Civil Engineer Trainee (2 positions)

Material Investigations Engineer Trainee

**Position Number:** PW110-23-75-702-62-01

**Opening Date:** March 11, 2019

**Closing Date:** April 5, 2019

**Shift:** 8:00 am – 4:30 pm

**Monday – Friday**

**Salary:** $4,275 – $5,118*

**Office/Central Bureau/District/Work Address:**

**Position Purpose:**
This position is accountable for assisting in material investigations, quality testing, and/or inspection of hot-mix asphalt (HMA), Portland cement concrete (PCC), PCC products, metals and miscellaneous products, or other materials utilized in transportation infrastructure as required.

**Qualifications:**

**Position Requirements:**
- Bachelor of Science in Civil Engineering from an ABET accredited university prior to date of employment or must be a Licensed Engineer Intern in the state of Illinois (includes those expecting to graduate in spring 2019)
- Minimum 2.5 cumulative GPA in engineering related courses (If GPA is between a 2.0-2.5, candidate must have passed Fundamentals of Engineering Exam.)
- Statewide and occasional out-of-state travel
- Valid driver's license

**Position Desirables:**
- Working knowledge of highway materials testing and laboratory testing equipment
- Ability to maintain cooperative relationships with departmental staff
- Strong oral and written communication skills

**How to Apply/Remarks:**
Technical Applications PM1080 (rev 6/1/17) 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 4:30 pm on the closing date listed above. Applications will not be accepted after this date and time. Applicants will be notified in writing to schedule interviews.

**Agency Contact:** Bureau of Personnel Management, 217/782-5594

To be considered for a permanent position within IDOT, you must either be a US citizen or a non-citizen with permanent work authorization.

Only education/coursework listed within the application will be considered for determining eligibility for this position.

**NOTE:** Unofficial college transcripts must be included with the application. Official college transcripts must be submitted upon date of employment. Applicants possessing an Engineer Intern license must also include a copy with application. Applicants not submitting these documents by the posting deadline will not be considered for employment. Please include IPR number on the application.

**NOTE:** Please be advised that if a high volume of applications is received, the applications may be screened to establish a smaller pool of applicants for interview. The screening will be based on the information contained in the application.

*Individual salary offers are computed based on an applicant's current position and experience level in comparison to the posted title as well as internal equity of staff in the organizational unit.
**Position Purpose**

This position is accountable for assisting in material investigations, quality testing, and/or inspection of hot-mix asphalt (HMA), Portland cement concrete (PCC), PCC products, metals and miscellaneous products, or other materials utilized in transportation infrastructure as required.

**Dimensions**

Programs: All awarded construction contracts

**Nature and Scope**

This position reports to the Products Studies Engineer. There are no subordinates reporting to this position.

This position assists with investigations, data collection and analysis, testing, and inspection of various materials utilized in transportation infrastructure. These materials include HMA, PCC, metals and miscellaneous products, or other materials as required. As part of a rotation program, the incumbent may be transferred between various units (HMA operations, concrete technology, concrete products, geotechnical, metals and miscellaneous, etc.) within the bureau.

The greatest challenge to this position is in assisting with the evaluation of materials used in transportation infrastructure. A typical problem for the incumbent would be to conduct a study to determine how material properties contributed to an unexpected failure and to prepare a recommended solution to the problem.

This position is responsible for: performing special and routine materials tests; analyzing and correlating jobsite data with laboratory developed data; testing and evaluating in-place materials which exhibit performance problems; inspecting various materials producers; assisting in the development and updating of materials publications, policies, and specifications; assisting in the development of reports for special pavement investigations; and assisting with evaluations of products proposed for use in transportation infrastructure. The incumbent will travel throughout the state to obtain field data and assist with problem solving, performing inspections, monitoring studies, collecting data, and attending conferences and meetings.

This position is constrained by applicable departmental/state/federal guidelines and practices.

The incumbent's primary contacts are within the bureau. However, the incumbent may have occasional contact outside the bureau with material producers, universities, and other departmental bureaus and districts. Statewide and occasional out-of-state travel to participate in workshops and seminars is required.
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The effectiveness of this position is measured by the success in satisfactorily completing assigned work by scheduled target dates; by the acceptability of collected, analyzed, and summarized data; and by the effective communication of findings through oral and written summaries.

Principal Accountabilities

1. Conducts field and laboratory tests, evaluates test results, and correlates test results to ensure the applicability of laboratory developed results to field situations.

2. Performs inspections of materials producers' products.

3. Assists in the development and updating of materials publications and specifications.

4. Assists in the development of reports for special pavement investigations.

5. Assists with the evaluation of products proposed for use in transportation infrastructure.

6. Prepares memorandums and reports of findings.

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.

Subordinates of this position (If applicable, list subordinate information in the chart below)

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Supervisor of this position

Immediate Supervisor Position Classification: Civil Engineer V
Working Title: Products Studies Engineer
Position Number: PW115-23-75-702-62-01

Position Requirements

- Bachelor of Science in Civil Engineering from an Accreditation Board of Engineering and Technology, Inc. (ABET) accredited university prior to date of employment or must be a Licensed Engineer Intern in the state of Illinois
- Minimum 2.5 cumulative GPA in engineering related courses (If GPA is between a 2.0-2.5, candidate must have passed Fundamentals of Engineering Exam)
- Valid driver's license
- Statewide and occasional out-of-state travel
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**Position Desirables**

- Working knowledge of highway materials testing and laboratory testing equipment
- Ability to maintain cooperative relationships with departmental staff
- Strong oral and written communication skills

**Agency Approvals**

Becky Kocher
Bureau Chief of Personnel Management

Matt Magalis
Secretary, Department of Transportation