



# Illinois Department of Transportation

## Memorandum

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To: DEPUTY SECRETARIES, DIRECTORS AND BUREAU CHIEFS  
From: Dianna L. Taylor  
Bureau Chief of Personnel Management  
Subject: Technical Vacancy  
Date: May 5, 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 May 8, 2017 in the designated areas.

The deadline for applicants to submit their names for consideration is **4:30 p.m.** on **Friday, May 19, 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

CADD Supervisor  
Region 5/District 8/Program Development  
Office of Highways Project Implementation  
Collinsville

Attachments  
40909

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](mailto:DOT.CO.BPM.EmploymentApplications@Illinois.gov) by **Friday, May 19, 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

<b>Classification:</b>	<b>Engineering Technician V</b>	<b>Salary Range:</b>	<b>\$5,015 - \$9,155</b>
<b>Position Title:</b>	<b>Computer Aided Design &amp; Drafting Supervisor</b>	<b>Union Position:</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Position Number:</b>	<b>PW015-23-58-304-20-01</b>	<b>IPR#:</b>	<b>40909</b>

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

OHPI/Region 5/District 8/Bureau of Program Development/1102 Eastport Plaza Drive, Collinsville, IL

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#### Description Of Duties:

This position is responsible for directing and coordinating computer aided design and drafting activities to improve the district's design and plan preparation productivity. S/He evaluates design and drafting problems presented and develops effective solutions. This position functions under conditions characterized by a consistently high level of activity, frequently shifting program priorities, and personnel shortages. Increasingly sophisticated, highly specialized and rapidly changing technology requires that knowledge and skills be constantly upgraded.

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#### 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
- Twelve years of engineering technician experience under the direction of a professional engineer or equivalent with minimum of three years in a supervisory position
- Ability to plan, organize and execute administrative or technical program requirements
- Knowledge of highway design
- Strong oral and/or written communication skills

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#### 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**

<b>DATE:</b>	July 2015	<b>POSITION:</b>	Computer Aided Design and Drafting (CADD) Supervisor
<b>APPROVED BY:</b>	<u>Kirk Brown</u>	<b>DIVISION:</b>	Highways/Dist. 8/Program Development / Programming
<b>CODE:</b>	PW015-23-58-304-20-01	<b>REPORTS TO:</b>	Programming Engineer

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**POSITION PURPOSE:**

This position is responsible for directing and coordinating Computer Aided Design and Drafting activities to improve the District's design and plan preparation productivity.

**DIMENSIONS**

Number of Subordinate Personnel:	3-4
CADD Requests per Year:	500 - 1000
CADD Workstations/Plotters:	4/1
Annual Plan Sheets Produced:	500 - 1000

**NATURE AND SCOPE**

This position reports to the Programming Engineer as do the Estimating Engineer, Program Analysis Engineer, Systems & Services Engineer, Urban Planning Chief and an Executive Secretary. Reporting to this position are a CADD Lead Worker and three or more CADD Operators.

This position functions under conditions characterized by a consistently high level of activity reflected in an annual construction program at \$100 million to \$200 million, frequently shifting program priorities, and constant technical personnel shortages. Increasingly sophisticated, highly specialized and rapidly changing technology requires that knowledge and skills be constantly upgraded. A strong design engineering background is required to enable the incumbent to evaluate design and drafting problems presented and the development of effective solutions within the constraints of the CADD system.

Typical problems encountered in this position are to ensure that effective communications are developed among all District CADD users and the CADD unit; ensure that all data and information required for CADD performance is available in a timely manner; ensure the effectiveness of quality controls over work being produced; develop adequate work schedules to meet predefined lettings and analyze design problems in a manner that optimizes the use of Computer Aided Design and Drafting facilities.

The greatest challenge of the position is to ensure that correct, complete plans are produced by subordinate CADD operators in order to satisfy the demands for high quality drafting work imposed by highway Designers within the time constraints of project completion date deadlines.

The incumbent in this position personally consults with all subordinate Operators to review work progress and to discuss work assignments and methods of using the CADD system, meets with other supervisors and managers regarding CADD Unit work schedules, the relative priorities of projects and resolving engineering problems to facilitate the use of the Computer Aided Design and Drafting system, resolves questions regarding correct drafting methods and unclear work requests, and reviews plans produced by the CADD Unit to ensure that the drafting and related aspects of these plans meet established, accepted drafting and design procedures and guidelines. The incumbent also matches the complexity of the work requests with varying skill levels of the CADD Operators. The incumbent will perform file management functions such as moving completed projects to the archive area, and creating project directories and copying the appropriate seed files to them. The incumbent will insure file and system integrity is maintained by assigning access rights to project directories and associated files. He/She will maintain cell and detail libraries to insure correctness and consistency when used in plan preparation. The incumbent will maintain the most recent version of IDOT's CADD Roadway and Structure Project Deliverables Policy and insure that system users adhere to these standards. He/she will act as the clearinghouse for review of consultant files to ensure adherence to State defined CADD standards. Additionally, the incumbent will review Aerial Survey files and make them available to users in acceptable formats. This requires splitting out the topography, contours, and spot elevations and break lines into separate files, and converting the spot elevations and break lines into ground coordinates from state-plane coordinates. Additionally, the incumbent will maintain documentation to track all existing files showing the location and status of the files.

This position accomplishes its accountabilities through a CADD Lead Worker and two or more subordinate CADD Operators who are accountable for the production of correctly drafted work which is requested from various functional units in the District. The incumbent maintains frequent contact with other unit chiefs, section chiefs, and Highway Engineers, Designers, and other personnel in the Bureaus of Program Development, Project Implementation and Operations in order to coordinate the flow of information and the drafting of plan sheets produced in the CADD Unit. External contacts are maintained with other organizations, both public and private, regarding the application of CADD systems to highway engineering work.

The incumbent exercises wide latitude in identifying and solving CADD production problems and in resolving differences in work requirements between highway designers. The incumbent is responsible for personnel administration in the CADD Unit including selecting CADD Operators, planning and evaluating Operator performance and recommending salary adjustments. The incumbent works directly with Managers, supervisors and designers so that CADD technology is applied in consistent and effective ways in producing drafted final contract plans.

The effectiveness of this position is measured by the incumbent's ability to produce a high volume of complete, correct drafting work within the time constraints imposed by Designers and by scheduled letting dates.

PRINCIPAL ACCOUNTABILITIES

1. Ensures the timely, correct completion of plan sheet drafting by supervising CADD Operators.
2. Prioritizes and schedules work to meet scheduled project lettings and other deadlines imposed by District management.
3. Monitors quality of all work produced by the CADD Unit and takes necessary corrective action.
4. Reviews and evaluates subordinate performance, and provides necessary training for current and new CADD Operators.
5. Perform file management activities which include maintaining system and file integrity by assigning access rights to project directories and associated files; creating project directories and copying appropriate seed files to them; providing Aerial Survey files to system users in an acceptable format; moving completed projects to archive area; and maintaining documentation to track location of existing files and status.
6. Review consultant files to ensure adherence to State defined CADD standards.
7. Ensure cell and detail libraries are consistent and correct and statewide drafting procedures are followed.
8. Provides liaison between the CADD Unit and other District organizations and integrates necessary procedures.
9. Motivates and develops subordinate personnel.
10. Coordinates the resolution of CADD system utilization problems and ensures that sufficient information is available to identify the cause of the system problems.
11. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
12. Performs other duties as assigned.