

SPECIFICATIONS
HVAC ANNUAL MAINTENANCE CONTRACT
and Repairs under Time and Materials
2007-2008 School Year
For
Linwood Board of Education
of Atlantic County Belhaven Avenue
Linwood, New Jersey 08221

Intent:

Under this contract, the work to be performed shall consist of supplying a trained mechanic and helper (if required) with all tools, equipment, and all else necessary to perform at least **(3) three** scheduled maintenance service calls, unless otherwise specified, necessary to keep the equipment listed in attached exhibit in good operating order to the owner's facilities of Seaview School, Belhaven School including, but not limited to the following:

1. Provide emergency service, whenever needed, 24 hours a day, 7 days a week at a specified price to be detailed and included in this bid.
1. Use only qualified, ***factory trained*** personnel directly employed or supervised by contractor awarded this bid. Provide proof of Trane Equipment Factory training for Voyager roof tops as well as other Trane manufactured equipment training.
1. The contractor shall be required to obtain prior owner authorization before engaging in work to improve or repair the equipment which would require additional compensation be paid to the contractor.
1. Take all reasonable precautions to avoid damage to property and injuries to persons.
1. Instruct owner/owners' agent in the basic operation of the system to provide the best operating efficiency.
1. Provide written reports following each regular inspection or emergency call that provide make, model and location of equipment worked on..

Scope of Services:

- A. The contractor shall supply all labor, materials, tools, and equipment necessary to perform all routine ***HVAC*** maintenance service to the owners equipment/properties as detailed above and as may be required and as directed by the owner's representative. These services are to include, but are *not* limited to:

Reciprocating/Scroll Systems including Split Systems

1. Lubricate motor bearings
2. Check, and adjust safety and operating controls, calibrate annually.
3. Check drives, align and adjust belts/coupling
4. Check suction, oil, and discharge pressure
5. Check oil level and pressure, where applicable
6. Check refrigerant controls, and adjust if required
7. Check rotation
8. Check refrigerant charge
9. Pump down refrigerant system as needed.
10. Check operation of unloaders
11. Meg test compressor motor.
12. Tighten motor terminals and control panel terminal annually.
13. Check external interlocks, flow switch, pumps and fans.
14. Check operation of control circuit.
15. Condenser Cleaning - Mechanically and/or Chemically (as appropriate) materials included, one time per year

Condensing Medium - incl. Packaged Rooftop and Self Contained Units

1. Check and verify operation of safety controls for heating section annually
2. Verify unit thermostat controller operates properly
3. Lube all motors and bearings as required.
4. Check operation of the unit.
5. Check crankcase heater for proper operation, where applicable
6. Verify operation of the evaporator air side
7. Check condition of electrical wiring and operation of electrical components
8. Check condition of control circuit and unloaders.
9. Check for proper refrigerant and oil levels.
10. Perform routine maintenance including filter changes and lubrication as required. (Filters to be supplied by owner)
11. Inspect belts for proper condition and alignment within pulleys. Adjust if necessary.
12. Replace belts if necessary, (Owner to supply belts)
13. Verify all fans operate properly in response to controller
14. Vacuum clean coils during maintenance inspection,
15. Verify proper operation of the heating sections
16. Gas Heat routine annually to include:
 1. Check operation of gas train components
 2. Check burner sequence of operation, Vacuum clean combustion chamber and burner tube and assembly.
 3. Check combustion blower and clean ,check efficiency
 4. Inspect heat exchanger for cracks and leakage.
 5. Check gas pressure to unit and/or manifold
 6. Inspect flame condition
 7. Verify integrity of flue system

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Water Pumps

1. Lubricate motor and pump bearings
2. Check motor mounts and vibration pads, tighten as required.
3. Check pump alignment coupling. Adjust if needed.
4. Inspect electrical connections and contacts.
5. Clean and Inspect strainers and check valves.
6. Inspect mechanical seals and pump packing, replace and adjust as required.
7. Operate pumps and check efficiency.
8. Check motor operating conditions, voltage and amperage. Record readings and work on Pump Log sheets provided at each pump.

Air Handling Systems Includes all Ducted systems. VAVs Classroom Univents (Not Included)

1. Tighten motor terminals and control panel terminals.
2. Lubricate fan bearings
3. Inspect and adjust belt alignment and tension, replace as necessary. Owner to supply belts
4. Check damper operations, Clean and lubricate and adjust as necessary.
5. Clean and flush drain pans and condensate lines.
6. Check evaporator coils and clean on maintenance visit every 4 months.
7. Service Actuator Valves.

(Filters supplied by Owner)

Special Services

1. Cleaning of Semco Wheels Annually and testing of associated controls
2. Check belts, replace if necessary.
3. Check, oil, lubricate, and clean electric motor.
4. Check pillow block.

- B. The contractor shall also be required to supply *HVAC* routine and emergency repair under this item at an hourly rate to detailed in this bid.

Definition of Owner:

Linwood Board of Education

Project Name:

***HVAC ANNUAL MAINTENANCE SERVICE AND
REPAIRS UNDER TIME AND MATIERAL BASIS***

Contract Period:

The contract period shall commence on the date of the contract and terminate one year from said date. Contract may be renewed each year in accordance with Title 18A. Include cost per year for this contract to be renewed up to 3 years maximum.