



Illinois Department of Transportation

Memorandum

To: DEPUTY SECRETARIES, DIRECTORS AND BUREAU CHIEFS
From: Becky Koehler
Bureau Chief of Personnel Management
Subject: Technical Vacancy
Date: February 28, 2018

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement March 2, 2018 in the designated areas.

The deadline for applicants to submit their applications for consideration is **4:30 p.m. on Thursday, March 15, 2018**. Applications will not be accepted after that time and date.

NOTE: 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.

ET V Computer Aided Design Drafting (CADD) Supervisor
Region 3/District 4/Program Development
Office of Highways Project Implementation
Peoria

Attachments
42587

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 by **Thursday, March 15, 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: 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	Salary:	\$5,015 - \$7,085*
Position Title:	Computer Aided Design Drafting (CADD) Supervisor	Union Position:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Position Number:	PW015-23-54-304-50-01	IPR#:	42587

Office/Central Bureau/District/Work Address:

OHPI / Region 3 / District 4 / Bureau of Program Development / 401 Main Street, Peoria, IL

Description Of Duties:

This position is accountable for supporting the drafting and designing of complex highway plans using sophisticated state-of-the-art computer aided design and drafting (CADD) software for project file management and identifying and resolving CADD system problems.

Special Qualifications:

Required:

- Valid driver's license
- Occasional districtwide and statewide travel; and overtime

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
- Twelve years of engineering technician experience under the direction of a professional engineer with a minimum of three years in a supervisory position
- Knowledge and experience in MicroStation, GEOPAK, ProjectWise, MS Office
- Experience in teaching Computer Aided Design & Drafting
- Ability to demonstrate basic problem-solving skills
- Strong organizational and communication skills

Shift/Remarks:

8:00 am – 4:30 pm / Monday – Friday

THIS POSITION IS COVERED UNDER THE REVOLVING DOOR PROHIBITION (RDP) POLICY.

*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**

DATE:	December 2017	POSITION:	Computer Aided Design Drafting (CADD) Supervisor
APPROVED BY:	Kensil Garnett	OFFICE/DIVISION:	OHPI/Region 3/District 4 Bureau of Program Development
CODE:	PW015-23-54-304-50-01	REPORTS TO:	Project Support Engineer

Position Purpose

This position is accountable for supporting the drafting and designing of complex highway plans using sophisticated state-of-the-art computer aided design and drafting (CADD) software, for project file management and for identifying and resolving CADD system problems.

Dimensions

Subordinate Personnel:	1-8
CADD System Value:	Approx. \$450,000
# of CADD Work Stations/Plotters:	70/3

Nature and Scope

This position reports to the Project Support Engineer. Reporting to this position are CADD Operator(s).

Computer Aided Design and Drafting systems are a highly specialized and rapidly developing area of highway engineering. The CADD system was introduced in order to meet the increased demands for plan preparation under limited staffing levels. Increasingly sophisticated, highly specialized and ever changing technology requires that knowledge and skills be refined and upgraded. The incumbent must exercise a high degree of design and drafting expertise and judgment in order to assist users in creating highly complex highway plans and translate 3D surface data into usable format for use by surveyors, designers, and construction personnel.

Typical problems include aiding designers with complex highway plans using the CADD system; assisting CADD users with technical problems; keeping abreast of district program priorities in order to properly prioritize projects; and addressing hardware and software failures and problems with the CADD system making it necessary to continually expand skill levels as software is added and upgraded. Other responsibilities include training new users in accurate and efficient methods of MicroStation and Geopak use and file management to ensure information and requests are addressed in a timely manner. The greatest challenge of the position is the creation of accurate 3D surface models and the processing, conversion and transfer of data beginning with surveys, to designers, to construction, and finally to maintenance.

The incumbent works closely with highway designers and project leaders to properly translate design concepts into correctly prepared and drafted plans within the accepted drafting practices and highway design standards. The incumbent applies considerable expertise and experience in the use of the CADD system to provide technical support and training to CADD users. The incumbent must continually refine and upgrade skills as technology advances are made available.

This position develops and presents the district training program, which must be reviewed and revised as software is upgraded or added to the system. The incumbent is responsible for file management including, but not limited to, creating projects, merging data from a large variety of sources, and maintaining district resource files such as dgnlibs, district-use maps, and plot configuration files.

The incumbent in this position meets with other managers and supervisors to schedule work; prioritizes and resolves technology issues; provides training for current and new CADD users, resolves issues and answers questions regarding correct drafting methods; and reviews finished plans to ensure the drafting and related aspect of these plans meet established, accepted drafting and design procedures and guidelines. S/He also monitors the large format plotters; serves as coordinator between the district and the Central Bureau of Information Processing relative to problems of software applications; acts as the CADD consultant liaison for the district by personally loading and reviewing consultant produced CADD files; advises the appropriate manager and supervisors on the integrities and reusability of transferred consultant files; and answers any consultant questions on the technical symbology and standards of the district CADD system.

The incumbent is also responsible for creating public exhibits and other special projects and acts as a back-up operator when necessary to meet tight district deadlines.

This position accomplishes its accountabilities through the following:

CADD Engineering Application Coordinator – who supports district CADD users by troubleshooting, teaching and taking on responsibilities of the CADD Supervisor as needed.

CADD Operator(s) – who assists CADD users with drawing techniques and software work-arounds for plan development.

The incumbent has broad latitude to accomplish responsibilities. Matters of a unique nature are referred to the supervisor with recommendations for resolution. The incumbent works within the confines of IDOT policies and procedures. This position may require occasional districtwide and statewide travel; and overtime.

The incumbent maintains frequent contacts with the Survey Chief, surveyors, designers, and project leaders in the district Bureaus of Program Development, Project Implementation and Operations, BIP; other districts counterparts. External contacts are with DoIT, CMS support personnel and consultants.

The effectiveness of this position is measured by the efficient production of highway design plans, timely resolution of failures and problems, training of CADD users, and a smooth flow of CADD data throughout the district.

Principal Accountabilities

1. Aids designers in producing timely, correctly drafted highway plans based on conceptual requirements defined by project leaders and designers.
2. Identifies, resolves and/or reports CADD system hardware and software issues.
3. Reviews, evaluates and promotes skills and knowledge advancement in subordinates. Develops and presents the district training program to all district CADD users through one on one task specifics sessions or group sessions.
4. Manages all CADD files.
5. Accurately processes, merges, and manipulates electronic data for use in developing highway plans. Converts and/or translates for delivery to various bureaus, the Central Office and contracted consultants.
6. Reviews all consultant generated projects for compliance to IDOT standards.
7. Performs other duties as assigned.
8. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.