

CHIEF SURVEYOR

JOB DESCRIPTION

Classification Responsibilities: Under general direction, supervises the performance of survey parties performing all types of field surveying; performs related work as required.

Distinguishing Features: Under the general direction of the Supervising Engineer, the Chief Surveyor directs the staff engaged in technical survey projects. The Chief Surveyor resolves problems and may perform the more difficult work associated with surveys. The Chief Surveyor imports raw survey data from field survey equipment and processes data in AutoCAD to create graphical representation of points, lines, and features. The Chief Surveyor creates digital terrain models. The Chief Surveyor, in compliance with Arizona Revised Statutes (ARS) requirements, writes legal descriptions, and creates associated exhibits in AutoCAD. The employee in this class is considered to be the principal land surveyor for the City of Mesa; they are required to seal survey's, and record drawings and legal descriptions. The Chief Surveyor analyzes survey records and other information to determine property locations. The employee in this class may perform and/or verify construction staking. This employee is required to use appropriate safety equipment and procedures in performing assignments. This class is FLSA exempt-executive.

QUALIFICATIONS

Employee Values: All employees of the City of Mesa are expected to uphold and exhibit the City's shared employee values of Knowledge, Respect, and Integrity.

Minimum Qualifications Required. Graduation from high school or GED. Extensive (5+ years) of surveying experience, including five or more years as a Registered Land Surveyor.

Special Requirements. Must be registered in the State of Arizona as a Land Surveyor. Must possess a valid Arizona Driver's License by hire date.

Substance Abuse Testing. Due to the safety and/or security sensitive nature of this classification, individuals shall be subject to pre-employment or pre-placement alcohol, drug and/or controlled substance testing as outlined in City policy and procedures.

Preferred/Desirable Qualification. Supplemental coursework in land surveying, advanced mathematics, and civil engineering is preferred.

ESSENTIAL FUNCTIONS

Communication: Communicates with the general public, other City employees, vendors, management, and contractors to answer questions, resolve problems, and coordinate work assignments. Instructs and trains subordinates in a classroom setting regarding work standards and policies, and technical aspects of surveying. Prepares written legal descriptions, performance appraisals, purchase orders, and departmental memos with clearly organized thoughts and using the proper sentence construction, punctuation, and grammar.

Manual/Physical: Reviews the work products of others to ensure compliance with standard operating procedures, and federal and state regulations. Operates a motor vehicle requiring a standard Arizona Driver's License to monitor and inspect work in progress, and to transport crew and equipment to job sites. Inspects, monitors, and evaluates survey control points, section corners, and bench marks to determine compliance with prescribed operating and safety standards. Distinguishes the full color spectrum in order to determine color code paint markings. Operates a variety of standard office equipment. Enters data into a personal computer (PC) or hand held calculator in order to complete survey work. Prepares and updates maps and schedules. Performs physical inventories of survey equipment and supplies. Meets scheduling and attendance requirements.

Mental: Plans, organizes, and directs survey personnel. Supervises and evaluates the work of subordinate personnel, such as preliminary and construction surveys. Prioritizes own work, work of staff, and assigns work to personnel. Resolves procedural and operational problems not covered by policies and procedures. Coordinates work activities and programs functions with other City departments, other cities, and other agencies. Develops policies and procedures, and short- and long-term objectives. Conducts research and analyzes data to ensure surveys are accurate, complete, and meet regulations. Performs mathematical calculations in order to perform surveys. Comprehends and makes inferences from written material, such as the U.S. Manual of Surveying Instructions, Specifications and Details, and publications to ensure work is completed within specified guidelines and to update survey technology. Understands and interprets legal descriptions, blueprints, schematic drawings, layouts and other visual aids. Estimates labor and material costs from blueprints and other work plans. Learns job-related material through on-the-job training and by studying surveying periodicals. Stays abreast of new technology and equipment as it pertains to the surveying field. Applies new information to staff training. Learns job-related material in a classroom setting regarding field surveying methods and techniques.

Knowledge and Abilities:

Knowledge of:

field surveying methods and techniques;
the surveying instruments used in the calculation of data and measurement, and locations of line elevations, areas, angles, points, and contours of the Earth's surface;
the local principles, rules, and regulations governing land surveying as defined in the Arizona Revised Statutes;
mathematics (examples: algebra, geometry, and trigonometry);
terminology, principles, and techniques of civil engineering;
applicable City policies and procedures;
construction methods and techniques;
supervisory techniques; and
the survey techniques used in making cross section, profile, location, topographic, and construction layout, right-of-way and boundary surveys.

Ability to:

schedule job crews not only in response to contractors' and engineers' requests, but to effectively undertake priority projects and attempt to meet the needs of all concerned parties;

establish priorities, evaluate workload, and recommend which projects are appropriate for external survey support;
develop and initiate training programs for subordinate surveyors to ensure a consistently high degree of accuracy in work performed by City survey parties;
coordinate survey requests from other City departments, divisions, and sections such as Traffic and Streets, Electric, Utility Construction, and Real Estate Services;
direct surveys in the most effective manner to approach job assignments;
research survey records, interpret, and write legal descriptions;
calculate and balance traverse surveys upon their completion in the field;
keep records and references to survey section corners, street intersection monuments, subdivision control points, and bench marks (known elevations);
resolve problems or conflicts due to interpretations of plans and specifications or situations not covered by policies and procedures;
investigate complaints from contractors, developers, engineers, and City staff regarding work of the personnel supervised;
approve minor deviations from plans and specifications;
assist the Field Supervising Engineer in evaluating requests for major changes;
demonstrate the use of complex optical and electronic instruments and equipment used in survey engineering;
read construction plans and specifications;
prepare analytical reports;
communicate effectively with engineers, public officials, and the general public;
supervise employees in a manner conducive to full performance and high morale;
employ the practical application of fractions, percentages, ratios and proportions, mensuration, logarithms, practical algebra, geometric construction, and essentials of trigonometry;
demonstrate and practice safe working procedures; and
handle all physical requirements of the class.

The duties listed above are intended only as general illustrations of the various types of work that may be performed. Specific statements of duties not included does not exclude them from the position if the work is similar, related, or a logical assignment to the position. Job descriptions are subject to change by the City as the needs of the City and requirements of the job change.

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EEO-Tech

JOB FCTN-TEC

INCREMENTS 53-200

PAY GRADE: 50

IND-9410

SWORN-No