

# PADRE DAM MUNICIPAL WATER DISTRICT CLASS SPECIFICATION

## CLASS TITLE: Engineering Technician

<b>DEPARTMENT:</b> Engineering	<b>ACCOUNTABLE TO:</b> Varies	<b>FLSA STATUS:</b> Non-Exempt
<b>SALARY RANGE:</b>	<b>18, 20, 23, 25</b>	
<p><b>CLASS SUMMARY:</b> Incumbents are responsible for providing skilled design, drafting and plan check activities for Padre Dam, public and private development capital projects. Duties include: performing plan checks on improvement projects; laying out and designing water, sewer, and recycled water pipelines, pump stations and water reservoirs; designing and checking recycled water pipelines and landscape irrigation plans for conformance with standards; performing field review of proposed projects; preparing project estimates; meeting with customers, developers and engineers regarding the design of their project; and, researching and maintaining planning data. Incumbents may be required to perform lead activities depending on assignment.</p>		
<p><b>DISTINGUISHING CHARACTERISTICS:</b> The Engineering Technician is a wide classification in the second level of a four level engineering series. The wide classification covers a broad spectrum of duties that varies depending on area of assignment, skills and experience. The Engineering Technician is distinguished from the Engineering Aide which is an entry-level classification. The Engineering Technician is distinguished from the Engineer which is the professional level requiring a Bachelor’s Degree and may include registration.</p>		

<b>DUTY NO.</b>	<b>ESSENTIAL DUTIES:</b> (These duties are a representative sample; position assignments may vary.)
1.	Performs Computer Aided Design Drafting utilizing industry standards and/or professional level design layout.
2.	Coordinates project work with inspection staff, other areas of Padre Dam and other public agencies; obtains capital project permits from appropriate agencies; reviews and makes recommendations on change orders; maintains project related files, reports and records.
3.	Performs reviews and plan checks of projects in order to verify accuracy, completeness and conformance to specifications and standards of Padre Dam, Dept. of Health Services and Regional Water Quality Control Board.
4.	Performs reviews and plan checks of project landscape irrigation plans for conformance with Padre Dam and Health Department Standards.
5.	Meets with inspection group, customers, developers, engineers, city, county and regulatory agency representatives regarding the design and coordination of projects/phases.
6.	Prepares project estimates by determining materials needed and applying existing unit costs and determining the overall cost of the project.

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DUTY NO.	ESSENTIAL DUTIES: (These duties are a representative sample; position assignments may vary.)
7.	Tracks projects in order to ensure they are on schedule and within the budget.
8.	Assists in the creation and preparation of Padre Dam standard specifications and project specifications and design guidelines utilizing manufacturers' data and recommendations and industry standards.
9.	Performs field review of proposed projects ensuring the site conforms to the plans drawn.
10.	Researches and maintains planning data to include demographics, land use, and sewer and water systems analysis, foreign utilities, record maps and cost estimates.
11.	Prepares and reviews easement documents, quit claims and encroachments to Padre Dam easements for conformance to Padre Dam standards.
12.	Assists in project management activities for completion of Padre Dam projects including correspondence, completion of Right-of-Way and Environmental permitting, participation in meetings, review submittal and field assistance during construction.
13.	Works with customers inquiring about water and sewer service including periodic back-up to the Engineering Customer Service Technician.
14.	Compiles data and assists in the preparation of reports. This may include conducting computer modeling, analyzing hydraulic results and providing recommendations for Padre Dam and developer projects.
15.	Using basic engineering design concepts, prepares preliminary design and complete engineering construction drawings under the direction of an Engineer, including plans, profiles, elevations, contours, cross-sections and detailed working drawings, maps and specifications for water and sewer facilities; performs calculations; transforms field and survey data into design elements; prepares engineering calculations and cost estimates for assigned projects.
16.	Represents Padre Dam on external committees such as the Regional Standards Committee, Water Agencies' Standards and the Water Agency Design Guidelines.
17.	Performs the lead role for capital improvement and construction projects initiated by Padre Dam; ensures compliance to contracts, specifications and Padre Dam standards.

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DUTY NO.	ESSENTIAL DUTIES: (These duties are a representative sample; position assignments may vary.)
18.	Provides leadership, mentoring and technical support for the completion of engineering related work for other technicians and engineering aids.
19.	Manages projects or project activities and assists Engineer in completing Padre Dam projects.
20.	Performs other duties of a similar nature or level.

**Knowledge** (position requirements at entry):

- Basic engineering theories and principles;
- Applicable laws and regulations;
- Drafting standards and practices for water and sewer;
- Computer Aided Drafting, word processing and spreadsheets;
- Mathematics including geometry and trigonometry;
- Survey principles;
- Construction methods and materials;
- Safety procedures.

**Skills** (position requirements at entry):

- Checking and reviewing plans and specifications;
- Reading maps and legal descriptions;
- Estimating project costs;
- Performing complex mathematical calculations;
- Drafting drawings with the computer and by hand;
- Tracking and recording documents;
- Using computers and related specialized computer applications such as Computer Aided Drafting, word processing and spreadsheets;
- Communication, interpersonal skills as applied to interaction with coworkers, supervisor, the general public, etc. sufficient to exchange or convey information and to receive work direction.

**Training and Experience** (position requirements at entry):

High school Diploma or General Equivalency Diploma (G.E.D.) and two years experience in civil engineering drafting and design at paraprofessional level using computer aided design and other drafting software; or, an equivalent combination of education and experience sufficient to successfully perform the essential duties of the job such as those listed above.

**Licensing Requirements** (position requirements at entry):

- Valid California Driver's License

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### **Physical Requirements:**

Positions in this class typically require: climbing, balancing, stooping, reaching, standing, walking, lifting, fingering, talking, hearing, seeing and repetitive motions. Incumbents may be subjected to fumes, odors and dusts.

Light Work: Exerting up to 20 pounds of force occasionally, and/or up to 10 pounds of force frequently, and/or negligible amount of force constantly to move objects. If the use of arm and/or leg controls requires exertion of forces greater than that for Sedentary Work and the worker sits most of the time, then the job is rated for Light Work.

### **Classification History:**

Date: 4/98; 6/01; 1/02; 1/05