



EDWARD DUGGER + ASSOCIATES, P.A.
Consultants in Architectural Acoustics

SITE NOISE STUDY

Date: 2 June 2021

To: Richard Kellems, CFO

Palm Beach Country Club
760 North Ocean Boulevard
Palm Beach, FL 33480

Cc: Michael Margolis, Member

From: Edward Dugger, FAIA ASA NCAC INCE
Irineo Jaimes, ASA

Re: **Architectural Acoustic – PADEL Tennis Noise Study**
Palm Beach Country Club
760 North Ocean Boulevard
Palm Beach, FL 33480

Richard,

Edward Dugger + Associates, P.A. (ED+A) prepared this noise study to detail the theoretical sound levels neighboring areas can expect from activity resulting from Palm Beach Country Club's proposed PADEL tennis courts.

Please contact ED+A with any questions or comments regarding the contents of this report.

SUMMARY

Edward Dugger + Associates (ED+A) were commissioned by Palm Beach Country Club (PBCC) to provide a noise study for proposed PADEL tennis courts to be located northwest of intersection N County Road and Fairview Rd. Nievera Williams Design (NWD) provided ED+A with site plans that were used to develop an acoustical model to determine the impact PADEL tennis activity would have on the surrounding areas near the site.

PROJECT INFORMATION

PBCC located at 760 N Ocean Blvd, Palm Beach, FL currently contains golf and tennis facilities. It is bordered by N Ocean Blvd on its east, Country Club Rd and Fairview Rd to its south, N Lake Trail to its west, and Bhama Lane to its north. PBCC is zoned R-A "Estate Residential" and is adjacent to residential properties to its north and south zoned R-B "Low Density Residential". PBCC and the surrounding properties are shown in Figure 1.

ACOUSTICAL MODEL

ED+A's acoustical model used data collected from previous ED+A acoustical studies of PADEL Tennis and standard Tennis to generate theoretical values representative of the noise that would propagate to surrounding areas. ED+A used a sound pressure level vs. distance from source calculation to generate values and factored in attenuation resulting from potential barriers.

REGULATORY CRITERIA – CODE OF THE TOWN OF PALM BEACH

The Code of the Town of Palm Beach, *Chapter 42 – Environment – Article V. – Division 2. – Measured Criteria – Sections 42-266 through 260* detail the noise regulations applicable to the proposed development.

Sound levels are evaluated at *"the property line of the private property originating the noise"*. The Code establishes separate standards for daytime (9:00 a.m. to 7:00 p.m.) and nighttime (7:00 p.m. to 9:00 a.m.) hours.

Sound Level Limits at Property Line of Private Property

The sound levels at the property line of private property (*"From the northerly corporate limits southerly to Wells Road"*) are not to exceed 61 dBA between 9:00 a.m. and 7:00 p.m., and 55 dBA between 7:00 p.m. and 9:00 a.m.

RESULTS

PADEL tennis activity typically generated sound levels 2 dBA lower than what resulted from regular tennis activity from our previous acoustic studies. Important to note that further attenuation would be enabled when accounting for the barrier structure that would surround the proposed PADEL Tennis Courts, which will be a heavy laminate glass (assumed > 0.5" thick). ED+A have observed, in previous studies, a reduction of 10 dB when implementing the glass barrier. Therefore, the PADEL theoretical sound levels were estimated between 42–54 dBA at the southern PBCC's property line. ED+A believes activity from PBCC's proposed new PADEL Tennis Court would be within the noise limits of 61 day / 55 night dBA set forth by the Town of Palm Beach.



Figure 1. PBCC (L1), the proposed PADEL tennis courts site (S1) and nearest residential properties (P1)