

## CHIEF LAND SURVEYOR

### JOB DESCRIPTION

**Classification Responsibilities:** A Chief Land Surveyor, under general direction, engages in technical land surveying work to include the performance of, and supervision of the performance of land survey personnel in performing research, all types of field surveying, processing of field data and preparation of legal descriptions, reports, and maps as required by each project.

**Distinguishing Features:** Under the general direction of a Supervising Engineer, the Chief Land Surveyor is responsible for supervising and coordinating the work of the land survey staff involved in performing technical survey work for city projects. The Chief Land Surveyor resolves problems and may perform the more difficult work associated with land surveys. The employee in this class is the principal land surveyor for the City of Mesa. In compliance with Arizona Revised Statutes (ARS) requirements, this class writes legal descriptions and creates associated exhibits in AutoCAD. The Chief Land Surveyor is required to seal land surveys and record drawings and legal descriptions. The employee in this class analyzes survey records and other information to determine property locations. The employee in this class may perform and/or verify construction staking. The Chief Land Surveyor imports raw land survey data from field survey equipment and processes data in AutoCAD to create graphical representation of points, lines, and features. The Chief Land Surveyor creates digital terrain models. This employee is required to use appropriate safety equipment and procedures in performing assignments. The employee in this class must be able to handle multiple and complicated tasks and have prompt decision-making skills in times of pressure and high work volume. 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 seven (7) years of professional surveying experience with at least one (1) year as a registered land surveyor.

**Special Requirements.** Must be registered in the State of Arizona as a Land Surveyor by hire date. Must possess a valid Class D Arizona Driver's License by hire or promotion 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 Qualifications.** 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. Trains

land survey staff on work standards and policies, and technical aspects of surveying. Prepares written legal descriptions, performance appraisals, and departmental memos with clearly organized thoughts and using the proper sentence construction, punctuation, and grammar. Ability to maintain concentration, accuracy, and ethical behavior. Ability to work well with other coworkers, managers, business partners and the public. Ability to always maintain a professional demeanor.

**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 Class D Arizona Driver's License to monitor and inspect work in progress. Inspects, monitors, and evaluates survey control points, section corners, and benchmarks to determine the needs for updating the published descriptions, positions, and elevations as required. 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 land survey personnel. Supervises and evaluates the work of land survey staff such as boundary, topographic, and construction surveys. Prioritizes own work, work of staff, and assigns work to land survey staff. 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 for Public Works Construction, and recognized land surveying publications to ensure work is completed within specified guidelines. 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.

### **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 performing topographic, right-of-way, boundary, and construction surveys.

Ability to:

schedule land survey staff not only in response to land survey 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 land surveyors to ensure a consistently high degree of accuracy in work performed by City land survey staff;  
coordinate survey requests from other City departments;  
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 benchmarks (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 land survey staff supervised;  
approve minor deviations from plans and specifications;  
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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JOB FCTN-TEC

INCREMENTS 38-200

PAY GRADE 56

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