

CITY OF EFFINGHAM

Job Description

Title: Engineer	Grade: P4
Reports To: City Engineer	FLSA: Non Exempt
Division: Public Works	Modified Date: August 6, 2019

JOB SUMMARY:

Performs difficult and advanced civil engineering work in the field and in the office; assists with preparing the Public Works Capital Improvement Program; does related work as required by the Director of Public Works.

ESSENTIAL FUNCTIONS:

- Advises developers and others concerning procedures for submission of projects to Plan Commission for review and approval;
- Reviews new subdivision plans and commercial developments against City's subdivision and drainage ordinances and certifies compliance;
- Conducts preliminary studies and prepares designs and specifications for public works facilities, such as street paving projects, storms and sanitary sewer projects, water distributive systems, and related projects;
- Develops plan specifications, estimates and standards;
- Supervises installation of streets and utility improvements in subdivisions;
- Advises and answers technical questions from the general public and other City divisions;
- Conducts traffic counts and other surveys;
- Prepares special and periodic reports;
- Performs technical inspections to assure compliance with City standards in construction projects on roads, waters, sewer lines, lift stations, and site improvements projects including the following;
- Performs the following inspections: concrete inspection (slump, air, cylinder, beams, reports, etc.); traffic control; erosion control; material inspection and certification;
- Coordinating, staking and surveying layout for contractor;
- Preparing compliance reports weekly, monthly, quarterly and annually to submit to various agencies for project completion, equal employee opportunity (EEO);
- Reviews and approves shop drawing submitted for structural items;

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- Measuring and calculating quantities placed or removed by contractor for documentation;
- Prepares pay estimates for contract payment and change orders
- Notifies City Engineer or Director of Public Works' office when emergency vehicles need to be notified due to work;
- Assists in the design and preparation of plans and specifications for various roads, water, sewer, site improvements including the following: reviews and surveys all existing features on the proposed site that may need to be addressed during construction;
- Utilizes a computer-aided design (CAD) and GIS drafting system to prepare contract plans;
- Assists with reviewing and preparing plans, bid specifications, advertising, legal documents, and special drawings of the work proposed to be built according to Illinois Division of Transportation's Standard Specifications for Road and Bridge Construction and the Standard Specifications For Water & Sewer Main Construction In Illinois;
- Checks for utility conflicts that may need to be addressed before project bidding;
- Assists in the environmental clearance that is need to complete project;
- Ensures contracts, bonding and insurances are in place before contractor proceeds;
- Issues the Notice to Proceed to the contractor;
- Prepares bid documents, scope of work and plans for maintenance work including the following: sewer lining and construction, water line construction, street resurfacing, street maintenance (oil and chip and patch mix); sidewalk replacement; ordering material for projects; building maintenance;
- Stakes or surveys water, sewer, streets, ditch projects;
- Prepares plans and requests permits from the EPA for water and sewer projects;
- Coordinates between the division and contractors on utility placements or relocations;
- Requests permits from IDOT for highway access for utilities, maintenance and traffic control;
- Research archived as-built plans for locations of utilities within the City for consultant engineers and other divisions;

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- Assists in writing and maintaining maintenance contract for traffic signals in the City;
- Maintains correspondence with IDOT for the City's master agreement for traffic signals shared maintenance cost;
- Assists City Engineer or Director of Public Works in plan review of private development projects including site plans and ensure compliance with City requirements and overseeing these projects during construction for compliance with plans and specifications;
- Prepares ordinances that place stop and yield signs at intersections after reviewing traffic situation according to standards and Manual on Uniform Traffic Control Devices;
- Assists with GIS work gathering attribute information on infrastructure throughout the City, update computer mapping for the City water, zoning, subdivisions, sidewalks, road, sewer, boundaries, and other layers of information;
- Conducts traffic counts and studies, parking studies;
- Conducts sample and inspections under EPA requirements;
- Completes applications and permits;
- Drafts legal descriptions for annexations or other work that requires description;
- Researches records and legal documents, plats, deeds, easement documents, and other legal documents for right of way acquisition, and easements, clarification of ownership;
- Performs other related duties.

SECONDARY FUNCTIONS: Performs other related duties as required

SUPERVISORY FUNCTIONS: None.

MINIMUM QUALIFICATIONS: To perform this job successfully, an individual must be able to perform each essential function satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

LANGUAGE SKILLS: Ability to read, analyze, and interpret common scientific and technical journals, financial reports, and legal documents. Ability to respond

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to common inquiries or complaints from customers, regulatory agencies, or members of the business community. Ability to write speeches and articles for publication that conform to prescribed style and format. Ability to effectively present information to top management, public groups, and/or boards of directors.

MATH SKILLS: Ability to comprehend and apply principles of advanced calculus, modern algebra, and advanced statistical theory. Ability to work with concepts such as limits, rings, quadratic and differential equations, and proofs of theorems.

REASONING SKILLS: Ability to define problems, collect data, establish facts, and draw valid conclusions. Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables.

COMPETENCIES:

- To perform the job successfully, an individual should demonstrate the following competencies:
- Problem Solving - Identifies and resolves problems in a timely manner; works well in group problem solving situations.
- Customer Service - Manages difficult or emotional customer situations; responds promptly to customer needs; solicits customer feedback to improve service; responds to requests for service and assistance; meets commitments.
- Judgment - Displays willingness to make decisions. Exhibits sound and accurate judgment. Supports and explains reasoning for decisions. Includes appropriate people in decision making process. Makes timely decisions.
- Communication - Listens and gets clarification, ability to read, write and understand instructions.
- Cooperation - Establishes and maintains effective relations. Exhibits tact and consideration. Displays positive outlook and pleasant manner. Offers assistance and support to co-workers. Works cooperatively in group situations. Works actively to resolve conflicts.
- Job Knowledge - Competent in required job skills and knowledge. Exhibits ability to learn and apply new skills. Keeps abreast of current developments. Requires minimal supervision. Displays understanding of how job relates to others. Uses resources effectively.
- Dependability - Follows instructions, responds to management direction; takes responsibility for own actions; keeps commitments; commits to long

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hours of work when necessary to reach goals; completes tasks on time or notifies appropriate person with an alternate plan.

- Initiative - Volunteers readily; undertakes self-development activities; seeks increased responsibilities; asks for and offers help when needed.
- Quality - Demonstrates accuracy and thoroughness. Displays commitment to excellence. Looks for ways to improve and promote quality. Applies feedback to improve performance. Monitors own work to ensure quality. Generates suggestions for improving work.
- Safety and Security - Observes safety and security procedures; determines appropriate action beyond guidelines; reports potentially unsafe conditions; uses equipment and materials properly.

CERTIFICATIONS, LICENSES, REGISTRATIONS: Valid driver's license. Professional Engineer (preferred); AutoCad or Microstation Certified (preferred).

REQUIRED EDUCATION/OR EXPERIENCE:

Bachelor's degree from four-year college or university; or five years related experience and/or training; or equivalent combination of education and experience.

PREFERRED EDUCATION/OR EXPERIENCE:

Master's degree or equivalent; or five years related experience and/or training; or equivalent combination of education and experience.

PHYSICAL CONDITIONS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to talk or hear. The employee is frequently required to walk; sit; use hands to finger, handle, or feel; reach with hands and arms; stoop, kneel, crouch, crawl, smell. The employee is occasionally required to stand and climb or balance.

The employee must occasionally lift and /or move up to 10 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

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WORKING CONDITIONS:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly exposed moving mechanical parts; outside weather conditions. The employee is occasionally exposed to vibration; fumes or airborne particles. The noise level in the work environment is usually moderate, but can be loud.

SIGNATURE/APPROVAL

Employee

Date

Director of Public Works

Date

City Administrator

Date

The above statements are intended to describe the general nature and level of work being performed by individuals assigned to this job. They are not intended to be an exhaustive list of all responsibilities, duties, and skills required of personnel so classified in this position.