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Attn: Vince Dalke

ACS has been asked to assess the potential noise impact from the proposed Pickle and Pour (7300 E McDowell Road, Scottsdale) to the closest residential properties to the north. See attached Site Plan.

TECHNICAL TERMS:

Decibel - A unit for measuring the intensity of sound. The human hearing range is from 0 dB (the theoretical threshold of audibility) to 130 dB (the average pain threshold).

dBA - Sound pressure level expressed in decibels, filtered or weighted at the various frequencies to approximate the response of the human ear.

Changes in Intensity Level, dBA	Changes in Apparent Loudness
1	Almost imperceptible
3	Just perceptible
5	Clearly noticeable
10	Twice (or half) as loud

Leq - Equivalent Continuous Level. A logarithmic energy average over a specific time period.

NOISE LEVEL LIMIT:

The City of Scottsdale noise ordinance does not necessarily specify a noise level limit. The ordinance states:

Sec. 19-26. - Unreasonable noise created by businesses that serve alcohol or provide live entertainment prohibited.

(A) It shall be unlawful for a business that serves alcohol or provides live entertainment to create unreasonable noise that through its operations disturbs the peace or quiet of a residential district that contains dwellings.

(C) A sound level meter may be used, but is not required, to assist in determining whether noise is unreasonable or not.

(D) It shall be a rebuttable presumption under this article that noise levels over sixty-eight (68) dBA are considered unreasonable.

Since the 68 dBA level is described as “rebuttable”, the assessment location is somewhat unclear, and a violation can be determined subjectively (without the use of a sound meter), I recommend a quieter design goal of not to exceed 55 dBA at the residential property line.

55 dBA has been used as a historic noise limit guideline by the City of Phoenix. Phoenix has specified a 55 dBA limit at the residential properties for numerous projects, including to protect the residential properties near the Wrigley Mansion Club and the Royal Palms Resort. Additionally, the City of Scottsdale has used a specified 55 dBA noise limit at the residential properties for some uses.

FINDINGS:

Pickle and Pour Noise Sources

The potential noise sources from this use are pickleball paddle strikes, background music at the courts, periodic live music in the building, and patron noise.

Pickleball Noise – To project the potential noise level of the pickle ball paddle strikes to the residential property line, ACS used the maximum noise level measurement (performed by others) at Osborne Parks, Sandusky, Ohio. These measurements were documented within a white paper “Pickleball Sound 101” presented at Noise-Con 2023. The maximum pickleball noise level (LAF Max dBA) measured during this study was used as a baseline for the projections to the residential property line north of the proposed Pickle and Pour.

The projected maximum levels (without any barrier) are 63.0 dBA to 67.2 dBA depending on how close the paddle strike occurs to the property line. To reduce the potential noise impact to the proposed design goal of 55 dBA, I recommend a 10’ high barrier at the dining and recreational area fence – such as AcoustiBlok. <https://acoustiblok.com/2013/04/08/pickleball-court-reduced-noise/>

Note: Make sure the AcoustiBlok product overlaps to ensure a solid/continuous barrier.

This barrier should reduce the noise level at the residential property line to 53.5 dBA to 54.6 dBA (depending on the player’s location on the court).

Live Music - ACS has been informed that this periodic occurrence would be contained indoors. The levels should be limited so that the potential noise impact at the residential property line complies with the proposed design goal. The barrier used to help reduce the pickleball noise will also reduce the music noise levels.

Outdoor Speakers - ACS has been informed that background music will be played at the pickleball courts. The speakers will be oriented away from the residential properties. The levels should be limited so that the potential noise impact at the residential property line complies with the proposed design goal. The barrier used to help reduce the pickleball noise will also reduce the music noise levels.

Patron Noise - Patron noise is typically not subject to municipal noise ordinances. The barrier used to help reduce the pickleball noise will also reduce the patron noise levels.

CONCLUSIONS:

With the 10’ high barrier, the potential noise should be controlled to the recommended design goal of 55 dBA at the residential property line. (Note: This does not include the additional noise reduction provided by the existing CMU residential wall.)

Please let me know if you have any questions or need additional information.

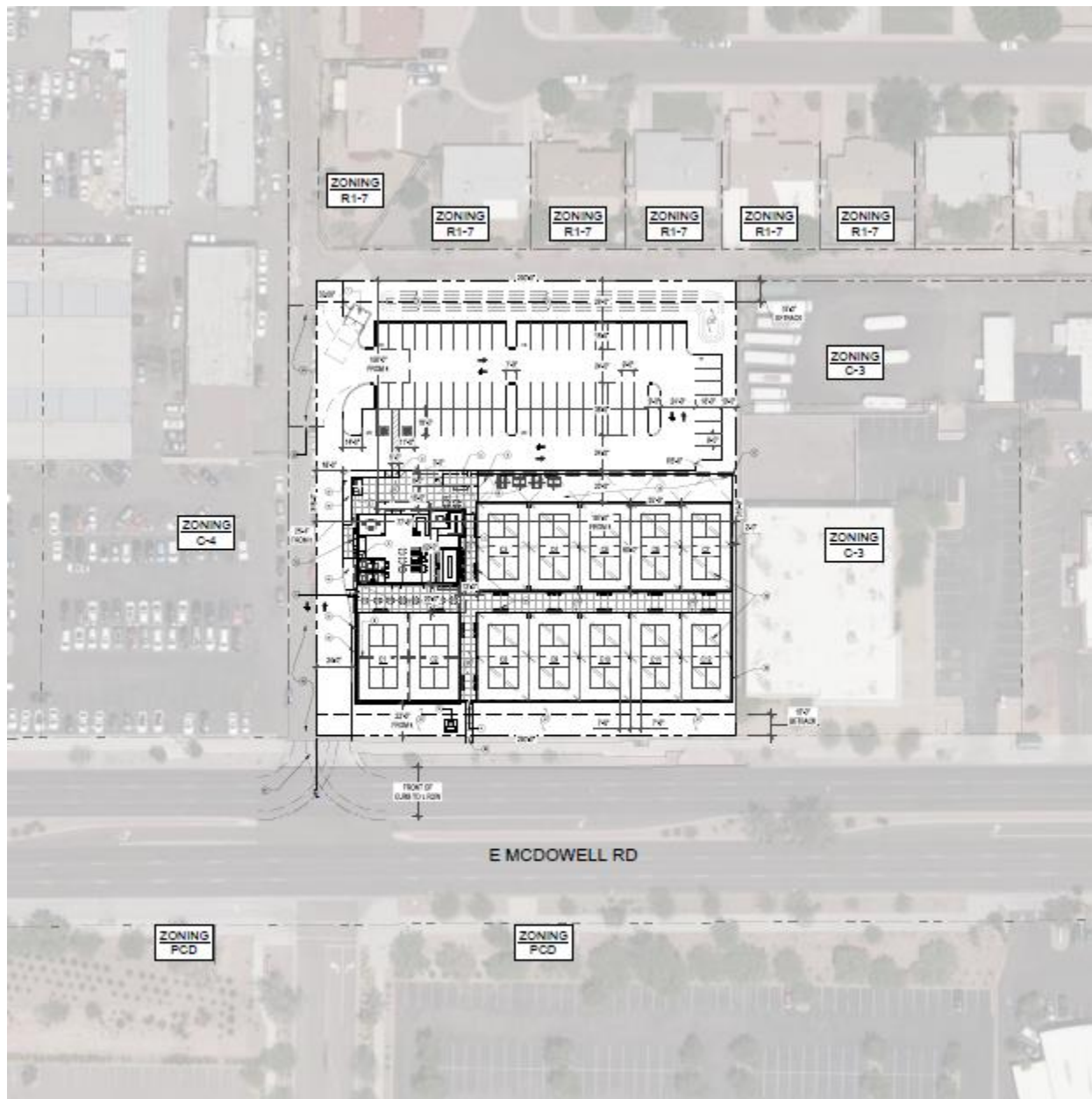
Respectfully,



Tony Sola

Acoustical Consulting Services, LLC

Site Plan



PRELIMINARY SITE & PARKING PLAN
SCALE: 1" = 40'-0"

