



# Illinois Department of Transportation

## Memorandum

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To: DEPUTY SECRETARIES, DIRECTORS AND BUREAU CHIEFS  
From: Becky Koehler  
Bureau Chief of Personnel Management  
Subject: Technical Vacancy  
Date: December 21, 2017

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Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement Friday, December 22, 2017 in the designated areas.

The deadline for applicants to submit their applications for consideration is **4:30 p.m. on Tuesday, January 23, 2018**. Applications will not be accepted after that time and date.

**NOTE: Official college transcripts must be included with application. 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. 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.**

If you have any questions, please contact the Bureau of Personnel Management at 217/782-5594.

CET

Assistant Design Engineer Trainee  
Aeronautics/Bureau of Airport Engineering  
Office of Intermodal Project Implementation  
Springfield

Attachments  
42429

**IDOT considers official college transcripts to be original embossed transcripts in a sealed envelope from the university/college or in PDF format sent from the university/college directly to the Bureau of Personnel Management.**

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](mailto:DOT.CO.BPM.EmploymentApplications@Illinois.gov) by **Tuesday, January 23, 2018, 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: Official college transcripts must be included with application. 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. Please be advised that if a high volume of applications are received, the applications may be screened to establish**



## Position Summary Sheet

An Equal Opportunity Employer

|                         |  |                        |   |
|-------------------------|--|------------------------|---|
| <b>Classification:</b>  | <b>Civil Engineer Trainee</b>            | <b>Salary:</b>         | <b>\$4,275 - \$4,655*</b>   |
| <b>Position Title:</b>  | <b>Assistant Design Engineer Trainee</b> | <b>Union Position:</b> | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <b>Position Number:</b> | <b>PW110-23-60-201-00-01</b>             | <b>IPR#:</b>           | <b>42429</b>  |

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

Office of Intermodal Project Implementation, Aeronautics / Bureau of Airport Engineering / 1 Langhorne Bond Drive, Springfield, IL

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### Description Of Duties:

Under direct supervision, this position is accountable for providing technical engineering assistance to the airport design section engineers while gaining valuable experience and knowledge in airport development (particularly planning and design) that is necessary for the future advancement of airport improvement projects in Illinois. The incumbent, on a case-by-case basis, will also be responsible for the implementation, direction and coordination of project designs for select airport improvement projects under the direct guidance and supervision of a registered professional engineer.

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### Special Qualifications:

#### Required:

- 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 winter 2017/spring 2018).
- Minimum 2.5 cumulative GPA in engineering related courses (If GPA is between 2.0-2.5, candidate must have passed Fundamentals of Engineering Exam.)
- Official college transcripts must be included with application. (Official transcripts indicating graduation date for winter 2017/spring 2018 graduates must be provided at time of hire.)
- Occasional statewide travel
- Valid driver's license

#### Desired:

- Private pilot's certificate
- Basic skill in the use of engineering field and office instruments, including Microsoft Office and Auto CADD
- Working knowledge of the routine practices of civil engineering
- Strong oral and written communication skills
- Ability to write technical reports

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### Shift/Remarks:

8:00 am – 4:30 pm / Monday – Friday

**THIS IS AN ENTRY-LEVEL POSITION.**

**IDOT considers official college transcripts to be original embossed transcripts in a sealed envelope from the university/college or in PDF format sent from the university/college directly to the Bureau of Personnel Management.**

\*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.

\*\*Technical Application PM1080 (revised 6/1/17) is required. No previous version of the PM1080 will be accepted.

**ILLINOIS DEPARTMENT OF TRANSPORTATION  
POSITION DESCRIPTION**

|                     |                       |                         |  |
|---------------------|-----------------------|-------------------------|--|
| <b>DATE:</b>        | September 8, 2017     | <b>POSITION:</b>        | Assistant Design Engineer Trainee  |
| <b>APPROVED BY:</b> | <i>Ken Martin</i>     | <b>OFFICE/DIVISION:</b> | Office of Intermodal Project Implementation, Aeronautics/Bureau of Airport Engineering |
| <b>CODE:</b>        | PW110-23-60-201-00-01 | <b>REPORTS TO:</b>      | Section Chief of Airport Design  |

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***Position Purpose***

Under direct supervision, this position is accountable for providing technical engineering assistance to the airport design section engineers while gaining valuable experience and knowledge in airport development (particularly planning and design) that is necessary for the future advancement of airport improvement projects in Illinois. The incumbent, on a case-by-case basis, will also be responsible for the implementation, direction and coordination of project designs for select airport improvement projects under the direct guidance and supervision of a registered professional engineer.

***Dimensions***

|  |                     |
|--|---------------------|
| Annual Job Site Inspections            | 10 – 15             |
| Annual Value of Projects Developed     | \$15 - \$25 million |
| Annual Number of Projects Developed    | 10 - 20             |
| Engineer Agreements Processed Annually | 10 - 20             |

***Nature and Scope***

This position reports to the Section Chief of Airport Design as do three other airport design engineers and an Office Coordinator.

The State of Illinois, Airport Improvement Program is administered entirely through the Division of Aeronautics. Eighty public owned airports throughout the State are eligible to receive federal, state and local program funds to create, develop and improve the airport facilities. Project justification and eligibility are monitored by the Division to assure compliance with all state and federal requirements.

Typical problems include the identification of project component eligibility, resolution of project scope, identification of affected agencies and permitting requirements, agency coordination and consensus building, identification of scope creep, resolution of differing design philosophies with consultants, negotiation of project design fees, establishing and requiring within the contract documents a minimum standard of performance for acceptable airport construction practices. The greatest challenge to the incumbent is to resolve complex design problems to the satisfaction of all contractual parties while remaining within budget. In doing so, the incumbent must strive to provide and maintain a cooperative working relationship with the consulting engineering firms, the airport sponsors, the FAA, and other state officials, both inside and outside the Department.

The primary responsibility of this position is to assist the design section engineers with daily technical reviews of projects and engineering agreements. As part of this role, the incumbent provides guidance to consulting and engineering firms with regards to the proper development of construction plans and specifications in accordance with the consulting and engineering firms, and their representatives, to ensure that quality designs are developed efficiently and economically. S/He visits airport sites and makes inspections, as required, with the Aeronautics' design engineer, and possibly the consultant's project engineer, FAA representative and an airport owner's representative. The incumbent will attend pre-design conferences between the Aeronautics design engineer, consultant, the FAA and the airport representative to discuss the overall project scope, contract requirements, unique problems anticipated and the general work sequence in order to ensure that quality plans are developed.

On occasion, the incumbent will be required to exercise independent judgment on decisions concerning complex engineering problems. S/He will be given freedom to exercise judgment on technical matters within established engineering codes, standards and the Design Section's policies. All matters dealing with the interpretation of policy, elements of precedence, regulatory changes and other areas of controversy will be referred to the Section Chief of Airport Design for the final decision.

The incumbent will represent the Division in all matters involving the design phase of airport projects while under the direction of the Division design staff.

S/He maintains frequent contact with other state agencies, other Divisions and Bureaus within IDOT, the FAA, Cities, Counting and Airport Municipalities, contractors, consultant engineers and others in performing assigned duties.

The effectiveness of this position is measured by the incumbent's ability to provide safe, timely, well designed, cost effective airport construction projects designed to serve the public. Other indicators of effectiveness are the timeliness of resolving problems and the maintaining of high level of cooperation with all contractual parties.

### **Principal Accountabilities**

1. Reviews assigned Transportation Improvement Program (TIP) submittals for scope and cost estimates.
2. Ensures accuracy and adequacy for later project development.
3. Attends pre-design and special coordination meetings.
4. Provides guidance to all consultants and engineers during design of airport projects.
5. Reviews the engineering report and provides recommendations to the responsible design engineer as to adequacy and adherence to FAA guidelines. Recommends appropriate solution methods for complex designs.
6. Reviews plans and specifications, approves the same upon completion with recommendations made to the responsible design engineer.
7. Reviews and recommends approval of engineering agreements for: airport design which may include preliminary and special services; construction engineering services; and payment of subsequent design invoices.
8. Recommends projects ready for letting and assists with the preparation of contract documents for same.
9. Performs bid reviews and analysis and makes recommendations on contract award status.
10. Prepares post letting documents, which include the detailed project budget (APMS) and release request narrative and notifies all appropriate parties including the sponsor, consultants and bidders.
11. Assists the Section Chief of Airport design in the developing, writing, updating, and when applicable, the publishing and republishing of all Section documents including: the "Illinois Standard Specifications for Construction of Airports"; the Manual of Policies and Procedures – Airport Design Section; the boiler plate Agreements for Engineering Services; and the Contract Document for both Federal/State/Local and State/Local projects. Performs other duties as assigned by the Section Chief of Airport Design.
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 required or assigned.