

*Code: 2314*

*Title: CIVIL ENGINEER*

**SUMMARY:** Supervises, within the limits imposed by registration or certification, civil engineering planning, design and construction and performs complex professional civil engineering work.

**DUTIES/RESPONSIBILITIES:** (Work assignments may vary depending on the department's needs and will be communicated to the applicant or incumbent by the supervisor.)

Supervises a team of engineering assistants, technicians and aides in the investigation, design and preparation or review of plans, estimates and reports involved in the construction and maintenance of roads, streets, storm drains, sewers and sewerage systems, structures and miscellaneous projects;  
Initiates and directs preliminary designs, studies and cost estimates and prepares reports of assigned future and proposed projects;  
Maintains work schedules for assigned team personnel;  
Determines need for basic data, such as field surveys, location of utilities and soil tests and requests information through appropriate channels;  
Coordinates design and other features of work with other public agencies;  
Reviews work completed by staff for conformance with original job instructions and accepted engineering practices;  
Reviews or checks designs, drawings and profiles for adequacy, soundness of engineering features and practicality;  
Checks and reviews final plans and specifications including contract projects for submission to supervisor;  
Performs complex research, investigative and design work;  
Directs the construction of large and complex roadways, dams, bridges, structures, sewage treatment facilities or other civil engineering projects;  
Resolves complex engineering problems;  
Directs the activities of project engineers on assigned projects;  
Provides professional engineering direction and guidance in the construction, maintenance or operation of roads and bridges;  
Recommends methods of resolving unusual and complex problems and improving materials and practices;  
Directs engineering planning studies;  
Interprets engineering and administrative directives, policies and standards.

**KNOWLEDGE & SKILLS:**

Knowledge of:

- principles and practices of civil and structural engineering;
- civil engineering methods and practices followed in performing engineering planning studies, preparing designs, plans, specifications, estimates and reports as applied to street improvements, storm drains, sanitary sewers, wastewater treatment works, reinforced concrete and wooden structures;
- field engineering, including surveying, inspection and construction practices;
- sources of engineering information.

Skill in:

- receiving assignments in general terms and in planning laying-out and directing the work of a group of engineering personnel;
- coordinating the work of a unit with a general program or specific problems;
- application of engineering theory to complex field and office problems;
- coordination of various engineering and operational activities;
- supervising professional and support personnel.

MINIMUM QUALIFICATIONS:

Current registration or license in any state as a Professional Engineer (PE) or Registered Professional Engineer (RPE).

OTHER REQUIREMENTS:

Licenses and Certificates: Registration in the State of Arizona as a Professional Engineer is required within one year from date of appointment. Some positions require a valid Arizona Class D driver license at the time of application. Failure to obtain/maintain the required registration/licensure shall be grounds for termination.

Special Notice: (Current Incumbents within this Classification Only) Pending professional Arizona State technical registration as a Civil Engineer, incumbents must not use the title Civil Engineer. The interim title of Civil Engineering Associate is to be used during this period. Alternatively, if the incumbent has achieved Civil Engineer-in-training status by virtue of having passed the Civil Engineer-in-training State Board examination, the title of Civil Engineer-in-training may be used until full professional registration is obtained.

Physical/Sensory Requirements: Physical and sensory abilities will be determined by position.

This classification specification is intended to indicate the basic nature of positions allocated to the classification and examples of typical duties that may be assigned. It does not imply that all positions within the classification perform all of the duties listed, nor does it necessarily list all possible duties that may be assigned.

Pima County

Revised 06/01/83  
Updated 12/13/13(lg)