

CITY OF CHATTANOOGA

Classification Specification Title: Civil Engineer 1

Department: Public Works

Pay Grade: GS.12

Supervision Received From: Multiple

FLSA Status: Exempt

Supervisory Responsibility For: None

Established: 6/29/07

**Revision Dates: 4/1/25;
4/5/24; 10/20/23; 1/11/23**

CLASSIFICATION SUMMARY:

Incumbents in this classification are responsible for performing technical engineering work as assigned by the City Engineer and/or Engineer-of-Record associated with the design and/or coordination of transportation engineering and construction projects to ensure compliance with established industry standards and/or applicable codes; projects are built to plans and specifications, meeting all applicable laws, rules and ordinances and that the quality of work is satisfactory and acceptable within a given time period. Work requires moderate to limited supervision and the use of independent judgment and discretion.

SERIES LEVEL:

The Civil Engineer 1 is the first level of a four-level engineer series.

ESSENTIAL FUNCTIONS:

(The following duties ARE NOT intended to serve as a comprehensive list of all duties performed by all employees in this classification, only a representative summary of the primary duties and responsibilities. Incumbent(s) may not be required to perform all duties listed and may be required to perform additional, position-specific duties.)

Designs transportation projects for public works, ensuring compliance with all applicable codes, laws and regulations, standards, policies and procedures.

Public works transportation projects include but are not limited to geotechnical engineering and design, roadways and streetscapes, storm and sanitary sewer systems, erosion and sediment control, traffic control, traffic signal related analysis, retention and detention ponds and/or other related design items.

Designs and coordinates City-wide services projects which includes investigating public requests, problems and complaints; contacts applicable individuals to initiate corrective action activities; generates work orders to resolve service issues; prepares and completes field design sketches for work orders as necessary; coordinates construction activities with applicable internal departments and external organizations and performs other related activities.

Prepares and/or reviews engineering designs, plans, maps, charts, diagrams, estimates and permitting requests for projects, achieves a comprehensive and current working knowledge of applicable laws, regulations and codes.

Applicable codes include but are not limited to the American Association of State Highway and Transportation Officials (AASHTO) Green Book - A Policy on Geometric Design of Highways and Streets, Manual on Uniform Traffic Control Devices (MUTCD), Americans with Disabilities Act (ADA), American Concrete Institute (ACI) Codes and Standards and Technical Release 55 Manual (TR 55).

Coordinates engineering project activities with a variety of internal departments and external organizations or entities including but not limited to utility companies, other municipalities, surveyors, land agents and/or property owners as necessary.

Assists as directed by Supervisor in the procurement and oversight of professional consulting and/or contracting services which includes assembling bid documents, preparing specifications, opening bids, evaluating responses to bids, participating in pre-bid meetings and performing other related activities.

Communicates with supervisor, management staff, other employees, developers, engineers, contractors, citizens and external organizations to coordinate activities.

Performs project reviews and evaluations and makes recommendations based on findings.

Conducts inspections and site visits to ensure projects are in compliance with applicable codes, laws, rules, regulations, specifications, standards, policies and procedures; initiates corrective action to mitigate violations and deviations. Oversees and monitors on-site materials testing activities.

Represents the department and/or the City at a variety of meetings, public events, training sessions, committees and/or other related events or groups in order to receive and convey information pertaining to City projects or programs.

Provides technical guidance on a variety of construction-related projects.

Creates and processes work orders for transportation engineering projects. Facilitates and/or coordinates the processing of engineering documents, permits, GIS data and/or applications with applicable internal departments.

Prepares a variety of engineering records and documentation to include technical documentation, notices, publications, reports, maps, specifications, design drawings, manuals, catalogs, reference materials, regulations and/or other related items; disseminates applicable documents to internal staff, government agencies and external businesses or individuals.

Responsible for reading current technical literature, maintaining professional affiliations and attending workshops and technical training sessions when appropriate.

Maintains databases for roadways and bridges owned by the City.

Works directly with inspectors and senior engineers to research, initiate and implement pavement preservation and maintenance activities.

Uses, carries, and answers their cell phone for business purposes as determined by the assigned job duties and the department head.

Must meet regular attendance requirements.

Must be able to maintain good interpersonal relationships with staff, co-workers, managers, and citizens.

Must accomplish the essential functions of the job, with or without reasonable accommodations, in a timely manner.

Performs other duties as assigned.

DEPARTMENT SPECIFIC DUTIES (if any):

MINIMUM QUALIFICATIONS:

Bachelor's Degree in Civil Engineering (B.S.C.E.) and two (2) years previous experience preferred that includes training in computer-aided design of streets and roads, traffic signals, sanitary sewers, storm water sewers and related structures; or two (2) years previous experience preferred in construction engineering and inspection (CEI) procedures and methods; or any combination of equivalent experience and education. Education may include other applicable engineering fields.

Experience with AutoCAD Civil 3D is preferred.

This is a career ladder position. This position will receive an automatic progression to Civil Engineer 2 when the incumbent has achieved the required minimum qualifications and licenses/certifications for the next position in the series.

LICENSING AND CERTIFICATIONS:

Valid Driver's License

Preferred Certifications:

Engineer-In-Training Certification

Tennessee Department of Environment & Conservation Certifications: Level I and Level II
Erosion & Sediment Control

Hot Mix Asphalt Roadway Certification

Concrete Certified Field Technician

Concrete Plant Quality Control Technician

Soils & Aggregate Certified Testing Technician

Tennessee Academy for Transportation Engineering Certificate (TATE)

KNOWLEDGE AND SKILLS:

Knowledge of applicable Federal, State and Local laws, ordinances, codes, rules, regulations, policies and procedures preferred; engineering design standards; customer service principles; civil engineering design principles; construction principles and practices; materials, tools and methods involved in the design and construction or repair of roads, highways and structures and land surveying guidelines. Skill in using a computer and related software applications, such as AutoCAD, ArcView, MicroPAVER and ArcGIS, Synchro and HCS+; in managing projects; implementation of design and construction documents for municipal construction projects; coordinating construction contract activities; providing customer service; reading and comprehending a variety of technical plans, drawings and models; using logic and reasoning to identify strengths and weaknesses of alternative solutions, conclusions or approaches to problems; preparing technical documents; preparing and reviewing engineering designs in compliance with applicable standards; interpreting and comprehending applicable laws,

ordinances, codes, rules, regulations, policies and procedures and communication and interpersonal skills as applied to interaction with co-workers, supervisor, the general public, etc. sufficient to exchange or convey information and to receive work direction.

PHYSICAL DEMANDS:

Positions in this class typically require reaching, standing, walking, fingering, grasping, feeling, talking, hearing, seeing, and repetitive motions.

WORK ENVIRONMENT:

Light Work: Exerting up to 20 pounds of force occasionally and/or up to 10 pounds of force frequently and/or negligible amount of force constantly to move objects. If the use of arm and/or leg controls requires exertion of forces greater than that for Sedentary Work and the worker sits most of the time, the job is rated for Light Work. Incumbents may be subjected to fumes, odors, dust and extreme temperatures.

SPECIAL REQUIREMENTS:

Safety Sensitive: N

Department of Transportation - CDL: N

Child Sensitive: N

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