

AMINA RAHMAN, P.E.

GEOTECHNICAL ENGINEER

Houston, TX | (713) 555-0148 | amina.rahman@example.com | linkedin.com/in/amina-rahman-geotech

Professional Summary

Licensed Professional Engineer with 8+ years of experience delivering geotechnical investigations, foundation recommendations, slope-stability evaluations, and construction support for transportation, industrial, and flood-control projects. Translates field and laboratory data into practical, risk-informed designs and clear reports. Managed investigation programs valued up to \$1.8M and contributed to more than \$450M in constructed infrastructure.

Technical Expertise

Site Investigation	Boring and CPT programs, test pits, instrumentation, field logging, sampling plans, laboratory testing
Analysis	Shallow and deep foundations, settlement, bearing capacity, lateral piles, slope stability, seepage, liquefaction
Software	PLAXIS 2D, GeoStudio (SLOPE/W, SEEP/W), LPILE, GROUP, Settle3, gINT, AutoCAD Civil 3D, ArcGIS, Bluebeam
Standards	ASTM soil and rock testing, AASHTO LRFD, IBC, FHWA guidance, USACE criteria, TxDOT procedures

Professional Experience

Senior Geotechnical Engineer

May 2021 – Present

TerraPoint Engineering Consultants

Houston, TX

- Lead geotechnical delivery for highway, bridge, industrial, and flood-resilience projects, directing scopes, budgets, schedules, field programs, analyses, reports, and construction-phase services for 15–20 concurrent assignments.
- Designed a \$1.8M subsurface investigation for a 12-mile highway expansion, optimizing 86 borings and 34 CPT soundings through phased data review; reduced planned drilling footage by 18% while maintaining coverage of critical strata.
- Developed driven-pile and drilled-shaft recommendations for six bridge crossings using axial, lateral, settlement, and downdrag analyses; value-engineering refinements reduced estimated foundation cost by \$3.2M.
- Evaluated stability and seepage for 7 miles of levees and detention embankments in GeoStudio, identifying staged-construction and ground-improvement measures that achieved target factors of safety under rapid-drawdown and flood conditions.
- Resolved variable-fill and soft-clay risks at a 70-acre logistics campus by comparing surcharge, wick drains, rigid inclusions, and deep foundations; selected approach shortened the projected settlement period by approximately six months.
- Mentor five engineers and geologists, review calculations and reports, and maintain QA/QC checklists that helped the group deliver more than 95% of submittals on schedule with no major design-related claims.

Geotechnical Project Engineer

Jun 2017 – Apr 2021

Gulf Coast Infrastructure Group

Houston, TX

- Planned and executed more than 60 geotechnical investigations for municipal roadways, water and wastewater facilities, mid-rise developments, and energy sites across the Texas Gulf Coast.
- Performed bearing-capacity, settlement, pile-capacity, pavement, retaining-wall, and slope-stability analyses; prepared sealed reports, drawings, specifications, quantity estimates, and technical memoranda.
- Managed instrumentation and settlement monitoring for a 2.4-million-gallon tank founded on improved ground; interpreted piezometer and settlement-plate data to safely shorten hold time by 21 days.
- Provided construction observation for drilled shafts, auger-cast piles, proofrolling, earthwork, and ground improvement; issued same-day field recommendations that prevented schedule impacts during unforeseen soil conditions.
- Standardized gINT logs and calculation templates, cutting routine report-production time by 25% and improving consistency across a 12-person practice.

Staff Geotechnical Engineer

Jul 2015 – May 2017

Delta Materials & Engineering

Baton Rouge, LA

- Logged soil and rock borings, classified samples under USCS, coordinated laboratory testing, and prepared subsurface profiles for transportation, commercial, and public-works projects.
- Supported foundation, pavement, and earthwork recommendations using SPT, CPT, consolidation, triaxial, direct-shear, and Atterberg-limit data; assisted with field density and concrete testing during construction.

Education & Credentials

Master of Science, Civil Engineering (Geotechnical)

May 2015

Texas A&M University, College Station, TX

GPA: 3.8/4.0

Bachelor of Science, Civil Engineering

May 2013

Louisiana State University, Baton Rouge, LA

Magna Cum Laude

Professional Engineer: Texas No. 136842 | Louisiana No. 47219 | **Safety:** OSHA 30-Hour Construction

Affiliations: American Society of Civil Engineers (ASCE) | Geo-Institute | Deep Foundations Institute (DFI)