

**JOB DESCRIPTION
CITY OF SPRINGFIELD**

**HUMAN RESOURCES DEPARTMENT
EMPLOYMENT AND
COMPENSATION DIVISION**

Job Title	<u>Designer</u>
Sch & Grade	<u>PAT-9</u>
Class Code	<u>CD04</u>
FLSA Status	<u>Non-exempt</u>
Bargain Unit Elig.	<u>AFSCME</u>
Occupational Group	<u>Engineering Support</u>

PRIMARY PURPOSE:

Acting under the direction of a Professional Engineer, may act as a City representative on a variety of public improvements and infrastructure projects. Serves as principal project contact for assigned projects, which will include design and planning responsibilities for multifaceted public infrastructure improvements. Typically assigned to a division of Public Works requiring specific technical expertise in Civil, Traffic, Storm Water, Solid Waste or Sanitary Services. Performs computer-aided drafting and paraprofessional design for public infrastructure improvements including streets, storm sewers, and sanitary sewers, which includes preparing plans, specifications, computations, estimates, and engineering drawings.

SUPERVISION:

Under the general supervision of a Professional Engineer on day-to-day assignments and may direct the work of assigned support staff as required based on project assignments.

DESCRIPTION OF WORK:

ESSENTIAL FUNCTIONS:

1. Performs paraprofessional engineering design services for multifaceted public infrastructure improvements including streets, gravity flow sewers, drainage systems, and other public improvement projects which includes the preparation of estimates, computational and design duties, and the creation of plans, specifications, special provisions and engineering drawings.
2. Checks, analyzes, reduces and uses survey and other field data to adapt and transfer such material to plans and maps.
3. Utilizes appropriate design standards and related reference information to establish profiles, cross sections, drafts or other compilation forms to compile data used in preparing engineering specifications.
4. Interprets moderately complex problems related to sewer, stormwater drainage and street design plans and special provisions for construction inspectors as required.
5. Reviews public infrastructure improvement plans submitted by consulting engineers relating to sewer, stormwater drainage and street design for completeness and compliance with city policies and standards and communicates requirements.
6. Utilizes Computer Aided Design (CAD) systems with softdesk Civil Engineering design software to produce engineering drawings utilizing moderately complex drafting and design procedures.
7. Works with a Professional Engineer to coordinate Public Works construction projects including collecting field data, preparing plans and specifications for bidding, administering contracts, contract change orders and preparation of monthly pay estimates
8. May direct the work of assigned support staff.
9. Reads, understands and prepares legal descriptions, technical manuals, etc. and maintains accurate project records.
10. Travels to a variety of project locations.
11. Uses networked computer system to archive and save files, share and transmit drawings, and plot plans.
12. Deals effectively with the public to provide information about project status and scheduling, impacts upon private property, and other related information.
13. Coordinates design with utilities and communications providers.
14. Provides onsite construction inspection to ensure construction is in accordance with approved plans.

IMPORTANT FUNCTIONS:

1. Performs routine office administration tasks such as copying, faxing, etc. as required.
2. Utilizes computer software applications such as word processing, spreadsheet, database, and other engineering related programs.

Performs related work as required.

QUALIFICATIONS REQUIRED:

Any combination of education, training, and experience providing the following knowledge, skills, and abilities:

Knowledge

Demonstrated knowledge of principles, methods, and procedures involved in paraprofessional engineering design of multifaceted public infrastructure improvements including streets, storm sewers, and sanitary sewers; familiar with operation of computer hardware and communications within a networked computer system; knowledge of design standards for public streets, storm sewers and sanitary sewers; Softdesk Civil Engineering design software or similar design software; Computer Aided Design (CAD) systems; math as it relates to drafting and design.

Abilities

Ability to independently perform paraprofessional engineering design duties with general direction from Professional Engineer; create engineering drawings; transfer data collected by survey crews to maps and drawings; direct the work of assigned support staff in the design of Public Works projects; effectively coordinate a variety of public improvement and infrastructure projects; operate Computer Aided Design (CAD) systems; read and understand technical manuals and legal descriptions; maintain accurate records; follow oral and written instructions; communicate effectively both verbally and in writing; deal effectively and courteously with associates, contractors, outside agencies, and the general public; perform the essential functions of the job without posing a direct threat to the health and safety of others; effectively welcome and embrace differences among employees and citizens; performs effectively as a member of the team in carrying out the City’s stated mission and philosophy.

Experience, Education, and Training

Graduation from an accredited college or university with a Bachelor’s degree in Civil Engineering; or Industrial Technology (with an emphasis in Drafting and Design, Construction Management, or related area) with a minimum of four years of demonstrated responsibility for and work experience in street, storm sewer, or sanitary sewer design on moderately complex public works projects; or a degree from a two-year program in Drafting and Design, Construction Management, or related area and six years of demonstrated responsibility for and work experience in street, storm sewer, or sanitary sewer design on medium to large moderately complex public works projects. Demonstrated and documented responsible work experience in a related field may be substituted for the education requirement on a year-for-year basis.

Physical Requirements

Performs bending and reaching to both ground level and overhead; lifts, carries, pushes and pulls up to 50 pounds; must be able to hold and grip objects and possess the ability to operate a computer keyboard and mouse; climbs in and out of manholes, ditches, etc. as required; must be able to distinguish primary colors; performs field work such as onsite reviews of projects.

Working Environment

Primarily indoors with heating and cooling regulated; may be exposed to extreme weather conditions and safety hazards associated with construction sites when occasionally conducting field work to investigate project areas.

Licensing/Certification

None required.

Miscellaneous Requirements

If operating a motor vehicle for the purpose of completing job duties, must possess a valid Missouri Motor Vehicle Operator’s License.

Last Revision:	February 9, 2012	GENERAL ORDINANCE NO. 5278
Commentes:	Updated Abilities	Date: June 16, 2003

I have read the foregoing job description in its entirety and understand its contents. I can perform the essential functions outlined with or without reasonable accommodation under the Americans with Disabilities Act.

Signed: _____ **Date:** _____