ENGINEER I

DEFINITION OF CLASS:
This is entry level professional engineering work. Contacts are with engineers, contractors, consultants, the general public, and coworkers to provide technical advice or to agree with others on a course of action. Public service in this class is limited to the provision of information and guidance incidental to the primary purpose of the job.

Employees in this class perform assignments requiring the use of engineering principles and practices to perform assignments intended to introduce the beginning engineer to the standards, practices and policies of the field and of the unit to which assigned. Incumbents are assigned work with specified instructions, limitations, and deadlines. Employees carry out recurring assignments independently but refer deviations, problems, and unfamiliar situations to a supervisor. Work is reviewed for compliance with instructions or established procedures. Guidelines for the work have been established and include office procedures, local and National codes, regulations, and statutes. Employees use judgment in locating, selecting, and applying the appropriate guideline. The work involves a variety of processes and methods, and requires analysis of conditions, which are addressed through field investigations and studies, and plan reviews. The scope of the work involves performing projects of limited scope or segments of larger projects. The employee applies established engineering principles and procedures to complete assigned engineering projects, investigations, or tests. The work requires employees to visit sites to make field investigations, conduct surveys, and/or observe and/or inspect construction. Hazards include those requiring the use of hard hats, eye protection, and reflective vests worn when working in moving traffic. Physical effort involves occasional standing for long periods and/or walking over rough and uneven constructions sites, and occasional stooping, bending, reaching and climbing at construction sites.

EXAMPLES OF DUTIES: (Illustrative Only)
Depending on area of assignment:

- Prepares engineering designs for smaller structures or for segments of larger structures.
- Reviews plans submitted by developers and other public and/or private organizations to determine if the plans and projects meet required laws, regulations and ordinances.
- Reviews plans submitted by Architectural and Engineering (A&E) firms to determine if they meet design requirements, and for cost and compatibility with County standards and guides.
- Performs field investigations, including land surveys, to collect and analyze data regarding engineering proposals, and conducts analyses, research and other studies to determine feasibility and costs of such proposals.
- Monitors work of contractors engaged in constructing engineering projects; visits sites to observe work and to inspect (or have inspected) materials used in construction; confers with contractors regarding schedules, safety measures, site problems, and delays; reviews requests for changes and other paperwork, prepares project reports and maintains project records and files.
- May assist in preparing formal bid documents for engineering projects; compiles and assembles bid documents.
information including plans and drawings, specifications, and contract provisions. May participate in contract administration by reviewing invoices for payment and processing related contract documents.

- Conducts environmental studies of proposed development/construction to determine effects of such development on groundwater resources and other aspects of the environment.
- May advise the public and others regarding engineering policies and requirements for construction and assist such persons on such matters as regulatory compliance, County policies and procedures.
- Initiates correspondence and other communications with developers, designers, contractors, property owners, other governmental agencies and the general public in response to requests for information, to explain legal/regulatory requirements, or to provide technical assistance.
- As assigned, participates in meetings, work groups and task forces formed to deal with engineering related projects and issues.
- Performs related work as required.

KNOWLEDGE, SKILLS AND ABILITIES:

- Knowledge of and the ability to apply modern principles and practices of engineering to which the position is assigned.
- Knowledge of applicable codes, statutes, and regulations related to the assigned engineering field.
- Knowledge of computer engineering applications and models.
- Ability to work with coworkers and County employees to interpret requirements, discuss problems to obtain agreements.
- Ability to prepare written reports and correspondences.
- Ability to conduct field investigations and inspections.
- Ability to attend meetings or perform other assignments at locations outside the office.

MINIMUM QUALIFICATIONS:

Experience: None.

Education: Graduation from an accredited college or university with a Bachelor's Degree in engineering, or a related discipline appropriate to the assigned position. Registration as a Professional Engineer may substitute for the degree.

Equivalency: An equivalent combination of education and experience may be substituted, provided such combination includes at least 60 accredited semester hours (or an equivalent amount of accredited professional training) in engineering or related courses appropriate to the assigned position.

LICENSE:

- Some positions may require possession and maintenance at all times of a valid Class "C" (or equivalent) driver’s license from the applicant's state of residence or the ability to perform work at locations outside of the office.

PROBATIONARY PERIOD:

Individuals appointed to this class will be required to serve a probationary period of six (6) months, during which time performance will be carefully evaluated. Continuation in this class will be contingent upon successful completion of the probationary period.

MEDICAL EXAM PROTOCOL: Limited Core Exam.

Note: Engineer positions assigned to the Montgomery County Fire and Rescue Service as “Fire Protection
Engineers” require a Core Exam with a Drug/Alcohol Screen. Call OMS for clarification when assignment known.

**Class Established:** December 1973

**Revised:** July 1980
August 1987

**Classification Study:** February 1995 (M)

**Classification Study:** February 2003 (M)
March 2008
June 2013
August 2013