



*Becky Koehler*

**Engineering Technician I (1 Position)  
Junior Laboratory Technician**

<b>IPR Number:</b>	<b>44657</b>	<b>Union Position:</b>	<input checked="" type="checkbox"/> <b>Yes</b> <input type="checkbox"/> <b>No</b>
<b>Position Number:</b>	<b>PW011-23-56-203-31-01</b>	<b>Shift:</b>	<b>8:00 am – 4:30 pm Monday – Friday</b>
<b>Opening Date:</b>	<b>October 1, 2020</b>		
<b>Closing Date:</b>	<b>October 30, 2020</b>	<b>Salary:</b>	<b>\$2,695 – \$4,735 *</b>

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

Office of Highways Project Implementation / Bureau of Project Implementation / Region 4 District 6 / 1340 N. 9<sup>th</sup> St.,  
Springfield, Illinois

**Position Purpose:**

This position is accountable for performing laboratory tests and recording the results on materials used for district, county, local and other state agency transportation projects.

**Qualifications:**

**Position Requirements:**

- Education/Experience:
  - Completion of two years of college in civil engineering technology, pre-engineering or a job related technical/science curriculum; OR
  - Two years of engineering experience
- IDOT QC/QA Certification in, or ability to successfully obtain IDOT QC/QA Certification in, Aggregate and HMA Level I within twelve months of hire date
- Ability to lift 50 pounds, traverse stairs, ladders, and rough terrain
- District-wide travel
- Valid driver's license
- Overtime
- Outdoor work in a variety of conditions including, but not limited to, active construction sites, drilling sites, and roads open to traffic

**Position Desirables:**

- Working knowledge of math to include algebra
- Working knowledge of materials testing and laboratory testing equipment
- Ability to communicate effectively and follow oral and written instructions

**How to Apply/Remarks:**

Technical Applications PM1080 (rev 8/23/19) 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](mailto: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.

**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 and experience listed within the application will be considered for determining eligibility for this position.

Applicants may submit college transcripts for completed coursework.

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.

Applicants will be notified in writing to schedule interviews.

\*Individual salary offers are computed based on an applicant's qualifications and experience relative to the posted title as well as internal equity of staff in the organizational unit.

**ILLINOIS DEPARTMENT OF TRANSPORTATION  
POSITION DESCRIPTION**

<b>DATE:</b>	July 16, 2019	<b>WORKING TITLE:</b>	Junior Laboratory Technician
<b>POSITION CLASSIFICATION:</b>	Engineering Technician I	<b>OFFICE/BUREAU:</b>	Highways Project Implementation / Project Implementation
<b>POSITION NUMBER:</b>	PW011-23-56-203-31-01	<b>REGION/DISTRICT:</b>	Region Four / District Six

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***Position Purpose***

This position is accountable for performing laboratory tests and recording the results on materials used for district, county, local and other state agency transportation projects.

***Dimensions***

Number of samples taken:	1,500 - 2,500 annually
Number of reports submitted:	1,500 - 2,500 annually
Value of materials tested:	\$5,000,000 - \$30,000,000

***Nature and Scope***

This position reports to the Laboratory Supervisor. No subordinates report to this position.

This is an entry-level position subject to a rotation program. This position is of a technical nature and performs various tests on materials gathered, collected or purchased for use in district transportation projects which ultimately results in the acceptance or rejection of the material tested. Information and test results provided by this position assist management during the construction of projects.

The incumbent is required to successfully obtain Illinois Department of Transportation (IDOT) Quality Assurance/Quality Control (QA/QC) certification in Aggregate and Hot Mix Asphalt (HMA) Level I within twelve months of hire date. In the performance of duties, the incumbent must have the ability to do basic algebraic calculations.

Typical problems encountered include matching the samples tested with the appropriate specifications and reporting the results in a timely manner to prevent delays in the field. The greatest challenge is accurately testing materials and samples so that acceptance or rejection decisions are based on the actual physical qualities of the material tested.

Functions performed by the incumbent include conducting various types of laboratory tests and keeping records of tests and maintaining, repairing and calibrating laboratory and field test equipment. The incumbent is required to perform data entry into various computer programs including MISTIC and Excel spreadsheets. Some of the laboratory tests include: hot mix asphalt extractions, superpave gyratory tests, core density testing, Portland Cement Concrete (PCC) compressions and flexural strengths, soil tests for hydrometer analysis, Atterberg limits and sieve analysis, moisture-density relationships of soils and aggregates and gradation tests of aggregates. The incumbent must have the ability to lift 50 pounds and traverse stairs, ladders and rough terrain; work overtime during construction season; and have a valid drivers' license as s/he may need to work out in the field occasionally (in a variety of conditions including, but not limited to, active construction sites, drilling sites, and roads open to traffic) in order to obtain samples.

This position operates within the guidelines established in the American Society for Testing and Materials (ASTM) Manual, the American Association of State Highway and Transportation Officials (AASHTO) Manual and all applicable departmental guidelines. S/He works under the close supervision of the Laboratory Supervisor. The incumbent processes samples and submits reports to the Area Bituminous Mixtures Supervisor who makes the acceptance, rejection or any other decision which is indicated. Any questions which arise during the testing will also be directed to the Laboratory Supervisor.

The incumbent has internal contacts with other sections in the district Bureaus of Project Implementation and Operations during the accomplishment of assignments. Externally, s/he has contacts with suppliers, producers, county and local agencies for gathering information. This position may require overtime and overnight travel.

The effectiveness of this position can be measured by the ability of the incumbent to ensure that the materials are tested in accordance with the proper standards.

**Principal Accountabilities**

1. Performs materials tests to determine whether the product conforms to approved standards and/or determine properties of the product.
2. Maintains complete and accurate materials test records.
3. Assists in calibrating and maintaining laboratory testing equipment to ensure information is accurate.
4. Performs data entry.
5. Maintains, repairs and calibrates field testing equipment.
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.

**Subordinates of this position**

Position Classification	Position Number	Working Title	Authorized Identical
N/A			

**Supervisor of this position**

Immediate Supervisor Position Classification: Engineering Technician IV

Working Title: Laboratory Supervisor

Position Number: PW014-23-56-203-31-01

**Position Requirements**

- Education/Experience:
  - Completion of two years of college in civil engineering technology, pre-engineering or a job related technical/science curriculum; OR
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*PW011-23-56-203-31-01*

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**Position Desirables**

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**Agency Approvals**

*Becky Koehler JG*

Bureau Chief of Personnel Management

*James J. ...*

Secretary, Department of Transportation