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September 16, 2010

Mr. Warren Fondu
Andretti Indoor Karting and Games
11000 Alpharetta Highway
Roswell, Georgia 30076

Re: Andretti Speed Lab Noise Survey

Dear Warren:

We have completed our study of the potential acoustical impact of the proposed outdoor go-kart track at your facility upon the nearby residential community and offer the following report.

INVESTIGATION

In order to determine the potential acoustical impact of the proposed outdoor go-kart track upon the ambient sound level at the nearest residential community, Brookdale Chambrel at Roswell located near the intersection of Houze Way and Houze Road, two sets of sound level measurements were performed. The first set of measurements was made at four locations in the vicinity of your facility on Tuesday, September 14, 2010 between approximately 9:15 am and 9:40 am while ten go-karts were operating in the parking lot in the proposed location of the outdoor track. The measurement locations, shown and notated as Locations 1 through 4 in Figure 1, were chosen to provide data at various distances from the proposed track. At each location, measurements were made for approximately three minutes in order to establish an average sound level produced by the go-karts. The figure also shows the location of the proposed outdoor go-kart track and the residential community approximately 900 feet to the southwest. At the time measurements were made, the temperature was approximately 70° F, winds were below 10 miles per hour and there was no precipitation. At each of the locations, the equivalent sound level, L_{eq} , was logged every second during the respective survey times. The L_{eq} is defined as the steady sound level which, over a stated time period, would have the same sound energy as the actual varying sound level over that time period and can be thought of as an average sound level.

The second set of measurements was made near the residential community, just south of the First Church of Christ, Scientist. This location was nearest to 110-114 McIntosh Way at the residential subdivision and is also shown in Figure 1. The survey at this location comprised continuous unattended monitoring over the course of 22 hours, between 10:26 am on Tuesday, September 14, 2010 and 8:26 am on Wednesday, September 15, 2010. The sound monitor was securely chained to a tree and configured to log and store several metrics, including L_{eq} , every ten minutes. These measurements were made to establish the ambient baseline in the vicinity over the course of approximately one day. During this time, the temperature was between approximately 64° F and 89° F, winds were below 10 miles per hour and there was no precipitation.

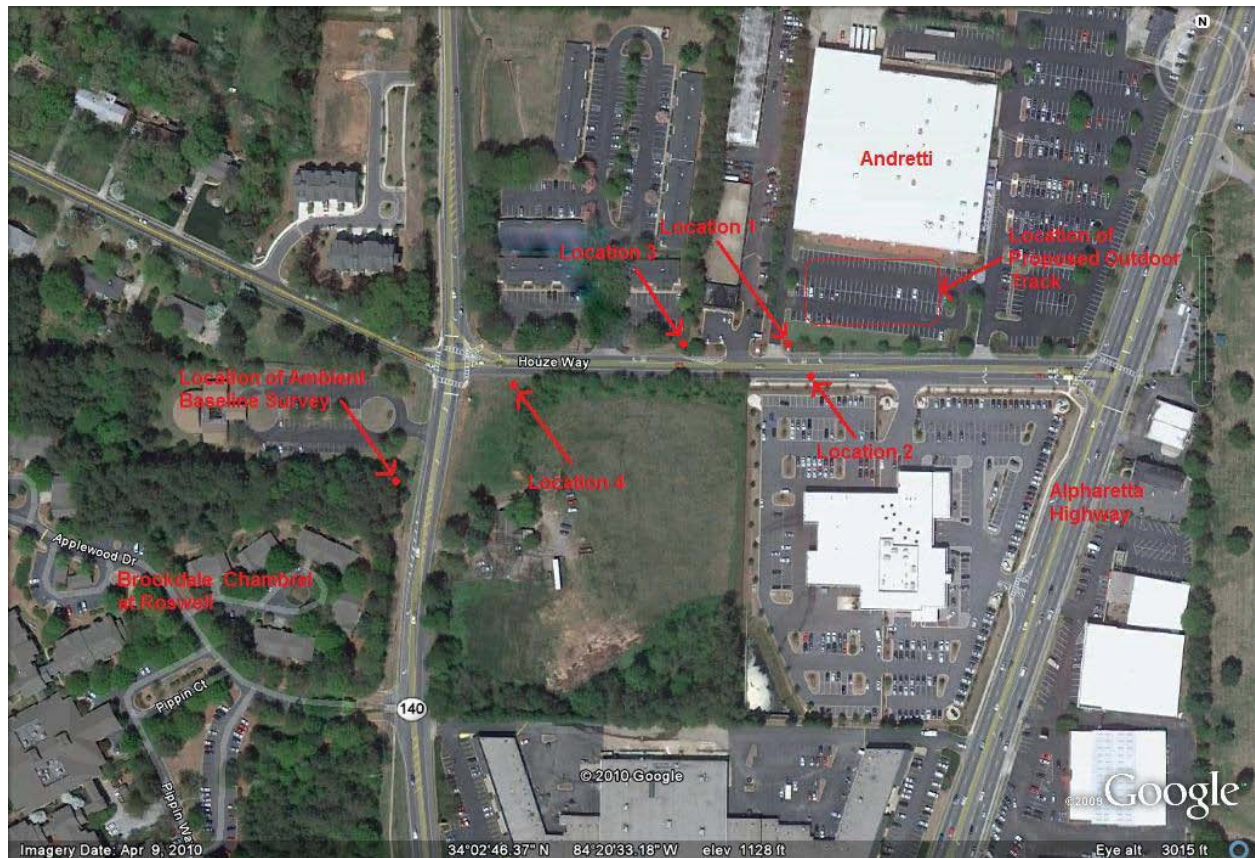


Figure 1 – Survey Locations in the Vicinity of Andretti

The survey equipment for the first set of measurements comprised a handheld Larson•Davis System 824 sound level meter and real time analyzer (SN 1771) with a Larson•Davis Model 2560 ½" random incidence microphone (SN 3249) and Larson•Davis Model PRM902 preamplifier (SN 2276). This system was calibrated with a Larson•Davis Model CAL250 precision acoustic calibrator (SN 4096) and fitted with a windscreen. The survey equipment for the second set of measurements comprised a Larson•Davis LxT2 sound level meter (SN 2175) with a model PRMLxT2 preamplifier (SN SN 12006) and a model 375A02 ½" microphone (SN 10128). This system was calibrated with a Larson•Davis Model CAL250 acoustic calibrator (SN 3981) and fitted with a windscreen and bird spikes. This noise monitor was powered by a 12 volt battery located in a secure case and had a cable enabling the microphone to be mounted on a tripod at a height of approximately 6'.

RESULTS

During the first set of measurements, operation of the go-karts was audible and measurable at Locations 1, 2, and 3. At each location, operation of the go-karts produced a moderately changing sound level over which was superimposed sporadic loud noise events, predominantly due to traffic on Houze Way. At Location 4, the go-kart track was not audible or measurable above the consistent traffic at the intersection of Houze Way and Houze Road. One can safely assume that the measured sound levels would have been approximately six decibels higher (accounting for the logarithmic nature of sound level addition and a three decibel safety factor) if 20 go-karts were in operation, as might be a high-end estimate for go-kart usage on a typical day. Table 1 shows the measured sound levels clearly attributable to go-kart operation at Locations 1 through 3 and the hypothetical calculated levels had 20 go-karts been in operation.

Table 1 – Measured and Calculated Sound Levels from Go-Kart Operation in the Vicinity of Andretti's, Measurements Made on 9/14/10

	Measured Sound Level Range Attributable to Go-Kart Operation, 10 Go-Karts (dBA)	Estimated Sound Level Range Attributable to Go-Kart Operation, 20 Go-Karts (dBA)
Location 1	68-73	74-79
Location 2	65-68	71-74
Location 3	60-65	66-71

Given the relative approximate distances of each of these locations from the proposed outdoor go-kart track (approximately 140' and 250' for Locations 2 and 3, respectively), one can extrapolate what the corresponding sound level would be at a distance of 900 feet away near the Brookdale Chambrel at Roswell subdivision. Assuming the operation of 20 go-karts, we estimate the sound level due to go-kart operation would be approximately 55-60 dBA at this location.

Figure 2 shows the ambient baseline L_{eq} as measured near the intersection of Houze Way and Houze Road during the 22-hour monitoring period spanning Tuesday, September 14, 2010 and Wednesday, September 15, 2010.

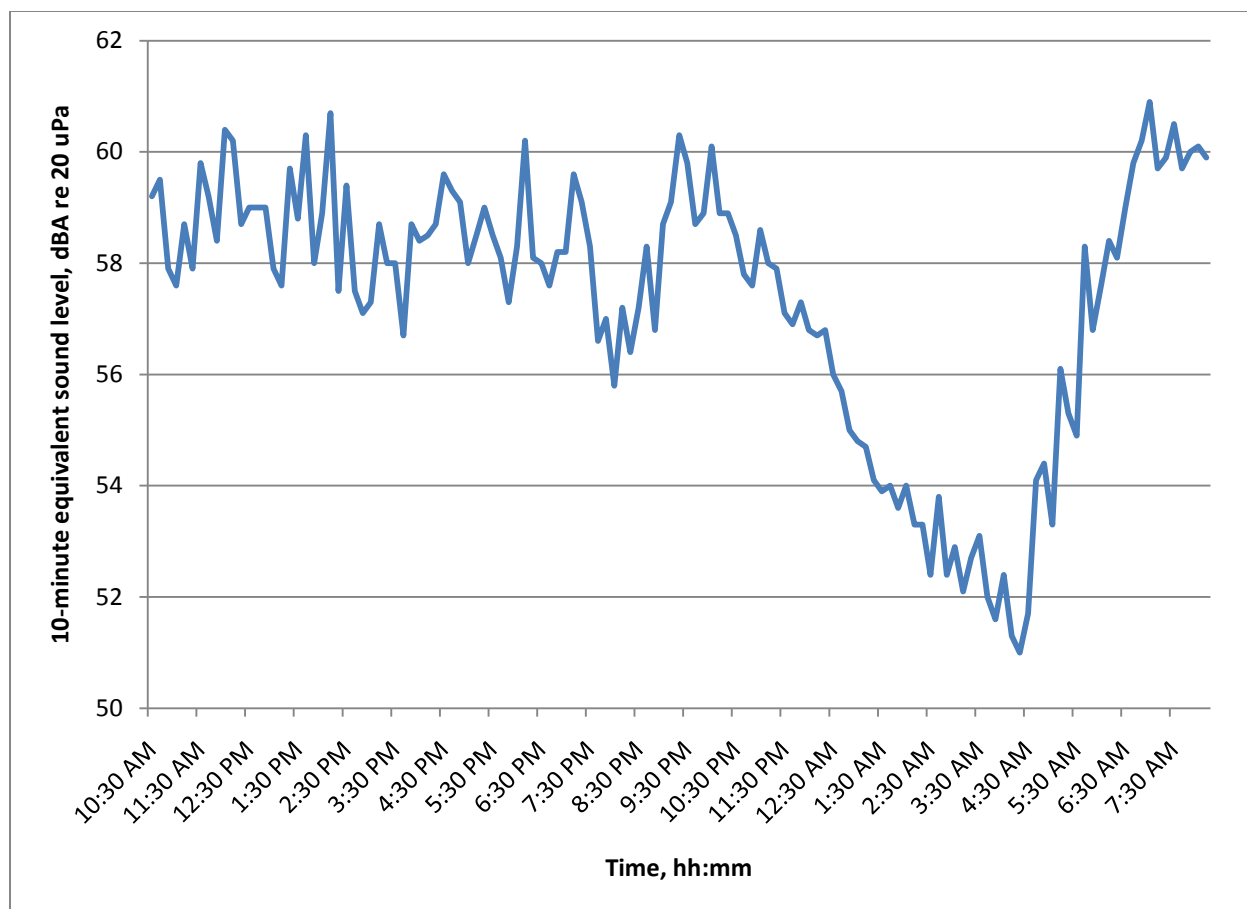


Figure 2 – Ambient Sound Levels Near Brookdale Chambrel at Roswell Subdivision Measurements Made 9/14/10-9/15/10

Figure 2 shows that the sound level in the area during the day was typically 58-60 dBA during daytime hours with a slight dip between approximately 7:40 pm and 9:00 pm. Sound levels started a significant reduction at approximately 11:00 pm, reaching a low of 51 dBA at approximately 4:20 am. The sound level was never above 58 dBA between 11:10 pm and 5:40 am the following morning. During our deployment and retrieval, the main noise source was noted as being road traffic on Houze Way and Houze Road. Although unconfirmed, the nighttime sound level may have been determined primarily by sporadic traffic and insects.

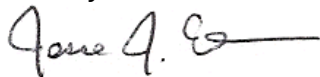
Based on our estimates, we anticipate that there would be a slight chance that the operation of 20 go-karts at the proposed outdoor track at Andretti's would be audible at some outdoor locations, particularly ones remote from Houze Road, at Brookdale Chambrel at Roswell during daytime hours. This is due to the fact that measured ambient sound levels measured at our ambient monitoring site were near those anticipated from go-kart operation. As the distance from Houze Road and the receiver position is increased, the masking sound level from the road would decrease at a faster rate than that of the go-karts and the sound of the go-karts may actually become slightly more audible. The potential for go-kart audibility at outdoor locations would increase late at night when the masking effects of the reducing ambient sound level takes effect. Assuming typical construction and closed windows, we do not expect that go-karts would be audible inside residences at the community.

In addition to the aforementioned, the City of Roswell Noise Ordinance states that "no person shall cause, suffer, allow, or permit a domestic animal or the operation of any sound source in such a manner as to create a sound level that exceeds" 70 dBA between 7:00 am and 11:00 pm or 60 dBA between 11:00 pm and 7:00 am on a residential receiving property "when measured at or within the real property line of the receiving property using the slow response setting unless otherwise noted" and that "such a sound source would constitute a noise disturbance." We do not anticipate that operation of the proposed outdoor go-kart facility would violate the daytime portion of this ordinance insofar as the Brookdale Chambrel at Roswell community is concerned. There is the potential, however, for the 60 dBA limit set for nighttime hours (11:00 pm to 7:00 am) to be exceeded.

Note that these estimates and conclusions are based on the ambient sound levels measured during our ambient survey spanning Tuesday, September 14, 2010 and Wednesday, September 15, 2010 as well as the go-kart sound levels measured on Tuesday, September 14, 2010. Note, also, that this analysis does not include the effects of topography or shielding provided by buildings or wooded areas between the Andretti property and the community which may serve to reduce sound levels due to go-kart operation somewhat. In addition, it does not account for the potential for atypical sound propagation characteristics as may arise from wind gradients or nighttime temperature inversions in the atmosphere which may either increase or decrease the measured levels. These facts notwithstanding, we feel that the results we have presented provide a realistic estimate of average conditions one might reasonably expect at the site.

Please feel free to contact me at 404-277-6528 if you have any questions or need additional information.

Sincerely,



Jesse J. Ehnert
Arpeggio Acoustic Consulting, LLC