POSITION

Civil Engineer

FLSA CLASSIFICATION

Exempt

FACILITY AND WORK AREA

City of Clive Public Works facility and other locations generally within the City of Clive.



Under general supervision of the Engineering Administrator, manages public infrastructure projects from concept and design through construction, prepares, reviews and seals civil engineering plan specifications for such projects; works with contractors and staff on public works-related topics, responds to general and project specific inquiries from citizens; performs engineering and Geographic Information System (GIS) related analysis, graphics and mapping. Provides professional engineering judgment, ensures compliance with state and federal design standards, and oversees consultant and contractor performance.

JOB FUNCTIONS

Examples of Essential Job Functions

- Prepares staff reports, presentations, engineering calculations, engineering designs and specifications, contract documents, permit applications to state and federal agencies and cost estimates for budgetary and bidding purposes.
- Develops and administers designs, budgets, bidding, plans and specifications for public infrastructure
 projects including water main, sanitary sewer, storm sewer, storm water detention, street paving (including
 grades and alignment) sidewalks, traffic control improvements, grading/erosion control, legal description
 and easements.
- Analyzes infrastructure problems in Public Works, develops solutions and makes recommendations to the Engineering Administrator and Director of Public Works.
- Provides engineering recommendations, prepares technical memoranda, and presents findings to City leadership, elected officials, and the public.
- Utilizes Geographic Information System (GIS) and other resources to perform analysis of engineering related data.
- Performs field inspections, surveys and studies.
- Prepares and negotiates easements and property acquisition.
- Evaluates workflow and makes recommendations for process improvements.
- Completes reports required by state and federal agencies.
- Attends City Council meetings as needed to present project updates and answer questions.
- Supervises and assists in the maintenance and updating of a variety of reports, files and records.
- Reviews and approves engineering drawings and construction submittals prepared by consultants or developers for compliance with City standards.
- Assists in developing long-range infrastructure and capital improvement plans.
- Regular attendance is essential for this position.



Other Job Functions

- Represents the City on various metro boards and committees as directed by the Engineering Administrator.
- Attends workshops, seminars, and conferences as approved to further develop knowledge, skills, and abilities in order to maintain, enhance, or achieve certification in various areas of expertise.
- Performs activities under strict deadlines and other time pressures.
- Responds to public inquiries and concerns related to the City engineering and infrastructure operations.
- Assists other City departments with engineering-related services as directed.
- Attends meetings during the day or after hours as needed.
- Performs other duties or assumes other responsibilities as apparent or assigned.

PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS

Required Physical Activities

Sitting, finger dexterity, grasping, feeling, talking, hearing, reaching, repetitive motions.

<u>Vision Requirements</u>

The minimum for those whose work is involved primarily with extensive reading, preparing, analyzing text and/or data, and the use of a computer terminal.

Physical Characteristics of the Job

Medium work requiring exertion of twenty (20) to fifty (50) pounds of force occasionally, and/or ten (10) to twenty-five (25) pounds of force frequently, and/or greater than negligible up to ten (10) pounds of force constantly.

Environmental Characteristics

The work is performed both inside and outside which includes seasonal exposure to cold and heat. The worker is also exposed to darkness or poor lighting, dirt, dust, fumes/odors, moving machinery, noise, vibration, visual strain, wetness humidity, working on uneven ground, mechanical hazards, chemical hazards, electrical hazards, fire hazards, traffic hazards, and bodily injury. Also, the work may expose the employee to unpleasant social situations and require the employee to work irregular hours.

EQUIPMENT AND MATERIALS USED

Network computer including keyboard, monitor, mouse, and printer; Mobile radio, cellular phone, photocopier, plotter, scanner, telephone, car/light truck, fax machine, City of Clive Code of Ordinances, Code of Iowa, Manual for Uniform Traffic Control Devices (MUTCD), Statewide Urban Design and Specifications Manual (SUDAS), GPS device, transit, level, metal detecting device, computer hardware and software, calculator, extension cords, ladders, measuring equipment, photographic equipment, digital photographic equipment, digital scanners, personnel policies.

EMPLOYMENT STANDARDS

Required Knowledge, Skills, and Abilities

- Ability to use logical thinking to solve problems with several concrete or abstract variables; ability to communicate technical solutions to non-technical people.
- Ability to perform arithmetic, algebraic and geometric calculations as necessary to review and analyze engineering calculations.
- · Ability to compose original correspondence; ability to understand technical manuals and data.
- Basic knowledge of materials and methods used in construction; knowledge of construction processes; knowledge of engineering and land surveying principles and practice.
- Ability to read and interpret plans, specifications, blueprints, legal descriptions and contract documents accurately.
- Ability to operate a personal computer and software such as Microsoft Office, AutoCAD, ArcView and other related software.
- Ability to establish and maintain an effective working relationship with superiors, co-workers, and the public.
- Ability to perform all job duties safely and in accordance with applicable rules, guidelines, policies and training.
- Strong leadership and project management skills with the ability to coordinate multidisciplinary teams and outside consultants.
- Knowledge of applicable state and federal design standards, including SUDAS, IDOT specifications, and stormwater regulations.
- Ability to review and sign off on construction drawings and ensure compliance with engineering codes and regulations.

EDUCATION, TRAINING AND EXPERIENCE

Required Education

Bachelor's degree in civil engineering from a four (4) year Accreditation Board for Engineering and Technology (ABET) accredited college or university.

Required Experience

A minimum of (4) years of progressively responsible civil engineering experience, including both field and office work.

Must have intermediate-level experience in Civil 3D, including independent ability to perform sheeting, alignments, profiles, grading, and corridor modeling within the software.

Required Qualifications

- Shall possess or be able to obtain a valid Iowa Driver License and have a good driving record for the past three years.
- Shall possess and maintain a State of Iowa Professional Engineering (PE) License.

The City of Clive retains the authority to change the job duties included in this job description at any time. The list of duties is not exhaustive, and various requirements are subject to possible modification as a reasonable accommodation for a qualified individual.