

Job Title: CIVIL ENGINEER IV - SENIOR DESIGN SQUAD ENGINEER - IPR#44662

Agency: Department of Transportation

Closing Date/Time: 04/20/2021

Salary: \$5,920 - \$9,230 Monthly

Job Type: Salaried Full Time

County: Cook

Number of Vacancies: 2

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. The previous application form revised 10/16/20 will be accepted until May 8, 2021. 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#44662 on the Technical Application PM1080.

Agency Mission Statement

The Illinois Department of Transportation is seeking to hire Senior Design Squad Engineers.

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 accountable for the supervision and direction of a squad of designers within the Plan Preparations Section of the Bureau of Design. It ensures that contract plans for highway improvements are prepared and designed in accordance with departmental policies, specifications, procedures, and accepted engineering principles.

This position reports to the Plan Preparation Engineer. Reporting to this position are the Designers, Design Technicians, Associate Designer Technicians, Designer Technician Assistants, and Design Squad Technicians.

This position functions in a transitional area, characterized by intense urban development within and immediately abutting the city of Chicago, the rapidly changing land use in the eastern and central portions of the metropolitan area, and the western suburban and rural areas of the district; all of which pose a wide variety of technical and engineering problems associated with the design and preparation of contract documents for unusually complex highway construction programs with very demanding deadlines. The district can be identified by over one hundred miles of expressways and ten thousand miles of arterial highways, which handle nineteen to twenty billion vehicle miles of travel annually;

several hundred diverse abutting and/or overlapping municipal entities with often competing transportation priorities; and a huge complex of public and private utilities, all competing for use of our limited state highway rights-of-way. This position is responsible for directing the preparation of contract plans and specifications for major improvement projects, such as freeway and multi-lane repair and reconstruction, major intersection improvements, urban widening and resurfacing, and the widening and repair of structures.

A typical problem of this position is determining the appropriate design procedures and standards to be applied to the preparation of contract plans. This entails coordinating with the Bureau of Programming to ensure the proper evaluation of Phase I project studies, coordinating with the Bureau of Construction to ensure that the proposed scope of work is compatible with the project site, and providing for the proper coordination with utility companies for the adjustment of utility facilities. Other problems include establishing productivity and work standards for subordinates to measure and evaluate their performance. The greatest challenge to this position is maintaining an effective level of staff performance to ensure timely completion.

(Job Responsibilities continued)

The incumbent personally plans and schedules work, assigning subordinate staff to ensure that established schedules are maintained; monitors work progress and adjusts schedules and work assignments to ensure timely completion; consults with and instructs subordinate staff in the solution of technical problems encountered; ensures that work by other district bureaus for inclusion in the plans is completed on time; reviews final plans, special provisions, and associated documents to assure their accuracy and completeness; provides instruction and counseling for subordinate staff; and makes field checks as needed and manages projects that are prepared by consultants.

The incumbent accomplishes his/her accountabilities through the following subordinate staff:

- Designer: is, with varying levels of responsibility, responsible for preparing design plans for minor highway improvements; reviewing Computer Aided Design & Drafting (CADD) reproduced topography and plotting proposed roadway plans and cross sections for use in computing earthwork quantities; solving minor drainage problems; refining geometric layouts, intersection designs, and horizontal and vertical alignments; recommending the elements to be included in improvement agreements; and ensuring the accuracy of input for design computer programs.
- Design Technician: is responsible for the design and development of plans for highway improvements in accordance with departmental policies, specifications, procedures, and accepted engineering principles to ensure their accurate and timely completion.
- Associate Designer Technician: is responsible for developing plans for minor highway improvements in accordance with departmental specifications, policies, procedures, and accepted engineering practice.
- Designer Technician Assistant: is responsible for participating with the Design Squad in the preparation of highway plans, specifications, and contract documents to ensure timely project completion.
- Design Squad Technician: is responsible for performing a variety of detailed tasks associated with designing and preparing plans and specifications for highway facility improvements.

The incumbent is given considerable latitude in the interpretation of design policies during contract plan preparation. Occasionally, the complexity of assigned projects results in certain design problems which must be referred to the Plan Preparation Engineer.

Within the district, the incumbent maintains communication with the Bureaus of: Construction, Materials, Land Acquisition, Programming, Maintenance, and Traffic. Outside contact with local and federal governmental agencies, utility companies, private organizations, engineering consultants and the general public are frequently required. The incumbent also has frequent contact with the central Bureau of Design & Environment.

The effectiveness of this position is measured by the ability of the squad to produce complete and accurate contract plans, specifications, and estimates within designated time limits. The degree of difficulty experienced by the Resident Engineer during construction is also used to measure the performance of this position.

Principal Accountabilities

1. Plans, organizes, and directs plan preparation to ensure projects are completed in an effective, efficient, and timely manner.
2. Ensures that all plans and specifications are in accordance with design policies and procedures.
3. Ensures that other district bureaus complete plan preparation responsibilities to meet established letting dates.
4. Motivates, evaluates, organizes, and assigns subordinates to properly perform their duties.
5. Provides subordinates with direction and training necessary for the performance of their duties.
6. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
7. Performs other duties as assigned.

Qualifications

Position Requirements

- Education/Experience
 - Current registration as a licensed Professional Engineer in the state of Illinois
 - Four years of experience in civil engineering
- Valid driver's license

Position Desirables

- Experience as a lead designer in highway engineering
- Working knowledge of the contract plan preparations of highway improvement projects
- Ability to supervise the work of other engineers and technicians
- Strong oral and written communication skills

Work Hours: 8:00 AM - 4:15 PM Monday - Friday (45-minute lunch)

Work Location: Schaumburg - 201 Center Ct

Office: Office of Highways Project Implementation/Region 1/District 1/Design

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.