



## SPRINGFIELD UTILITY BOARD

### Job Description

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**TITLE:** Engineering Technician 1 – 3 – WSC  
**REPORTS TO:** Water Engineering Supervisor and  
Water Superintendent

**STATUS:** Non-exempt / Non-union  
**RANGE:** 14 – 18 – 24

**POSITION SUMMARY:** The Engineering Technician 1 – 3 is responsible for the engineering work within SUB's service territory. The work will involve the preparation designs, estimates, studies and reports for new and existing facilities. This position will work with other public agencies, contractors and SUB's crews. Movement through Engineering Technician levels 1 – 3 is based upon satisfactory performance and years of service. Position starts as an Engineering Technician 1. Performs other duties as assigned.

#### **MAJOR RESPONSIBILITIES**

##### *Essential Functions*

1. Supports and models behavior to promote the Mission and Core Values of SUB to staff and customers.
2. Develops and maintains professionalism and effective teamwork in the performance of job duties.
3. Maintains reliable and predictable attendance.
4. Works with customers and contractors on water requests.
5. Designs, plans, layouts and estimates for the installation of distribution facilities for new customers, which includes joint trench.
6. Reviews completed jobs for estimated/actual costs, materials, specification compliance and files for closing and recordkeeping.
7. Designs, plans, layouts and estimates for maintenance projects including, pipe replacements, air relief valves, service replacements, valves, hydrants, etc.
8. Designs, plans, layouts and estimates for the installation, removal and maintenance of meter projects.
9. Uses AutoCAD in the design, plans and layouts for projects.
10. Participates, coordinates and routinely follows-up on construction projects with the water crews.
11. Participates, coordinates, inspects and routinely follows-up on construction projects with contract crews.

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12. Performs field measurements for documentation of facilities for projects, customers, CAD drawing updates or studies.
13. Assists in the review or developing of construction and material standards.
14. Assists in writing and acquiring right-of-way easements.
15. Represents the Water Division at City pre-construction, developer/contractor or on-site meetings.
16. Prepares billing estimates and notifications to customer/developers. Ensures invoices are accurate, including all necessary pertinent information such as name, address, phone number, etc.
17. Maintains valid Oregon driver's license and good driving and safety record.

### ***Marginal Functions***

18. Verifies and updates electronic database for water facilities.
19. Performs studies, identifies, or investigates possible concerns within the water system and makes recommendations or solutions.

*Given the dynamic and challenging environment of the utility industry and our mission to provide exceptional service to our internal and external customers, additional duties and responsibilities, other than those listed in this job description, may be assigned (contingent on labor agreement provisions, if applicable). Your supervisor will communicate these changes either formally or informally, verbally or in writing.*

### ***Attributes***

SUB strives to promote a safe, positive and caring work environment. In addition to the above qualifications, the following attributes are essential to be a successful employee at SUB:

- Being committed to SUB's Mission and Core Values
- Complying with safety practices and policies
- Being professional, honest, courteous and respectful to others in your conduct
- Being responsive to suggestions to improve performance
- Being flexible to adapt to a changing work environment
- Performing as a productive team member
- Being accountable for your own performance, behaviors and contributions
- Taking the initiative to accomplish your responsibilities to the best of your ability

These qualities in our employees ensure that working at SUB is motivating, fun and enjoyable while performing a valuable service to our utility and community.

**OTHERS SUPERVISED**

- None

**MINIMUM QUALIFICATIONS**

***Experience***

- Applicable experience is preferred, but not required if education, knowledge, skills and abilities requirements are met
- Advancement from the Engineering Technician 1 to the Engineering Technician 2 and 3 levels is a function of education, training, skills, years of experience and satisfactory performance

***Knowledge, Skills & Abilities***

***Engineering Tech 1 – Works under close supervision***

- Demonstrated aptitude or knowledge in math, science, engineering, construction, or other technical disciplines
- Demonstrated experience (industry or academic) in designing basic level projects in AutoCAD
- Basic surveying skills within scope of assigned tasks
- Excellent interpersonal skills to communicate orally and in writing with staff, supervisors and customers on a daily basis
- Competent in Microsoft Office Word, Outlook and Excel; basic Access knowledge
- Basic problem solving skills within scope of assigned tasks
- Excellent organizational skills and attention to detail to complete assigned work
- Must be able to manage a moderate number of concurrent multiple projects from multiple sources and meet deadlines
- Supports the completion of division goals

***Engineering Tech 2 – Works under moderate supervision***

- Competent in all Engineering Tech 1 – Knowledge, Skills & Abilities
- Must have a minimum of 3.5 years of satisfactory performance as an Engineering Tech 1
- Proficient in AutoCad Civil 3D including alignments, profiles and surfaces
- Performs water utility calculations and demonstrates competency in applying SUB's engineering standards
- Proactive in identifying basic to moderate problems; effectively and timely resolves problems when they occur
- Reads, understands and integrates SUB's AutoCAD designs with other agency designs

***Engineering Tech 3 – Works independently, minimal supervision required***

- Proficient in all Engineering Tech 1 and 2 – Knowledge, Skills & Abilities
- Must have a minimum of 3 years of satisfactory performance as an Engineering Tech 2
- Proactive in identifying complex problems; effectively and timely resolves problems when they occur
- Manages and prioritizes a large volume of work and projects from multiple sources and meets deadlines
- Assists in mentoring Engineering Tech 1 and 2 employees

***Education***

- High school diploma or equivalent
- Associate’s degree in civil engineering technology or related technical area preferred
- Applicable course work and/or training may substituted for part of the education requirements

**PHYSICAL AND MENTAL REQUIREMENTS**

- **ALERTNESS & CONCENTRATION:** Maintains full alertness and concentration at all times directing work of fellow employees while working alone.
- **ABILITY TO DEAL WITH STRESS:** Makes decisions quickly and calmly in stressful situations. Thinks and reacts quickly if accidents occur. Interacts well with co-workers. Able to coordinate and direct many jobs/tasks, employing a variety of people at the same time.
- **VISION:**
  - Far visual acuity:** Sees adequately to drive a vehicle.
  - Near visual acuity:** Reads small print on maps, plans, labels, reports, numerous other written documents and computer screens.
  - Peripheral vision/depth perception:** Maintains full field of vision in all directions to assess proximity to construction hazards, holes, traffic, co-workers, movements of equipment, or objects falling from above.
  - Color vision:** Judges red, green and yellow traffic lights adequately to drive on highways. Differentiates color of documents and reports.
  - Night vision:** Maintains the visual abilities listed above when working at night and in poor light and inclement weather conditions.
- **HEARING:** Hears spoken conversation well in person and on telephone despite heavy background noise from traffic, construction equipment, rain or wind, and when visual signals cannot be used. Hears adequately to operate a two-way radio.

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- **SPEECH:** Speaks loudly and clearly enough to be accurately understood when speaking to a co-worker, or when up to 100 feet away from a co-worker despite heavy background noise from traffic, construction equipment or wind, and when visual signals cannot be used. Speaks clearly communicating by two-way radio.
- **STANDING:** The worker stands on the job a very short period of time. The worker may actually be on their feet for longer periods of time, but maneuvers around the work site at intervals.
- **SITTING:** Worker sits on a variety of vehicle seat types and office furniture. May spend up to an eight-hour shift sitting.
- **WORKER MOBILITY:** Can change positions frequently, in and out of vehicles and in and out of holes/trenches using ladders and not using ladders, which requires full body bending and/or twisting and/or lifting. At times on knees and bent over. Must be able to operate manual transmission.
- **WALKING:** Rarely walks one to two miles at a time on uneven ground. More common maximum distance walked is 1/8 to 1/4 miles. Total walking per shift is 0-15 percent. Walking occurs in slippery conditions, in mud, on rock and on uneven ground.
- **LIFTING/CARRYING:** 0-10 lbs.--often; 11-20 lbs.--occasionally; 21-50 lbs.--occasionally.
- **PUSHING/PULLING:** Pushing/pulling materials and equipment from trucks. Pushing/pulling may be done while bent over.
- **REACHING/HANDLING:** Occasionally works at full extent of his/her reach. Writes information and draws diagrams. Uses 10-key, data entry, computer, opens envelopes, uses telephones, radios, etc.
- **TWISTING:** Rotates head fully to both sides to observe equipment and co-workers while maintaining body in awkward position. Some twisting is required when lifting items or handing items to fellow workers.
- **CLIMBING:** Climbs in and out of ditches/holes. Climbs into manholes and into underground vaults. Climbs hills and walks over uneven ground while carrying equipment. Climbs in and out of trucks and heavy equipment.
- **CRAWLING:** Not usually required.
- **ENVIRONMENTAL FACTORS:** Performs a variety of non-strenuous tasks outside with temperatures varying from below zero to over 100 degrees, sometimes in rainy, windy, snowy or icy conditions. Exposed to occasional noise from traffic construction, heavy equipment near construction sites, jackhammers, power saws, and tamps. Hearing protection is provided. Works occasionally in confined spaces, such as underground vaults requiring entry through a manhole. Works occasionally in ditches of various depths and widths. Works inside shoring when

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required. Exposed to chemicals (primarily through skin contact or inhaling) used to glue pipe and disinfect pipe often in the ditch. Exposed to numerous types of pollen, depending on location, season or climatic conditions. Bee/wasp stings, animal bites or poison oak may also occur. Exposed to some petroleum products used for maintenance of trucks and trailer.

- **PRODUCTS AND MATERIALS:** Lumber, bolts, plastic and metal pipe/fittings.
- **MACHINES/TOOLS/EQUIPMENT:** Uses 10-key, computer, typewriter, copier, phone, two-way radio and other office equipment.

Revised: June 1, 2016