



City of Irving Job Description

Engineering Technician

FLSA Status:	Non-Exempt	Job Department:	Capital Improvement Program Department
Job Code:	K612	Reports To (Job Title):	Engineering Manager

PURPOSE

To support senior staff with engineering design, technical documentation, and project management of in-house public works assignments. To perform a variety of technical tasks relative to assigned area of responsibility.

ESSENTIAL DUTIES AND RESPONSIBILITIES

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily.*

- Prepare engineering designs and drawing for Public Works projects, including water, sanitary sewer, storm sewer, hydraulic systems, and paving.
- Write technical documents, including project specifications, contracts, cost estimates, and bid proposals.
- Use software systems to design and prepare documents, GIS data, and reports.
- Work with public to resolve complaints regarding in-house projects.
- Assist public with research, construction planning, plating, and identifying utilities.
- Provide technical support to inspectors, surveyors, and contractors.
- Research utility easement locations, right-of-ways, and property ownership through City Secretary's office, GIS, and public records.
- Perform related duties as assigned.

OTHER DUTIES AND RESPONSIBILITIES

- Prepare technical data into presentation exhibits for internal and external meetings.

SUPERVISORY RESPONSIBILITIES

Supervisory responsibility is not a regular part of the position.

FINANCIAL / BUDGETARY RESPONSIBILITY

Frequently asked to estimate proposed construction costs.

QUALIFICATIONS:

The requirements listed below are representative of the knowledge, skill, and/or ability required.*

EDUCATION

- Associate's degree from accredited college or university in related field or equivalent experience.

EXPERIENCE

- Minimum of two (2) years of experience in related field.

CERTIFICATES, LICENSES, REGISTRATIONS

- Appropriate, valid, state-issued driver's license.

KNOWLEDGE OF

- Design: Design techniques, principles, tools, and instruments involved in the production and use of precision technical plans, blueprints, drawings, and models.
- Computers and Electronics: Computer hardware and software including applications and programming, especially CAD and other technical design related programs.
- Customer Service: Principles and processes for providing customer and personal services including a desire to help customers regardless of their circumstance..
- English Language: The structure and content of the English language, including the meaning and spelling of words and the rules of composition and grammar.
- Advanced Math: Mathematical calculations including geometry, trigonometry, algebra, statistics, and calculus.

SKILLS AND ABILITIES IN

- System Analysis: Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes.
- System Evaluation: Identifying measures or indicators of system performance and the actions needed to improve or correct performance relative to the goals of the system.
- Mechanical/Technical: Operating highly-complex computer and office equipment, including computer-driven communications and mapping systems.
- Interactive Presentation: Effectively presenting information and responding to questions from groups of managers, clients, customers, and the general public.
- Complex Problem Solving Identifying problems and reviewing related information to develop and evaluate options, project consequences, and implement solutions in support of goals.
- Sequencing: Correctly following a given rule or set of rules to arrange things or actions. The things or actions can include numbers, letters, words, pictures, procedures, sentences, and mathematical or logical operations.
- Written Expression: Communicating information and ideas in writing so others will understand, including completing reports according to pre-set formats.
- Technical Reasoning: Interpreting an extensive variety of technical instructions in mathematical or diagram form and deal with multiple abstract and concrete variables.

GUIDANCE RECEIVED

Periodic Supervision and Range of Guidelines/Procedures

Follows periodic direct instructions and guidelines, policies and procedures that require some interpretation. Problems that cannot be addressed through an existing guideline, policy or procedure are referred to supervisor or more senior position. Position incumbent must exercise judgment about when to escalate issues.

CONTACTS

This position interacts with other departments such as Water Utilities, Police, Fire, Code Enforcement and Inspections. Often, this position will also interact with outside agencies such as consulting firms, Dallas County, DART and TxDOT.

EQUIPMENT AND PROPERTY

Computers, plotters, printers, automobile and calculator.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.*

The employee constantly is required to see, sit, talk, and/or walk. Frequently, s/he is required to listen, stand, and/or balance. Occasionally, s/he is required to drive a vehicle, grasp, stoop, handle, feel, push, pull, and/or reach. In rare instances, s/he is required to carry, smell, and/or lift up to 25 pounds.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.*

The employee occasionally is exposed to a dirty environment and air contamination. The noise level in the work environment is usually quiet.

* Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Note: A class specification is a general listing of duties, responsibilities, knowledge, skills, and abilities required of an incumbent assigned to a particular class of work. There may be one or multiple positions assigned to a single classification; therefore, the class specification lists those work attributes that are common to every incumbent in the class.