

CLASS SPECIFICATION



CLASS: Senior Civil Engineer
ALLOCATION: Community Development Services Agency
FLSA STATUS: Non-Exempt
UNION AFFILIATION: YCEA

ESTABLISHED: July 2016

JOB SUMMARY:

Under limited supervision, perform the more difficult professional engineering work including the preparation of civil design plans for various Public Works projects, conducting research studies, performing field inspections and testing, analyzing reports, maps, drawings, or geological data, and procuring permits; act as a resource to staff, contracts, consultants, other agencies and the public regarding areas of assignment; provide lead direction and technical assistance to assigned staff and/or project management; and perform related work as assigned. Incumbents are fully qualified to perform all duties specified as a Professional Engineer by the State of California.

This is the master level in the civil engineer series.

CLASS CHARACTERISTICS:

This position reports directly to Principal Engineer. This class is distinguished from Principal Engineer in that the latter has supervisory and management responsibilities of staff engaged in varied and difficult professional and technical engineering activities, such as, the County's land development, water resources, or capital projects functions.

EXAMPLES OF DUTIES:

Essential:

- Review plans and inspect projects; provide engineering design and code information and ensure that designs meet accepted industry and legal standards, and projects are biddable and buildable.
- Interpret and explain complex and technical laws, codes and regulations and provide information related to Public Works Engineering activities; may receive and respond to complaints and recommend corrective action as necessary.
- Initiate and maintain professional relationships with other departments, businesses, local community and professional organizations.
- Provide direction as a lead worker; expected to review the work of professional civil engineers and support staff to ensure compliance with established procedures related to design, construction and inspection of flood control, storm water management, water resources, bridges, parks, roads and other related projects as well as provide input on assigned staff performance to management; provide guidance to professional and technical staff.
- Prepare agreements and contracts for approval by department management; assist in developing and administering professional services or construction project contracts.
- Perform full range of associate civil engineer duties.
- Prepare a variety of written communications, including analytical reports and correspondence; direct the preparation of maps, plans and graphic materials.
- Make oral and graphic presentations or prepare materials for presentation to boards, commissions, community groups and regulatory agencies; answer questions, provide information and assistance to the public.
- Select and use computer software to develop engineering and mathematical analysis of design problems in hydraulics and hydrology, drainage and control facilities, earthwork and grading, highway and bridge design, traffic control and operations.

Important:

- Comply with all County equipment and safety policies and procedures, and California Occupational Safety and Health Administration (CalOSHA) rules and regulations.
- Use standard office equipment, including a computer, in the course of the work; may be required to drive a personal or County-owned motor vehicle to attend meetings and visit work sites.

EMPLOYMENT STANDARDS:

Knowledge of:

- Applicable engineering computer programs and applications used for modeling, calculation,

database, mapping and computer-aided drafting.

- Techniques for working successfully with other employees in a lead capacity.
- Principles and practices of technical and functional supervisory and training.
- Basic, business management principles involved in strategic planning, resource allocation, leadership techniques, production methods and coordination of people and resources.
- Principles and practices of project planning, development and evaluation.
- Principles, methods and materials used in land development and in the design and construction of roads, bridges, facility and/or building design and construction.
- Project design and management principles and practices.
- Basic surveying principles and practices.
- Principles and practices of materials and soil analysis and materials testing, including as they apply to levees and other earthen structures.
- Applicable federal, state and local laws, codes, regulations, ordinances, policies and practices pertaining to civil engineering.
- Safety principles and practices related to the work.

Skill in:

- Project management.
- Providing lead direction over assigned staff including planning, directing and reviewing the work of others on a project or day-to-day basis.
- Training others in work procedures, individually and in a group setting.
- Performing the most complex professional civil engineer tasks.
- Researching, analyzing and summarizing engineering data both manually and with computer applications.
- Making complex engineering calculations quickly and accurately.
- Performing technical and detailed engineering design, computer modeling and related project development.
- Serving as the on-site project administrator for a variety of engineering field projects.
- Interpreting maps, plans and specifications, graphs and statistical data.
- Applying modern engineering techniques to solve a variety of engineering problems.
- Maintaining accurate files and records.

Ability to:

- Organize own work, manage multiple projects and demands, and meet critical deadlines.
- Evaluate the work of contractors and consultants for compliance with project plans, specifications and applicable laws, ordinances and policies.
- Initiate project tasks with minimal direction.
- Understand and explain complex rules and programs so others can easily understand them.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Make rational judgments and decisions in a timely manner particularly in situations involving potential risks.
- Work within a team framework, both as a leader and a member.
- Prepare clear, concise and accurate records and reports.
- Listen carefully to what other people are saying, take time to understand the points being made, and ask questions as appropriate for clarification.
- Promote harmony, good morale, establish rapport and maintain effective working relationships with coworkers, other County employees, vendors, other agencies and the public.

Physical Demands: The physical demands and work environment described here are representative of those that must be met by an employee to successfully perform the essential function of the job, with or without accommodation. Prospective employees must complete a pre-employment medical exam (Occupational Group III) which will measure the ability to:

- See well enough to read fine print and view a computer screen; speak and hear well enough to understand, respond, and communicate clearly in person and on the telephone; independent body mobility sufficient to stand, sit, walk, stoop and bend to access the work environment and a

standard office environment; manual dexterity and sufficient use of hands, arms and shoulders to repetitively operate a keyboard and to write; and the ability to sit or walk for prolonged periods of time.

- Mobility to inspect construction sites involving trenches, embankments and uneven terrain.
- Strength and mobility to lift and/or maneuver up to 50 lbs.
- Drive a motor vehicle to inspection sites and to attend meetings.

Accommodation may be made for some of these physical demands for otherwise qualified individuals who require and request such accommodation.

Work Environment:

- Work is performed both in office and in the field at various work sites.
- Work with exposure to potentially hazardous chemicals, uneven footing, inclement weather, temperature extremes, or other potentially dangerous conditions.
- Exposure to loud noises at construction sites; potential hazards at various construction sites; hazards of electrical wiring; fumes and odors of gases and exhaust; dust of households, storage spaces; animal and human waste; dissatisfied and potentially hostile individuals.

QUALIFICATIONS:

The minimum and preferred requirements are listed below. While the following requirements outline the minimum qualifications, Human Resources reserves the right to select applicants for further consideration who demonstrate the best qualifications match for the job. Meeting the minimum qualifications does not guarantee further participation in selection procedures.

Licenses and Certification:

- Possess a valid registration as a Civil Engineer in the State of California.
- The ability to obtain a valid California Class C driver's license within ten (10) days of employment; maintain throughout employment.

Special Requirements:

- Must successfully complete an extensive and thorough background investigation which may include Live Scan fingerprinting prior to hire.
- DMV printout prior to hire.
- Will be required to perform disaster service activities pursuant to Government Code 3100-3109.

Education and Experience:

MINIMUM: Bachelor's Degree from an accredited college or university in Civil Engineering, Surveying or a closely related field and four years of professional engineering experience.

PREFERRED: In addition to the minimum, a Master's Degree in Civil Engineering and additional years of professional civil engineering experience in a public agency with at least some experience in a lead capacity.

This class specification lists the major duties and requirements of the job. Incumbent may be expected to perform job-related duties other than those contained in this document.

Dept Approval:
Date:

EEOC: B
WC: 9410

Human Resources Approval: Analyst
Date:

Signature: _____

Signature: _____