

**LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
SPECIFICATIONS**

**MONTHLY HVAC / CHILLER MAINTENANCE
DISTRICT 04**

SCOPE OF WORK

These specifications are for Monthly HVAC Maintenance contract for the heating, ventilating and air conditioning (HVAC) system located at the Louisiana Department of Transportation and Development District 04 Headquarters office, 3339 Industrial Dr., Bossier City, LA 71112.

Contractor shall perform all maintenance service, either to repair or replace components/parts that prove defective or become worn under normal use. This service shall be provided on a 24 hour, 7 day basis to include Holidays. See **Schedules 1** and **2** for equipment listing, descriptions, locations and air filter information.

The contractor will provide complete mechanical maintenance in accordance with the terms and conditions set forth in these specifications and the maintenance recommendations of the equipment manufacturers. The contract will consist of furnishing all labor, component parts, equipment, and materials for the routine maintenance, repair and/or replacement of all equipment pertaining to the heating and air conditioning systems.

The contractor shall be responsible for the maintenance, repair, and replacement of all electrical components such as compressors, fan motors, contactors, and thermostats. The system will receive routine maintenance and complete repair or replacement under the terms and conditions provided under this contract. Any equipment installed during the monthly maintenance will become part of the scope of work for monthly maintenance at the prices bid.

Replacements and/or repairs to satisfy the monthly maintenance must be performed in the most expedient manner possible (including outside of normal business hours and on weekends) and in accordance with industry standards and to the satisfaction of the Department. Normal preventive maintenance must take place between the hours of 7:45 A.M. and 4:15 P.M., Monday through Friday, excluding Department holidays. The contractor shall be free to start and stop all primary equipment incidentals to the heating and air conditioning systems by mutual agreement between the contractor and the DOTD representative. The contractor will furnish a detailed estimate of downtime for all major repairs.

PREVENTIVE MAINTENANCE

Preventive maintenance inspection and service shall be scheduled and performed on a monthly basis on equipment to keep all systems operating at optimum comfort and efficiency levels.

Contractor's responsibility is to perform all work necessary to assure a complete, dependable and operational system.

Contractor will provide the following maintenance services for the building environmental mechanical system(s) comprised of the equipment and Air filter service listed on **Schedule 1**.

Job labor and travel to clean, align, calibrate, tighten, adjust, lubricate and paint equipment. These activities are intended to extend equipment life and assure proper operating condition and efficiency. Examples of such activities include, but are not limited to the following:

- CLEANING coil surfaces; fan impellers and blades; electrical contacts; burner orifices; passages and nozzles; pilot and igniter; cooling tower baffles, basin, sump and float; chiller, condenser and boiler tubes, etc
- ALIGNING belt drives; drive couplings; air fins, etc
- CALIBRATING safety controls; temperature and pressure controls, etc
- TIGHTENING electrical connections; mounting bolts; pipe clamps; refrigerant piping fittings; damper sections, etc
- ADJUSTING belt tension; refrigerant charge; super heat; fan RPM; water chemical feed and feed rate; burner fuel/air ratios; gas pressure; set point of controls and limits; compressor cylinder unloaders; damper close-off; sump floats, etc
- LUBRICATING motors; fan and damper bearings; valve stems; damper linkages; fan vane linkages, etc
- PAINTING, for corrosion control, as directed by our scheduling system and on an as-needed basis
- FILTERS, furnish and install air filter materials on a quarterly basis, as defined in **Schedule 2**

TESTING AND INSPECTING:

INSPECT and TEST equipment to determine its operating condition and efficiency. Examples of such activities include, but are not limited to the following:

- TESTING for excessive vibration; motor winding resistance; refrigerant charge; fan RPM; refrigerant oil (acid); water condition; flue gas analysis; safety controls; combustion and draft; crankcase heaters; control system(s), etc.
- INSPECTING for worn, failed or doubtful parts; mountings; drive couplings; oil level; rotation; soot; flame composition and shape; pilot and igniter; steam, water, oil and/or refrigerant leaks, etc.

The contractor shall schedule the monthly maintenance visit with Regina Conly (318)549-8388, forty-eight (48) hours prior to the visit. The contractor must meet with Ms. Conly prior to beginning work and upon completion of work.

Note: The contractor is to abide by all refrigerant laws in place at the time of service. Neither the State of Louisiana nor any of its employees will assume responsibility for the contractor's non-compliance.

REPAIR AND REPLACEMENT PARTS

The contractor shall furnish and install all necessary refrigerants, system in proper operating condition at no additional cost to the Department. Under this contract and at no additional cost to the Department, all equipment necessary for the operation of the system will be repaired with new parts, or reconditioned components if approved by the District Administrator. The contractor will be responsible for providing standard manufacturer's warranty on all parts and labor.

SUPPLEMENTAL SERVICE

Additional services upon request and proper authorization by Department personnel will be invoiced by the contractor at the contractor's prevailing billing rate as listed below, and will remain in effect during the contract.

Straight time ----- per working hour
Time and one-half ----- per working hour
Double time ----- per working hour

Note: The working hour rate is defined as the number of hours on site needed to complete the task. Working hours should not be confused with man hours. DOTD will not be responsible for fuel surcharges or travel time to / from job site.

EMERGENCY SERVICE

The contractor will make emergency service available on a continuous 24-hour basis. Response time is not to exceed two (2) hours. The contractor is required to maintain a point of contact for service twenty-four (24) hours per day, seven (7) days per week including holidays. If the trouble call is made after normal business hours, the contractor has the option to respond at the start of the next business day provided the failing equipment can be safely shut down and a backup system is properly holding the load needed during that time.

CONTRACTOR QUALIFICATIONS

The contractor must be a licensed HVAC service contractor and shall have all the necessary licenses required by the city, parish and state to perform the work required by these specifications on the attached equipment list. Service personnel must have a minimum of five (5) years of experience on the specified equipment.

REPORTS

The contractor shall provide to Department personnel a written report of all work performed for each inspection, repair, or emergency call.

**SCHEDULE 1
INVENTORY OF EQUIPMENT**

QTY	Description	MFG	Model	Serial Number	Rating	Location
	Chiller System					
1	Chiller 1	Trane	CGAM 070F	U13E36347		Ground
2	Compressors				15 Tons	
2	Compressors				20 Tons	
1	CHWP 1	Aurora	344A-BF	450063598-4504170	5 HP	MER-1
1	CHWP 2	Aurora	344A-BF	450063598-4504023	5 HP	MER-1
1	Chilled Water Tank	Lochinvar	CVU300		300 Gallons	Ground
	Air Handlers					
1	Air Handling Unit 1	Trane	MCCA021MD JOCOAODC			MER-1
1	Supply Fan Motor				20HP	
1	Air Handling Unit 2	Trane	MCCA025MD JOCOAODC			MER-2
1	Supply Fan Motor				20HP	
	Fan System					
28	VariTrane Shutoff & Fan Powered Heating/Cooling Units	Trane				1st and 2nd Floors
	Package Units					
1	Split System #1	Goodman	GSX140421KA	1509081816		Ground
1	Evaporator Unit		ARUF43C14AA	1507184993		Ceiling
1	Split System #2	Trane	TRUYA0361KA70NA	180U013717H1D34		Ground
1	Evaporator Unit		TPKA0A0361KA70A	0XM0007165TKM2		Ceiling
	Remote Components					
1	Compressor				2 Tons	
1	Condenser Fan Motor				0.5 HP	
1	HVAC Control Management System	Trane				1st and 2nd Floors

SCHEDULE 2
AIR FILTER SERVICE

Description	# of Filters	Size of Filters	Changes Per Year
Air Handlers			
Air Handling Unit #1	2	20x20x2.0	4
	4	20x25x2.0	4
Air Handling Unit #2	6	20x25x2.0	4
	2	16x25x2.0	4
Fan System			
VariTrane Shutoff & Fan Powered Heating/Cooling Units	28	15x20x1.0	4
Package Units			
Split System #1	1	20x20x4	4
Split System #2	2	18 x 17.5 (Washable)	4