

City of Kansas City, Missouri Job Class Specification

Job Title: ENGINEERING TECHNICIAN Department: MULTI

Job Code: 2025 Status: NONEXEMPT Grade: L-6

Summary

This is skilled work in the technical engineering field.

The work involves the operation and maintenance of technical survey instruments with an engineering survey party or inspection of various types of construction projects, as well as computer aided drafting work with Geographical Information Systems (GIS), or in the preparation of engineering drawings, maps and plans. Work is reviewed by a technical supervisor through review of records and reports, re-inspections and periodic observation or general technical supervision and advice is readily available, but employees of this class are expected to perform the more routine tasks independently.

Duties and Responsibilities

- Utilizes a computer aided drafting and design system to create, modify, delete, transfer, copy, store and plot graphic and data files in the preparation of drawings and other related engineering data.
- Prepares street plans, profiles, and cross sections for the grading, paving and curbing of municipal streets; draws appropriate drainage structures and calculates and locates these structures; prepares calculations of quantities and cost estimates.
- Prepares renderings of preliminary construction plans As-built plans, details, and final plans for modifications of existing building structures.
- Creates standards for street improvements, reinforcing specifications for concrete construction and pavement, plans and profiles for street improvements, striping plans, street widening and median removal plans, general layout and drainage plans and similar tasks.
- Reduces field notes, and plots preliminary drawings, including property lines and existing utilities, after engineers lay out proposed projects on preliminary drawings; completes details such as special manholes, fire hydrants, water main locations, type and size, water service details and sanitary service connections on finished plans.
- Assists in the keeping of field notes indicating lines, angles, distances, traverses, benchmarks, monuments and stakes as well as "as built" details of size, location and elevations of public works facilities; makes sketches, prior to additional survey work or as a guide to drafters and engineering designers.
- Creates and maintains water distribution maps of metropolitan area; makes detailed drawings of manhole covers, frames and catch basins; details street intersections, showing location of valves, fire hydrants, water mains and their sizes; building locations and other surface features.
- Inspects work of water, wastewater, storm water, bridge, street and boulevard construction contractors for conformance with specifications as to quality, material and workmanship, and for compliance with ordinances and regulations as directed.
- Checks for quality, material and workmanship involving the laying of airport runways, aprons and related appurtenances, erection of public buildings and facilities; inspects and checks foundations, structures, electrical, plumbing and related mechanical systems, makes special investigations and prepares special reports as required.
- Inspects, measures and condemns sidewalks, driveways and curbs; explains reason why repair or replacement is necessary.
- Performs related duties as required.

Technical Skills

- Must demonstrate knowledge of the terminology, methods, equipment, practices, instruments and techniques of general engineering field; Read and interpret maps, plans, aerial photographs, survey notes and other records.
- Must demonstrate ability to apply sound engineering principals and practices in their applicable field.
- Must demonstrate skill in reading engineering plans and drawings and in the use and care of computers and related equipment.
- Must demonstrate ability to perform addition, subtraction, multiplication and division of whole numbers and fractions.

Education and Experience

High school graduation

Certificates/ Licenses/Special Requirements

- Must pass a background check, drug screen and a
- Must pass a physical examination as prescribed by the City.
- Will be required to pass a preemployment drug screen.
- Must possess a valid State –issued driver's license in accordance with the City of KCMO policies.

Supervisory Responsibility

None

Supervision Received

Work is performed under general supervision.

Note: This job description should not be construed to imply that these requirements are the exclusive standards of the position. Incumbents will follow any other instructions, and perform any other related duties, as may be required. Reasonable accommodation will be provided to qualified individuals with disabilities. The City of Kansas City has the right to revise this job description at any time. The job description is not to be construed as a contract for employment.

Created

9/06

Revised

8/2022, 01/2024