

POSITION DESCRIPTION

Jo Daviess County, Illinois

Position Title: Staff Engineer
Department: Highway Department
Location: Highway Department Building, Hanover, IL
Reports To: County Engineer
Salary Level:
FLSA Status:
Approved By: County Board
Approved Date:

SUMMARY:

Work involves planning, organizing, supervising, and coordinating the project design and implementation functions of the County Highway Department under the direction of the County Engineer. Work involves performing a variety of responsible administrative and/or engineering work, requiring the application of professional engineering principles and practices. Work is performed with considerable independence according to Illinois Department of Transportation standards and specifications, professional engineering standards, county policies and procedures, as well as from discussions of overall departmental goals and objectives with the County Engineer. Work involves preparing and reviewing engineering plans, proposals and specifications for road and/or bridge-related construction or maintenance projects. Responsibilities involve planning, overseeing, and directing the activities of technical personnel, and maintenance and administrative support personnel for specific projects. Work is reviewed by the County Engineer for results in achieving departmental goals and objectives and conformance to professional engineering standards and specifications.

APPOINTMENT AND SUPERVISION:

This position is employed by and works under the supervision of the County Engineer.

DUTIES AND RESPONSIBILITIES:

Serves as Staff Engineer for the Highway Department ensuring through departmental staff and contract service providers the proper and efficient design construction and maintenance of County and Road District highways/roads, bridges and drainage facilities. Supervises and oversees the design and development of plans, proposals, specifications and cost estimates for the construction of County and Road District highways/roads, bridges and major drainage projects. Oversees and manages contracts under construction, coordinates assigned activities with other entities and the public, conducts inspections of county highways/roads and bridges; participates in updating the county highway/road and bridge five year plan.

Duties may include but are not limited to the following:

- Prepares all necessary forms and applications for Local, State, and Federal projects and grants.
- Accompanies survey crew in field to collect data required for the preparation of design plans and revision of construction drawings.
- Conducts hydrologic and hydraulic studies to size drainage structures and flood control projects
- Design and draft detailed plans of roadway and drainage structure projects.
- Develops proposals and bidding documents for roadway and drainage structure projects.

- Inspects construction sites to monitor progress and ensure conformance to engineering plans, specifications, and construction and safety standards.
- Directs construction and maintenance activities at project sites.
- Monitors construction projects, computes quantities for pay estimates, and completes necessary job status reports.
- Performs duties related to construction layout and construction inspection.
- Conducts bridge inspections.
- Maintains records and accounts on Federal and State Construction Projects.
- **Performs other duties as assigned and requested.**

SUPERVISORY RESPONSIBILITY:

This position supervises County Highway, technical staff, and may supervise maintenance workers and administrative staff as it relates to a specific project. The responsibilities of this position include: training employees; planning, assigning, and directing work; and resolving problems.

MINIMUM QUALIFICATIONS:

- Graduation from an accredited college or university with a bachelor's of science degree in civil engineering; and
- Registered Illinois Engineer Intern or the ability to obtain within 6 months ; or
- Registered Professional Engineer in Illinois; and
- Valid Illinois Drivers License.

KNOWLEDGE, SKILLS, AND ABILITIES:

- Considerable knowledge of the principles and practices of professional civil engineering applicable to road and bridge construction and maintenance projects.
- Considerable knowledge of the precautions necessary to work safely around construction and maintenance equipment.
- Knowledge of the principles and practices of supervision and management techniques.
- Ability to define problems, collect data, establish facts, and draw valid conclusions; to interpret and follow instructions presented in a variety of forms; and to deal with abstract and concrete variables.
- Ability to work with mathematical concepts such as geometry and trigonometry, which directly correlate with this position; and to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.
- Ability to communicate effectively verbally and in writing with the public, officials, departments, offices, and staff; to make effective public presentations involving Highway Department related matters; and to prepare clearly written correspondence that may involve complex engineering, construction, and/or maintenance information.
- Ability to perform tasks with a very high level of accuracy.
- Working knowledge of, experience with, and skill in the operation of surveying equipment and personal computers and computer programs such as word processing, electronic spreadsheets, databases, and computer aided design.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this position. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this position, the employee is frequently required to stand; walk, sit, use hands to finger, handle, or feel objects, tools, or controls; reach with hands and arms; climb or balance; stoop, kneel, crouch, or crawl; and talk or hear; and may be required to walk in rough terrain. Specific vision abilities required by this job include close vision, distance vision, and depth perception.

The employee must occasionally lift and/or move up to 100 pounds.

WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this position. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee frequently works outside in all types of weather conditions. The employee occasionally works near moving mechanical equipment and parts; in high, precarious places; is exposed to wet and/or humid conditions; and exposed to the sun's radiation.

The noise level in the work environment is usually quiet to moderate, although from time to time it may be loud due to the operation of heavy construction and maintenance equipment.