



Career Service Authority

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Staff Engineer

GENERAL STATEMENT OF CLASS DUTIES

Performs entry level professional engineering work under close supervision while learning and assisting in the design, construction, and/or plan review processes in accordance with standard engineering practices.

DISTINGUISHING CHARACTERISTICS

This class performs entry level professional engineering work. This class is distinguished from the Engineer class that performs intermediate level professional engineering work on a variety of engineering assignments with emphasis placed upon the application of engineering mathematics, principles, and practices on moderately difficult engineering projects/assignments. The Staff Engineer class is also distinguished from the Senior Engineer class that performs full performance professional engineering work on a variety of complex engineering assignments with emphasis placed upon the application of engineering mathematics, principles, and practices in all phases of major engineering projects/assignments.

Guidelines, Difficulty and Decision Making Level:

Guidelines are generally numerous, well established, and directly applicable to the work assignment. Work assignment and desired results are explained by general oral or written instructions.

Duties assigned are generally repetitive and restricted in scope but may be of substantial intricacy. Employee primarily applies standardized practices.

Decisions or recommendations on non-standardized situations are limited to relating organizational policies to specific cases. Problems that are not covered by guidelines or are without precedent are taken up with the supervisor.

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 some degree of discretion and judgment are required within the parameters of the job function.

Level of Supervision Exercised:

By position, performs lead work.

ESSENTIAL DUTIES

Performs professional entry-level engineering work on small routine projects or parts of large projects under the direction of a licensed engineer.

Learns the processes, practices, and applications of design and construction project management and the principles, standards, requirements, and guidelines for plans review.

Trains and assists in the preparation of pre-bid materials defining scope of work and related information necessary for Request for Proposal (RFP), provides background information to design and/or engineering consultants and construction contractors, and responds to questions concerning the project.

Trains and becomes proficient in reviewing specifications for small projects or parts of large projects and monitoring construction projects of limited scope for compliance with design guidelines, requirements, and standards.

Reviews plans for new construction, alterations, and repair for compliance on code conformance with city codes, requirements, ordinances, and national standards.

Meets with contract personnel, citizen/neighborhood groups, and other city staff to resolve problems and concerns and answer questions on non controversial issues/projects.

Assists with field inspections of projects for conformance to approved plans.

Trains in the formulation of budgets for projects including planning, design, regulatory, and construction phases.

Performs increasingly more responsible work as the employee gains experience and independently performs engineering duties.

Performs other related duties as assigned.

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.

MINIMUM QUALIFICATIONS

Competencies, Knowledge, & Skills:

Engineering – Knowledge of the concepts, principles, theories, and methods required to plan, design, construct, operate, and maintain facilities such as buildings, transportation systems water and sanitary systems, and other public works systems.

Project Management – Applies principles, methods, or tools for developing, scheduling, coordinating, monitoring, evaluating, and managing projects and resources including technical performance.

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 program goals, and causes change.

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

Influencing/Negotiating – Persuades others to accept recommendations, cooperate, or change their behavior, works with others toward an agreement, and negotiates to find mutually acceptable solutions.

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, and monitors progress and evaluates outcomes.

Interpersonal Relationship and Service Orientation – Demonstrated competency in working with a wide range of government departments with diverse business needs, interests, expectations, and requirements.

Oral Communication - Clearly communicates and explains organizational and program policies and work assignments to staff and communicates information about the program area's activities to peers, higher-level managers, administrative staff of other organizations, and internal and external customers.

Written Communication - Composes, reviews, edits, and issues written materials for diverse audiences and communicates purpose in a succinct and organized manner appropriate for context, time, and place. Written materials are of a routine nature and affect the immediate program area(s).

Interpersonal Skills - Establishes and maintains constructive and cooperative interpersonal relationships with staff, peers, higher-level managers, staff from other organizations, internal and external customers, and local stakeholder groups to accomplish a program's mission. Adapts approach to different people and situations.

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

Conflict Management – Manages and resolves conflicts, grievance, confrontations, or disagreements in a constructive manner to minimize negative personal impact.

Problem Solving – Identifies problems, determines accuracy and relevance of information, uses sound judgment to generate and evaluate alternatives, and makes recommendations.

Diversity – Is sensitive to cultural diversity, race, gender, and other individual differences in the workforce.

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

Physical Demands (Physical Demands are a general guide and specific positions will vary based on working conditions, locations, and agency/department needs):

Standing: remaining on one's feet in an upright position.
Walking: moving about on foot.
Sitting: remaining in the normal seated position.
Carrying: transporting an object, usually by hand, arm, or shoulder.
Balancing: maintaining body equilibrium to prevent falling over.
Stooping: bending the body by bending spine at the waist.
Reaching: extending the hand(s) and arm(s).
Handling: seizing, holding, grasping, or otherwise working with hand(s).
Feeling: perceiving attributes of objects by means of skin receptors.
Talking: expressing or exchanging ideas by means of spoken words.
Hearing: perceiving the nature of sounds by the ear.
Eye/hand/foot coordination: performing work through using two or more.
Lifting: raising or lowering an object from one level to another.
Far Acuity: ability to see clearly at 20 feet or more.
Near Acuity: ability to see clearly at 20 inches or less.
Depth Perception: ability to judge distance and space relationships.
Field of Vision: ability to see peripherally.
Accommodation: ability to distinguish and identify different colors.

Working Environment:

Pressure due to multiple calls and inquiries.
Subject to long irregular hours.
Subject to many interruptions.

Education Requirement:

Bachelor's Degree.

Experience Requirement:

None.

Licensure and/or Certification:

Registration as an Engineer Intern issued by the Colorado State Board of Registration for Professional Engineers at the time application. Registration as an Engineer Intern by another state will be accepted in lieu of this requirement providing the applicant is registered by the State of Colorado by the completion of the probationary period.

Possession of a valid driver's license at the time of application.

CLASS DETAIL

FLSA CODE: Exempt

ESTABLISHED DATE: 09/16/1995

REVISED DATE: 08/08/2010

REVISED BY: Patricia Anderson

CLASS HISTORY 10/2009 - This class specification was revised and updated as part of the Engineer/Architect Study (2009).
8/2010 – The following was added to the Licensure and/or Certification Section: Registration as an Engineer Intern by another state will be accepted in lieu of this requirement providing the applicant is registered by the State of Colorado by the completion of the probationary period.