



Tualatin Valley Water District



Full-Time Job Opening: Engineering Associate

Salary Grade 8: start \$34.26 to midpoint \$42.83 (depending on qualifications)

PERS/OPSRP members are subject to a mandatory 6% employee contribution.

Non-members will be eligible after 6 full-calendar months of service.

Opens: June 2, 2017

Closing Date: June 20th by 11 a.m.

Please see the attached job description for more information specific to this position.

Required Materials:

- 1) Cover letter
- 2) Resume
- 3) TVWD application
- 4) Answers to the supplemental questions
- 5) Veteran's preference, you must submit a copy of your Federal DD Form 214/215 or a veteran's disability preference letter from the US Department of Veterans Affairs in order to be considered.

Supplemental Questions: Please answer the following questions, limit your response to 2 pages double sided.

Applications received after the filing deadline or without responses to the supplemental questions will not be considered.

1. Describe your experience with the design and management of engineering projects. What roles have you played in public infrastructure improvement projects?
2. Describe your understanding and experience with water conveyance systems and components, include experience with design, operation, and application of design standards for potable water systems.
3. Describe your experience with providing customer service. Explain a situation in which you had to deal with someone who was upset and how you were able to resolve the issue.
4. Describe your experience and level of expertise with different technical software programs that are typically used in engineering.



Submission of Materials: Various ways to apply:

- Email: tvwdjobs@tvwd.org; or
- Fax: (503) 356-3190; or
- Mail: 1850 SW 170th Ave, Beaverton OR 97003.

All materials must be received by **June 20th by 11 a.m.** See our website for more information: www.tvwd.org.

Tualatin Valley Water District



Delivering the Best Water  Service  Value

Title: Engineering Associate	Job Grade: 8
Reporting to: Chief or Project Engineer	Department: Engineering Services

Tualatin Valley Water District believes that each employee makes a significant contribution to our success. That contribution should not be limited by the assigned responsibilities. Therefore, this job description is designed to outline primary duties, qualifications and job scope, but not limit the incumbent nor the organization to just the work identified. It is our expectation that each employee will offer his/her services wherever and whenever necessary to achieve our mission to provide our community quality water and customer service.

Overall Purpose of the Job: This position serves as a staff engineer involved in a variety of activities including design, managing capital improvement projects, development plan review, customer interface and answering questions about District standards, field testing and data entry, field inspections and investigations related to system operations and construction, and coordination with other District staff and crews. All functions are performed under the direction and final approval of the District's Chief Engineer or designee. The Engineering Associate applies basic engineering knowledge to the planning, design, and construction oversight of maintenance and projects pertaining to the District's infrastructure and private development.

Essential Job Functions:

- Works under the direction of a Professional Engineer to prepare engineering plans and specifications for small to mid-sized capital improvements and maintenance projects; researches and plans water system and facilities requirements; coordinates activities for surveying, mapping, preparation of contract documents, and for application and acquisition of required permits.
- Prepares and reviews project designs to ensure conformance with District objectives, rules and regulations, and standards.
- Manages capital improvement projects to repair, replace, and construct new District infrastructure, including managing consultants and construction contractors. Reviews and approves monthly invoices and pay requests.
- Uses computer aided drafting (AutoCAD) to prepare design drawings, standard details, site plans, and other products to support Engineering Department projects and activities.
- Provides support to engineers on various engineering and construction projects, and prepares engineering calculations and analyses. Uses computerized hydraulic models to support engineering calculations and designs. Reviews and analyzes construction projects planned by other agencies for potential impact on District facilities and operations; confers with personnel from other agencies regarding current and proposed construction projects; identifies and resolves problems in compatibility between other agency systems and District systems.
- Gathers field data such as identifying other existing utilities along water main design routes; collects mapping information using survey and/or Global Positioning System (GPS) methods. Uses the District's GIS to gather information for use on various projects.
- Customer interface including activities related to plan review, meter sales, SDCs and other fees, water truck inspections, issuing hydrant permits, and answering customer questions.
- Reviews developer plans for conformance with District standards and monitors and reviews progress of developer projects. Prepares contracts for the purchase of meters and payment of SDCs for large meters.
- Provides technical oversight of work by Engineering Interns including identification of project assignments, work planning, development of design criteria, and oversight of technical details.
- Provides technical assistance in support of project management tasks on various engineering and construction projects; prepares project schedules and tracks project progress against schedule; arranges, facilitates and attends pre-design and pre-construction meetings; reviews and approves material submittals; coordinates review and approval of requests for information and change orders; prepares, reviews and approves work orders; conducts

field inspections; develops and analyzes project alternatives; and monitors completed projects in case of needed warranty repairs.

- Coordinates with District engineering staff and contractors, consultants, other utilities and other agencies; reviews work by outside consultants; prepares standard operating procedures; prepares consultant and contractor procurement documents; reviews, evaluates and rates consultant proposals; reviews and comments on scope of work and contract terms; evaluates project schedules; prepares contract documents for bidding, including cost estimates and project schedules; advertises for and evaluates construction bids.
- Monitors work in progress, including monitoring and conducting regular and emergency field investigations and inspections, to ensure compliance with approved plans, specifications and standards; analyzes data and results of instrument readings; prepares inspection reports.
- Compiles and maintains project files, records, documents and databases; maintains work order logs and ensures documents are updated to reflect changes; develops and designs databases for projects.
- Prepares and delivers presentations of technical data and results to technical review committees, District staff and other governmental agencies.
- Keeps up-to-date on current technology in field of specialization through reading professional literature, attending conferences and training.
- Provides assistance and support related to emergency operations.
- Performs other related duties as assigned.

Knowledge, Skills and Abilities Required:

- Knowledge of theory, principles and practices of civil, structural, or mechanical engineering design and project management.
- Knowledge of theory and practice of land surveying.
- Knowledge of safety practices and procedures applicable to the job.
- Knowledge of engineering hydraulics, hydraulic calculations, hydraulic modeling and application of results to water system planning and design.
- Knowledge of basic computer operations including AutoCAD and Microsoft applications such as Word, Excel, Outlook and PowerPoint.
- Knowledge of personnel, administrative, safety and departmental policies.
- Skill in customer relations and communications, including the ability to effectively and tactfully work with difficult customers and complex customer issues.
- Ability to review, prepare and coordinate preparation of engineering plans and specifications for small to mid-sized capital improvements projects.
- Ability to prepare and evaluate engineering studies of water system infrastructure related projects.
- Ability to plan and manage engineering projects from planning and design thru construction.
- Ability to clearly communicate scientific and technical matters to coworkers and technical staff.
- Ability to communicate effectively both orally and in writing with coworkers, customers and other agencies.
- Ability to establish and maintain respectful and harmonious relationships with others both inside and outside the organization.
- Ability to learn the District's customized utility billing program and any supporting programs.
- Ability to learn to effectively use the Meter and Service Installation System and process.
- Ability to perform effectively in an independent or team environment, as well as display self-motivation skills.
- Ability to recognize and keep sensitive information confidential.
- Ability to manage records and information in any format, in accordance with applicable statutes, regulations and District policy, guidance and records retention schedule.
- Ability to display TVWD's vision of delivering the best water, service and value by demonstrating reliability, integrity, stewardship, excellence and safety.

Minimum Requirements:

- Bachelors degree in civil or mechanical engineering or related engineering specialty; and
- Minimum of two years of entry-level engineering or equivalent experience; and
- Certification as Engineer in Training (EIT) in Oregon; or

- Any combination of experience and training which provides the equivalent scope of knowledge, skills and abilities required to perform the work.

Special Qualifications:

- Possess a driver's license valid in the State of Oregon; have and maintain a safe driving record.

Working Conditions:

- Have regular and predictable attendance.
- Prolonged periods of sitting or standing.
- Operate, read information and focus on a personal computer, telephone and other related equipment.
- Daily verbal communications both in person and on the telephone.
- Respond to work, without advanced notice, in times of adverse weather, natural disaster, emergency, or other unusual event as determined by the District.
- Occasional work outdoors in unfavorable conditions, on rough terrain and the ability to perform physical tasks that are moderately demanding.
- Attend meetings at various locations in and out of the Portland Metro Area, often times are outside of normal working hours.

Tualatin Valley Water District PHYSICAL JOB TASK ANALYSIS

Engineering – Engineering Associate

GENERAL ACTIVITIES (time spent)

	Sit	Stand	Moving About	Drive	Total
At one time	3	3	2	1	7
Total hrs for the day	3	3	2	1	9

Essential Job Tasks - Please see attached job description.

PHYSICAL ACTIVITIES

In an eight-hour day, this job requires:					
R - Rarely less than 1 hr or 1-5% per day		F – Frequently 2.5 – 5.5 hrs or 34-66% per day (34% -> 20x/hr, 66% = 120x/hr or < 720x/day)			
O – Occasionally 1-2.5 hrs or 10-33% per day (10% = 4-6x/hr, 33% = 20x/hr or < 60x/day)		C – Continually 5.5-8 hrs or 67-100% per day (67% = > 120 x/hr or > 720X/day)			
	R	O	F	C	Notes
Assembly	X				
Sitting			X		
Standing			X		
Walking			X		
Squatting/crouching		X			
Driving		X			
Crawling	X				
Kneeling	X				
Digging/Shoveling	X				
Stooping/bending	X				
Turn/twisting	X				
Balancing	X				
Reaching forward	X				
Reaching overhead	X				
Climbing	X				
Ladder climbing		X			
Wrist turning		X			
Grasping		X			
Pinch/squeeze	X				
Finger manipulation	X				

Physical Demand Category

Sedentary	Light	Medium	Heavy	Very Heavy
GENERAL PHYSICAL DEMAND CHARACTERISTICS OF WORK				
DEMAND LEVEL:	OCCASSIONAL(1-33% of workday)	FREQUENT (34-66% of workday)	CONSTANT(67-100% of workday)	
SEDENTARY	10 POUNDS	NEGLIGIBLE	NEGLIGIBLE	
LIGHT	20 POUNDS	10 POUNDS	NEGLIGIBLE	
MEDIUM	50 POUNDS	20 POUNDS	10 POUNDS	
MEDIUM-HEAVY	75 POUNDS	35 POUNDS	15 POUNDS	
HEAVY	100 POUNDS	50 POUNDS	20 POUNDS	
VERY HEAVY	OVER 100 POUNDS	OVER 50 POUNDS	OVER 20 POUNDS	

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