



-  19 Saddle Road  
Cedar Knolls, NJ 07927
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## **Engineering Field Specialist**

### **Non-Union; Non-Exempt**

#### **RESPONSIBILITIES**

The primary area of responsibility of this position is to apply engineering principles to support all areas of the SMCMUA's business as a Federal and State regulated New Jersey Public Water System.

#### **ESSENTIAL FUNCTIONS**

1. Prepares schedule of site visits in a workday for all present and active projects. Conducts and coordinates construction site visits and performs observation and inspection services, ensuring that SMCMUA standards are observed, followed, and enforced.
2. Acts as the construction liaison for SMCMUA Engineering and Finance Divisions.
3. Completes and submits reports digitally in accordance with requirements of the SMCMUA Engineering Division.
4. Reviews shop drawings and related cut sheets submitted by contractors for conformance with SMCMUA standards.
5. Responsible for implementation of scheduling service connections with Operations Division when contractor is ready, e.g. residential taps, fire line wet cuts, large diameter domestic service lines.
6. Responsible for observation of contractor's installation of water service lines within the right-of-way through and including shut off valve. Construction observation includes trench restoration, installation of water service lines on private property, etc.
7. Schedules, witnesses, and observes disinfection and pressure testing with the Water Quality and Operations Divisions.
8. Responsible for signing off on development projects upon installation of meters as this will notify the Finance Division when to activate the account for proper billing services.
9. Reports unauthorized construction activities to the Engineering and Finance Divisions.
10. Responsible for creating a tracking system of unauthorized water usage at project sites. Creating a notification process to inform the Engineering and Finance Divisions when said

**SOUTHEAST MORRIS COUNTY MUNICIPAL UTILITIES AUTHORITY**

events occur so that information is properly captured in the water audit program and appropriate fines are issued to contractors.

11. GPS newly constructed water assets and features using SMCMUA supplied equipment, i.e., EOS Arrow Positioning and ESRI Field Data Collection. Coordinates this activity with Engineering Division ensuring that the GPS points have been edited and posted to the GIS Enterprise Utility Network.
12. Ensures construction issues are resolved in accordance with best practices and while maintaining SMCMUA standards.
13. Coordinates field changes with contractors and SMCMUA Engineering Division.
14. Reviews and interprets drawings and specifications.
15. During planning and design phases, conducts site investigations to verify design sketches for development project or in-house design projects.
16. Coordinates efforts required to collect data and inventory information for the Backflow Preventer Program in accordance with the SMCMUA Cross Connection Control Program which is in conformance with NJDEP requirements. The data must be collected and coordinated for database management in the GIS Enterprise Utility Network. Coordination with building managers or owners may be required.
17. Coordinates efforts required to collect data and inventory information for private fire pumps. The data must be collected and coordinated for database management in the GIS Enterprise Utility Network. Coordination with building managers or owners may be required.
18. Performs related and other duties, as assigned.

This job description is not designed to cover or contain a comprehensive listing of activities, duties, or responsibilities that are required of the employee for this job. Duties, responsibilities, and activities may change at any time with or without notice. Functions of this position include work assignments in the ambient atmosphere including extreme cold, hot, wet or other inclement weather conditions.

**REPORTING RELATIONSHIPS & INTERACTIONS**

This position is a direct report to the Engineering Manager, or assigned alternate. The position



requires interaction with SMCMUA staff, vendors, general public and local, County, State and Federal public agency representatives. The position requires routine interaction and coordination of duties with all Divisions of the SMCMUA.

### **AUTHORITY**

The responsibilities of this position require administering proprietary and security information with confidentiality in accordance with Southeast Morris County Municipal Utilities Authority policy and procedures as well as applicable law.

### **WORK HOURS & LOCATION**

This position will be assigned to work at the SMCMUA Headquarters located at 19 Saddle Road Cedar Knolls, NJ 07927, and at any other of the SMCMUA's facilities and throughout the SMCMUA's service area or other assigned work locations. Pandemic or other conditions may require remote work. The general assigned work hours are from 7:30 a.m. to 4:00 p.m., Monday through Friday, with a one-hour non-paid lunch. The start and finish times of a workday may vary depending on SMCMUA's needs. Office assignments will be supplemented with SMCMUA fieldwork activities.

Travel, including overnight and weekend stays, as needed to attend professional-related seminars, conferences, etc. Travel may be local, regional, or within the Continental US.

### **QUALIFICATIONS**

As a condition of employment, after an offer has been issued but before employment has commenced, the applicant must successfully complete an illegal substance test, background check, motor vehicle check, and a physical/functional capacity exam (FCE) based on the attached job specific Functional Capacity Requirements (FCR).

### **LICENSES & CERTIFICATIONS**

- Maintenance of a New Jersey Basic Driver's License.

### **EDUCATION & EXPERIENCE**

- Minimum of 5-7 years of relevant experience in engineering construction.

- Associate's degree in engineering, construction, or combination of education and relevant experience.

### **SKILLS & COMPETENCIES**

- Demonstrates knowledge in comprehension, written and oral skills in English so that technical documents can be read, understood, produced, and communicated.
- Demonstrates knowledge in Microsoft Office applications.
- Demonstrates knowledge in engineering applications, including record keeping.
- Demonstrates knowledge of interpretation of construction plans and specifications.
- Demonstrates ability to work harmoniously with co-workers, supervisors, managers, contractors, and the public.
- Working harmoniously with co-workers, supervisors, managers, and the public.
- Maintains an understanding and satisfactory compliance of the SMCMUA policies, procedures, practices, processes, and essential functions required for the position.

### **FUNCTIONAL CAPACITY REQUIREMENTS**

Reference the Functional Capacity Requirement document for the specific physical tasks, details, frequency, and specifications required for the position.

**FUNCTIONAL CAPACITY REQUIREMENTS FOR ENGINEERING DIVISION**

<b>VERSION DATE:</b>	10/19/2020	<b>APPROVED BY:</b>	C. Mercado
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PHYSICAL TASKS	DETAILS	RARE	SELDOM	OCCASIONAL	FREQUENT	CONTINUOUS	Weight Amounts, if Applicable	COMMENTS
		up to 5 minutes of total work time	6-29 minutes daily	30 minutes to 2.5 hours per day	2.5 to 5.25 hours per day	5.25 hours or more per day		
Balance	To maintain body equilibrium on narrow or inclined surfaces.			✓				
Bending	Flexion of the upper trunk forward while standing and knees extended or knees flexed when sitting.			✓				
Carrying	To hold or rest weighted objects ( <i>indicate weight</i> ) directly on hands, arms, shoulders, or back while walking from one location to another.		21-40 lbs	10-20 lbs			≤ 40 lbs.	Use of Buddy System/Team Lift if carrying more than 50 lbs.
Climbing Ladders	Ascend/descend with gradual or continuous progress by oneself, using both hands and feet.	0-10 ft.	✓					
		10-20 ft.	✓					
		20-30 ft.	✓					
Climbing Stairs	Ascend/descend with gradual or continuous progress by oneself, using both hands and feet.			✓				
Crawling	Moving body slowly in a prone position on hands and knees flexion, with arms extended and elbows bent.	✓						
Crouching	Bending downward and forward by bending the legs and spine		✓					
Digging	To break up, turn over or remove earth, sand, etc, as with a shovel, spade, bulldozer, or claw.	✓						
Driving	The controlled operation and movement of a land vehicle, such as a car, truck or bus ( <i>indicate manual or automatic</i> )			✓ automatic				
Grasping	To handle, clasp or embrace with both arms, hands fingers. Applying pressure to an object with fingers and palm.		✓					
Handle	To maneuver objects, to manipulate or reposition medium to large sized items. Has handles to be grasped by the hands in order to manage dexterously or efficiently, e.g., large bag of trash, move furniture, cases/boxes with handles.		✓					
Handling	Flex and extend fingers with opposition of thumb using palms, fingers and thumbs to grasp or manipulate objects.		✓					
Keyboarding/Typing (motor coordination)	To move the fingers rapidly and accurately during keyboarding tasks.				✓			
Kneeling	Maintaining the body in an erect posture while resting body weight on one or both knees.		✓					
Lifting/Loading	Raising objects from a lower to a higher position or moving objects from position to position.		21-40 lbs	10-20 lbs				Use of Buddy system/Team Lift if carrying more than 50 lbs.
Manipulate	To operate, manage, control, or utilize skillfully with the hands. Adroit handling, e.g., steering wheel, hand truck, pallet jack.	✓						

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Manual Dexterity	To move one or more hands rapidly and skillfully to perform gross grasping, placing and turning motions. Including handwriting.				✓			
Pulling	Exertion of force to draw an object towards oneself in a particular direction or position.		✓				≤ 40 lbs.	
Pushing	Exertion of force on or against an object ( <i>indicate weight/size</i> ) to move it from one location to another.		✓				≤ 40 lbs.	
Reaching	Extending the hands and arms in any direction.		✓					
Reaching Above Shoulder	To extend either arm to reach from shoulder level to overhead.		✓					
Repetitive Motions	Substantial movements (motions) of the wrists, hands, and/or fingers.				✓			
Shoveling	To move or remove with a shovel gravel, sand, and/or snow.	✓						
Sitting	Resting of the body weight in a seated position while engaging in a single activity.				✓			
Squatting	Maintaining the body in an erect position with full flexion of the knees.		✓					
Standing	Maintaining the entire body in an erect posture without change in location.			✓				
Stooping	Flexion of the upper body forward at the waist with partial flexion of the knee.		✓					
Trunk Twisting	Rotation of the neck or trunk to the right or left from a neutral position while sitting or standing.			✓				
Neck Twisting	Rotation of the neck to the right or left from a neutral position while sitting or standing.			✓				

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Carrying	To hold or rest weighted objects ( <i>indicate weight</i> ) directly on hands, arms, shoulders, or back while walking from one location to another.		21-40 lbs	10-20 lbs			≤ 40 lbs.	Use of Buddy System/Team Lift if carrying more than 50 lbs.
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Climbing Stairs	Ascend/descend with gradual or continuous progress by oneself, using both hands and feet.			✓				
Crawling	Moving body slowly in a prone position on hands and knees flexion, with arms extended and elbows bent.	✓						
Crouching	Bending downward and forward by bending the legs and spine		✓					
Digging	To break up, turn over or remove earth, sand, etc, as with a shovel, spade, bulldozer, or claw.	✓						
Driving	The controlled operation and movement of a land vehicle, such as a car, truck or bus ( <i>indicate manual or automatic</i> )			✓ automatic				
Grasping	To handle, clasp or embrace with both arms, hands fingers. Applying pressure to an object with fingers and palm.		✓					
Handle	To maneuver objects, to manipulate or reposition medium to large sized items. Has handles to be grasped by the hands in order to manage dexterously or efficiently, e.g., large bag of trash, move furniture, cases/boxes with handles.		✓					
Handling	Flex and extend fingers with opposition of thumb using palms, fingers and thumbs to grasp or manipulate objects.		✓					
Keyboarding/Typing (motor coordination)	To move the fingers rapidly and accurately during keyboarding tasks.				✓			
Kneeling	Maintaining the body in an erect posture while resting body weight on one or both knees.		✓					
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