

Code: 2412

Title: PUBLIC WORKS ENGINEERING TECHNICIAN

SUMMARY: Performs technical public works functions gathering and analyzing data, reviewing plans, issuing permits, inspecting construction activity, investigating and responding to complaints, maintaining and/or operating technical equipment and performing public works related testing procedures.

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

Performs basic drafting and mapping activities;
Provides technical engineering information to engineers and contractors such as rainfall and stream gauge data, and sewer line descriptions, manhole and cleanout locations;
Reviews approved engineering plans to determine permit requirements or to obtain specific construction and/or design information;
Inspects construction projects for compliance with specifications, safety procedures and hazards;
Maintains microcomputers to track, monitor and analyze data associated with special engineering reports;
Conducts information searches, compiles data and prepares spreadsheets, computer graphics and other special reports;
Inspects structural integrity of improvements including catch basins, box culverts, barrier walls and curbs;
Inspects soil cement bank protection to insure proper mixing and curing of soil cement and compliance with line and grade specifications;
Performs routine testing procedures on soils including the sand cone method to determine density and the plasticity index test to determine the amount of clay in a given soil;
Tests concrete cylinders under compression, makes associated calculations and documents test results;
Implements county participation in the utility "Blue Stake" locator program by reviewing plans for proposed conflicts with existing or planned improvements;
Researches drainage, property and safety complaints and documents findings;
Tests electronic components associated with flood warning;
Installs and maintains precipitation and stream gauges;
Investigates resource protection issues and needs;
Identifies, sorts and handles hazardous materials as required.

KNOWLEDGE & SKILLS:

Knowledge of:

- principles and practices of plan review;
- construction inspection procedures to ensure that improvements are according to plan;
- computer applications as related to engineering;
- principles and practices of drafting;
- data collection and processing;
- report preparation;
- county procedures for issuing construction permits.

Skill in:

- reading and interpreting construction plans;

- performing mathematical calculations;
- conducting basic research and compiling data;
- preparing spreadsheets, graphics and other sorted data;
- insuring that construction work is in compliance with specifications;
- performing routine materials testing procedures.

MINIMUM QUALIFICATIONS:

EITHER:

(1) Two years of general work experience in a field related to public works engineering such as construction, inspection, surveying, drafting and/or materials testing.

OR:

(2) Two years of experience with Pima County as a Public Works Engineering Aide.

(Additional relevant experience and/or education from an accredited college university or technical school may be substituted.)

OTHER REQUIREMENTS:

Licenses and Certificates: Some positions require a valid Arizona Class D driver license at the time of application or prior to completion of initial or promotional probation. Failure to obtain/maintain the required licensure shall be grounds for termination.

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

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

Pima County

6/1/87

Updated 2/7/14(tb)