

CLASS SPECIFICATION

Class Code: 16150
Date Est: 05/2007
Last Rev: 08/2016

Last Title Chg:

FLSA: Non-exempt Probation: 12 months

GEOMATICS SPECIALIST

DEFINITION

Under general supervision, performs geomatics engineering surveying work requiring the application of geomatics engineering principles, practices and theories; operate and maintain the regional Base Station System; plans, directs and participates in Global Positioning System (GPS) static, fast static and real time survey activities; and performs related work as required.

EXPERIENCE AND TRAINING REQUIREMENTS

A bachelor's degree from an accredited college or university with a major in geomatics engineering, civil engineering, surveying or a closely related field <u>plus</u> three years of full-time experience in GPS geodetic survey work and territorial land survey work to include experience in researching, preparing and recording maps, legal descriptions and easements; OR an equivalent combination of training and experience.

LICENSE OR CERTIFICATE

Current licensure as a Professional Land Surveyor with the State of Nevada.

A valid driver's license is required at the time of appointment.

SUPERVISION EXERCISED

Serve as a lead worker over geomatics technical and engineering support staff.

EXAMPLES OF DUTIES (The following is used as a partial description and is not restrictive as to duties required.)

Operate and maintain regional GPS base stations; establish geodetic positions on new and existing GPS base stations for the regional GPS network; ensure real time kinematic GPS survey corrections for surveying and mapping uses.

Plan, direct and participate in GPS static, fast static and real time survey activities; determine appropriate locations for GPS geodetic control points; calculate and distribute final geodetic survey control values for SDE GIS database.

Perform technical map checks for the County, Reno and Sparks as defined by the interlocal agreement for survey maps, subdivision tract maps, parcel maps and boundary line adjustments; notify licensed document holder of need for corrections; assist in problem resolution prior to recordation.

Review of survey maps, land maps, subdivision tract maps and parcel maps for compliance with state laws, county codes, local ordinances and geospatial relationships with the County's GIS database prior to recordation.

Verify the coordinate location of maps submitted through the interlocal agreement by licensed engineers and land surveyors for placement into the GIS database prior to recordation by participating in field visits; make necessary calculations for GPS observations and computations of grades, curves, coordinates and angles for construction projects.

Plan and direct activities required for completion of survey fieldwork; direct staff in the use of GPS and electronic distance measuring devices to obtain measurements for determining positions of improvements for the GIS SDE database, boundary, road right of way, construction, photogrammetric, geodetic and topographic survey projects.

Research, prepare and write property legal descriptions, easements and abandonments to create or relinquish property for the County.

Perform advanced processing functions using established GIS commands and software; plan and sequence processing steps for database creations, application and display to ensure consistency and quality of final products; review database automation and maintenance performed by project staff to ensure adherence to quality standards and avoid duplication of data automation and information storage.

Participate in system administration duties such as loading programs and assisting with installation of hardware; participate in design and development of methods that allow existing databases in other systems to interface with the Washoe County GIS database; create spatial overlays and compose plots in support of County projects by combining information from a variety of existing data layers and field survey observations.

Cooperate and assist various departments with review of County parcel maps, the recordation process, resolving parcel discrepancies and property research; assist with solving problems associated with the Washoe County GIS database.

May serve as County Surveyor absent a Geomatics Supervisor pursuant to NRS 225.070.

May represent the Engineering Division on the Regional Street Naming Committee, the Parcel Map Review Committee, and the Regional Base Map Committee and other committees as assigned.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

Full Performance (These may be acquired on the job and are needed to perform the work assigned.)

Knowledge of:

Departmental/division policies and procedures.

Procedures and functions of the assigned position.

Principles and practices of lead supervision and training.

Ability to:

Provide work direction and training to staff.

Evaluate work priorities, procedures and processes to determine their effectiveness and efficiency.

Entry Level (Applicants will be screened for possession of these through written, oral, performance, or other evaluation methods.)

Knowledge of:

Principles and practices of geomatics engineering and land surveying.

Geodesy and geodetic surveying.

Procedures in static and real time survey practices.

Geographic Information Systems (GIS).

Surveying mathematics and elementary trigonometry.

Survey techniques, equipment, and instruments.

Mapping practices and procedures.

Database design principles and management.

Basic engineering principles.

Ability to:

Use computer software to perform surveying and geomatic engineering functions.

Perform a variety of surveying calculations involving geometry and trigonometry.

Use and operate a variety of survey equipment and tools.

Compile and analyze data.

Plan and organize work to meet schedules and deadlines.

Exercise good judgment, flexibility, creativity and sensitivity in response to changing situations and needs.

Manage spatial data.

Read, interpret and comprehend legal property descriptions, pertinent records, documents and trade materials.

Interpret and apply regulations, policies and procedures.

Communicate effectively, both orally and in writing.

Maintain effective working relationships with contractors, developers, vendors, division staff and representatives of other departments.

SPECIAL REQUIREMENTS

Essential duties require the following physical skills and work environment.

Ability to sit for extended periods. Ability to frequently stand, walk, stoop, and kneel. Ability to lift and move objects weighing up to 25 lbs. Ability to use a drafting machine, blueprint equipment, digitizers, plotters, printers, computers, and manual drafting equipment. Ability to use office equipment including copiers, telephone, and FAX machine.

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