

**CITY OF WEST COLUMBIA, SOUTH CAROLINA
JOB DESCRIPTION, DECEMBER 2016**

**JOB TITLE: CIVIL ENGINEER
ADMINISTRATION**

GENERAL STATEMENT OF JOB

Under limited supervision provides engineering and construction support, administrative support and project management for engineering and construction functions related to the design and installation of water and sewer facilities. Responsible for researching and analyzing engineering data, reviewing and designing plans, approving and maintaining related engineering information and providing assistance with project inquiries and concerns. Reports to the deputy city administrator.

SPECIFIC DUTIES AND RESPONSIBILITIES

ESSENTIAL JOB FUNCTIONS

Designs capital improvement projects for the city and provides project management to ensure contractor compliance with time and budget parameters.

Assists in the development of short long-range plans and projects for the city's infrastructure; water and sewer systems.

Recommends projects, estimates budgets, completes applications and seeks approval for capital improvements.

Performs design and administrative review of commercial development, site, and subdivision development plans; reviews plats, plans, specifications, site development plans and subdivision designs prepared by engineering consultants, developers and other contractors for accuracy, completeness and conformance with various laws, codes and regulations, and engineering standards.

Provides field review of projects to ensure compliance to approved plans and performs periodic oversight of contractors.

Publishes requests for proposals, approves bid packages, approves estimates of quantities, monitors bid processes and negotiates with contractors.

Prepares project reports, prepares invoices for funding sources and oversees closeout of projects; gathers, analyzes, and prepares data for studies, reports and recommendations.

Makes presentations concerning engineering projects or functions.

Meets with other departments to establish required assistance and to coordinate engineering responsibilities; consults and coordinates with other local, state and federal agencies.

Utilizes drafting and design software, electronic devices and equipment, land surveying techniques and

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the metric system.

ADDITIONAL JOB FUNCTIONS

Investigates and responds to inquires and concerns from contractors, other departments and agencies, and the general public.

Attends professional development workshops and conferences to keep abreast of trends and developments in the field of municipal planning and engineering.

Performs other duties as needed.

MINIMUM TRAINING AND EXPERIENCE

Requires a Bachelor's Degree in civil engineering or closely related field; supplemented by five (5) years of progressively responsible experience in public works, civil design, construction and operations; or any equivalent combination of education, training and experience which provides the requisite knowledge, skills and abilities for this position. Must possess and maintain a valid South Carolina driver's license. Most possess and maintain a Professional Engineer license.

MINIMUM QUALIFICATIONS OR STANDARDS REQUIRED TO PERFORM ESSENTIAL JOB FUNCTIONS

Physical Requirements: Must be physically able to operate an automobile and a variety of automated office machines including a level, transit, planimeter, radio, flow gauge, computer, telephone, blueprint machine, calculator, copier, drafting instruments, hand tools, etc. Must be physically able to exert up to fifty pounds of force occasionally and/or up to twenty-five pounds of force frequently, and/or a negligible amount of force frequently or constantly to lift, carry, push, pull, or otherwise move objects.

Data Conception: Requires the ability to compare and/or judge the readily observable, functional, structural, or compositional characteristics (whether similar to or divergent from obvious standards) of data, people or things.

Interpersonal Communication: Requires the ability of speaking and/or signaling people to convey or exchange information. Includes giving assignments and/or directions to co-workers or assistants. Includes receiving assignments and/or directions from the deputy city administrator and/or his/her designee.

Language Ability: Requires the ability to read a variety of informational documents, reports, commercial and residential construction plans, blueprints, etc. Requires the ability to prepare various reports and documents including construction plans, inspection reports, computer graphs, etc., using prescribed format and conforming to all rules of punctuation, grammar, diction and style. Must be able to speak before an audience with poise, voice control and confidence; and to articulate information to others.

Intelligence: Requires the ability to apply principles of logical or scientific thinking to define problems, collect data, establish facts, and draw valid conclusions; to interpret an extensive variety of technical

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instructions in mathematical or diagrammatic form.

Verbal Aptitude: Requires the ability to record and deliver information, to explain procedures, to follow oral and written instructions. Must be able to communicate effectively and efficiently in a variety of technical and/or professional languages including Civil Engineering and Contract Law.

Numerical Aptitude: Requires the ability to utilize mathematical formulas; to add and subtract totals; to multiply and divide; to determine percentages and decimals; and determine time and weight. Must be able to use practical applications of fractions, percentages, and ratio and proportion, and statistics.

Form/Spatial Aptitude: Requires the ability to inspect items for proper length, width and shape.

Motor Coordination: Requires the ability to coordinate hands and eyes rapidly and accurately in using automated office equipment; to operate motor vehicles.

Manual Dexterity: Requires the ability to handle a variety of items, office equipment, control knobs, switches, etc. Must have minimal levels of eye/hand/foot coordination.

Color Discrimination and Visual Acuity: Requires the ability to differentiate colors and shades of color; requires the visual acuity to determine depth perception, peripheral vision, inspection for small parts; preparing and analyzing written or computer data, etc.

Interpersonal Temperament: Requires the ability to deal with people beyond giving and receiving instructions. The employee needs to relate to people in situations involving more than giving or receiving instructions. Must be adaptable to performing under minimal levels of stress when confronted with an emergency.

Physical Communication: Requires the ability to talk and/or hear: (talking: expressing or exchanging ideas by means of spoken words; hearing - perceiving nature of sounds by ear).

PERFORMANCE INDICATORS

Knowledge of Job: Has extensive knowledge of the general policies, procedures, guidelines, specifications and regulations established by the city and other regulatory agencies governing the city pertaining to the duties and responsibilities of the position. Has thorough knowledge of engineering design, system components, public utility systems, engineering drawings and specifications, construction plans, and other related subjects as applied to duties and responsibilities. Has knowledge of the terminology relative to civil engineering, real estate development, planning, and construction. Has knowledge how to read and interpret blueprints. Is able to conduct complete and error free reviews and analyses of proposed engineering plans and specifications. Is able to ensure guidelines are satisfied or that reasonable workable alternatives are presented and followed. Has thorough knowledge of supervisory methods and techniques. Is able to conduct thorough and efficient construction investigations for the city. Has thorough knowledge of safety regulations, laws, and standards. Is able to analyze problems that arise in areas of responsibility and recommend solutions. Is able to use judgment and discretion in managing assigned activities. Is able to assemble and analyze information and make written and oral reports concisely, clearly, and effectively. Is able to comprehend, interpret and apply regulations, procedures, and related information. Is able to communicate effectively with a wide variety of public and private groups and is persuasive in such communication. Is able to perform the required mathematical calculations. Has knowledge of how to

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operate and utilize various equipment, machinery and tools in the performance of daily activities. Is able to provide technical assistance to other departments as needed. Is able to work under stressful situations.

Quality of Work: Maintains high standards of accuracy in exercising duties and responsibilities. Exercises immediate remedial action to correct any quality deficiencies that occur in areas of responsibility. Maintains high quality communication and interface with all city departments and divisions, co-workers and customers, and the general public.

Quantity of Work: Maintains effective and efficient output of all duties and responsibilities as described under "Specific Duties and Responsibilities."

Dependability: Assumes responsibility for doing assigned work and for meeting deadlines. Completes assigned work on or before deadlines in accordance with directives, city policy, standards and prescribed procedures. Accepts accountability for meeting assigned responsibilities in the technical, human and conceptual areas.

Attendance: Attends work regularly and on time with a minimum of tardiness and absences and adheres to city policies and procedures regarding absences and tardiness. Provides adequate notice to higher management with respect to vacation time and time-off requests.

Initiative and Enthusiasm: Maintains an enthusiastic, self-reliant and self-starting approach to meet job responsibilities and accountabilities. Strives to anticipate work to be done and initiates proper and acceptable direction for the completion of work with a minimum of supervision and instruction.

Judgment: Exercises analytical judgments in areas of responsibility. Identifies problems or situations as they occur and specifies decision objectives. Identifies or assists in identifying alternative solutions to problems or situations. Implements decisions in accordance with prescribed and effective policies and procedures and with a minimum of errors. Seeks expert or experienced advice and researches problems, situations and alternatives before exercising judgment.

Cooperation: Accepts supervisory instruction and direction and strives to meet the goals and objectives of same. Questions such instruction and direction when clarification of results or consequences are justified, i.e., poor communications, variance with city policy or procedures, etc. Offers suggestions and recommendations to encourage and improve cooperation between all staff persons and departments within city.

Relationships with Others: Shares knowledge with managers, supervisors and staff for mutual and city benefit. Contributes to maintaining high morale among all city employees. Develops and maintains cooperative and courteous relationships with department employees, staffers and managers in other departments, representatives from organizations, customers, and the general public so as to maintain good will toward city and to project a good image. Tactfully and effectively handles requests, suggestions and complaints from other departments and persons in order to maintain good will within city. Emphasizes the importance of maintaining a positive image within city. Interfaces effectively with higher management, professionals, customers, and the general public.

Coordination of Work: Plans and organizes daily work routine. Establishes priorities for the completion of work in accordance with sound time-management methodology. Avoids duplication of effort. Estimates expected time of completion of elements of work and establishes a personal schedule

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accordingly. Attends meetings, planning sessions and discussions on time. Implements work activity in accordance with priorities and estimated schedules. Maintains a calendar for meetings, deadlines and events.

Safety and Housekeeping: Adheres to all safety and housekeeping standards established by city and various regulatory agencies. Sees that the standards are not violated. Maintains a clean and orderly workplace.

DISCLAIMER: This job description is not an employment agreement or contract. Management has the exclusive right to alter this job description at any time without notice.