

GS-0810-12 Civil Engineer (Geotechnical), Savannah District Office, Savannah GA

Serves as a civil engineer specialist in geotechnical engineering and foundation design on the staff of a design organization responsible for planning, and design of new and/or extension, conversion, or modernization of existing buildings or facilities sites/complexes. Attends conferences with division and regional representatives and various design agencies of the Air Force, Army and National Guard; coordinates and consults with other planning and design activities in connection with scope and design of geotechnical projects and in obtaining necessary and current design criteria. Applies the latest design and construction techniques to all type project sites.

1. Performs foundation analysis and design for assigned civil works, military and Hazardous, Toxic, and Radiological Waste (HTRW) projects such as earth, dams, levees, dredge disposal dikes, bridges, buildings, and other structures supported by soil. Makes recommendations as to the most suitable site and type foundation for such structures with respect to soil conditions. Responsible for the coordination of planning and design efforts with those in other specialties to insure compatibility of approach and optimum results. Perform geotechnical engineering aspects associated with USACE dam and levee infrastructure risk management.
2. Prepares seepage, stability, and settlement analyses for earth embankments for landfills, levees, dikes, and dams. Participates in the development and review of risk assessments, analyses of potential failure modes, and issue evaluation studies. Prepares technical reports and design documents using the results of the above analyses.
3. Performs design of slope protection for river and harbor banks and beach preservation or restoration. Designs rock groins, jetties, and breakwaters using hydraulic data furnished by other District organizations.
4. Plans, assigns, schedules, and coordinates subsurface investigations for designated projects with other organizations and utility locators. Plans, assigns, schedules and coordinates the soil testing program for assigned projects. Analyzes subsurface investigation logs and laboratory test reports for the determination of soil strength and construction characteristics. Prepares foundation design and other reports related to site specific material evaluations, earthwork and site improvement requirements, and foundation design criteria.
5. Prepares drawings, earthwork specifications, and other design documents for geotechnical portion of assigned projects including landfills, levees, dikes, dams, shore protection, ocean groins and jetties, and building foundations.
6. Completes plans, specifications, and reports using appropriate computer software including Microsoft Office products, Micro Station, DAMRAE, Arc/GIS, and the Corps' Levee Inspection Tool.

7. Designs and coordinates the installation, monitoring, and reduction of data for instrumentation systems for civil, military, and HTRW projects. Prepares instrumentation design documents.