



ENGINEERING TECH

Summary

This classification is to perform technical and minor administrative functions associated with the Office of the City Engineer, including, but not limited to: inspection of municipal infrastructure projects consisting of water mains, sanitary sewer, storm sewer, streets and erosion control; miscellaneous field surveys; sampling, and report preparation.

DUTIES AND RESPONSIBILITIES

The following duties are normal for this classification. The omission of specific duties does not exclude them from the classification if the work is similar, related, or a logical assignment for this classification. Other duties may be required and assigned.

- Responsible for field inspection of construction sites (streets/roadways, concrete placement, sanitary sewer, and storm sewer construction) for conformance to plans, specifications and established engineering and environmental standards.
- Checks and verifies grade elevations on municipal infrastructure projects and other miscellaneous locations as directed.
- Observes compaction testing; air and mandrel testing; analyzes test results; maintains records.
- Prepares/maintains records documenting inspection activities; maintains accurate field notes/records of utility locations, contractor payments, and construction material quality and quantity.
- Assists in the implementation of the City's Stormwater Management Plan including water quality testing and monitoring of site Best Management Practices (BMPs).
- Responds to calls from elected officials and the public concerning storm drainage maintenance problems, complaints, or emergency situations; investigates citizen complaints regarding the municipal separate storm sewer system (MS4).
- Prepares and/or completes correspondence, forms, reports, or other documents to meet local, state and federal reporting requirements when directed.

- Assists with establishment and implementation of geographical information system (GIS) containing base city map, road system, sanitary sewer system, storm sewer system, potable water system, traffic control system, city limits, police jurisdiction, planning jurisdiction, natural gas distribution lines, power lines, etc.
- Performs minor research functions as assigned; reads and interprets maps and construction plans; operates computers to determine locations of project jobs.
- Coordinates work activities with other departments, contractors, engineers, and outside agencies.
- Operates equipment, tools and instruments associated with Civil engineering and inspection activities, specifically: motor vehicles, handheld computers, GPS equipment, sanitary sewer disk locators, level, surveyor distance measures, manhole hooks, chipping hammers, bush axes, probing rods, measuring wheels, and tape measures.
- Must accomplish the essential functions of the job, with or without reasonable accommodations, in a timely manner.
- Must meet regular attendance requirements.
- Attends workshops, training sessions, meetings and serves on committees.
- Performs some clerical functions.
- Must be able to maintain good interpersonal relationships with staff, co-workers, managers and citizens.
- Comprehends, retains and implements local, state and federal codes pertaining to job function, including but not limited to subdivision regulations, planning and zoning ordinances, stormwater ordinances, FEMA, ADEM, etc.
- Performs other related duties as required.

JOB SPECIFICATIONS

Qualifications:

- Associates degree or vocational/technical school diploma in computer-aided design, geographic information systems, drafting, or related field preferred; high school diploma or GED required, engineering degree preferred.
- Three (3) years of related experience preferably in a municipal or state agency engineering environment working with state or municipal codes, computer-aided design, geographic information systems, drafting, or a related field; or any equivalent combination of education, experience, and/or training which provides the requisite knowledge, skills, and abilities for this job.

- Must possess and maintain a valid driver's license.
- Persons assigned to this job classification must obtain an Alabama Department of Environmental Management (ADEM) Qualified Credentialed Inspectors (QCI) designation and must obtain this designation within one (1) year of employment

Knowledge, Skills, and Abilities:

- 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 which may include forms, reports, reference materials, legal documents, technical journals, regulatory documents, maps, blueprints, directories, procedural manuals, and operational manuals.
- Requires the ability to speak with and/or signal people to convey or exchange information, including giving/receiving assignments and/or directions to/from co-workers, assistants, managers, or supervisors as well as communicating with engineers, regulatory personnel, contractors, and the general public.
- Requires ability to read a variety of civil, environmental and stormwater utility-related documentation, directions, instructions, and methods and procedures. Requires the ability to write job related documentation and reports with proper format, punctuation, spelling and grammar, using all parts of speech.
- Requires the ability to learn and understand relatively simple civil and environmental engineering design information and techniques, to understand departmental policies and procedures, to make independent judgments in absence of supervision, and to acquire and be able to expound on knowledge of topics related to primary occupation.
- Requires the ability to record and deliver information, to explain procedures, and to follow verbal and written instructions.
- Requires the ability to add and subtract, multiply and divide, calculate decimals and percentages; determine time and weight.
- Requires the ability to visually inspect items for proper length, width, and shape using job related equipment which includes drafting instruments, a level, measuring wheel, and standard measuring devices.
- Requires the ability to deal with and relate to people beyond giving and receiving instructions. Must be able to adapt to and perform under moderate-stress when confronted with an emergency.

Physical Characteristics:

- Must be able to operate a pick-up truck, office equipment including a computer, printer, calculator, copiers, fax machines, telephone, drafting instruments, measuring wheel, scale, etc. and a variety of equipment, machinery and tools which may include a handheld computer, sanitary sewer disk locator, level, surveyor distance measure, manhole opener, chipping hammer, bush ax, and probing rod. Physical demand requirements are at levels of

those for medium work.

- Requires the ability to coordinate hands and eyes in using job-related equipment, office equipment and to operate a motor vehicle.
- Requires the ability to handle a variety of items, machinery, automated office equipment, control knobs, drafting instruments, switches, etc. Must have the ability to use one hand for twisting motion or turning motion while coordinating other hand with different activities. Must have average levels of eye/hand/foot coordination.
- May require the ability to discern color.
- Requires the ability to talk, express, or exchange ideas by means of spoken words and/or hear and perceive nature of sounds by ear.

*May be learned on the job.