

### STATE OF NEVADA

# Department of Administration Division of Human Resource Management

## CLASS SPECIFICATION

TITLE GRADE EEO-4 CODE

PROFESSIONAL LAND SURVEYOR 42 B 6.208

Professional Land Surveyors are supervisors who plan, organize, schedule and oversee the layout of survey projects for the section; discuss projects with representatives of all divisions within the department and other involved agencies to determine limits of the areas to be covered and the types of survey data needed. Incumbents design and devise measurement specifications and standards to accomplish measurements with the desired precision, accuracy, error control and adjustment; act as the primary analyst of both measurement data and boundary evidence and are required to give professional opinions or expert testimony regarding most probable ground locations.

Research cartography, engineering files, geodesy, right-of-way engineering and other sources to obtain data on boundaries, centerlines and right-of-way lines to be set in the field; determine flight lines and placement of needed survey control points for aerial survey projects; determine placement of centerlines, offset lines and traverses needed for conventional location survey projects; determine through map sheets and/or plan sheets whether boundary control points can be set from existing survey control or if new control points need to be established.

Conduct project reconnaissance to search for survey control to be used and/or property corners and section corners to be tied; conduct a project orientation with personnel assigned to the project; retrace property boundaries and perform geodetic and other precise control surveys.

Train, supervise and evaluate the performance of professional and technical staff; assign and review work; determine training needs and implement training activities; and forecast staffing needs.

Prepare and negotiate draft budget requests and review purchase requests for supplies, equipment and services for compliance with fiscal policies and procedures.

Perform related duties as assigned.

#### MINIMUM QUALIFICATIONS

#### **INFORMATIONAL NOTE:**

\* Any person licensed as a Professional Land Surveyor in another state must become licensed in Nevada within six months following the date of appointment as a condition of employment.

EDUCATION AND EXPERIENCE: Licensure as a Professional Land Surveyor in Nevada and two years of licensed professional experience in a supervisory or responsible project charge capacity. (See Informational Note)

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES (required at time of application):

**Detailed knowledge of:** principles and practices of land surveying; use, care and adjustment of surveying instruments; survey methods and procedures. **Working knowledge of:** mathematics, algebra, geometry, calculus, statistics, and their applications; procedures for the recording of maps, records of surveys, parcel maps and documents requiring certification by a Professional Land Surveyor; principles and methods for describing

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# MINIMUM QUALIFICATIONS (cont'd)

#### ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES (cont'd)

the features of land, sea and air masses, including physical characteristics, locations, interrelationships, and distribution of plants, animals, and human life; communicating effectively both orally and in writing as appropriate for the needs of the audience. Ability to: read and interpret highway construction plans, survey plats, topographic maps, township plats, and aerial photographs; calculate heights, depths, relative positions, property lines and other characteristics of terrain; compute geodetic measurements and interpret survey data in order to determine positions, shapes and elevations of geomorphic and topographic features; determine longitudes and latitudes of important features and boundaries in survey areas, using theodolites, transits, levels, and satellite-based global positioning systems (GPS); plan and conduct surveys designed to establish baselines, elevations, and other geodetic measurements; record the results of surveys including the shape, contour, location, elevations, and dimensions of land or land features; verify the accuracy of survey data including measurements and calculations conducted at survey sites.

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES (typically acquired on the job):

**Detailed knowledge of:** optimum placement and minimum density of survey control for photogrammetric bridging; geodetic surveying; construction surveying. **Working knowledge of:** principles of training and supervision; State personnel and purchasing regulations.

This class specification is used for classification, recruitment and examination purposes. It is not to be considered a substitute for work performance standards for positions assigned to this class.

6.208

ESTABLISHED: 10/1/04PC