

Matthew Foster, EIT, INCE
Engineer



Matthew joined Phoenix Noise & Vibration in June of 2023 as an Associate Engineer after graduating from Frostburg State University with a Bachelor of Science in Engineering with a concentration in materials, and was promoted to the role of Engineer one year later. His interest in acoustics goes back to 2011 when he built his first set of DIY loudspeakers which led to further research into the physics of sound propagation.

He now seeks to utilize his knowledge of noise and vibration to help clients in designing excellent acoustical environments in a wide array of settings from residential to secure government facilities through his work with Phoenix Noise & Vibration. Additionally, he aims to further his knowledge through membership and participation in national engineering and consulting societies, and is an authorized Engineer-In-Training working towards a Professional Engineer status in the state of Maryland.

CAREER SUMMARY

Engineer – Phoenix Noise & Vibration, Frederick MD (June 2023 – Present)

- Noise impact determination and economical mitigation design for residential developments.
- Collaboration with civil engineers to optimize site grading and noise barrier design.
- Production of detailed 3D noise propagation models for complex outdoor sites.
- Building design review to gain compliance with national and international codes and standards.
- Investigative and acceptance field testing for noise/vibration isolation and reverberation.
- Construction administration and inspection during the building process, including secure facilities.
- Acoustical products recommendation (unaffiliated) and submittal review.
- Mitigation in existing spaces, multifamily, office, educational, medical, other.
- Develop and execute novel post-construction noise testing solutions to meet municipal requirements for residential development certification while minimizing downtime for clients.

Small Signage Manufacturer – Hallmark Engraving, Accident MD (2018 - 2023)

- Specify/quote projects, prepare materials, maintain machinery and inventory, specialty products.

Final Assembly, Testing, Quality Control – Quality Musical Systems, Candler NC (2015 - 2017)

- Install loudspeaker components, write SOPs/BOMs, approve/reject products for shipping.

PROJECT SUMMARY (ABBR.)

- Modera Foundry, Charlotte NC – Transportation noise mitigation for a large multifamily building along a railway.
- Oakville Triangle, Alexandria VA – Gypcrete flooring installation construction administration.
- Lakeforest Project, Gaithersburg MD – Large-scale noise impact determination for redevelopment of closed shopping mall.
- The Learning Experience, Gaithersburg MD – Drawing review for compliance with International Green Construction Code.
- Cabin Branch, Clarksburg MD – Optimization of noise barrier along I-270.
- The Camille Apartments, Bethesda MD – Outdoor-indoor noise testing and building certification.
- Rippling Woods Elementary School, Glen Burnie MD – Outdoor-indoor noise testing according to FAA for noise from Baltimore/Washington International (BWI) Airport.
- Hord Coplan Macht Offices, Baltimore MD – Reverberation time measurements and recommendations.
- Miramont Villas, Rockville MD – Site visit and recommendations for hydraulic elevator noise complaints.
- Howard University Video Studio, Washington DC – Recommendations for renovation of critical acoustical environment.
- Walker Mill Middle School, Capitol Heights MD – Airborne noise and impact isolation testing.
- HUD studies necessary for FHA loans throughout the Mid-Atlantic region.
- NDA government/military projects including testing of secure spaces.

EDUCATION & ACHIEVEMENTS

- Bachelor of Science, Engineering (materials conc.) May 2023 (*Frostburg State University, Frostburg MD*)
- Presented at NOISE-CON 2025, experimental outdoor-indoor noise reduction testing method.
- Authored article for National Council of Acoustical Consultants quarterly newsletter Winter 2025.

MEMBERSHIPS

Institute of Noise Control Engineering (INCE)

National Council of Acoustical Consultants (NCAC)

Acoustical Society of America (ASA)

National Society of Professional Engineers (NSPE)