



Illinois Department of Transportation

Memorandum

To: DEPUTY SECRETARIES, DIRECTORS AND BUREAU CHIEFS
From: Dianna L. Taylor
Bureau Chief of Personnel Management
Subject: Technical Vacancy
Date: April 6, 2017

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement April 7, 2017 in the designated areas.

The deadline for applicants to submit their names for consideration is **4:30 p.m.** on **Thursday, April 20, 2017**. Applicants will not be accepted after that time and date.

NOTE: Applications will be accepted from qualified permanent DOT employees only. Please be advised that if a high volume of applications are 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.

All applicants will receive a position description for the position they are applying for. If you have any questions, please contact the Bureau of Personnel Management at 217/782-5594.

ET V (2 pos) Mixtures Control Supervisor
Region 5/District 8/Project Implementation
Highways Project Implementation
Collinsville

Attachments
40911

Technical Applications (PM 1080 rev 9/19/16) **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 **Thursday, April 20, 2017**, 4:30 p.m. Please include address, daytime phone and position for which applying if not already listed on application. Applicants will be notified in writing to schedule interviews.

NOTE: Applications will be accepted from qualified permanent DOT employees only. Please be advised that if a high volume of applications are 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.



**Illinois Department
of Transportation**

An Equal Opportunity Employer

Position Summary Sheet

Classification:	Engineering Technician V (2 Positions)	Salary Range:	\$5,015 - \$9,155
Position Title:	Mixtures Control Supervisor	Union Position:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Position Number:	PW015-23-58-203-20-01	IPR#:	40911

Office/Central Bureau/District/Work Address:

Office of Highways Project Implementation / Region 5 / District 8 / Bureau of Project Implementation / 1102 Eastport Plaza Drive, Collinsville, IL

Description Of Duties:

This position is accountable for quality control / quality assurance activities that ensure Hot Mix Asphalt, Portland Cement Concrete and cement aggregate mixtures are acceptable for use on state and local highway improvement projects within the assigned portion of the district.

Special Qualifications:

Desired:

- Three years of college with the major courses of study being in pre-engineering, completion of a two-year program in civil engineering technology or a four-year degree in a scientific program other than engineering. Additional specialized training will be considered.
- Twelve years of engineering technician experience under the direction of a professional engineer or equivalent with a minimum of three years in a supervisory position
- Ability to maintain harmonious relationships with employees, agency officials and the general public
- Strong oral and/or written communication skills

Shift/Remarks:

Typically, 8:00 am - 4:30 pm / Monday - Friday, subject to variance according to district operational needs.

**ILLINOIS DEPARTMENT OF TRANSPORTATION
POSITION DESCRIPTION**

DATE:	August 2015	POSITION:	Mixtures Control Supervisor
APPROVED BY:	<u>Jeffrey Keirn</u>	OFFICE/DIVISION:	D8/Project Implementation/Materials
CODE:	PW015-23-58-203-20-01	REPORTS TO:	Mixture Control Engineer

Position Purpose

This position is accountable for quality control / quality assurance activities that insure that Hot Mix Asphalt, Portland Cement Concrete and cement aggregate mixtures are acceptable for use on State and Local highway improvement projects within the assigned portion of the district.

Dimensions

Subordinate Personnel:	3 - 5 Direct
Number of Samples Taken:	500 – 1,000 Annually
Number of Construction Consultants:	10 - 20
Number of Plants Inspected:	2 - 3 Bituminous 20 – 30 Concrete

Nature and Scope

This position reports to the Mixtures Control Engineer as does the Mixture Control Engineer Supervisor. Reporting to this position are 3-5 Mixture Proportioning Technicians.

The incumbent and his/her staff are responsible for the quality of Portland Cement Concrete, Hot Mix Asphalt, Cement Aggregate Mixtures and other mixtures produced at many locations and used in the construction of transportation facility improvements. This quality control is achieved by: 1) utilizing properly inspected aggregates and materials, 2) Proportioning each mixture, 3) surveying and calibrating plants to assure predictable uniform mixtures, 4) daily inspecting, sampling, testing and adjusting mixes, 5) assuring the quality by progress and final sampling and testing and, 6) monitoring projects which are operating under the newly developed bituminous and concrete QC-QA programs. The plants are of the most modern technology which includes the operation of completely automatic electronic batching control systems. These functions require a great deal of expertise involving detailed knowledge of materials, the interaction of components of a mixture and the resulting effects on the properties of the final product. The incumbent must impart to his/her subordinates and to contractor's personnel involved in QC-QA projects this required expertise so that the daily on-job control of mixtures will be accomplished at many locations in the District.

A major challenge is to secure the confidence and cooperation of the plant owner and operating personnel. Typical problems encountered in this position include: verifying and approving mixtures following Department specifications and policies; advising contractors on proper interpretation of current QA-QC specifications; trouble-shooting mix related problems at plants utilizing highly complex electronic equipment; assisting construction personnel when problems are encountered during mix placement and supervising the Departments implementation of the QC/QA Program.

The incumbent assigns mixtures proportioning personnel to plants and instructs and supervises them in the performance of their duties. The incumbent inspects and assigns to the MISTIC reporting system, mixtures and related products used on Federal and State funded projects. Decisions are based on Standard Specifications and Policy Memoranda. She/he must pass the prescribed QC/QA HMA Level I, Level II, and Level III, training courses and PCC Level I, Level II and Level III training courses. as well as be able to use computer software developed for plant control and testing.

MIXTURES CONTROL SUPERVISOR

Page 2

Typical problems encountered in this position include insuring acceptable mixture designs to improve skid resistant properties and other safety and wear features of pavement surfaces; determining the capability of sophisticated electronic plant proportioning equipment, evaluating the effectiveness of consultant testing equipment and consultant personnel engaged in materials proportioning and inspection.

The incumbent personally determines whether Hot Mix Asphalt and Portland Cement Concrete materials will be used on projects in those instances where questions have been made as to materials acceptability and insures prompt investigation and resolution of complaints regarding mixture design.

The incumbent accomplishes accountabilities through the following staff on a project basis:

Mixture Proportioning Technician – three to five, who perform the daily inspecting, sampling, and testing of the aggregates, asphalt and mixtures at their assigned plants.

The incumbent operates within the guidelines included in the standard specifications but is required to exercise considerable technical judgment in designing and establishing appropriate inspection procedures for Bituminous Hot Mix Asphalt and Portland Cement Concrete mixtures, in establishing proper HMA density and compaction procedures, and in evaluating the impact of substitute materials on the effectiveness of existing mixtures.

The incumbent has frequent contacts with the District Bureaus of Program Implementation, Operations and Local Roads to coordinate schedules to ensure the timely and effective proportioning and inspection of mixtures. The incumbent negotiates the acceptability of special provisions covering unique mixture problems with the Bureau of Program Development, the Central Bureau of Materials and Physical Research, and the Federal Highway Administration. She/he also deals continuously with contractors, consultants, material suppliers and local officials to insure understanding of guidelines governing conditions of material acceptability.

The effectiveness of this position is measured by the quality of the Portland Cement Concrete and Hot Mix Asphalt Mixture which is reflected in the riding characteristics and durability of the pavement constructed, and ability in handling business relationships.

Principal Accountabilities

1. Responsible for surveying, calibrating, and approving bituminous hot-mix plants and concrete plants.
2. Responsible for training, motivating, and evaluating subordinate staff.
3. Responsible for assigning the appropriate mixture to the project and modifying mix designs as necessary; and for coordinating inspection reports for shipments of HMA mixtures and PCC mixtures to projects under construction.
4. Responsible for ongoing statistical review of the results of laboratory and field test performed on mixtures produced and placed.
5. Responsible for monitoring contractors on HMA and PCC QC/QA Projects.
6. Responsible for the timely and accurate completion of all required reports and documents.
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.