



Illinois Department of Transportation

Memorandum

To: DIRECTORS, DEPUTY DIRECTORS, AND BUREAU CHIEFS
From: Dianna L. Taylor
Bureau Chief of Personnel Management
Subject: Technical Vacancy
Date: September 21, 2016

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement September 26, 2016 in the designated areas.

The deadline for applicants to submit their names for consideration is **4:30 p.m.** on **Friday, October 7, 2016**. Applicants 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.

All applicants will receive a position description for the position they are applying for. If you have any questions, please contact Jennifer Sunderland or Denise Hamilton at 217/782-5594.

CET (1 pos) Hydraulics Engineer Trainee
Bureau of Bridges and Structures
Office of Program Development
Springfield

Attachments
41307

*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 (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 **Friday, October 7, 2016**, 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 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:	Civil Engineer Trainee	Salary Range:	\$4,275 - \$4,655
Position Title:	Hydraulics Engineer Trainee	Union Position:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Position Number:	PW110-23-65-905-10-01	IPR#:	41307

Office/Central Bureau/District/Work Address:

Office of Program Development/Bureau of Bridges and Structures/2300 S. Dirksen Parkway, Springfield, IL

Description Of Duties:

This position performs the hydrologic and hydraulic analysis required for the design of bridges and culverts over stream crossings.

Special Qualifications:**Required:**

- Bachelor of Science degree 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 2016/spring 2017).
- Minimum 2.5 cumulative GPA in engineering related courses (If GPA is between 2.0–2.5, candidate must have passed the Fundamentals of Engineering Exam.)
- Official college transcripts must be included with application. (Official transcripts indicating graduation date for winter 2016/spring 2017 graduates must be provided at time of hire.)

Desired:

- Strong oral and written communication skills

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.**

**ILLINOIS DEPARTMENT OF TRANSPORTATION
POSITION DESCRIPTION**

DATE:	8/18/2016	POSITION:	Hydraulics Engineer Trainee
APPROVED BY:	<i>Carl Puzey</i>	OFFICE/DIVISION:	Office of Program Development/Bureau of Bridges and Structures
CODE:	PW110-23-65-905-10-01	REPORTS TO:	Hydraulics Group Engineer

Position Purpose

This position performs the hydrologic and hydraulic analysis required for the design of bridges and culverts over stream crossings.

Dimensions

Annual Projects 30

Nature and Scope

This position reports to the Hydraulics Group Engineer, as do the Senior Hydraulics Engineer, the Hydraulics Engineer, and the Associate and Assistant Hydraulic Engineers.

This position operates within an environment of basic hydrologic and hydraulic computations, learning and exercising engineering judgment and displaying knowledge of hydraulic engineering theory.

The greatest challenge to this position is acquiring the technical knowledge and hydraulic expertise required to properly understand the various complex and unique hydraulic situations encountered. In order to accomplish this purpose, this position must continually strive to be well read and progress with the profession in new and innovative concepts and theories.

This position is personally responsible for assisting with projects of routine complexity. This position provides the hydrologic and hydraulic analysis for highway stream crossings utilizing examples of similar work previously performed. This position's work flow is initiated within the Section. The incumbent is assigned hydraulic projects of a simple or routine nature and provides the technical expertise required to complete a detailed hydraulic report containing the necessary analysis and conclusions on such hydraulic features as flood magnitudes and frequencies, pertinent highwater elevations, scour potential and necessary erosion protection, structure skew, pier location and orientation, and effective waterway opening required to pass the design flood with a minimum amount of damage to adjacent property, the stream and floodplain environment, and the highway facility and satisfying project constraints originating from regulatory agencies.

This position functions under direct supervision and approval is required for all decisions.

This position functions with minimum contact outside of the Department.

The effectiveness of this position is measured by the technical expertise displayed by the incumbent in the solution of simple hydrologic and hydraulic analysis in the preparation of structure Hydraulic Reports and review of Hydraulic Reports.

Principal Accountabilities

1. Understands hydrologic and hydraulic analysis of routine drainage situations.
2. Completes Hydraulic Report with recommendations to supervisor.
3. Within the scope of the incumbent's experience, reviews and analyzes Hydraulic Reports prepared by others.
4. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
5. Performs other duties as required or assigned.