



## Career Service Authority

### Staff Land Surveyor

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#### **GENERAL STATEMENT OF CLASS DUTIES**

Performs entry level surveying work by assisting with land surveying which requires the application of the fundamentals of land surveying while gaining practical experience under the direction of a licensed surveyor in responsible charge.

#### **DISTINGUISHING CHARACTERISTICS**

There are three classes in the professional surveying series and this is the first class in the series (Land Surveyor and Senior Land Surveyor). This class describes the entry level non-licensed surveyor work assisting a Land Surveyor in their professional duties and may lead a survey crew or perform surveying work individually within a range of specified, acceptable standards, alternatives, and technical practices. This class is distinguished from a Land Surveyor that performs full performance professional land surveying work requiring independent application of the principles and practices of land surveying. The Staff Land Surveyor is also distinguished from the Senior Land Surveyor that performs supervisory duties over professional land surveyors.

#### ***Guidelines, Difficulty and Decision Making Level:***

Guidelines are generally but not always clearly applicable, requiring the employee to exercise judgment in selecting the most pertinent guideline, interpret precedents, adapt standard practices to differing situations and recommend alternative actions in situations without precedent.

Duties assigned are generally complex and may be of substantial intricacy. Work assignment is performed within an established framework under general instructions but requires simultaneous coordination of assigned functions or projects in various stages of completion.

Employee is responsible for determining time, place and sequence of actions to be taken. Unusual problems or proposed deviations from guidelines, practices or precedents may be discussed with the supervisor before being initiated.

#### ***Level of Supervision Received and Quality Review:***

Under normal supervision, within a standardized work situation, the employee performs duties common to the line of work without close supervision or detailed instruction. Work product is subject to continual review.

#### ***Interpersonal Communications and Purpose:***

Contacts with the public or employees where explanatory or interpretive information is exchanged, gathered or presented and presented and some degree of discretion and judgment are required within the parameters of the job function.

***Level of Supervision Exercised:***

By position, performs lead work over para-professional staff.

**ESSENTIAL DUTIES**

Assists with performing land surveys including subdivision checks, laying out of property line, deformation studies, monument maintenance, and ties to the state plane coordinate system.

Assists with preparing and checking legal descriptions for properties, plans, ordinances, easements, and agreements.

Assists with electronic and manual review of maps, plats, development projects, legal descriptions, and related documents.

Makes recommendations to the land surveyor in responsible charge for project compliance, approval, or denial.

Leads survey personnel in obtaining and adjusting of horizontal and vertical measurements taken in the field; used for designing infrastructure, preparation of topographical maps, and in the establishment of survey control points and positions.

Establishes line and grade control staking for various field projects, calculates survey closures and earth quantities, and maintains detailed field and office notes for design and construction purposes.

Researches recorded data from such sources as property descriptions, plats, utility maps, and land corner records including Internet resources.

Leads staff in the establishment and retracing of property boundaries and lines taken from an analysis and interpretation of legal descriptions, plat, and notes under the direction of the land surveyor in responsible charge.

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Any one position may not include all of the duties listed. However, the allocation of positions will be determined by the amount of time spent in performing the essential duties listed above.

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**MINIMUM QUALIFICATIONS**

***Competencies, Knowledges & Skills:***

**Surveying** - Knowledge of the concepts, principles, theories, and methods used in the measurement or determination of land boundaries, distances, elevations, areas, angles, and other features of the earth's surface.

**Integrity/Honesty** - Contributes to maintaining the integrity of the organization; displays high standards of ethical conduct and understands the impact of violating these standards on an organization, self, and others; is trustworthy.

**Technical Competence** - Uses knowledge that is acquired through formal training or extensive on-the-job experience to perform one's job; works with, understands, and evaluates technical information related to the job; advises others on technical issues.

**Technology Application** - Uses machines, tools, instruments, or equipment effectively; uses computers and computer applications to analyze and communicate information in the appropriate format.

**Mathematical Reasoning** - Solves practical problems by choosing appropriately from a variety of mathematical and statistical techniques.

**Reading** - Understands and interprets written material, including technical material, rules, regulations, instructions, reports, charts, graphs, or tables; applies what is learned from written material to specific situations.

**Attention to Detail** - Is thorough when performing work and conscientious about attending to detail.

**Writing** - Recognizes or uses correct English grammar, punctuation, and spelling; communicates information (for example, facts, ideas, or messages) in a succinct and organized manner; produces written information, which may include technical material that is appropriate for the intended audience.

**Interpersonal Skills** - Shows understanding, friendliness, courtesy, tact, empathy, concern, and politeness to others; develops and maintains effective relationships with others; may include effectively dealing with individuals who are difficult, hostile, or distressed; relates well to people from varied backgrounds and different situations; is sensitive to cultural diversity, race, gender, disabilities and other individual differences.

**Spatial Orientation** - Knows one's location in relation to the environment; determines where other objects are in relation to one's self (for example, when using a map).

**Self-Management** - Sets well-defined and realistic personal goals; displays a high level of initiative, effort, and commitment towards completing assignments in a timely manner; works with minimal supervision; is motivated to achieve; demonstrates responsible behavior.

**Problem Solving** - Identifies problems; determines accuracy and relevance of information; uses sound judgment to generate and evaluate alternatives, and to make recommendations.

**Planning and Evaluating** - Organizes work, sets priorities, and determines resource requirements; determines short- or long-term goals and strategies to achieve them; coordinates with other organizations or parts of the organization to accomplish goals; monitors progress and evaluates outcomes.

**Reasoning** - Identifies rules, principles, or relationships that explain facts, data, or other information; analyzes information and makes correct inferences or draws accurate conclusions.

**Self Esteem** - Believes in own self-worth; maintains a positive view of self and displays a professional image.

**Decision Making** - Makes sound, well-informed, and objective decisions; perceives the impact and implications of decisions; commits to action, even in uncertain situations, to accomplish organizational goals; causes change.

**Cartography** - Knowledge of the concepts, principles, theories, and methods related to the research, design, development, or revision of maps, charts, and related cartographic products, and photogrammetric and cartographic processing.

**Oral Communication** - Expresses information (for example, ideas or facts) to individuals or groups effectively, taking into account the audience and nature of the information (for example, technical,

sensitive, controversial); makes clear and convincing oral presentations; listens to others, attends to nonverbal cues, and responds appropriately.

**Teamwork** - Encourages and facilitates cooperation, pride, trust, and group identity; fosters commitment and team spirit; works with others to achieve goals.

**Customer Service** - Works with clients and customers (that is, any individuals who use or receive the services or products that your work unit produces, including the general public, individuals who work in the agency, other agencies, or organizations outside the Government) to assess their needs, provide information or assistance, resolve their problems, or satisfy their expectations; knows about available products and services; is committed to providing quality products and services.

**Information Management** - Identifies a need for and knows where or how to gather information organizes and maintains information or information management systems.

**Learning** - Uses efficient learning techniques to acquire and apply new knowledge and skills; uses training, feedback, or other opportunities for self-learning and development.

**Flexibility** - Is open to change and new information; adapts behavior or work methods in response to new information, changing conditions, or unexpected obstacles; effectively deals with ambiguity.

**Memory** - Recalls information that has been presented previously.

**Creative Thinking** - Uses imagination to develop new insights into situations and applies innovative solutions to problems; designs new methods where established methods and procedures are inapplicable or are unavailable.

**Stress Tolerance** - Deals calmly and effectively with high stress situations (for example, tight deadlines, hostile individuals, emergency situations, dangerous situations).

Knowledge of land geographic information systems, surveying computations, and boundary law sufficient to be able to perform land surveys and define property lines.

Knowledge of rules, regulations, and requirements for processing Subdivisions, Planned Unit Developments (PUD), and Planned Building Groups (PBG).

Knowledge of the process and requirements for Revocable Permits, Right-of-Way Dedications, Street and Alley Vacations and Easement Relinquishments.

Knowledge of research of City ownership, right-of-way and other property issues.

Knowledge of supervisory principles and practices sufficient to be able to perform a variety of lead work functions.

Knowledge of supervisory principles and practices sufficient to be able to contribute to the development of an employee performance plan and document employee performance.

Skill in using a computer and various software packages.

Skill in using land geographic information systems and knowledge of standard legal practices and interpretations.

Skill in recognizing non-standardized situations and preparing recommendations for problem resolution.

***Physical Demands:***

Standing: remaining on one's feet in an upright position  
Walking: moving about on foot.  
Lifting: raising or lowering an object from one level to another.  
Carrying: transporting an object, usually by hand, arm, or shoulder.  
Pushing: exerting force upon an object so that the object is away.  
Pulling: exerting force on an object so that it is moving to the person.  
Climbing: ascending or descending objects usually with hands/feet.  
Balancing: maintaining body equilibrium to prevent falling.  
Stooping: bending the body by bending spine at the waist.  
Kneeling: bending legs to come to rest on one or both knees.  
Crouching: bending body downward and forward by bending legs.  
Reaching: extending the hand(s) and arm(s) in any direction.  
Handling: seizing, holding, grasping, or otherwise working with hand(s).  
Fingering: picking, pinching, or otherwise working with fingers.  
Hearing: perceiving the nature of sounds by the ear.  
Repetitive motions: making frequent movements with a part of the body.  
Eye/hand/foot coordination: performing work through using two or more.

***Working Environment:***

May be exposed to extremes of heat and cold.  
May be exposed to sufficient noise to cause distraction.  
May be exposed to conditions where there is danger to life and body (automobile traffic).  
May be exposed to atmospheric conditions that affect the skin or respiratory system.

***Education Requirement:***

Baccalaureate Degree in surveying, engineering, science or a related field.

***Experience Requirement:***

None.

***Education/Experience Equivalency:***

Additional appropriate experience may be substituted for the minimum education requirement on a one year for one year basis.

***Licensure and/or Certification:***

Enrollment as a Land Surveyor Intern (LSI) issued by the Colorado State Board of Licensure for Professional Engineers and professional Land Surveyors at the time of application. Enrollment as a Land Surveyor Intern (LSI) by another state will be accepted in lieu of this requirement providing the applicant is enrolled by the State of Colorado by the completion of the probationary period.

Possession of a valid Colorado Class "R" Driver's license at the time of application.

**CLASS DETAIL**

**FLSA CODE:** Exempt

**ESTABLISHED DATE:** 03/16/2006

**ESTABLISHED BY:** Jerome Cooper

**REVISED DATE:** 05/10/2009

**REVISED BY:** Patricia Anderson

**CLASS HISTORY:** 3/2006 – Created new class classification.  
5/2009 – Changed the experience requirement to “None” which is the same requirement for other professional staff level classes.