

Job Title: ENGINEERING TECH IV - CADD SUPPORT TECHNICIAN - IPR#45055

Agency : Department of Transportation

Closing Date/Time: 09/26/2022

Salary: \$4,790 - \$8,775 Monthly

Job Type: Salaried Full Time

County: Sangamon

Number of Vacancies: 1

Plan/BU: NR916 - Protech Teamsters

This position is a union position; therefore, provisions of the relevant collective bargaining agreement/labor contract apply to the filling of this position.

All applicants who want to be considered for this position MUST apply electronically through the illinois.jobs2web.com website. State of Illinois employees should click the link near the top left to apply through the **SuccessFactors employee career portal.**

Applications submitted via email or any paper manner (mail, fax, hand delivery) will not be considered.

Agency Mission Statement

The Illinois Department of Transportation is seeking to hire a CADD Support Technician.

The IDOT team works diligently to provide safe, cost-effective transportation for Illinois in ways that enhance quality of life, promote economic prosperity and protect our environment. We are problem solvers and leaders, constantly searching for innovations and improvements in support of our commitment to providing the best multimodal transportation system for Illinois.

Our team fosters a culture of inclusivity. We value diversity and hold ourselves to the highest ethical standards as we work together for a common purpose. Team members frequently collaborate with colleagues and others outside the department to best meet customer needs.

The department offers extensive training and career advancement opportunities. Employees also receive a robust benefit package including:

- Monday-Friday work schedule
- Flexible work schedules are available in many program areas.
- Health, Life, Vision, and Dental Insurance
- Pension Plan
- (10) Weeks paid Maternity/Paternity Leave
- Deferred Compensation Program and other pre-tax benefit programs (Medical/Daycare)
- Employees earn (12) paid Sick Days annually.
- New Employees earn (10) paid Vacation Days their first year of service and can earn up to (25) paid Vacation Days annually.
- Employees earn (3) paid Personal Days annually.
- (13-14) paid holidays annually (based on start date)
- Tuition Reimbursement
-

We invite qualified applicants to apply to become part of our team. We are confident that you will take pride in serving Illinois and its residents and visitors.

Job Responsibilities

This position is responsible for using computer aided design and drafting (CADD) equipment in the management and development of the Illinois Department of Transportation's (IDOT) CADD workspace environment including

maintenance and development of pertinent font styles, annotation scales, cell libraries, and civil cell applications used by the department. This position also provides detailed CADD support and training to other bureau and district CADD users and may also assist districts in the design of roadway plans using CADD.

Annual number of CADD requests: +/- 60
Annual number of special details/projects: +/- 30

This position reports to the Technology Policy and Support Manager. There are no subordinates reporting to this position.

This position works in an environment that is impacted by the ever-changing technology of the electronic data processing environment, increasing workloads, and revised workflows. The incumbent provides new or improved information for users through computer application development, technical support, and training, resulting in improved production for departmental CADD users. The incumbent also manages IDOT's ProjectWise and CADD workspace environment. The incumbent functions in an environment where both long and short-term data processing needs must be met. These needs comprise the delivery of the department's CADD data processing and software application functions and management of its CADD workspace environment, including maintenance and development of annotation scales, font styles, cell libraries, and civil cell applications. The rapidly changing technology in computer science and the frequent enhancement of both hardware and software demands that the incumbent remain proficient in the technical aspects of this position; have a firm understanding of engineering design; and understand central office bureau and district office design, management, and support functions. The incumbent must maintain confidentiality when dealing with the user's electronic information.

The greatest challenge of this position is the ability to organize CADD tasks in support of new technologies without delay to users. An additional challenge of this position is to ensure that the IDOT CADD environment, including cell libraries and civil cells, are produced and appropriately maintained to meet the demands of the district offices, consultants, and contractors. The incumbent must be familiar with the duties of the other central office bureaus and the districts and with information processing systems and equipment. Typical problems include developing CADD resources and applications for use by the central office bureaus, district offices, consultants, and contractors; providing expertise in solving complex computer application issues; and recommending areas for the standardization of CADD process deliverables and overall process improvements.

(Job Responsibilities continued)

The incumbent personally consults with internal personnel to review work progress and to discuss and resolve work assignments, methods of using the CADD system, and questions regarding correct drafting methods and procedures. S/He actively uses computer software applications including GEOPAK, MicroStation, OpenRoads, Autoturn, Microsoft Office, and geographic information systems (GIS). The incumbent is responsible for the necessary technical support, user training, and maintenance of information processing systems used within the Bureau of Design and Environment (BDE) in the support of district and central office design functions. These responsibilities include providing department liaison capacity between central office bureau staff, district office staff, consultant users, CADD application software vendors, engineering consultants, contractors, information technology (IT) staff of other state agencies, and CADD users and/or managers from other state transportation departments. The incumbent may also be responsible for assisting district offices in the design of roadway plans using CADD, and as such, must be well versed in both two-dimensional (2-D) and three-dimensional (3-D) CADD functions.

The incumbent operates under the general supervision of the Technology Policy and Support Manager on complex highway drafting projects and processes routine design projects, the roadway cell library, civil cell development, and details for the Bureau of Design and Environment's policy manuals. S/He encourages users to work within the limitations set forth by the department's IT policy and reports situations in violation to the Technology Policy and Support Manager. The incumbent is given a wide degree of latitude in the performance of his/her duties referring unusual situations to the Technology Policy and Support Manager. S/He has the freedom to act within his/her realm of responsibility within the departmental policies and procedures.

The incumbent advises, coordinates efforts, and works closely with central office bureau and district design and environment staff and technical support personnel. External contacts are with staff of other state agency IT departments, consultants, contractors, and vendor representatives. The incumbent assists the Technology Policy and Support Manager as needed in a liaison capacity with the Bureau of Information Processing (BIP), other central office bureaus, and the district offices. The incumbent may have occasional statewide travel with overnight stays to attend meetings and training.

The effectiveness of this position is demonstrated by the incumbent's ability to provide timely and accurate technical services and information processing programs, applications, and details which will enable the department to carry out its responsibilities in a timely and cost-effective manner. The effectiveness is further measured by results achieved from the incumbent's coordination and communication with department personnel, dissemination of information with vendor representatives, development of proposed training programs, and implementation of solutions to central office bureau and district technical issues.

Principal Accountabilities

1. Assists and coordinates in the technical support of department CADD applications including MicroStation, Geopak, OpenRoads, and Autoturn. Uses Microsoft Access and Office applications, Adobe Acrobat, and GIS as appropriate.
2. Coordinates and implements new or enhanced engineering technology systems and policies for departmental deployment and use.
3. Assists in the maintenance and development of the IDOT CADD workspace environment, ProjectWise, cell libraries, civil cell libraries, annotation scales, and font types.
4. Assists in the development and use of 2-D and 3-D civil cell applications and assists district staff in the design of roadway plans using CADD including the use of 3-D CADD technology.
5. Provides CADD support for updates to the highway standards and CADD drawings in the Bureau of Design and Environment Manual and other bureau publications.
6. Provides department liaison capacity between central office bureaus, district offices, consultants, and other pertinent department staff and CADD application software vendors and consultants.
7. Tracks best practices and program deliverables, conducts specialized user training of departmental CADD functions, and works with diversified users both within and outside the department, keeping all pertinent information confidential.
8. Provides training and technical support functions to ensure that department technical staff are aware of the capabilities of the engineering computer programs available.
9. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
10. Performs other duties as assigned.

Qualifications

Position Requirements

- Education/Experience
 - Completion of two years of college in civil engineering technology, pre-engineering, or a job related technical/science curriculum plus five years of engineering experience; OR
 - Seven years of engineering experience
- Valid driver's license
- Occasional statewide travel with overnight stays

Position Desirables

- Knowledge of the use of CADD software applications with special emphasis on highway design and plan preparation
- Strong oral and written communication skills
- Ability to maintain confidentiality

Work Hours: 8:00 AM - 4:30 PM Monday-Friday

Work Location: 2300 S Dirksen Pkwy Springfield, IL 62764-0001

Office: Office of Highways Project Implementation/Bureau of Design and Environment

Agency Contact: DOT.CO.BPM.EmploymentApplications@illinois.gov

Job Family: Transportation

APPLICATION INSTRUCTIONS

Use the "Apply" button at the top right or bottom right of this posting to begin the application process.

If you are not already signed in, you will be prompted to do so.

State employees should sign in to the career portal for State of Illinois employees – a link is available at the top left of the Illinois.jobs2web.com homepage in the blue ribbon.

Non-State employees should log in on the using the “View Profile” link in the top right of the Illinois.jobs2web.com homepage in the blue ribbon. If you have never before signed in, you will be prompted to create an account.

If you have questions about how to apply, please see the following resources:

State employees: Log in to the [career portal](#) for State employees and review the [Internal Candidate Application Job Aid](#)

Non-State employees: on Illinois.jobs2web.com – click “Application Procedures” in the footer of every page of the website.

The main form of communication will be through email. Please check your “junk mail”, “spam”, or “other” folder for communication(s) regarding any submitted application(s). You may receive emails from the following addresses:

- donotreply@SIL-P1.ns2cloud.com
- systems@SIL-P1.ns2cloud.com