

CITY OF SOLVANG
JOB DESCRIPTION
ENGINEERING TECHNICIAN

This is not an individualized job description. It defines the general character and scope of responsibilities. It is not intended to describe and does not necessarily list every duty for a given position.

DEFINITION

Under the supervision of the Public Works Director/City Engineer, makes engineering computations, layouts and lettering, and prepares engineering drawings, maps and charts.

LICENSE REQUIRED

Possession of a valid and appropriate California driver's license.

EXAMPLES OF DUTIES

Duties may include, but are not limited to the following:

- Preparation of preliminary and final designs from field notes and data files, drawings, plotting profiles and cross sections.
- Calculates areas and performs other necessary mathematical computations.
- Reviews bids, plans and designs submitted by private contracting firms for completeness and conformance with well established ordinance codes, standard plans, department policies, criteria, engineering principles and conditions of approval.
- Develops applications for grant funding by preparing cost estimates and other support documentation.
- Assists in coordinating activities necessary for the execution and implementation of capital projects.
- Reviews memorandums, reports and other written materials for the purpose of summarizing and making reports and recommendations.
- Prepares analyses of cost and/or effectiveness of engineering alternatives.
- Inspects various public works construction of public and private facilities
- Confers with and assists the public, utility company and private contractor inquiries on various public works related projects during the planning, design and construction phases.
- Participates in in-depth study projects, works independently on technical engineering assignments and provides support to a professional engineer.
- Provides limited supervision to others engaged in technical engineering related work; performs other related duties as assigned.

ESSENTIAL FUNCTIONS

- Prepares correspondence & keeps daily log books for public works projects
- Prepares drawings of streets, structures, sewers, storm drains, water and other utility plans.
- Draws, traces and updates maps and charts.
- Performs design drafting by utilizing CAD (Computer Aided Design).
- Prepares visual aids for public presentations.
- Makes trigonometric and other mathematical calculations.
- Reads and interprets engineering sketches, maps, survey field notes, aerial photographs and drawings of electrical and mechanical systems.

- Plots profiles and cross sections.
- Makes field investigations.

Engineering Tech Cont'd

- Computes areas, angles, grades, elevations, boundaries, distances, volumes and traverses.
- Assists in preparing cost estimates and analyzes material costs, quality and quantity.
- Performs field surveys.
- Conducts plan checks for compliance with City standards, regulations and noninterference with utilities.
- Collects data such as traffic parameters and inspect traffic control and striping.
- Assists in developing project standards and specifications.
- Performs other related duties as required.

PHYSICAL DEMANDS

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

PHYSICAL REQUIREMENTS

Strength: Light – Exert force to 20 pounds occasionally or 10 pounds frequently, or negligible force constantly to lift, carry, push, pull, or move objects, Frequently stand or walk or sit; fingering, typing. Occasionally bend, stoop, crouch, kneel, handle, grip, grasp, extend neck upward, downward or side-to-side. Rarely crawl, climb, reach, push/pull, twist at the waist.

Vision: visual acuity sufficient to perform the essential functions of the position; average depth perception needed.

Hearing: ability to effectively hear and comprehend oral instructions and communication and construction and traffic noise.

ENVIRONMENTAL CONDITIONS

Work both indoors and outdoors; Frequent use of computer; Occasional to frequent work around machinery and drive motorized vehicles; Occasional exposure to dust, fumes, smoke, gases, and odors, excessive noises and to slippery or uneven walking surfaces, excessive noises, chemicals, solvents, grease, or oil; Rare exposure to chemicals, solvents, grease or oil; Frequently works alone and occasionally with others; some exposure to water, chemicals, hazardous materials, noise, heavy lifting/moving, standing, climbing; May work at heights, in confined spaces, and in inclement weather.

EDUCATION AND EXPERIENCE

Two years experience in engineering drafting and calculations. Education equivalent to completion of high school including or supplemented by course work in algebra, geometry, trigonometry and drafting.

This is to acknowledge that I have received a copy of this job description and understand its contents.

Employee Signature

Date

City Council Approval: 05/10/10

Meet & Confer Approval: 04/12/2010