

ENVIRONMENTAL NOISE LEVEL SURVEY

Prepared for:
4AM Development
6539 Burkhalter Road,
Statesboro, GA 30458
May 30, 2026

This document has been prepared by Mobile Health Diagnostics. The material and data in this report were prepared under the supervision and direction of the undersigned.

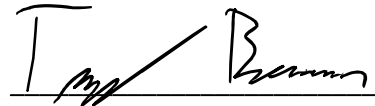

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Acronyms

dB	Decibel reference 20uPa
dBZ	Unweighted decibel
dBA	A-weight decibel. A-weighting reflects how humans perceive sound.
dBZ	C-weight decibel. C-weighting reflects how humans perceive sound at high output levels (90dB+).
SLM	Sound level meter
SPL	Sound pressure level

1. Introduction

Mobile Health Diagnostics was contracted to perform environmental noise level testing at a potential future data center location for 4AM Development. The site is located at 6539 Burkhalter Road, Statesboro, GA 30458. The goal of this testing was to understand the current ambient acoustic levels of the potential site. The Statesboro Georgia noise ordinance does not specify a dB limit, but defines excess noise more generally [1]:

It shall be unlawful for any person to make, continue, or cause to be made or continued any excessive, unnecessary or unusually loud noise or any noise which either annoys, disturbs, injures or endangers the comfort, repose, health, peace or safety of others, within the limits of the city.

The currently posted Statesboro draft ordinance language requires data center sound at the property line of a sensitive receptor to not exceed the existing ambient condition or 50 dBA, whichever is greater. Public reporting indicates that a dBC component was added during amendment, but no official posted numerical dBC threshold was located as of May 30, 2026 [2].

The testing for this study was conducted on May 21, 2026

2. Methodology

A sound level meter (SLM) was placed on a tripod and roamed around the property lines. The measurement locations are shown in Table 1 & Figure 1.

Table 1: Description of test point locations

Plot Point	Start Time	End Time	Notes
1	10:25 AM	11:25 PM	West side of site. The SLM was mounted to top of fence that divides the site from the apartments. The area to the west of the fence consists of a roadway and 2-story townhouse style apartments approximately 100-feet away. The area to the east of the fence is densely wooded. Temp: 81 degrees, Humidity: 66%; Pressure: 30.07
2	11:39 AM	12:39 PM	West side of site. The SLM was mounted to top of fence that divides the site from the apartments. The area to the west of the fence consists of a roadway and 2-story townhouse style apartments approximately 100-feet away. The area to the east of the fence is densely wooded. Temp: 87 degrees, Humidity: 50%; Pressure: 30.05
3	12:55 PM	1:55 PM	North side of site. The SLM was mounted to the tripod near the property lined that divides the site from an apartment complex. The area to the north of the property line consists of 2-story townhouse style apartments approximately 75-feet away. The area to the south is densely wooded. Temp: 88, Humidity: 47%, Pressure: 30.05
4	2:05 PM	3:05 PM	South Side of site. This side of the site is bordered by Burkhalter Road which is a 2-way, 2-lane roadway with light to moderate traffic throughout the day. The SLM was mounted to the tripod on the property line approximately 20-feet from the roadway. A single-family home neighborhood is being built on the south side of the road. The site to the north is mostly open fields. Temp: 90, Humidity: 44, Pressure: 30.02
5	3:09 PM	4:09 PM	East side of the site. The SLM was mounted to the tripod on the property line. A solar panel farm sits approximately 30 feet to the east. The site to the west is mostly open fields. Temp: 90, Humidity: 43%, Pressure: 30.0
6	4:13 PM	5:13 PM	South Side of site. This side of the site is bordered by Burkhalter Road which is a 2-way, 2-lane roadway with light to moderate traffic throughout the day. The SLM was mounted to the tripod on the property line approximately 20-feet from the roadway. A single-family home neighborhood is being built on the south side of the road. The site to the north is mostly open fields. Temp: 91, Humidity: 43, Pressure: 29.99



Figure 1: Map showing data collection points

Sound was recorded in 1-hour periods from 10am to 5pm. From that data, Unweighted and A-weighted average levels were computed (i.e. LZeq & LAeq). Additionally, the A-weighted 1/3 octave band levels were recorded. The measurements were made using a Quest Sound Pro sound level meter, SN BIZ 040003 set to slow response. The sound level meter was calibrated before and after each testing day using a 3M AC300 calibrator, SN AC300002640, and were within 0.5dB between each calibration. The calibration certificates for the equipment can be found in Appendix A. The weather on testing day was 88F, 47% humidity, and 30.05 inHg pressure.

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3. Results

The results from the testing are shown in Table 2. The overall human perceived levels (i.e. LAeq) were loudest at locations 4 & 6 at ~ 64dBA. This was expected as those locations are along Burkhalter Road. The remaining locations are all ~56dBA, which is above the 50 dBA proposed ordinance requirements. The 1/3 octave band levels for each way point are given in Appendix B for future reference.

Table 2: Results from testing at each waypoint.

Point	LAeq (dBA)	LZeq (dBZ)
1	55.7	76.9
2	55.3	65.0
3	56.0	64.0
4	62.6	74.3
5	57.1	74.0
6	66.2	81.3

Figure 2 shows examples of dBA levels for reference.

PAINFUL & DANGEROUS		
Use hearing protection or avoid	140	• Fireworks • Gun shots • Custom car stereos (at full volume)
	130	• Jackhammers • Ambulances
UNCOMFORTABLE		
Dangerous over 30 seconds	120	• Jet planes (during take off)
VERY LOUD		
Dangerous over 30 minutes	110	• Concerts (any genre of music) • Car horns • Sporting events
	100	• Snowmobiles • MP3 players (at full volume)
	90	• Lawnmowers • Power tools • Blenders • Hair dryers
Over 85 dB for extended periods can cause permanent hearing loss.		
LOUD		
	80	• Alarm clocks
	70	• Traffic • Vacuums
MODERATE		
	60	• Normal conversation • Dishwashers
	50	• Moderate rainfall
SOFT		
	40	• Quiet library
	30	• Whisper
FAINT		
	20	• Leaves rustling

Figure 2: Reference dBA examples [3]

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4. Conclusions

Acoustic data were acquired at a potential future data center location for 4AM Development. The site is located at 6539 Burkhalter Road, Statesboro, GA 30458. The results showed the acoustic background level was ~56 dBA for all locations except by Burkhalter Road where the levels increased to ~64 dBA. This means the ambient level at this facility is already above the proposed 50 dBA requirement. Therefore, the development should be designed to not cause the current ambient level of 56 & 64 dBA to increase.

5. References

[1] Statesboro, GA Noise Ordinance

https://library.municode.com/ga/statesboro/codes/code_of_ordinances?nodeId=PTIICOOR_CH38EN_ARTIV_NO

[2] Statesboro, GA data center requirements

<https://www.statesboroherald.com/local/statesboro-council-to-hold-second-public-hearing-on-downscaled-data-centers-law/>

[3] dBA Examples Chart

<https://decibelpro.app/blog/decibel-chart-of-common-sound-sources/#2>

6. LIMITATIONS

The services described in this work product were performed in accordance with generally accepted professional consulting principles and practices. No other representations or warranties, expressed or implied, are made. These services were performed consistent with our agreement with our client. This work product is intended solely for the use and information of our client unless otherwise noted. Any reliance on this work product by a third party is at such party's sole risk.

Opinions and recommendations contained in this work product are based on conditions that existed at the time the services were performed and are intended only for the client, purposes, positions, time frames, and project parameters indicated. The data reported and the findings, observations, and conclusions expressed are limited by the scope of work. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this work product.

This work product presents professional opinions and findings of a scientific and technical nature. The work product shall not be construed to offer legal opinion or representations as to the requirements of, nor the compliance with, environmental laws rules, regulations, or federal, state or local regulations.

Appendix A – Calibration Certificates

TSI Incorporated 5200 Dickey John Rd, Auburn, IL 62615 USA tel 217.438.3371 toll free 800.637.3302 www.tsi.com					
Certificate of Calibration Certificate No: 1293329A Rev.: 1 AC300002640 ANAB Certificate number AC-3298					
Submitted By:		MOBILE HEALTH DIAGNOSTICS 3195 BLAKE STREET UNIT 106 DENVER, CO 80206			
Serial Number:	AC300002640	Additional ID:	NA		
Customer ID:	5199133	Date Received:	1/12/2026		
Model:	AC-300 CALIBRATOR	Date Issued:	1/23/2026		
Test Conditions	Before	After	Model Conditions:		
Temperature:	22.1 °C	22.1 °C	As Found:	IN TOLERANCE	
Humidity:	48.5 %	48.9 %	As Left:	IN TOLERANCE	
Barometric Pressure:	1016.3 mbar	1016.3 mbar			
SubAssemblies:		Serial Number:			
Description:		NA			
NA		NA			
Calibration Procedure: 057V079					
Reference Standard(s):					
I.D. Number	Device	Last Calibration	Date Calibration Due		
ET0000556	54K ENSEMBLE	7/17/2025	7/17/2026		
Measurement Uncertainty:		Calibrated By:			
ACOUSTIC ±0.34dB		 RACHEL WEST 1/23/2026			
FREQUENCY ±0.6%					
Estimated at 95% Confidence Level (k=2)					
Reviewed and Approved per FR.04.3 By:		 1/23/2026			
TSI Incorporated does hereby certify that the above described instrument conforms to the manufacturer's specifications, as left from this lab, and has been calibrated using standards whose accuracies are traceable to the International System of Units (SI) through the National Institute of Standards and Technology within the limitations of NIST's calibration services. Decision rule is based on ILAC-G8:09/2019, section 4.2.1, "Binary Statement for Simple Acceptance Rule". This report must not be reproduced except in its entirety without the written approval of TSI Incorporated.					
098-393 Rev. C		Per 7.8.4.3 of ISO 17025, the calibration certificate cannot contain any recommendation regarding the calibration interval without written request.			Page 1 of

A1-1: Calibration certification for the calibrator

TSI Incorporated
5200 Dickey John Rd, Auburn, IL 62615 USA
tel 217.438.3371 | toll free 800.637.3302 | www.tsi.com



Certificate of Calibration

Certificate No: 1293267A BIZ040003

Submitted By: MOBILE HEALTH DIAGNOSTICS
12303 AIRPORT WAY SUITE 160
BROOMFIELD, CO. 80021-2729

Serial Number: BIZ040003

Alternate ID: N/A

Customer ID: 557572

Date Received: 1/12/2026

Model: SOUNDPRO DL-2-1/3 SIM

Date Issued: 1/22/2026

Test Conditions	Before	After
Temperature:	20.6 °C	21.8 °C
Humidity:	50.2 %	47.5 %
Barometric Pressure:	1013 mbar	1008 mbar

Valid Until: 1/22/2027

Model Conditions:

As Found: OUT OF TOLERANCE

As Left: IN TOLERANCE

SubAssemblies:

Description:
MICROPHONE OE 7052 1/2 IN. ELECTRET
TYPE 2 PREAMP

Serial Number:
55725
10252946

Calibrated per Procedure: 53V899

Reference Standard(s):

I.D. Number	Device	Last Calibration	Calibration Due
EF000172	QUEST-CAL	12/10/2025	12/10/2026
ET0000615	FLUKE 8946A	6/18/2025	6/18/2026
ET000329	FUNCTION GENERATOR	4/8/2025	4/8/2026

Calibrated By:

Kenneth Arnold
KEN ARNOLD Service Technician 1/22/2026

TSI Incorporated does hereby certify that the above described instrument conforms to the manufacturer's specifications, as left from this lab, and has been calibrated using standards whose accuracies are traceable to the International System of Units (SI) through the National Institute of Standards and Technology within the limitations of NIST's calibration services. This report must not be reproduced except in its entirety without the written approval of TSI Incorporated.

A1-2: Calibration certificate for the sound level meter

Appendix B – 1/3 Octave A weighted data

1/1 LAeq	WP 1	WP 2	WP 3	WP 4	WP 5	WP 6
12.5 Hz	41.6	25.2	25.2	30.3	29.0	25.9
16 Hz	39.2	25.2	25.2	28.8	28.1	25.7
20 Hz	35.1	25.3	25.3	26.9	27.5	25.6
25 Hz	37.4	28.2	28.2	29.6	28.7	28.3
31.5 Hz	35.2	28.4	28.2	29.1	28.6	32.0
40 Hz	31.3	28.2	28.2	29.0	28.5	29.3
50 Hz	31.6	31.2	31.2	32.2	31.5	35.8
63 Hz	33.3	31.2	31.4	34.8	31.8	37.2
80 Hz	33.2	31.3	31.2	39.5	32.2	41.3
100 Hz	39.0	34.2	34.2	43.1	35.1	49.9
125 Hz	41.9	34.2	34.3	44.2	35.0	50.2
160 Hz	39.6	34.3	34.8	44.3	35.0	51.6
200 Hz	39.3	37.2	38.0	46.3	37.3	49.1
250 Hz	38.2	37.2	38.2	45.4	37.3	50.1
315 Hz	38.2	37.2	39.2	45.3	37.8	50.6
400 Hz	40.6	40.4	41.9	45.1	40.6	49.6
500 Hz	40.6	40.7	41.8	47.1	40.8	51.8
630 Hz	40.6	40.6	42.8	50.3	40.8	55.4
800 Hz	43.4	43.3	44.8	53.8	43.6	57.1
1.00 kHz	43.4	43.3	44.6	54.8	43.7	58.0
1.25 kHz	43.4	43.3	44.4	54.7	43.6	57.7
1.60 kHz	46.3	46.3	46.7	53.7	46.3	56.4
2.00 kHz	46.3	46.3	46.8	51.6	46.3	54.2
2.50 kHz	46.3	46.3	46.6	49.6	46.3	51.8
3.15 kHz	49.3	49.2	49.3	49.7	49.2	51.3
4.00 kHz	49.2	49.2	49.3	49.5	49.2	50.8
5.00 kHz	49.2	49.2	49.3	49.3	49.2	50.2
6.30 kHz	52.2	44.0	52.3	52.3	52.2	52.4
8.00 kHz	50.9	45.9	52.3	52.3	52.2	52.3
10.00 kHz	50.6	43.7	52.3	52.2	52.2	52.0
12.50 kHz	45.5	37.5	55.2	49.4	50.3	53.4
16.00 kHz	39.0	33.6	50.7	41.8	46.7	46.1
20.00 kHz	30.1	32.2	43.3	32.3	43.7	39.4

B1-1: 1/3 octave A-weighted (i.e. LAeq) data for each way point.

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