.cfm

L(n): The A-weighted sound level exceeded during a certain percentage of the sample time. For example, L10 in the sound level exceeded 10 percent of the sample time. Similarly, L50, L90 and L99, etc.

Noise: *A*ny unwanted sound or sound which is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying. The State Noise Control Act defines noise as "...excessive undesirable sound...".

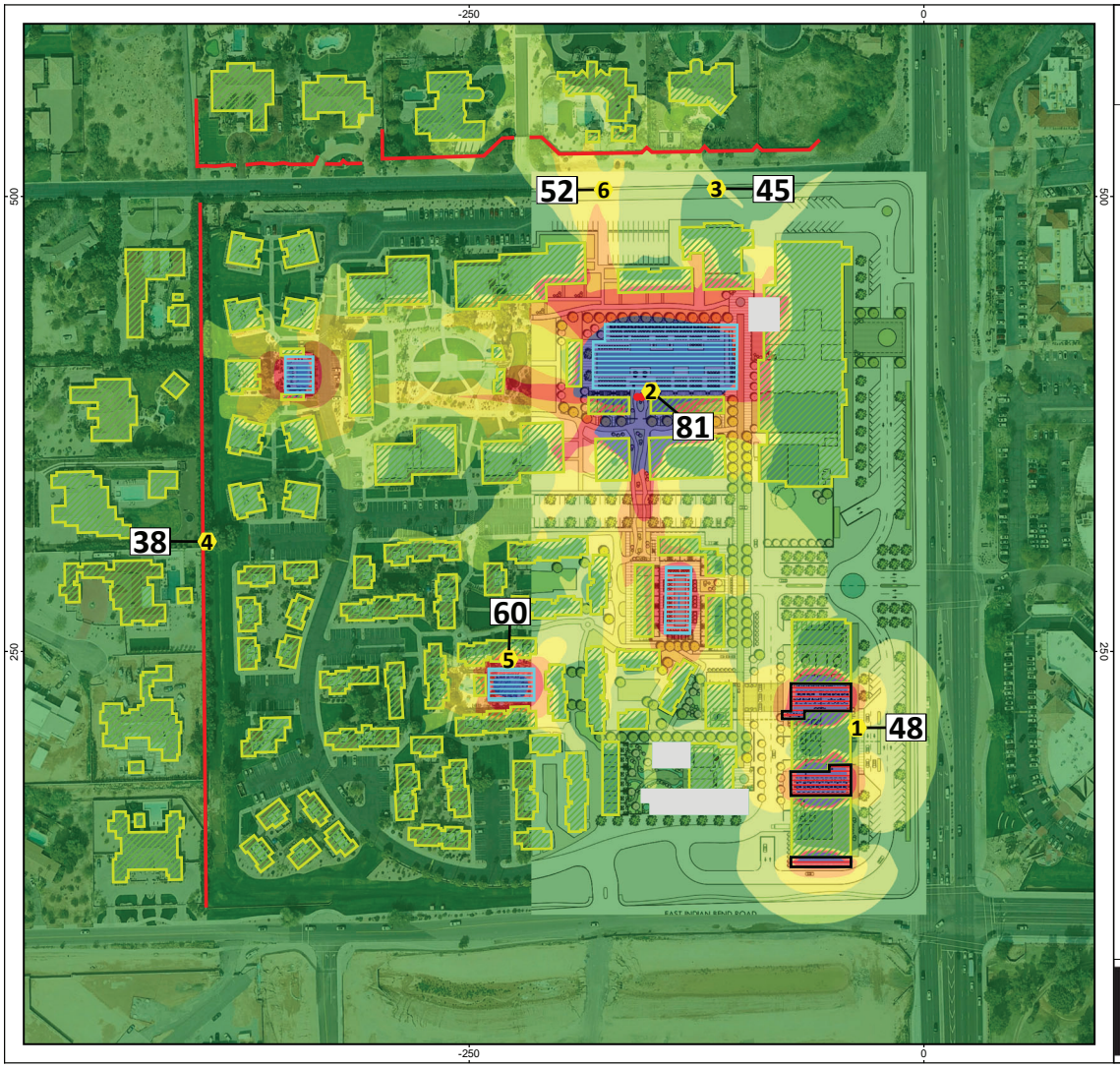
Percent Noise Levels: See L(n).

Sound Level (Noise Level): The weighted sound pressure level obtained by use of a sound level meter having a standard frequency-filter for attenuating part of the sound spectrum.

Sound Level Meter: An instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement and determination of noise and sound levels.

Single Event Noise Exposure Level (SENEL): The dB(A) level which, if it lasted for one second, would produce the same A-weighted sound energy as the actual event.

Appendix B
SoundPlan Outputs



09822201 Scottsdale Plaza Resort
Noise Level Contours
Future Building Layout

Pool Event Scenario

Levels in dB(A)

	<	45
45	-	50
50	-	55
55	-	60
60	-	65
	>=	65

Signs and symbols

- 57|50 / 58|51 / 59|52 — Level table, dBA
- Point Receiver
- Speaker
- Buildings
- Wall
- Pool Activity
- Elevated Outdoor Deck
- Restaurant Area

Length scale 1:175

0 100 200 400 feet

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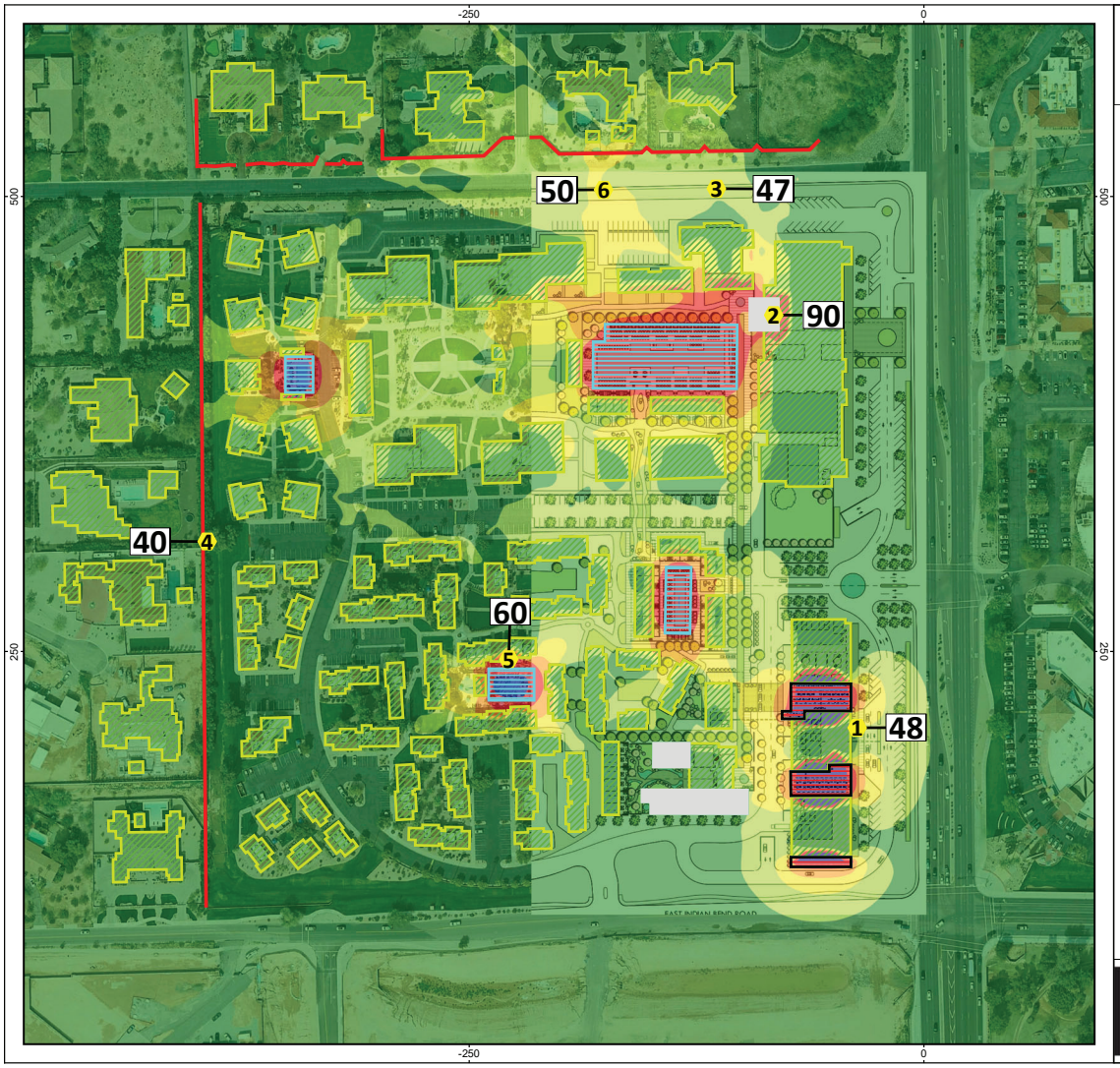

09822201 Scottsdale Plaza Resort
Noise Level Contours
Future Building Layout

Elevated Terrace Event Scenario

Levels in dB(A)

	<	45
45	-	50
50	-	55
55	-	60
60	-	65
	>=	65

Signs and symbols

- Level table, dBA
- Point Receiver
- Speaker
- Buildings
- Wall
- Pool Activity
- Elevated Outdoor Deck
- Restaurant Area

Length scale 1:175

0 100 200 400 feet

MD ACOUSTICS
Sound Solutions for Planning and Design

Scottsdale Plaza Resort
Past Noise Complaints

Police records over last 5 years

- 7 total complaints on noise
- Complaints were on 5 days
    - Sept 29, 2019, 9:25 p.m. (Fri) – from a resort guest
    - Jan 2, 2021, 11:07 p.m. (Sat) – Fiesta Bowl party - from a resort guest
    - Feb 6, 2021, 8:22 p.m. (Sat) – 70 decibels – from person at train park
    - Oct 27, 2022, 8:18 p.m. 8:22 p.m., & 9:40 p.m. (Thurs)
    - Nov 18, 2022, 8:25 p.m. (Fri) – 47 decibels not a violation

Note: Only includes complaints filed with Town Police Department

Record range January 2018 through January 2023