



CLASS SPECIFICATION FOR:

## Engineer I

### General Statement of Duties:

Performs entry-level professional engineering work in the field and in the office for an assigned department; monitors and inspects assigned projects to ensure the completion of projects in compliance with all contract specifications and applicable local, state and federal laws; does related work as required.

### Distinguishing Features of Class:

The work involves application of professional engineering knowledge and skills in the area of assignment. This class affords opportunities for independent planning of work details with latitude to gain a greater depth of knowledge in assigned specialty areas. Reviews plans for proper techniques and acceptable engineering practices; may review permits; makes routine engineering calculations, and ensures assigned projects' compliance with all applicable code requirements. Monitors and inspects all phases of project construction and makes site visits and ensures assigned projects are completed within approved specifications. Provides routine policy interpretation and technical assistance on project issues for County agencies, the County Board, residents, developers, contractors and other stakeholders involved in the projects. Supervision may be exercised over technical and support personnel. Identifies issues and handles routine engineering issues independently. Refers unusual issues and situations to supervisor. Requires excellent organization and interpersonal skills with the ability to multi task effectively, manage multiple projects simultaneously, track and manage project records and documentation, and work effectively with internal and external stakeholders to resolve issues and complete projects according to specifications and within approved budgets. Work is performed under general supervision.

### Examples of Assigned Duties *(illustrative of the types and scope of duties and responsibilities assigned to positions in this class):*

- Review plans and permits for accuracy, completeness and compliance with project specifications, applicable standards, County policies / procedures, proper construction techniques and acceptable engineering practices;
- Monitors and inspects all phases of construction for assigned projects and permits to ensure compliance with contract documents, plans, specifications, standards, County policies and procedures;
- Reviews and evaluates plans, makes comments and recommendations as needed;
- Participates in the preparation and review of specifications, plans, estimates, contracts, and reports involved in the construction, maintenance and operation of a variety of projects;
- Performs engineering design and drafting duties in connection with assignments and projects;
- Plans, designs, and performs engineering calculations for a variety of small and less complex projects for an assigned department;
- Provides professional engineering support and basic technical advice in connection with assignments and projects;
- Provides basic policy interpretation and technical assistance on assigned projects and related issues for County agencies and staff, residents, developers, contractors and other stakeholders involved in project related activities;
- Provides design recommendations, coordinating reviews with developers and engineers in the interpretation of County standards and policies;
- May serve as field engineer on projects requiring engineering oversight for an assigned department;
- Investigates and analyzes problems for specifications and requirements for an assigned department or projects;
- Makes technical engineering calculations for an assigned department or projects;
- Makes routine decisions related to plans and project design, construction and compliance;
- May supervise non-technical and paraprofessional personnel as assigned;
- Collaborates with staff, agencies, developers, engineers and citizens coordinating projects and resolving problems;
- Creates and maintains accurate project related documentation as required;
- May perform review of permit applications, compliance inspections and sampling as assigned;
- May assist with budget preparation, reviews and approve or recommend approval of expenditures;
- Maintains current knowledge of industry best practices, methods, techniques, equipment, etc.;
- Attends all scheduled meetings and required training and maintains all required certifications;
- Performs other duties as assigned.



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### Required Knowledge, Skills and Abilities:

Knowledge of engineering principles and practices as it relates to the assigned position and department; ability to prepare and review plans, estimates and specifications; knowledge of common methods and practices used in engineering, inspection and construction of County infrastructure projects; basic knowledge of common methods and equipment used in engineering, construction and of inspection methods used in reviewing such work; basic knowledge of the principles and practices, including related complex calculations and formulas, of civil engineering; ability to make engineering calculations; knowledge of environmental impacts; ability to maintain effective working relationships; ability to present ideas and recommendations clearly and concisely, both orally and in writing; ability to multitask and effectively manage competing priorities; good professional engineering judgment with ability to make sound decisions; critical thinking skills with the ability to problem solve; good organizational skills; basic supervisory skills including the ability to effectively manage workloads and projects and to foster and maintain high morale and engagement; ability to work on own initiative without close supervision or guidance; ability to multitask and effectively manage competing priorities; ability to research, collect and maintain data, consider and weigh a variety of factors in making sound decisions or recommendations; basic financial skills sufficient to manage assigned projects within approved budget; good knowledge of personal computers and/or automated systems with the ability to enter, maintain, retrieve, analyze and report technical data clearly and concisely from department and County specific systems and to use common office software and related peripherals; physical condition that permits activities including but not limited to perform assigned duties and access diverse environmental locations countywide; personal accountability including teamwork, establishing and maintaining positive relationships with a diverse community of internal and external stakeholders, customers and colleagues; ability to work independently under general supervision; good knowledge of personal computers and /or automated systems having the ability to enter, maintain, retrieve and analyze data; excellent customer service skills, tact and courtesy; may require a flexible work schedule based on assignments.

### Minimum Education and Experience:

- Education: Possession of a four (4) year degree in a relevant recognized field of engineering from an ABET accredited engineering program.
- Experience: Previous relevant professional experience in engineering preferred.

### Additional Requirements:

NOTE: Effective 4/1/2009 County Ordinance 1128 requires a criminal history record check and fingerprinting of all employees in authorized and hourly safety sensitive positions.

NOTE: All employees are required to successfully complete National Incident Management System (NIMS) Incident Command System (ICS) 700 (Introduction) training. Successful completion of additional NIMS ICS training courses may be required based on the job classification, level of responsibility, and department. Please refer to Fire's Intranet site for a list of NIMS ICS requirements by job classification.

- May require possession of a valid driver's license issued by the Commonwealth of Virginia.
- May require annual audio test or other job related physical testing as required by assigned position or department.