

Job Title: CIVIL ENGINEER V - GEOTECHNICAL ENGINEER - IPR#44775

Agency: Department of Transportation

Closing Date/Time: 07/30/2021

Salary: \$6,445 - \$10,210 Monthly

Job Type: Salaried Full Time

County: Sangamon

Number of Vacancies: 1

Plan/BU: NR916

DO NOT APPLY ONLINE

****DO NOT CLICK THE APPLY BUTTON****

HOW TO APPLY:

Technical Applications PM1080 (rev 3/8/21) must be received by the Bureau of Personnel Management, Room 113, 2300 South Dirksen Parkway, Springfield, IL 62764 (Fax# 217/557-3134) or emailed to DOT.CO.BPM.EmploymentApplications@Illinois.gov by the closing date listed above. A copy of each applicant's ACTIVE Illinois Professional Engineer License must accompany application for this position. Please visit <https://idot.illinois.gov/about-idot/employment-opportunities/employment/index> to download the Technical Application PM1080.

Please indicate IPR#44775 on the Technical Application PM1080.

***This position is covered by the Revolving Door Prohibition Policy.**

Agency Mission Statement

The Illinois Department of Transportation is seeking to hire a Geotechnical Engineer.

The IDOT team works diligently to provide safe, cost-effective transportation for Illinois in ways that enhance quality of life, promote economic prosperity and protect our environment. We are problem solvers and leaders, constantly searching for innovations and improvements in support of our commitment to providing the best multimodal transportation system for Illinois.

Our team fosters a culture of inclusivity. We value diversity and hold ourselves to the highest ethical standards as we work together for a common purpose. Team members frequently collaborate with colleagues and others outside the department to best meet customer needs.

Employees enjoy excellent benefits, including health, vision and dental insurance; a retirement plan and deferred compensation options; state holidays and other time off; tuition reimbursement; flexible schedules; and pre-tax benefit programs. The department also offers extensive training and career advancement opportunities.

We invite qualified applicants to apply to become part of our team. We are confident that you will take pride in serving Illinois and its residents and visitors.

Job Responsibilities

This position is responsible for planning and directing the geotechnical activities of the district as they relate to the planning, design, construction, and maintenance of roadways and structures on both state and local systems.

This position reports to the Materials Engineer. Reporting to this position are the Geotechnical Investigations Supervisor, the Nuclear Density Supervisor, and the Geotechnical Investigations Engineer.

A high degree of geotechnical engineering experience related to roadway and structure foundation design and construction, along with sound management skills, is essential to perform duties in this specialized technical field. The position requires knowledge with a wide range of geotechnical products, subsurface investigation methods, soil testing procedures, design methods and standards, and construction techniques. This position establishes geotechnical investigation and testing priorities that meet the needs of the district Program Development, Project Implementation, and Operations Bureaus. This position also establishes, reviews, and updates the district standard of practice regarding subsurface investigations, geotechnical analysis and reporting, geotechnical construction

inspection, and various other geotechnical activities.

Typical challenges faced by this position include identifying potential geotechnical problems and recommending practical, cost-effective solutions during plan development, and ensuring geotechnical construction inspection and problem resolution is performed effectively. The greatest challenges of this position are establishing and modifying a subsurface investigation and reporting program for multiple concurrent projects to correspond with changing Bureau of Program Development priorities, and quickly developing and coordinating corrective actions for unanticipated geotechnical problems or failures while minimizing the hazards to staff and the public.

Technical functions personally performed by this position include developing subsurface investigation objectives for individual projects; performing geotechnical analyses and design; preparing, reviewing, and approving geotechnical reports for structure and roadway improvements; preparing geotechnical recommendations for the district bureaus of Program Development, Construction, and Operations; reviewing plans for roadway and structure improvements at various stages of completion; developing geotechnical special provisions, details, and procedures; monitoring geotechnical construction and inspection; providing geotechnical guidance and training; and participating in geotechnical research.

Administrative functions performed by this position include ensuring geotechnical unit staff and construction inspectors are adequately trained to perform required work; coordinating geotechnical unit operations with studies and plans staff, construction staff, operations staff, design consultants, and geotechnical consultants; administering geotechnical consultant contracts, determining staffing requirements; assisting in budget preparation; preparing job descriptions and hiring criteria; developing specifications for major equipment purchases; ensuring geotechnical records are properly managed and retained; and ensuring construction contract documentation is correct and complete. This position is also responsible for ensuring compliance with applicable department, state, and federal policies and regulations regarding the use of nuclear density testing equipment.

(Job Responsibilities continued)

This position accomplishes these responsibilities through the following staff:

Geotechnical Investigations Supervisor - who is responsible for planning, executing, and directing subsurface investigations.

Nuclear Density Supervisor - who is responsible for ensuring the proper placement, testing, and documentation of sub grade and embankment materials. The position is also responsible for ensuring nuclear density testing on HMA materials is properly performed and documented, as well as for nuclear density equipment maintenance, training, and adherence to state and federal regulations regarding their use.

Geotechnical Investigations Engineer - who is responsible for organizing and analyzing geotechnical data, preparing geotechnical reports, and construction monitoring.

This position is given wide latitude in pursuing geotechnical activities according to department and federal standards and the principles of geotechnical engineering. Only significant technical or personnel problems are referred to the Materials Engineer, along with recommended solutions.

This position has internal contacts with all district bureaus; the central Bureaus of Materials, Research, Bridges and Structures, Design and Environment, and Construction; and with Geotechnical personnel from other districts. External contacts include consulting firms, contractors, private property owners impacted by subsurface investigations, Federal Highway Administration (FHWA), Illinois Department of Natural Resources (DNR), universities, geotechnical product vendors, and other state and local agencies. This position must maintain good communication and working relationships with contacts.

This position requires district-wide travel, travel with occasional overnight stays; overtime; outdoor work in a variety of conditions including, but not limited to, active construction sites, drilling sites, and roads open to traffic.

The effectiveness of this position is determined by efficiently completing subsurface investigations; completing accurate geotechnical reports in a timely fashion; and providing timely, practical, and economical solutions to geotechnical problems encountered during the design, construction, and maintenance of highway facilities.

Principal Accountabilities

1. Plans, organizes, and supervises the activities of the district Geotechnical Unit.
2. Provides timely, practical, and economical solutions to geotechnical problems encountered during the design, construction, and maintenance of roadways and structures.
3. Prepares, reviews, and approves Geotechnical Reports for structure and roadway improvements.
4. Reviews plans, and develops specifications, special provisions, and details regarding geotechnical construction.
5. Develops the scope of work and supervises professional contracts awarded to consulting firms for geotechnical work.
6. Provides geotechnical expertise to local highway agencies and other government agencies.
7. Ensures that geotechnical construction is performed according to applicable plans, special provisions, and standard specifications.
8. Assigns, trains, motivates, and evaluates staff.
9. Performs duties in compliance with departmental safety rules. Performs duties in a manner conducive to the fair and equitable treatment of all employees.
10. Performs other duties as assigned.

Qualifications

Position Requirements

- Current registration as a Licensed Professional Engineer in the state of Illinois
- Five years of experience in civil engineering
- Valid driver's license
- Overtime and occasional overnight travel
- Ability to traverse a variety of terrain including, but not limited to, slopes, ladders, steps, rocks and mud as well as outdoor work in a variety of environments including but not limited to: drilling sites, active construction sites and roadways open to traffic

Position Desirables

- Supervisory experience
- Strong oral and/or written communications skills

Work Hours: 8:00 AM - 4:30 PM Monday - Friday

Work Location: Springfield - 1340 N 9th St

Office: Office of Highways Project Implementation/Region 4/District 6/Project Implementation

Agency Contact: DOT.CO.BPM.EmploymentApplications@Illinois.gov

Job Function: Transportation

Collective Bargaining Agreement language applies to this requisition

We are currently transitioning our application process away from paper process to an electronic application process. This position has not been transitioned please follow the directions below when applying to this position.

Please visit the IDOT website at <http://www.idot.illinois.gov/about-idot/employment-opportunities/employment/index> to obtain the required bid forms and application forms.