

TAMA COUNTY
JOB DESCRIPTION

Assistant to the County Engineer

Date: May 17, 2023

Department: Secondary Roads

Title: Assistant to County Engineer

FLSA: Non-exempt

Reports to: Engineer

DEFINITION AND DUTIES:

Under direction, perform civil engineering duties ranging from design to project and staff management. Assist the County Engineer in the administration of the Secondary Roads Department.

KNOWLEDGE OF:

- ◇ Advanced principles and practices of civil engineering and surveying as applied to the design and maintenance of highways and bridges.
- ◇ Modern road and bridge construction and maintenance practices
- ◇ All phases of construction, including construction site inspection, plant inspection and surveying
- ◇ Engineering drawing techniques using computer software such as AutoCAD and ArcGIS
- ◇ Engineering design techniques using design software such as Civil 3D.
- ◇ Iowa Department of Transportation (IDOT) regulations and specifications
- ◇ Federal Highway Administration regulations and specifications
- ◇ English language to include grammar, spelling, sentence structure, vocabulary, and proofreading skills.

ABILITY TO:

- ◇ Analyze and interpret complex rules and information to design, implement and complete construction projects.
- ◇ Represent Tama County and perform duties in a professional, responsible and trustworthy manner.
- ◇ Communicate effectively, in public as necessary, both orally and in writing with staff, policy makers, other county employees, and members of the public
- ◇ Establish and maintain effective working relationships with co-workers, employees, supervisors, contractors, and members of the public.
- ◇ Effectively use engineering concepts and tools, surveying equipment, computer aided drafting and project management skills
- ◇ Make accurate calculations, keep accurate records, maintain organized documentation, and be detail oriented when completing work assignments.
- ◇ Read and understand engineering and surveying plans, plats, and specifications.
- ◇ Comprehend, analyze, and interpret technical procedures, governmental regulations, and professional periodicals.
- ◇ Follow oral and written instructions.
- ◇ Have clarity of speech, hearing, and writing which permits effective communication.

- ◇ Have sufficient vision which permits production and review of a wide variety of materials both in electronic and hard copy forms.
- ◇ Have sufficient manual dexterity to make handwritten notations and which permits moderate to heavy use of a keyboard and mouse.
- ◇ Handle moderate to high levels of stress, meet deadlines, and solve problems appropriate to the position, handle multiple tasks and competing priorities simultaneously.
- ◇ Organize and present facts, ideas, and opinions clearly and concisely, orally and in writing.
- ◇ Work outdoors on all types of terrain and endure exposure to adverse weather conditions while conducting field work.
- ◇ Use a computer, related software programs, and peripheral equipment for the purposes of engineering, word processing, CAD drafting, GIS mapping, data entry, spreadsheets, email, and the internet.
- ◇ Operate common office equipment such as calculators, fax machines, photocopiers, scanners, and multi-line telephones.
- ◇ Operate inspection and testing equipment both in the field and in the lab.
- ◇ Operate surveying instruments such as total stations, GPS receivers, data collectors, automatic levels, level rods, prism poles, magnetic locators and measuring tapes.
- ◇ Use equipment related to civil engineering and surveying including hand tools such as a hammer, spade, shovel, pickaxe and axe.
- ◇ Operate an automobile, pick-up truck, and/or larger trucks.
- ◇ Safely perform a variety of physical tasks associated with road construction inspection, surveying, repairs and maintenance, and engineering including standing, sitting, bending, climbing, balancing, stooping, kneeling, squatting, twisting, crawling, and reaching
- ◇ Perform manual labor (moderate to heavy) for extended periods of time.
- ◇ Stand and walk frequently, sometimes on uneven and unstable surfaces such as construction sites, roadway, or ditch embankments.
- ◇ Occasionally lift, carry, push and/or pull amounts weighing up to 100 pounds.
- ◇ Have sufficient personal mobility to complete field work at various county facilities and worksites.
- ◇ Work flexible schedule and overtime and be on-call as needed.

MINIMUM EDUCATION, TRAINING AND EXPERIENCE:

Associate degree in Civil Engineering Technology and five (5) years of experience in engineering, surveying, construction inspection, materials inspection and testing, GIS and CAD drafting OR any equivalent combination of education and experience which provides the required knowledge, skills, and abilities. Licensed as an Iowa Professional Engineer or Engineering Intern, Licensed Land Surveyor, and experience with AutoCAD Civil 3D is preferred.

Special requirements: Current Iowa Department of Transportation (I.D.O.T.) Certified Technician Level I and II Aggregate, Level I and II PCC, and Level I HMA or obtain within 1 year of hire. Valid Iowa Driver's License and insurable under County liability coverage. Demonstrate required engineering and/or surveying knowledge through written exam presented by the County Engineer.

SPECIFIC DUTIES:

- ◇ Perform a variety of design and drafting operations in the preparation of highway, bridge and culvert plans for paving, resurfacing, bridge, drainage, restoration, grading, recreational trails and other maintenance and construction projects.

- ◇ Maintain positive department public relations. Serve as a public liaison by answering questions, solving problems, correcting difficulties, and meeting with the public to provide information, including negotiating, and acquiring right of way for construction projects.
- ◇ Prepare pay estimates, resolve disputes, and monitor the progress of contracted work to ensure timely completion and compliance with federal, state and local standards.
- ◇ Prepare bidding and letting documents for construction and maintenance projects.
- ◇ Read and disseminate training manuals, IDOT specifications/special provisions and other bulletins, documents, and copies of changes to appropriate staff members. Ensure all IDOT manuals and Standards books are up to date.
- ◇ Attend work-related meetings and professional development opportunities to keep well informed on new standards, regulations, procedures.
- ◇ Perform back-up for County Engineer as necessary.
- ◇ Perform all work duties and activities in accordance with County policies, procedures, collective bargaining agreement, and safety practices.
- ◇ Lead and perform the work of a survey crew engaged in providing field information, data collection, stakeout, and control for construction and/or maintenance projects.
- ◇ Review engineering and/or surveying notes, data and calculations for completeness and accuracy.
- ◇ Update and maintain various inventory maps.
- ◇ Incorporate standard details into plan sets, calculate construction quantities and cost estimates and review plans and documents for accuracy and compliance with standards.
- ◇ Recommend modifications and/or changes to engineering plans and specifications.
- ◇ Perform inspection activities on varied construction projects such as highway grading and paving, bridges, culverts and erosion control including preparation of documentation required to ensure compliance with federal, state and local mandates.
- ◇ Perform a variety of standard quality control tests for construction both in the field and in the lab.
- ◇ Maintain detailed project records, prepare, and review periodic reports and perform technical duties in a construction office or lab. Including project diaries, notes and sketches of construction work performed and conversations with contractors, utility companies, property owners, state and federal officials and the general public.
- ◇ Measure, verify and document quantities of work completed and prepare payment vouchers and progress reports.
- ◇ Keep supervisor informed of progress of work-related activities and potential issues and problems.
- ◇ Responsible for the maintenance, upkeep, and protection from theft of assigned property and equipment.
- ◇ Assist in training employees in the operation of specified equipment and procedures in accordance with applicable safety standards.
- ◇ Attend work regularly at the designated time and place.

All requirements are subject to possible modification to reasonably accommodate qualified individuals/employee(s) with disabilities. Prospective employee(s) and incumbents are encouraged to discuss possible accommodations with the county.

Job descriptions in no way state or imply that the description includes every duty to be performed by the employee in the position.

I have carefully read and understand the contents of this job description. I understand the responsibilities, requirements and duties expected of me. I understand that this is not necessarily an exhaustive list of responsibilities, skills, duties, requirements, efforts or working conditions

associated with the job. While this list is intended to be an accurate reflection of the current job, the Employer reserves the right to revise the functions and duties of this job or to require that additional or different tasks be performed as directed by the Employer. I understand that I may be required to work additional time, different shifts or hours outside the normally defined workday or workweek. I also understand that this job description does not constitute a contract of employment nor alter my status as an at-will employee. I have the right to terminate my employment at any time and for any reason, and the Employer has a similar right.

Employee's Signature

Date

Department Head

Date

The County of Tama is an Equal Employment Opportunity Employer. In compliance with the Americans Disabilities Act, the County will provide reasonable accommodations to qualified individuals with disabilities and encourages prospective employees and incumbents to discuss potential accommodations with the Employer.