LICENSED ENGINEER

DEFINITION

Under general supervision, plans, designs, reviews, conditions, approves and manages civil engineering projects in the Community Services Department, Water Resources, Engineering or the Health District; and performs related work as required.

EXPERIENCE AND TRAINING REQUIREMENTS

A bachelor’s degree from an accredited college or university in civil engineering, architecture or a closely related field AND four years of professional engineering experience; OR ten years of active engineering experience.

LICENSE OR CERTIFICATE

Licensure as a Professional Engineer in the State of Nevada is required at the time of application. Reference Nevada Revised Statutes: Chapter 625.

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

DISTINGUISHING CHARACTERISTICS

This is the full journey level in the Environmental Engineer and Civil Engineer class series. Incumbents perform a wide scope of professional engineering duties; provide project direction and coordination with local agencies, design professionals and other staff, and provide training for staff. This class is distinguished from Civil Engineer II by requiring licensure to perform professional engineering work in the State of Nevada.

SUPERVISION EXERCISED

Provides technical and functional supervision for environmental and civil engineering professional staff; may exercise direct supervision of support staff.

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

Plans, designs, reviews, conditions, approves and manages civil engineering projects in the Community Services Department, Water Resources, Engineering and the Health District encompassing any of the following projects: roadway, street and traffic systems, stormwater and wastewater systems, water systems, wastewater facilities, well houses, pump stations, treatment facilities, sewers, flood control, potable water distribution systems, drainage, construction, land development, channel design and placement, and structural designs.

Condition tentative subdivision maps, parcel maps, development agreements and special use permits; appear before Board of Commissioners to discuss conditions of map approval and engineering related issues.

Review, condition and approve plans, reports and cost estimates for commercial, industrial or residential new construction or improvements for compliance with respective federal, state, county or district regulatory standards, regulations and criteria regarding surface runoff, drainage, easements, potable water and wastewater systems, public health sewage requirements, construction in flood plains, grading, roadway design, water quality/erosion control and other areas.
Meet and negotiate with developers, consultants and contractors concerning clarifications and implementation of development codes and tentative map conditions related to project design and construction.

Develop plans, specifications and Board agenda items for bidding purposes, open bids, recommend acceptance of specific bids for review by management staff, and present recommendation to County Commissioners.

Coordinate with contractors and design professionals concerning compliance with approved plans and specifications, monitor worksites, and review construction bonds for adequate funding.

Inspect project, pay estimate approval, negotiate change orders, coordinate construction activities with the general public, contractors, consultants and other agencies, and attend citizen group meetings to discuss project scope and impacts on the neighborhood.

Inspect final project work to ensure that codes, regulations and County and District Health regulatory and pollution standards and criteria have been met; call bonds as required if developer/contractor does not perform in accordance with Subdivision Improvement Agreement.

Perform project management for projects using state, federal and TRPA erosion control funds; present expert testimony at meetings related to Capital Improvement Program and planning for erosion control projects in the Tahoe Basin.

Perform traffic engineering studies, neighborhood traffic analysis and problem mitigation, signage evaluation and recommendations, capacity analysis and traffic lane requirements, intersection design, signal operation analysis, traffic calming studies and recommendations; review proposed land development projects for compliance with applicable safety and traffic engineering standards.

Participate in regional planning activities; make presentations to citizen groups and present expert testimony before Board of County Commissioner, advisory and regulatory boards, and court as required.

Analyze proposed construction projects to calculate time, material and cost estimates, and develop and/or review plans and specifications for bidding purposes; coordinate with other County departments to ensure project requirements and time schedules are met and budget conformance.

Participate in the formulation of special assessment districts including project design, plan preparation, development of cost estimates, estimation of assessment district size and benefits, construction management, petition review, cost estimation, recommendations to County Commissioners, and working with citizen advisory boards.

Manage pavement infrastructure preservation projects including application of a computerized pavement condition evaluation system; evaluate pavement condition data; prepare report and recommendations for pavement maintenance treatment for budget purposes; prepare maintenance construction contracts for bid and award; provide project management.

Administer various County codes and ordinances including County Flood Hazard Ordinance, EPA Stormwater Discharge regulations and Regional Road Impact Fee program.

Provide technical consultations for environmental engineers, inspections, investigators, developers and other design and construction professionals, ensuring compliance with public health and building safety standards and criteria; respond to inquiries on a variety of engineering, permits, and land development related topics.

Coordinate with federal and state agencies on implementation and enforcement of new regulations or the approval of assigned projects.

Provide project direction and coordination for civil engineering and technical support staff.
JOB RELATED AND ESSENTIAL QUALIFICATIONS

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

Knowledge of:
Department/division policies and procedures.

Building codes, public health and safety regulations, and engineering standards and criteria adopted by Washoe County, the Health District and the Cities of Reno and Sparks relating to sewer, potable water, wastewater, streets and roads, flood plain management, drainage and other commercial, industrial or residential construction.

Nevada Revised Statutes related to professional engineering assignments and responsibilities.

Principles of project management and coordination.

Computer software specific to the department/division.

Ability to:
Plan, organize, coordinate and carry out a variety of complex professional engineering projects.

Negotiate with consultants, developers and contractors.

Make effective presentations to staff, governing boards, elected officials and outside design professionals.

Implement county and departmental policies, procedures, standards and codes.

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

Knowledge of:
Principles and practices of civil engineering.

Modern methods and techniques of design and implementation of a variety of construction and maintenance projects (including use of applicable computer hardware/software applications).

Ability to:
Calculate time, material and cost estimates, and determine scheduling requirements for major Community Services Department, Water Resources and District Health projects.

Perform economic evaluations of assessment districts and assessment distributions.

Adapt approved engineering methods and standards to the design and construction of a variety of Community Services Department, Water Resources and District Health projects.

Perform technical research and provide accurate advice on resolving engineering problems as they relate to compliance with regulatory standards and criteria.

Read and interpret plans submitted by engineers, architects and other design professionals.

Analyze data, including evaluating job costs, preparing bid specifications and tracking expenditures.

Read, interpret and apply regulations, policies and procedures.

Communicate effectively, both orally and in writing.
Maintain effective working relationships with staff, design professionals, contractors, government staff, elected officials and the general public.

**SPECIAL REQUIREMENTS** *(Essential duties require the following physical skills and work environment.)*

Ability to sit for extended periods. Ability to frequently stand and walk. Ability to lift and move objects weighing up to 50 lbs. Ability to use blueprint machine, engineering calculator, planimeter, and office equipment such as computer, 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.