

Tennessee School for the Deaf Water Treatment Program Specifications

Tennessee School for the Deaf (TSD)
2725 Island Home Boulevard
Knoxville, TN 37920

Contact Person: Daniel Dooley, Safety and Projects Specialist
d.dooley@tsdeaf.org
Office: (865) 579-2409

Statement of Procurement Need

The Tennessee School for the Deaf (TSD) is seeking a vendor to provide a water treatment program for its hydronic systems that includes monthly testing and servicing, when needed.

The water treatment program is intended to promote system efficiency through the minimization of piping and equipment corrosion, scale formation, the accumulation of alluvial deposits, system wide microbial fouling and microbial induced corrosion. The sole purpose and scope of minimizing these factors is to aid in preservation of asset value, minimization of energy and water consumption, reduction of maintenance costs and to achieve optimal heat transfer. The systems needing service and testing are as follows.

Scope of Work

Monthly Water Treatment

1. The Contractor shall conduct monthly on-site visits at the TSD campus located at 2725 Island Home Boulevard, Knoxville, TN 37920. During the on-site visits, the Contractor will:
 - a. Test the water and fluids common to the systems to ensure that levels all levels are functioning within designated specifications
 - b. Clean, calibrate, and adjust conductivity control and chemical feed equipment, as required
 - c. Provide chemical treatment to achieve the purposes outlined in the Statement of Procurement Need
2. The Contractor will also report the results of all tests and provide a treatment plan and make any recommendations regarding repairs or modifications needed that are

outside the scope of the current contract. Any alteration from the specifications listed in the scope of work shall only be performed upon written change orders specifying any extra price/charge over the original proposal amount to obtain approval for additional items.

3. The Contractor shall maintain safe work environment as required by Occupational Safety and Health Administration (OSHA) and shall clean and dispose of any and all work-related debris.
4. The Contractor shall complete all work in accordance with generally accepted trade organization and industry guidelines.
5. The Contractor shall obtain/provide all necessary permits and handle all inspections that are required in order to comply with the building codes for the specific municipality in which the work is performed.
6. When the Contractor, its employees, or subcontractors have allegedly been involved civil or criminal charges, sexual harassment, or failure to meet obligations or performance standards defined in this Contract, the Contractor shall immediately inform the director of schools or designee following knowledge of such charges. The individual with the charges shall be removed from services until the charges have been resolved or dismissed to the satisfaction of the TSD.
7. The Contractor shall ensure that all employees and subcontractors provided under the Contract have a satisfactory background check prior to being assigned for service at TSD. This includes an FBI and TBI check, in accordance with T.C.A. § 49-5- 413(d) (1) (A). A satisfactory background check for the purposes of this Contract means the check has no indications for offenses as outlined in T.C.A. § 49-5-413(d)(3). Clearance letters from the TBI for each employee shall be required prior to the first date of service, and TSD reserves the right to request documentation of background checks at any time. The Contractor shall be solely responsible for all costs associated with the background check.
8. The Contractor and TSD shall conduct a pre-inspection and final inspection on the project prior to completion of the project.

Equipment Specifications

The following list shall contain the current water treatment equipment for TSD that shall be serviced under this procurement:

- a. Ward Building (401) & Boiler Room (414)
2 Pipe System – Boiler and Chiller
- b. Old Gym (404)

4 Pipe System

- c. Jones Vocational Building (413)
Steam Circulation Boiler System
- d. Elementary School (419)
4 Pipe System
- e. Edmunds Building (420/421)
4 Pipe System
- f. Akin Gym (433)
2 Pipe System – Boiler Only
- g. Alan J. Mealka Building (440)
2 Pipe System – Boiler and Chiller

Additional miscellaneous specifications for current TSD water treatment systems:

	C-TEC-2A-1T	Conductivity as mmhos	Conductivity Cycles	pH	Chlorine, Free (ppm as Cl ₂)	Chlorine, Total (ppm as Cl ₂)	Sodium Molybdate (ppm as Na ₂ MoO ₄)	Glycol %
440 Loop		Record		Maintain 8.3-11			Maintain 250-350	Record
440 Cooling Tower	Maintain 85-125 ppb	Record	Maintain 4-5	Record	Maintain .8-1.5	Record		
440 Make Up		Record		Record				

	R-TEC-4N-2 (ppm)	Conductivity as mmhos	pH
404 Hot Loop	Maintain 800-1500	Record	Maintain 8.3-11
404 Chilled Loop	Maintain 800-1500	Record	Maintain 8.3-11
401 Common Loop	Maintain 800-1500	Record	Maintain 8.3-11
419 Hot Loop	Maintain 800-1500	Record	Maintain 8.3-11
419 Chilled Loop	Maintain 800-1500	Record	Maintain 8.3-11
420 Hot Loop	Maintain 800-1500	Record	Maintain 8.3-11
420 Chilled Loop	Maintain 800-1500	Record	Maintain 8.3-11
433 Hot Loop	Maintain 800-1500	Record	Maintain 8.3-11

	R-TEC-4N-SB (ppm)	Conductivity as mmhos	pH
413 Hot Loop	Maintain 800-1500	Maintain 1500-4000	Maintain 8.3-11

