

CITY OF ST. LOUIS CLASSIFICATION SPECIFICATION

CLASSIFICATION

TITLE: Engineering Technician I

CLASS CODE: 4224

GENERAL DESCRIPTION OF DUTIES:

Incumbents in this classification perform inspections of construction, repair, and other projects to ensure compliance with applicable specifications, standards, and codes.

DISTINGUISHING CHARACTERISTICS:

This is an entry-level technical classification in the General Engineering Series-Sub-Professional Engineering Group job family within the City of St. Louis. Incumbents in this classification perform moderately complex duties with a variety of related tasks. The distinguishing characteristics of this classification within the series include responsibility for conducting inspections of construction, renovation, demolition, and other work projects. Employees in this class review plans and specifications to ensure code compliance and may direct the work of other employees.

Incumbents work under general supervision. While workers require some supervision in most assignments, they are free to develop their own work sequences within established procedures, methods and policies. They are generally subject to periodic supervisory checks.

This is an individual contributor class, meaning the incumbent is responsible for his/her own work including output, quality and timeliness. Incumbents may, however, explain work processes and train others, such as new employees, in the same or similar job title. The individual contributor may serve as a resource or guide by advising others on how to use processes within a system or as a member of a collaborative problem-solving team.

EXAMPLES OF WORK (Illustrative Only):

(The list of duties is intended to be representative of the duties performed in positions within this classification. It does not include all the duties that may be assigned to a position and is not necessarily descriptive of any one position in this class.)

Inspects construction, renovation, and demolition work projects.

Maintains logs of daily inspections.

Maintains related files and prepares reports.

Conducts pre-construction meetings.

Ensures plans and specifications are in compliance with city, state, and federal regulations.

Prepares and reviews as-built drawings.

Tracks payments and prepares progress payment reports.

Conducts testing of materials.

Reviews shop drawings.

Performs field measurements.

Operates survey equipment.

May prepare sketches or drawings.

May write specifications or requisitions for equipment, materials, and parts.

Prepares punchlists for corrective work.

Calculates scope of work budgets.

Performs budget reviews.

Prepares change order requests.

Performs change order request inspections.

Prepares cost estimates.

KNOWLEDGE, SKILLS AND ABILITIES:

Data Utilization:

Requires the ability to perform mid-level data analysis including the ability to audit, deduce, assess, conclude and appraise. Requires discretion in determining and referencing such to established criteria to define consequences and develop alternatives.

Human Interaction:

Requires the ability to persuade, convince, influence, train and monitor engineers, contractors, architects, tradesmen, and other inspectors, in favor of a desired outcome.

Equipment, Machinery, Tools and Materials Use:

Requires the ability to operate, maneuver and/or provide simple but continuous adjustment on equipment, machinery and tools such as a computer and a vehicle, and/or materials used in performing essential functions.

Verbal Aptitude:

Requires the ability to utilize a variety of reference, descriptive and advisory data and information such as field drawings, inspection logs, permits, county building codes, policy manuals, statutes, procedures, guidelines and non-routine correspondence.

Mathematical Aptitude:

Requires the ability to perform addition, subtraction, multiplication, and division; calculate decimals and percentages; perform basic algebra, geometry, and trigonometry.

Functional Reasoning:

Requires the ability to apply principles of rational systems. Ability to interpret instructions furnished in written, oral, diagrammatic or schedule form. Ability to exercise independent judgment to adopt or modify methods and standards to meet variations in assigned objective.

Situational Reasoning:

Requires the ability to exercise the judgment, decisiveness and creativity required in situations involving the evaluation of information against measurable or verifiable criteria.

Environmental Factors:

Tasks may risk exposure to adverse environmental conditions, such as dirt, dust, rain, fumes, temperature and noise extremes, machinery, vibrations, electric currents, traffic hazards, toxic/poisonous agents, irate individuals, or pathogenic substances.

Physical Requirements:

Tasks involve the ability to exert light to moderate physical effort in moderately physically demanding work that may include the ability to lift, push, and pull moderately light objects and materials, up to twenty (20) pounds.

Tasks require the ability to walk, crouch, crawl, bend, and climb in order to perform inspection duties.

Sensory Requirements:

Requires the ability to recognize and identify similarities or differences between characteristics of colors, shapes, sounds, odors and textures associated with job-related objects, materials and tasks.

EDUCATION AND EXPERIENCE STATEMENT:

Associate's degree in Mechanical Engineering Technology, Civil Engineering Technology, Construction Management, or a directly related field; or at least two (2) years of recent full-time paid experience in construction inspection, construction design, and/or mechanical design including familiarity with electrical and/or HVAC systems; or an equivalent combination of education, training and experience.

SPECIAL REQUIREMENTS:

Possess and maintain a valid Missouri driver's license while employed by the City of St. Louis.

The City of St. Louis is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the City of St. Louis will provide reasonable accommodations to qualified individuals with disabilities and encourages both prospective and current employees to discuss potential accommodations with the City.