

1. Name

Anthony Sands, EIT

2. Education

M.S., Environmental and Water Resources Engineering, The University of Texas at Austin, Austin, Texas, 2023

B.S., Civil Engineering, The Citadel, Charleston, SC, 2021

3. Academic and Professional Experience

*Academic Experience*

The Citadel, Adjunct Professor, Charleston, SC, 2025-Present

*Professional Experience*

Mount Pleasant Waterworks, Project Engineer, 2023-Present

Mount Pleasant Waterworks, Intern, 2021-2022

4. Professional Credentials, Certifications, and Licensing

*Credentials*

South Carolina Biological Wastewater Treatment, Class A, *SC LLR*, Nov. 2025

South Carolina Water Distribution, Class A, *SC LLR*, Jan. 2025

WEASC Wastewater Collections, Level A, WEASC, Mar. 2024

Engineering in Training, State of South Carolina

First Aid/CPR/AED/American Red Cross

*Memberships in Professional Organizations*

Water Environment Federation

American Water Works Association

SCAWWA/WEASC Young Professionals

5. Professional Development in the Past Five Years

Completion of graduate level coursework in the following areas: Engineering Microbiology, Water Pollution Chemistry, Hazardous Waste Management, Physical and Chemical Treatment, Biological Wastewater Treatment/Sludge Process, Design of Wastewater/Water Treatment Facilities, Project Controls, and Food/Energy/Water Systems Seminar

6. Contributions to the Discipline

*Service Activities*

Collaborated with consulting engineers and contractors during construction phases of capital and developer projects, providing field insights to improve constructability and performing construction administration and QA/QC inspections, including verification of pipe installation, pressure testing, manhole construction, and compliance with specifications.

Reviewed 125+ water and wastewater design submittals using Bluebeam and provided technical comments aligned with MPW standards and specifications to consulting engineers during design phases of capital and developer projects

Managed the FOG Program for 50+ facilities, coordinating inspections, compliance tracking and corrective actions.

Performed hydraulic and operational assessments with plant operators to maintain compliance with the EPA and SCDHEC, reviewing SCADA data, troubleshooting plant assets, and supporting the operation of 4 RO facilities and 2 activated sludge plants.

Performed water/wastewater sampling (BOD, TSS, residuals, turbidity, alkalinity) and maintained logs for regulatory reporting.