

Job Title: CIVIL ENGINEER IV - AIRPORT CERTIFICATION & MIXTURES ENGINEER - IPR#45077

Agency : Department of Transportation

Closing Date/Time: 06/16/2023

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

Job Type: Salaried Full Time

County: Sangamon

Number of Vacancies: 2

Plan/BU: NR916 - Protech Teamsters

This position is a union position; therefore, provisions of the relevant collective bargaining agreement/labor contract apply to the filling of this position.

All applicants who want to be considered for this position MUST apply electronically through the illinois.jobs2web.com website. State of Illinois employees should click the link near the top left to apply through the SuccessFactors employee career portal.

Applications submitted via email or any paper manner (mail, fax, hand delivery) will not be considered.

Agency Mission Statement

The Illinois Department of Transportation is seeking to hire a Airport Certification & Mixtures 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.

The department offers extensive training and career advancement opportunities. Employees also receive a robust benefit package including:

- Monday-Friday work schedule
- Flexible work schedules are available in many program areas.
- Health, Life, Vision, and Dental Insurance
- Pension Plan
- (10) Weeks paid Maternity/Paternity Leave
- Deferred Compensation Program and other pre-tax benefit programs (Medical/Daycare)
- Employees earn (12) paid Sick Days annually.
- New Employees earn (10) paid Vacation Days their first year of service and can earn up to (25) paid Vacation Days annually.
- Employees earn (3) paid Personal Days annually.
- (13-14) paid holidays annually (based on start date)
- Tuition Reimbursement

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 assisting the Section Chief of Airport Construction and Materials in the overall goal of ensuring proper materials on airport construction projects. In addition, this position is accountable for the operations of the division's Materials Certification Program to ensure that documentation of all inspected and

tested materials and mixes used in the construction of airport projects have received final certification and that all materials conform to the contract documents.

Number of projects annually:	40 - 60
Annual value of mixtures:	\$5 - \$15 million
Number of plants:	40 - 60 bituminous 15 -30 concrete
Number of construction consultants:	5-10
Value of materials inspected:	\$20 - \$30 million
Value of projects requiring certification:	\$140+ million

This position reports directly to the Section Chief of Airport Construction and Materials. There are no subordinates reporting to this position.

This position operates within an environment of developing and maintaining documentation procedures to ensure that adequate inspection and testing is being performed. In the performance of these responsibilities, the incumbent must be responsive to the working schedules of district Materials personnel, testing consulting firms, and project requirements to ensure that materials are inspected and tested on a timely basis to prevent delays and the use of unacceptable materials.

Typical problems encountered include the coordination of various agencies and staffs to ensure that all materials are inspected and tested with proper documentation pursuant to final project certification as well as coordination with contractors in the preparation of bituminous and Portland cement concrete (PCC) mix designs with follow-up test sections and test batches. The greatest challenge involves coordination with consulting firms and contractors to ensure proper mix preparation and that documentation and certification of materials conforms to contract requirements.

(Job Responsibilities continued)

This position is responsible for the development and recommendation of approved bituminous and PCC mix designs. This is accomplished through the review of the special provisions for each contract, notification of district Materials personnel for required inspections, coordination and training of Resident Engineers to ensure proper documentation is maintained, coordination and input of test and inspection data into the Illinois Department of Transportation (IDOT) Materials Integrated System for Test Inspection and Communication (MISTIC) system, issuance of approved job mix formulas (JMF), and assisting the airport consultants in the preparation of final certification reports. The incumbent accepts or rejects bituminous and PCC materials where questions arise as to the materials acceptability. This position assists with the establishment of consultant training programs and sets performance objectives.

The incumbent has wide latitude in designing and establishing appropriate inspection procedures for bituminous and PCC mixtures establishing proper bituminous density, compaction procedures, and evaluating the impact of substitute materials on the effectiveness of mixtures. The incumbent participates in the establishment of materials certification and documentation requirements and policies for airport projects.

Internal contacts include bureau staff, the Office of Highways Project Implementation staff, and the Office of Planning and Programming staff. External contacts include contractors, mixture producers, consultants, material suppliers, and local officials. Frequent statewide travel with occasional overnight stays is required.

The Airport Certification and Mixtures Engineer operates within the guidelines included in the Standard Specifications for Construction of Airports Projects and Special Provisions and the Federal Aviation Administration (FAA) specifications where applicable. This position is constrained by all departmental and applicable state and federal regulations. Matters of a unique nature are referred to the Section Chief of Airport Construction and Materials with recommendations for resolution.

The effectiveness of this position can be measured by providing maximum pavement life and safety with respect to wearing capabilities and skid-resistance of bituminous and PCC mixtures.

Principal Accountabilities

1. Establishes appropriate training and inspection methods and density and compaction procedures that ensure materials acceptability and documentation for certification under FAA and state criteria.

2. Determines acceptability and develops appropriate specifications for substitute materials in mixture designs.
3. Reviews and makes appropriate recommendations for final plans, specifications, and special provisions relating to materials prior to bid letting.
4. Establishes follow-up procedures to monitor performance of paving mixtures over a period of time.
5. Manages the Quality Assurance Sampling and Testing program as it relates to bituminous and PCC mixtures and mixture components.
6. Oversees bituminous test sections and PCC test batches and performs necessary follow-up supervision.
7. Ensures all materials used on airport projects are properly tested and inspected with data documents in the MISTIC system and the materials database.
8. Updates and maintains the division's Materials Certification Program through the utilization of the MISTIC system.
9. Trains and informs consulting engineers and testing consultant personnel on testing requirements.
10. Issues periodic updates on Contract Material Inspection Status Reports to each project Resident Engineer.
11. Coordinates with consulting engineers in preparing a final Materials Certification report.
12. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
13. Performs other duties as assigned.

Qualifications

Position Requirements

- Current registration as a Licensed Professional Engineer in the state of Illinois
- Four years of experience in civil engineering
- Valid driver's license
- Frequent statewide travel with occasional overnight stays

Position Desirables

- Basic skill in the use of engineering field programs and office instruments including Microsoft Office
- Working knowledge of the routine practices of civil engineering
- Good oral and/or written communication skills
- Ability to maintain a harmonious relationship with employees, airport sponsors, consultants, and contractors

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

Work Location: 1 Langhorne Bond Dr Springfield, IL 62707-8415

Office: Office of Intermodal Project Implementation/Division of Aeronautics/Bureau of Airport Engineering

Agency Contact: DOT.CONTACTHR@ILLINOIS.GOV

Job Family: Transportation; Science, Technology, Engineering & Mathematics

APPLICATION INSTRUCTIONS

Use the "Apply" button at the top right or bottom right of this posting to begin the application process.

If you are not already signed in, you will be prompted to do so.

State employees should sign in to the career portal for State of Illinois employees – a link is available at the top left of the Illinois.jobs2web.com homepage in the blue ribbon.

Non-State employees should log in on the using the "View Profile" link in the top right of the Illinois.jobs2web.com homepage in the blue ribbon. If you have never before signed in, you will be prompted to create an account.

If you have questions about how to apply, please see the following resources:

State employees: Log in to the career portal for State employees and review the Internal Candidate Application Job Aid

Non-State employees: on Illinois.jobs2web.com – click "Application Procedures" in the footer of every page of the website.

The main form of communication will be through email. Please check your “junk mail”, “spam”, or “other” folder for communication(s) regarding any submitted application(s). You may receive emails from the following addresses:

- donotreply@SIL-P1.ns2cloud.com
- systems@SIL-P1.ns2cloud.com