

Job Title: ENGINEERING TECH IV - BRIDGE & HYDRAULICS TECHNICIAN - IPR#44918

Agency: Department of Transportation

Closing Date/Time: 04/26/2021

Salary: \$4,790 - \$8,775 Monthly

Job Type: Salaried Full Time

County: Edgar

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. Please visit <https://idot.illinois.gov/about-idot/employment-opportunities/employment/index> to download the Technical Application PM1080. Please indicate IPR#44918 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 Bridge & Hydraulics Technicians.

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 assists the Bridge and Hydraulics Engineer in the design and preparation of plans and reports for bridges and other major drainage structures, and in the review and supervision of work done by consulting engineers. In the absence of the Bridge and Hydraulics Engineer, this position is responsible for providing any requested expertise on bridge and hydraulic matters, for ensuring plan and report preparations continue to progress, and for providing continuity in his/her absence.

This position reports to the Bridge and Hydraulics Engineer. No subordinates report directly to this position. However, one to two technicians report to this position on an as needed basis.

This position assists in the preparation of bridge and hydraulic reports and studies and assists in the preparation of contract plans for bridge projects. The incumbent functions in a specialized area which requires specific knowledge and expertise in hydraulic and bridge design in addition to knowledge of roadway design. The incumbent operates in a position that requires flexibility due to changing priorities in the annual and multi-year programs, changes in scope of work of individual projects, and requests for assistance to solve unexpected bridge and hydraulic related problems all which affect

plans prepared and the number and type of reports completed.

Typical problems faced by the incumbent involve maintaining flexibility to accommodate changes in work priorities. The incumbent's greatest challenge is to gather, compile, and process data that is accurate and adequately reflects prevailing conditions relative to bridge and hydraulic structures. This position is responsible for assisting in the implementation of the district bridge program which requires close coordination with other bureaus within the district, the central Bureau of Bridges and Structures and consulting engineers on projects which encompass bridge/hydraulic plans and designs. This position obtains the necessary data from field surveys and the Drainage Manual for preparing accurate hydraulic studies. The incumbent assists in the preparation of hydraulic studies, bridge inspections bridge condition report preparation, bridge design and hydraulics, laying out alignments, calculating and checking quantities. The incumbent assists in the preparation of bridge repair plans for contract maintenance and day labor. S/He is responsible for preparation of special bridge design details, calculating quantities for all pay items that are accurate and complete, and preparation of general notes and/or special provisions to clearly explain construction details or construction procedures. The

(Job Responsibilities continued)

incumbent gathers bridge deck patching data that is collected by both the district and consultants. S/He drafts bridge deck plots, collecting in the field the location of full- and partial-depth bridge deck patches, plots their location on the bridge deck plots, and incorporates this data into Bridge Condition Reports with an understanding of how those results affect the scope of repairs as indicated by the Bridge Condition Report Procedures and Practices. In the case of bridge deck patching surveys conducted by consultants, the incumbent processes the results as needed to incorporate final deck plots in the Bridge Condition Reports. This position is responsible for keeping up to date on the latest drainage methods and bridge repair procedures.

In accomplishing the objectives of this position, the incumbent must operate within the limits of the design standards and specifications, hydraulic design policies, the Illinois Highway Drainage Policies and Practices and the Division of Water Resources Regulatory Program.

The incumbent's contacts include other sections within the district Bureau of Program Development for coordination of surveying, traffic data, utility locations, right-of-way needs, cost estimates and providing bridge and hydraulic data for design and project reports; the district Bureau of Project Implementation for development of structure boring logs; and the district Bureau of Operations to obtain data for existing structures. External contacts are with the central Bureau of Bridges and Structures and consulting engineers. Less frequent contacts are with county and municipal officials and private parties to provide information pertaining to hydraulic improvements.

The effectiveness of this position is measured by the incumbent's ability to respond promptly and effectively to unexpected problems and changes in priorities, and by the quantity and quality of reports and plans prepared in a timely manner to facilitate the letting of contracts on schedule.

Principal Accountabilities

1. Ensures the data collected for hydraulic studies is accurate and complies with design policies, standards and specifications.
2. Assists in the development of hydraulic reports that are used to evaluate the scope of work and the structure type, size and location using survey information and field trip data.
3. Assists in the preparation of bridge condition and structure reports to ensure that they are accurate, neat, complete and in compliance with Design and Drainage Manuals and Policies.
4. Performs field inspection needed to ensure that the information for report and plan preparation is accurate and completed on a timely basis.
5. Prepares bridge repair plans and other drainage repair plans for the annual district program which are accurate, complete and in compliance with Design Standards and Policies.
6. Assists in reviewing work performed by consultants in hydraulic and bridge design.
7. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
8. Performs other duties as assigned.

Qualifications

Position Requirements

- Education/Experience:
 - Two years of college in civil engineering technology, pre-engineering or a job related technical/science curriculum PLUS five years of engineering experience OR
 - Seven years of engineering experience
- Valid driver's license

Position Desirables

- Ability to develop and maintain cooperative relationships with departmental staff
- Strong oral and written communication skills
- Strong organizational skills

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

Work Location: Paris - 13473 Il Highway 133

Office: Office of Highways Project Implementation/Region 3/District 5/Program Development

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.