

# Business Department

SchoolAdministration Building 304 New York Ave Oak Ridge, Tennessee 37830 Phone (865) 425-9005 Fax (865) 425-9060

# **Request for Proposal**

# Description of items/services requested:

The Oak Ridge Schools Board of Education is soliciting proposals for **Robertsville Middle School Boiler Replacement (RFP 24-010).** 

# **General Requirements:**

Proposals, bids, or responses will be accepted by the Oak Ridge Schools Business Department no later than **2:00 PM EDT, May 29, 2024.** Every document must be enclosed in an envelope clearly marked as a bid document. Two full copies of the proposal must be submitted each with original signatures on both Bid Forms (included in this packet). Any response, bid, or proposal received after the above deadline shall be considered late, and will not be opened or considered. Bid prices must be valid for no less than sixty (60) days from the date of the bid.

All documents shall be submitted to the following address:

Mary Ann Riley, Purchasing Specialist Re: RMS Boiler Replacement (RFP 24-010) Oak Ridge Schools 304 New York Ave Oak Ridge, TN 37830

# SPECIFICATIONS:

Per plan attached by BCE and following this specifications page.

# Please note:

Award of this project will be based on availability of funding. The project plans included in this RFP have been reviewed by the State Fire Marshal and include two addendum. Any changes will be brought forward through addendum or change order.

# BOILER REPLACEMENT AT:

# ROBERTSVILLE MIDDLE SCHOOL

245 ROBERTSVILLE ROAD OAK RIDGE, TENNESSEE

OWNER

# CITY OF OAK RIDGE

BCE PROJECT No. 24032 TFM # 04167 TFM Project # 2024-4-17-05 APRIL 15, 2024

Set Includes Addendum #1 (4-19-2024) for Sheets M1 & M2 Set Includes Addendum #2 (5-3-2024) for Cover Sheet & M2

# APPLICABLE CODES:

2012 INTERNATIONAL EXISTING BUILDING CODE
2012 INTERNATIONAL FIRE CODE
2012 NFPA 101 LIFE SAFETY CODE
2012 INTERNATIONAL ENERGY CONSERVATION CODE
2017 NATIONAL ELECTRICAL CODE & NFPA 70
2012 INTERNATIONAL FUEL GAS CODE
2012 INTERNATIONAL MECHANICAL CODE
2012 INTERNATIONAL BUILDING CODE

# BUILDING INFORMATION:

THE BUILDING IS TYPE IIB, FULLY SPRINKLERED
THE OCCUPANCY TYPE IS EDUCATIONAL EXISTING
THE BUILDING IS 2-STORY
THE MAXIMUM BUILDING HEIGHT IS APPROXIMATELY 39 FT
THERE IS NO NEW CONSTRUCTION
THE EXISTING BUILDING HAS ABOUT 121,300 SQ.FT.

# SCOPE OF WORK:

THE PROJECT CONSISTS OF THE REPLACEMENT OF TWO GAS FIRED HEATING WATER BOILERS & ASSOCIATED PIPING, PUMPS, PIPING ACCESSORIES & SYSTEM CONTROL VALVES AT THE ROBERTSVILLE MIDDLE SCHOOL.

# CITY OF OAK RIDGE FIRE DEPARTMENT INFORMATION

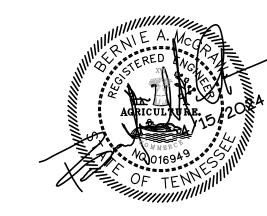
FIRE CHIEF: TRAVIS SOLOMON 200 S TULANE AVENUE OAK RIDGE, TN 37831 865-425-3428 tsolomon@oakridgetn.gov



5641 MERCHANTS CENTER BLVD; STE A104 KNOXVILLE, TENNESSEE 37912 T 865.637.8339 • F 865.523.8186 BCE1946.COM

# INDEX OF DRAWINGS WITH MOST CURRENT REVISION:

DRAWING NUMBER	DRAWING DESCRIPTION	SHEET ISSUE DATE	CURRENT REVISION DESCRIPTION	CURRENT REVISION DATE
COVER SHEET	Cover Sheet	4/15/2024	Rev A2: TSFMO Comments	5/3/24
M1	Controls & Demo Plan	4/15/2025	Rev A1: Owner changes	4/15/2024
M2	Piping Floor Plan, Piping Diagrams, Schedules & Specifications	4/15/2026	Rev A2: TSFMO Comments	5/3/24
P1	Water & Natural Gas	4/15/2027		



# **CONTROLS - GENERAL**

CONTROLLER IS EXISTING TO BE REUSED (AUTOMATED LOGIC). ALL CONTROL WIRING & SENSORS FURNISHED & INSTALLED BY MECHANICAL OR CONTROL CONTRACTOR; POWER WIRING & ALL CONTROL CONDUIT BY MECHANICAL OR CONTROL CONTRACTOR. NEW 2-WAY PRESSURE INDEPENDENT CONTROL VALVES SIZED & FURNISHED BY MECHANICAL OR CONTROL CONTRACTOR & INSTALLED BY MECHANICAL CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL OBTAIN THE SERVICES OF ENERGY SERVICES MANAGEMENT (BOB VLASTOS - 865.964.0150 -BOB@ENERGYSERVICESMGMT.COM) TO PROVIDE REPROGRAMMING OF THE EXISTING CONTROLLER & VERIFICATION OF INSTALLATION. INTEGRATION POINTS LIST FOR BOTH THE BOILERS AND PUMPING SYSTEM TO BE INCLUDED IN

# CONTROLS - 1953 CLASSROOM WING WSHP 2-WAY CONTROL VALVE

REMOVE THE EXISTING 3-WAY CONTROL VALVE SERVING THE WSHP SYSTEM IN THE 1953 ADDITION & INSTALL A NEW PRESSURE INDEPENDENT 2-WAY CONTROL VALVE. THE WSHP SYSTEM & THE HW LOOP ARE SEPARATE UNCONNECTED LOOPS & HEAT TRANSFER IS VIA AN EXISTING OWNER INSTALLED CONVERTER USED AS A WATER-TO-WATER HEAT EXCHANGER. THE NEW 2-WAY VALVE SHALL BE MODULATED AS REQUIRED TO MAINTAIN A MINIMUM 60F (ADJUSTABLE) SUPPLY TEMPERATURE IN THE 1953 WING WSHP LOOP. THE PIPING SIZE AT THE EXISTING 3-WAY CONTROL VALVE IS BELIEVED TO BE 6" (FIELD VERIFY). THE EXISTING FLOW TO THE HEAT EXCHANGER IS UNKNOWN BUT ESTIMATED TO BE UP TO 100 GPM BASED ON 90F SUPPLY & 60F RETURN. THE NEW PRESSURE INDEPENDENT 2-WAY CONTROL VALVE SHALL BE SIZED ACCORDINGLY BY THE CONTROL CONTRACTOR.

# CONTROLS - 1994 CLASSROOM WING WSHP 2-WAY CONTROL VALVE

REMOVE THE EXISTING 3-WAY CONTROL VALVE SERVING THE WSHP SYSTEM IN THE 1994 ADDITION & INSTALL A NEW PRESSURE INDEPENDENT 2-WAY CONTROL VALVE. THE WSHP SYSTEM & THE HW LOOP ARE CONNECTED VIA A COMMON PIPING SYSTEM. THE NEW 2-WAY VALVE SHALL BE MODULATED AS REQUIRED TO MAINTAIN A MINIMUM 60F (ADJUSTABLE) SUPPLY TEMPERATURE IN THE 1994 WING WSHP LOOP. THE PIPING SIZE AT THE EXISTING 3-WAY CONTROL VALVE IS BELIEVED TO BE 3" (FIELD VERIFY). THE EXISTING FLOW INTO THE COMMON PIPING IS UNKNOWN BUT ESTIMATED TO BE UP TO 25 GPM BASED ON 130F SUPPLY & 60F RETURN. THE NEW PRESSURE INDEPENDENT 2-WAY CONTROL VALVE SHALL BE SIZED ACCORDINGLY BY THE CONTROL CONTRACTOR.

# HOT WATER BOILERS & PUMPS - DESCRIPTION OF OPERATION

THE TWO HOT WATER BOILERS SHALL ROTATE STANDBY ON A WEEKLY BASIS AS TO EQUALIZE RUN TIME. BOTH BOILERS SHALL BE ALLOWED TO OPERATE SIMULTANEOUSLY IF REO'D. THE BOILERS SHALL OPERATE UNDER THEIR OWN INTERNAL CONTROLS TO ENERGIZE THE HOT WATER PRIMARY PUMPS (P1 & P2) TO MAINTAIN THE SETPOINT IN THE HWS LINE FEEDING THE BUILDING. THE SETPOINT SHALL BE VARIABLE & AS LOW AS POSSIBLE BUT HIGHER AS REQ'D TO MAINTAIN TEMPERATURES IN THE BUILDING SPACES. THE HW SYSTEM SERVES TWO WATER SOURCE HEAT PUMP SYSTEMS, TERMINAL BOXES WITH HW COILS & 4-PIPE FAN COILS IN THE BUILDING. THE LATTER TWO MAY REQUIRE 180F AT DESIGN HEATING CONDITIONS. RESET OF THE HEATING WATER SUPPLY TEMPERATURE BASED ON OUTDOOR TEMPERATURE IS RECOMMENDED - VERIFY WITH THE OWNER

THE HOT WATER SECONDARY PUMPS (S1 & S2) WILL BE CONTROLLED WITH THE BELL & GOSSETT TECHNOLOGIC 502 VARIABLE SPEED PUMP CONTROLLER. THE TWO HOT WATER PUMPS WILL ROTATE STANDBY ON A WEEKLY BASES AS TO EQUALIZE RUN TIME. WHEN THE SYSTEM IS ENABLED, THE LEAD HOT WATER PUMP WILL BE ENABLED. THE VFD WILL MODULATE TO MAINTAIN THE SYSTEM DIFFERENTIAL PRESSURE SETPOINT. THE BUILDING AUTOMATION SYSTEM SHALL PROVIDE START-STOP AND STATUS ONLY.

PROVIDE 24 VOLT EMERGENCY BOILER SHUNT TRIP ADJACENT TO THE BOILER ROOM EXIT DOOR IN ACCORDANCE WITH THE TENNESSEE BOILER CODE. WHEN ACTIVATED, BOTH BOILERS SHALL BE DE-ENERGIZED & N.C. GAS SOLENOID VALVE (BY CONTRACTOR) SHALL BE CLOSED.

PROVIDE CO & GAS DETECTION SENSORS IN THE BOILER ROOM THAT SHALL CLOSE THE GAS SOLENOID VALVE (BY CONTRACTOR) SERVING THE GAS APPLIANCES UPON DETECTION OF CO OR GAS.

THE MECHANICAL CONTRACTOR SHALL PROVIDE CONDUIT AND COMMUNICATIONS CABLE BETWEEN THE TWO BOILERS AS REQUIRED. 

# **POINTS LIST**

HOT WATER SUPPLY & RETURN TEMPERATURE FROM EACH HEATING BOILER

START/STOP/STATUS OF EACH BOILER

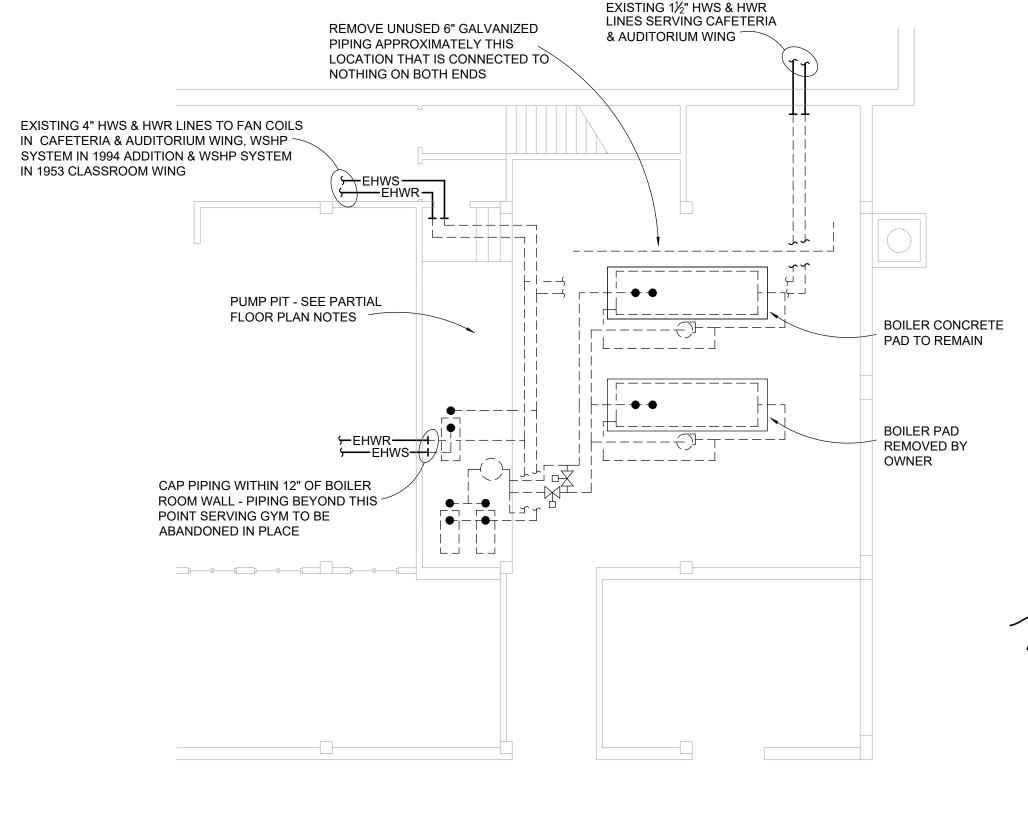
SECONDARY HOT WATER LOOP SUPPLY & RETURN WATER TEMPERATURES START/STOP/STATUS OF EACH HEATING WATER PUMP

UP TO 10 OTHER POINTS (AVAILABLE PER BACNET) FROM THE BOILERS AS DIRECTED BY THE OWNER

CONTROL /STATUS OF 2-WAY VALVE SERVING 1953 CLASSROOM WING WSHP SYSTEM TEMPERATURE ENTERING & LEAVING WSHP SIDE OF EXISTING HEAT EXCHANGER

CONTROL /STATUS OF 2-WAY VALVE SERVING 1994 CLASSROOM WING WSHP SYSTEM

PIPE LEGEND HOT WATER SUPPLY HOT WATER RETURN EXISTING HOT WATER SUPPLY EXISTING HOT WATER RETURN PIPING SYMBOLS → GATE VALVE BALL OR BUTTERFLY VALVE CIRCUIT SETTER FLEXIBLE COUPLING UNION OR FLANGE STRAINER WITH BLOWDOWN VALVE PRESSURE GAUGE WITH SNUBBER (RANGE ON DRAWINGS) THERMOMETER (RANGE ON DRAWINGS) **B&G TRIPLE DUTY VALVE** INDICATES CONNECTION OF NEW PIPING TO EXISTING

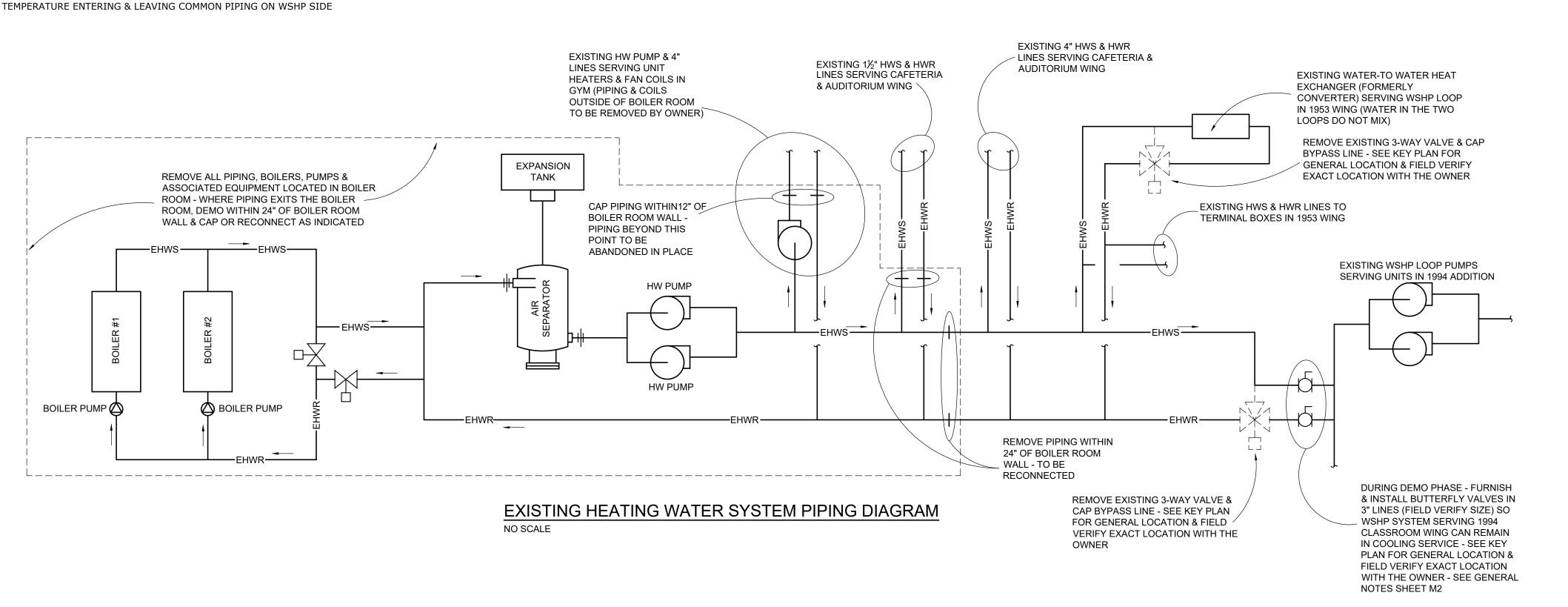


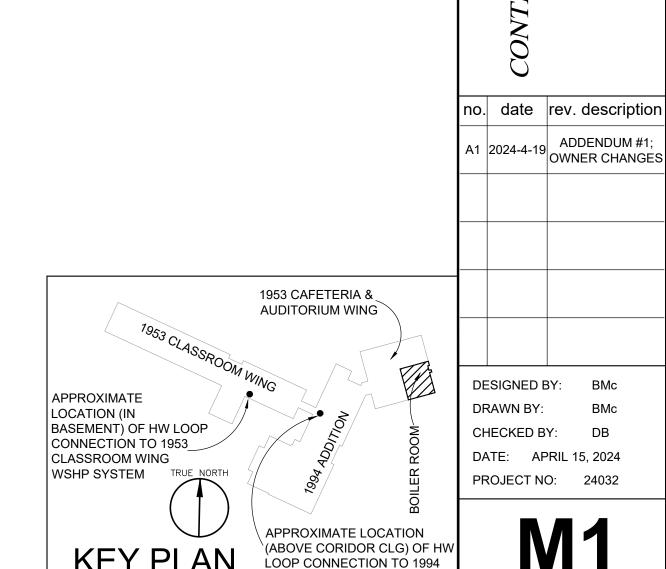
PARTIAL FLOOR PLAN - HVAC (DEMO)

1. CONTACT OWNER IMMEDIATELY AFTER DEMO WORK IS COMPLETE IN BOILER ROOM & THEY WILL FILL IN THE PIT & POUR CONCRETE TO PROVIDE A LEVEL SURFACE WITH THE BOILER ROOM FLOOR BEFORE CONTRACTOR BEGINS INSTALLATION OF NEW PIPING & PUMPS; FLOOR DRAINS IN THE PIT WILL BE EXTENDED TO SURFACE OF NEW CONCRETE FLOOR OVER FORMER PIT BY THE OWNER.

2. CHILLED WATER PUMPS & PIPING TO REMAIN (NOT SHOWN FOR CLARITY).

3. REMOVE EXISTING FLUES & CAP OPENING AT CHIMNEY (NOT SHOWN FOR CLARITY)

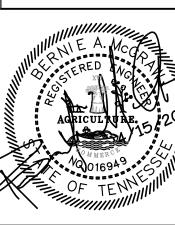


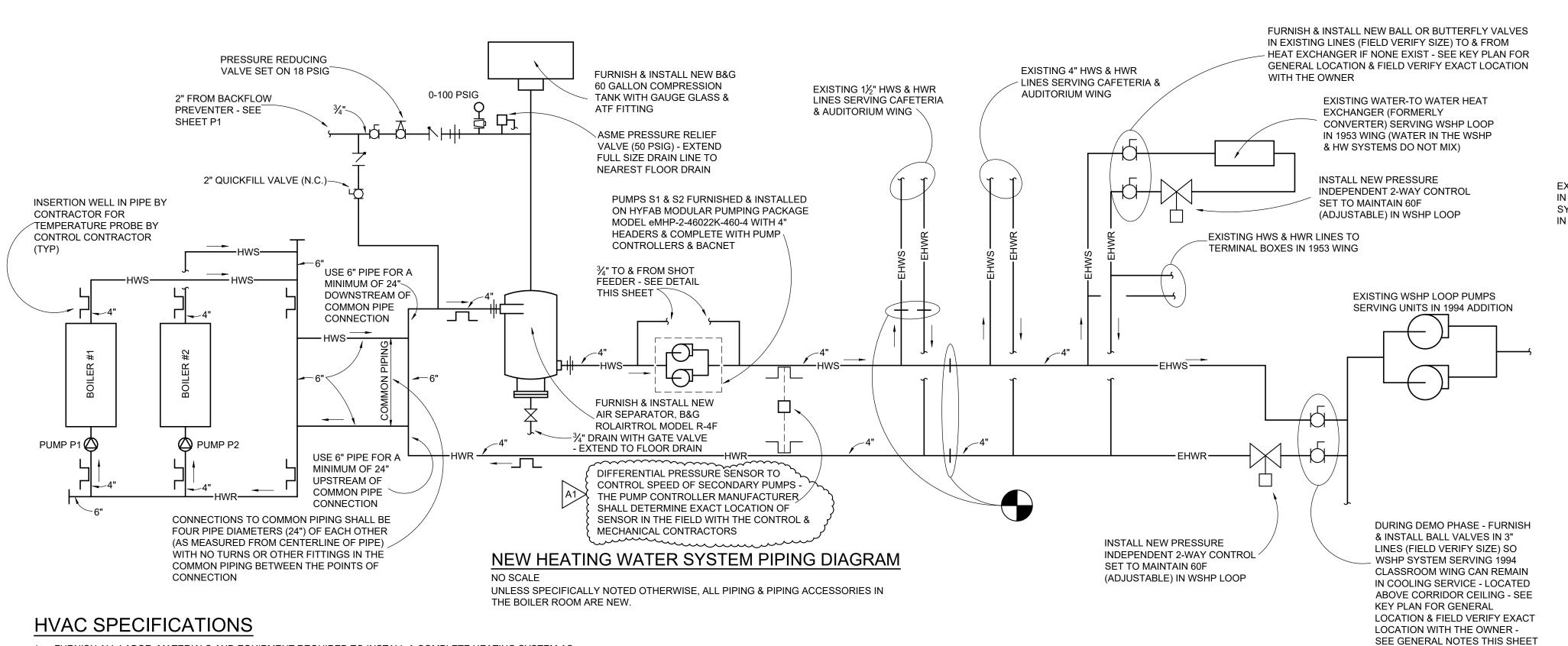


ADDITION WSHP SYSTEM

SU TS NN • F





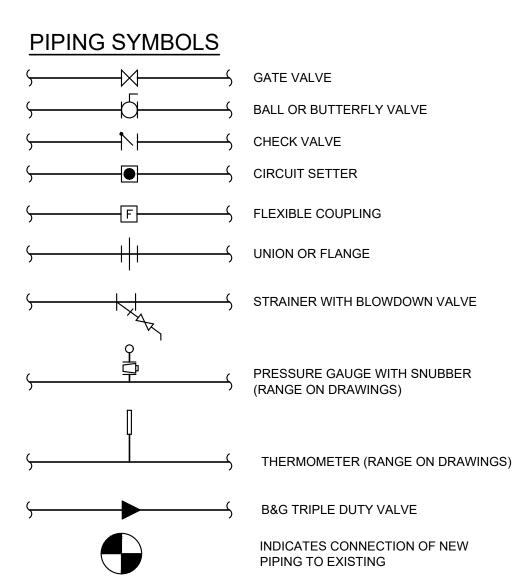


# EXISTING 1½" HWS & HWR LINES SERVING CAFETERIA & AUDITORIUM WING MINIMUM 36" CLEARANCE REQ'D AROUND & BETWEEN EACH BOILER PER STATE BOILER CODE EXISTING 4" HWS & HWR LINES TO FAN COILS IN CAFETERIA & AUDITORIUM WING, WSHP ~ SYSTEM IN 1994 ADDITION & WSHP SYSTEM IN 1953 CLASSROOM WING $\leftarrow$ FHWS-BOILERS ON <del>S→</del>EHWR-EXISTING / CONCRETE PAD **EXISTING DUST** COLLECTOR 6" FOR A MINIMUM OF 24" UPSTREAM & DOWNSTREAM OF / COMMON PIPE CONNECTION PUMPS S1 & S2 ON **FACTORY BUILT PIPING** 8" CPVC FLUE PACKAGE - MOUNT ON 4" FROM BOILER #2 45° ELBOW THICK CONCRETE SLAB TURNED DOWN 8" CPVC CA INTAKE (TYP) TO BOILER #2 AIR SEPARATOR -8" CPVC FLUE FROM BOILER #1 60 GALLON -COMPRESSION TANK 8" CPVC CA INTAKE -90° ELBOW TO BOILER #1 \TURNED DOWN (TYP) FLUE TERMINATIONS SHALL BE HIGH AS POSSIBLE FROM WITHIN THE BOILER ROOM, NOT BE ABOVE NOR LESS THAN 3' HORIZONTALLY FROM THE GAS METER, NOR LESS THAN 3' **EMERGENCY SHUNT TRIP** ABOVE CA INTAKE; MINIMUM TO SHUT-DOWN BOILERS ☐ ( DISTANCE BETWEEN FLUE & CA TERMINATIONS SHALL BE 18"; COVER EACH CA INTAKE & FLUE WITH STAINLESS STEEL BIRDSCREEN PARTIAL FLOOR PLAN - PIPING

- 1. FURNISH ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO INSTALL A COMPLETE HEATING SYSTEM AS INDICATED AND SPECIFIED ON THE DRAWINGS.
- 2. WORK SHALL COMPLY WITH IMC, NFPA, ALL APPLICABLE LAWS, ORDINANCES & CODES OF THE STATE OF TENNESSEE, LOCAL AUTHORITIES HAVING JURISDICTION AND WITH APPLICABLE RULES & REGULATIONS.
- 3. OBTAIN ALL PERMITS & INSPECTIONS REQUIRED FOR THE COMPLETION OF THE WORK & PAY ALL FEES & COSTS IN CONNECTION THEREWITH.
- 4. THE MECHANICAL DRAWINGS ARE GENERALLY DIAGRAMMATIC AND UNLESS SPECIFICALLY DIMENSIONED, THE LOCATIONS OF DUCTWORK AND EQUIPMENT AND THE ROUTING OF DUCTWORK IS APPROXIMATE ONLY AND SHALL NOT BE SCALED FROM THE MECHANICAL DRAWINGS.
- 5. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- SUBMIT TO THE ARCHITECT FOR APPROVAL, 10 DAYS AFTER RECEIPT OF NOTICE TO PROCEED WITH THE WORK, A COMPLETE LIST OF MATERIALS, EQUIPMENT AND ACCESSORIES PROPOSED FOR USE, INCLUDING COMPLETE DESCRIPTIONS AND SPECIFICATIONS OF ANY PROPOSED SUBSTITUTIONS, MANUFACTURER'S SHOP DRAWINGS, ROUGHING-IN DRAWINGS, AND ANY OTHER INFORMATION REQUIRED FOR THE PROPER INSTALLATION OF THE WORK. SUBMITTALS SHALL BE IN PDF FORMAT (NO PAPER COPIES).
- 7. CIRCULATING HOT WATER PIPING 2-1/2" AND SMALLER SHALL BE TYPE L, HARD DRAWN, SEAMLESS COPPER TUBING WITH WROUGHT COPPER, SOLDER JOINT-TYPE FITTINGS, ANSI B16.22. ELBOWS ARE TO BE LONG RADIUS PATTERN. SOLDER SHALL BE 95-5 TYPE.
- 8. CIRCULATING HOT AND CHILLED WATER PIPING 3" AND LARGER SHALL BE SCHEDULE 40, ASTM A-53 GRADE B ERW WITH WELDED OR FLANGED FITTINGS, ANSI B16.9. ELBOWS ARE TO BE LONG RADIUS PATTERN. FIELD-FABRICATED FITTINGS ARE NOT ACCEPTABLE. FORGED STEEL, GASKETED FLANGES, ANSI B16.5, OF THE WELDED NECK-TYPE ARE TO BE USED AT FLANGED CONNECTIONS. "SLIP-ON" TYPE MAY BE USED ON STRAIGHT PIPE. FLANGES MUST BE COMPATIBLE WITH VALVE AND EQUIPMENT CONNECTIONS. WHERE A BRANCH CONNECTION FROM A MAIN OR HEADER PIPE IS ONE HALF THE MAIN DIAMETER OR SMALLER, SADDLE-TYPE, FORGED STEEL WELDING FITTINGS MAY BE USED.
- WELDING SHALL CONFORM TO ANSI CODE FOR PRESSURE PIPING, SECTION B31.1. ALL WELDS SHALL BE OF THE SINGLE "V" BUTT JOINT-TYPE WITH OPTIMUM FUSION AND 100% WELD PENETRATION OF WALL THICKNESS OF PIPING. PIPING SHOULD BE WELDED BY THE SHIELD ARC TYPE ELECTRODE-ELECTRIC ARC PROCESS. BUTT JOINTS SHOULD BE MADE USING SPLIT BACKING RINGS. DIRECT WELDED CONNECTIONS SHALL NOT BE MADE TO VALVES, STRAINERS, EQUIPMENT, ETC. A CERTIFICATE SHALL BE OBTAINED FROM THE CONTRACTOR INDICATING CERTIFICATION OF ALL PIPE WELDERS ON THE PROJECT, IN ACCORDANCE WITH SECTION IX OF THE ASME CODE.
- 10. WHERE SIZE CHANGES ON HORIZONTAL LINES USE REDUCING FITTINGS HAVING ECCENTRICITY DOWN, HOLD TOP LEVEL. BUSHINGS SHALL NOT BE USED. AVOID "BULLHEADING" OF TEE CONNECTIONS.
- 11. GRADE PIPING UP STREAM ALLOWING AIR IN MAINS AND RISERS TO BE CARRIED UP AND DISCHARGED AT VENTING POINTS. VENTS SHALL BE MANUAL TYPE AND WHERE REQUIRED EXTEND 1/4" COPPER LINE WITH KEY AIR VENT FROM VENTING POINT TO ACCESSIBLE LOCATION. PROVIDE 3/4" DRAIN WITH HOSE CONNECTION AT ALL LOW POINTS. AUTOMATIC AIR VENTS SHALL NOT BE USED.
- 12. ALL CIRCULATING HOT WATER BALL VALVES 2 INCHES AND SMALLER SHALL BE RATED 150 SWP, 600 WOG MEETING WWV 35C TYPE II, CLASS A, STYLE 3. VALVES SHALL BE TWO PIECE THREADED BRONZE BODY, SOLID OR TUNNEL DRILLED, LARGE PORT, CHROME BALL. SEATS AND SEALS SHALL BE TEFLON. STEM SHALL BE OF BLOWOUT-PROOF DESIGN WITH THREADED ADJUSTABLE PACKING FOLLOWER. PACKING SHALL BE RETAINED UNDER FULL WORKING PRESSURE WITH HANDLE OR NUT REMOVED. HAMMOND 8501 OR 8511. ALL OTHER CIRCULATING HOT WATER BUTTERFLY VALVES SHALL BE TAPPED LUG BODY STYLE, MEETING MSS SP67. BODY TO BE CAST IRON, STEMS SHALL BE STAINLESS STEEL AND POSITIVELY RETAINED WITH LOCK PLATE OR GEAR REMOVED. DISC TO BE ALUMINUM BRONZE, WITH INTEGRAL DISC/STEM CONNECTION. WATERWAY SHALL BE FREE OF ALL PINS OR BOLTS. SEATS AND SEALS SHALL BE FIELD REPLACEABLE EPDM CARTRIDGE TYPE SUITABLE FOR ISOLATION OR TEMPORARY DEAD-END SERVICE TO THE RATED PRESSURE OF THE VALVE. VALVES 12 INCHES AND SMALLER SHALL BE RATED 200 WOG. BUTTERFLY VALVES 6 INCHES AND SMALLER SHALL HAVE LOCK LEVER HANDLES WITH MINIMUM OF 10 LOCKING POSITIONS. HAMMOND 6211-01.
- 13. CHECK VALVES 3 INCHES AND LARGER SHALL BE CLASS 125 SWP, FLANGED END, CAST IRON BODY, BRONZE TRIM, SWING CHECK MEETING MSS SP71. HAMMOND IR-1124.
- 14. PRIOR TO START-UP OF THE CIRCULATING WATER SYSTEM THE PIPING SHALL BE THOROUGHLY CLEANED FOR SEVERAL HOURS USING TRI-SODIUM PHOSPHATE OR APPROVED COMMERCIAL DETERGENT USING A TEMPORARY CIRCULATING PUMP. THE CONCENTRATION OF TRI-SODIUM PHOSPHATE USED SHALL BE 1/2-LB DRY WEIGHT PER 30 GALLON OF SYSTEM WATER. THE TRI-SODIUM PHOSPHATE SHALL BE DISSOLVED IN WARM WATER THEN ADDED TO THE SYSTEM IN LIQUID FORM. AFTER CIRCULATING FOR SEVERAL HOURS, THOROUGHLY FLUSH THE SYSTEM AND CLEAN ALL STRAINERS. AFTER ADDITION OF FRESH WATER, THE PH OF THE CIRCULATING WATER SHALL BE CHECKED. IF THE PH IS GREATER THAN 9, THE SYSTEM SHALL BE FLUSHED UNTIL THE PH IS LESS THAN 9 BUT NOT LESS THAN 7.
- 15. INSULATE ALL NEW CIRCULATING HOT WATER PIPING WITH HEAVY DENSITY FIBERGLASS PIPE INSULATION HAVING A FACTORY APPLIED ALL-SERVICE JACKET WITH SELF-SEALING LAP. INSULATION THICKNESS SHALL BE 2".
- 16. WHEN THE INSTALLATION IS COMPLETE, IT SHALL BE RUN & ADJUSTED BY THE CONTRACTOR. ANY EXCESSIVE NOISE OR VIBRATION SHALL BE CORRECTED.
- 17. SUBMIT WRITTEN AIR BALANCE REPORT TO THE ARCHITECT A MINIMUM OF 10 DAYS PRIOR TO THE FINAL INSPECTION. THE AIR BALANCE CONTRACTOR SHALL BE AABC OR NEBB CERTIFIED.
- 18. THE CONTRACTOR SHALL INSTRUCT THE OWNER IN THE OPERATION OF EQUIPMENT & PROVIDE THE OWNER WITH A COMPLETE SET OF OPERATING INSTRUCTIONS FOR EQUIPMENT INSTALLED UNDER HIS CONTRACT.
- 19. THE WORK SHALL BE GUARANTEED AGAINST ALL DEFECTIVE MATERIALS & EQUIPMENT FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE. THE CONTRACTOR SHALL MAKE ALL NECESSARY CORRECTIONS WITHOUT COST TO

# PIPE LEGEND

5	HWS	$\rightarrow$	HOT WATER SUPPLY
5	HWR-	<u> </u>	HOT WATER RETURN
<u> </u>	——EHWS———	<del></del>	EXISTING HOT WATER SUPPLY
<u> </u>	EHWR	<u> </u>	EXISTING HOT WATER RETURN



# HOT WATER BOILER SCHEDULE

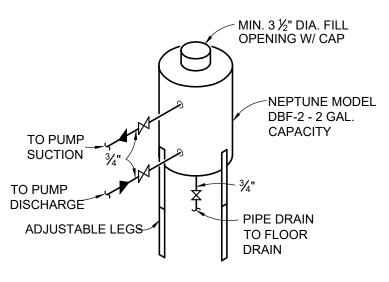
TOT WITH BOILER SOME BOLE								
MARK	MANUFACTURER & MODEL NUMBER	FUEL	MBH IN	MBH OUT	NET AHRI RATING (MBH)	PD (FT)	GPM	AMPS & VOLTS
1 2	LOCHINVAR CREST FBN2001	NATURAL GAS	1999	1923	1672	8.1	96	13.0 @ 120/1

- (1) EACH BOILER SHALL BE CAPABLE OF OPERATING WITH VARIABLE FLOW & BE CAPABLE OF PROPER & SAFE OPERATION WITH A
- (2) EACH BOILER SHALL BE FURNISHED & INSTALLED WITH BACNET COMMUNICATIONS & ACID NEUTRALIZATION TANK (ANT); EXTEND FULL SIZE DRAIN LINE FROM BOILER TO ANT & THEN FROM ANT TO FLOOR DRAIN
- (3) FOR EACH BOILER, RUN 8" PVC COMBUSTION AIR & 8" CPVC FLUE THRU WALL WITH SEPARATE WALL PENETRATIONS VERIFY SIZES WITH MFGR & INSTALL PIPING & TERMINATIONS IN ACCORDANCE WITH MFGR INSTRUCTIONS & ALL CODES

# PUMP SCHEDULE

MARK	GF	PM	TOTAL DEVELOPED	HP	RPM	VOLTS &	MFGR & MODEL	SERVICE
IVIAIN	MAX	MIN	HEAD (FT)	ПР	KPIVI	PHASE	WIFGR & WIODEL	SERVICE
P1 P2	100	25	18	1	1150	460/3	XYLEM SERIES e-80 MODEL 3x3x7C	PRIMARY (BOILER) HW PUMPS
(S1)(S2)	225	60	100	10	1750	460/3	XYLEM SERIES e-1510 MODEL 2EB	SECONDARY (BLDG SIDE) HW PUMPS
NOTES:								

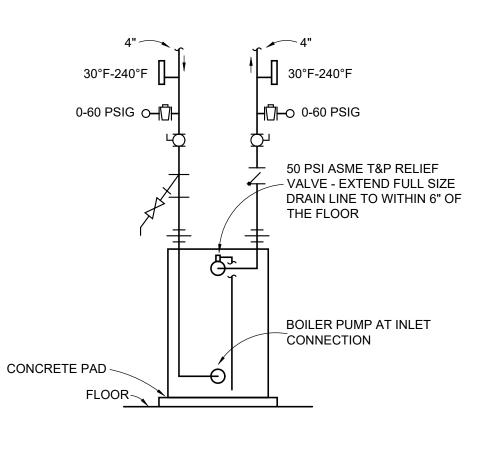
- (1) VERIFY VOLTAGE BEFORE ORDERING EQUIPMENT
- (2) PUMPS S1 & S2 FURNISHED & INSTALLED ON HYFAB MODULAR PUMPING PACKAGE MODEL eMHP-2-40022K-460-4 COMPLETE WITH 4" HEADERS, CUT-OFFS, SUCTION DIFFUSERS, PUMP CONTROLLERS, SINGLE POINT POWER CONNECTION & BACKET.
- (3) ALL PUMPS ARE VARIABLE SPEED & THE VFDs ARE FURNISHED BY THE PUMP MANUFACTURER
- (4) IT IS CRITICAL THAT THE PUMPS NOT BE ALLOWED TO OPERATE BELOW THE SCHEDULED MINIMUM FLOW. IF THE VALVES IN THE BUILDING SYSTEM ARE CONVERTED TO 2-WAY IN THE FUTURE, A SUFFICIENT NUMBER MUST REMAIN 3-WAY TO PROVIDE THE MINIMUM
- (5) PUMP P1 SERVES BOILER #1; PUMP P2 SERVES BOILER #2; PUMP S2 IS 100% BACKUP FOR PUMP S1



**DETAIL - CHEMICAL SHOT FEEDER** 

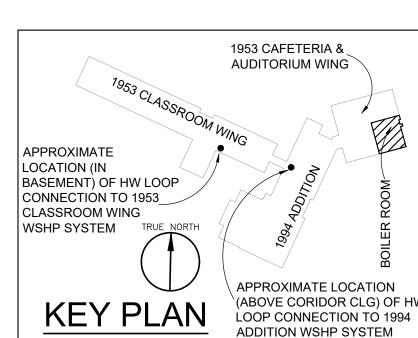
**GENERAL NOTES:** 

- 1. THE WSHP SYSTEM SERVING THE 1994 ADDITION IS DIRECT CONNECTED (VIA COMMON PIPING) TO THE HW SYSTEM. THUS DRAINING & REFILLING OF THAT WSHP SYSTEM IS REQUIRED & IS THE RESPONSIBILITY OF THE CONTRACTOR - COORDINATE WITH THE OWNER WHO WILL ASSIST.
- 2. WATER TREATMENT OF HEATING WATER SYSTEM & THE WSHP SYSTEM SERVING THE 1994 ADDITION IS BY THE OWNER; THERE SHALL BE NO GLYCOL PER OWNER (OWNER PROTECTS FLUID COOLER WITH OTHER METHODS). FLUSHING, CLEANING OF THE SYSTEM PER THE SPECS IS BY THE CONTRACTOR.
- 3. PROVIDE ALL REQUIRED ELECTRICAL & FIRE ALARM CONNECTIONS IN ACCORDANCE WITH LOCAL & STATE CODES



# **BOILER PIPING DIAGRAM** NO SCALE

- 1. EXTEND 8" PVC COMBUSTION AIR & 8" CPVC FLUE THRU WALL - VERIFY SIZES WITH MFGR & INSTALL IN ACCORDANCE WITH MFGR INSTRUCTIONS (NOT
- 2. THE BOILER SHALL BE FURNISHED & INSTALLED WITH HIGH LIMIT CONTROL, HIGH LIMIT SAFETY & LOW WATER CUT-OFF AS REQ'D BY CODE & PER MFGR RECOMMENDATIONS.



no. date rev. description ADDENDUM #1 A1 2024-4-19 OWNER CHANGES Revision per FN Review dated 5-2-24 A2 | 2024-5-3 TFM# 04167 Proi # 2024-04-17-05 DESIGNED BY: DRAWN BY: CHECKED BY: DATE: APRIL 15, 2024

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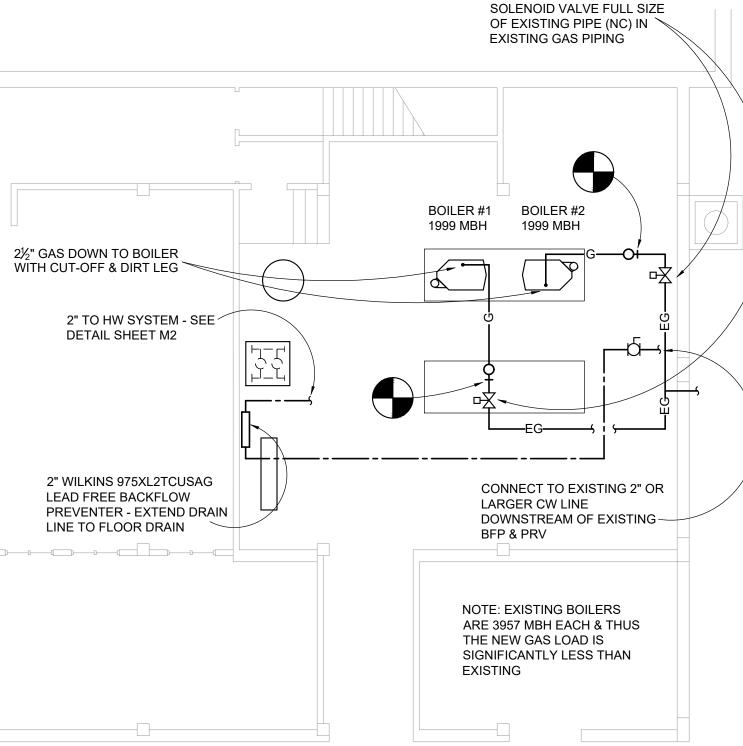
PROJECT NO: 24032

# PLUMBING SPECIFICATIONS

- 1. FURNISH ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO INSTALL A COMPLETE PLUMBING SYSTEM AS INDICATED AND SPECIFIED ON THE DRAWINGS.
- 2. WORK SHALL COMPLY WITH THE INTERNATIONAL PLUMBING CODE AND ALL APPLICABLE LAWS, ORDINANCES & CODES OF THE STATE OF TENNESSEE, LOCAL AUTHORITIES HAVING JURISDICTION AND WITH APPLICABLE RULES & REGULATIONS.
- 3. OBTAIN ALL PERMITS & INSPECTIONS REQUIRED FOR THE COMPLETION OF THE WORK & PAY ALL FEES & COSTS IN CONNECTION THEREWITH.
- 4. THE PLUMBING DRAWINGS ARE GENERALLY DIAGRAMMATIC AND UNLESS SPECIFICALLY DIMENSIONED, THE LOCATIONS OF FIXTURES AND EQUIPMENT AND THE ROUTING OF PIPING IS APPROXIMATE ONLY AND SHALL NOT BE SCALED FROM THE PLUMBING DRAWINGS.
- 5. INSTALL ALL EQUIPMENT AND FIXTURES IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- 6. BOILER CONDENSATE PIPING SHALL BE SCHEDULE 40 PVC SOLID WALL-DWV ASSEMBLED WITH SOLVENT WELD JOINTS.
- 7. INSTALLATION OF GAS PIPING SHALL COMPLY WITH THE LOCAL UTILITY CO., INTERNATIONAL GAS CODE, NFPA AND ALL OTHER AGENCIES HAVING JURISDICTION. ABOVE GROUND PIPING SHALL BE SCHEDULE 40 BLACK STEEL ASSEMBLED WITH MALLEABLE IRON FITTINGS FOR 2" AND SMALLER, AND WELDED FITTINGS FOR PIPING LARGER THAN 2" & GROUND JOINT UNIONS. GAS PIPING AT EACH APPLIANCE SHALL HAVE DIRT LEG & AND AGA GAS COCK. PAINT ALL GAS PIPING ON THE EXTERIOR AND INTERIOR OF THE BUILDING WITH TWO COATS OF CAUTION YELLOW PAINT.
- 8. ABOVE GRADE DOMESTIC WATER PIPING SHALL BE HARD DRAWN COPPER, TYPE "L" PIPING ASSEMBLED WITH WROUGHT COPPER SOLDER FITTINGS. CONNECTIONS OF COPPER PIPE TO FERROUS PIPE SHALL BE MADE WITH DIELECTRIC UNIONS OR COUPLINGS.
- 9. ALL NEW COLD WATER LINES SHALL BE INSULATED WITH OWENS-CORNING HEAVY DENSITY FIBERGLASS PIPE INSULATION HAVING A FACTORY APPLIED ALL-SERVICE JACKET WITH SELF-SEALING LAP. INSULATE ALL FITTINGS AND ELBOWS WITH PRE-FORMED INSULATION COVERED WITH PVC ZIP JACKET.

COLD WATER
½" TO 1¼" PIPE - ½" THICK INSULATION
1½" TO 8" PIPE - 1" THICK INSULATION

- 10. SUBMIT TO THE ARCHITECT FOR APPROVAL, 10 DAYS AFTER RECEIPT OF NOTICE TO PROCEED WITH THE WORK, A COMPLETE LIST OF MATERIALS, EQUIPMENT AND ACCESSORIES PROPOSED FOR USE, INCLUDING COMPLETE DESCRIPTIONS AND SPECIFICATIONS OF ANY PROPOSED SUBSTITUTIONS, MANUFACTURER'S SHOP DRAWINGS, ROUGHING-IN DRAWINGS, AND ANY OTHER INFORMATION REQUIRED FOR THE PROPER INSTALLATION OF THE WORK. SUBMITTALS SHALL BE IN PDF FORMAT (NO PAPER COPIES).
- 11. AFTER THE WATER SYSTEM HAS BEEN TESTED FOR LEAKS AND BEFORE THE SYSTEM HAS BEEN PLACED IN USE, INTRODUCE HTH SOLUTION, CHLORINE GAS, OR OTHER SIMILAR CHLORINATING AGENT IN SUFFICIENT QUANTITY TO PRODUCE A RESIDUAL OF 100 PPM THROUGHOUT THE ENTIRE SYSTEM AND ALLOW TO STAND THUS FILLED FOR 24 HOURS. AFTER THE 24 HOURS PERIOD, FLUSH CLEAN WATER THROUGHOUT THE PIPING SYSTEM UNTIL ALL NOTICEABLE TRACE OF CHLORINE GAS HAS DISAPPEARED. VERIFY PROCEDURES AND TESTING REQUIREMENTS WITH THE PUBLIC HEALTH AGENCY HAVING JURISDICTION.
- 12. THE WORK SHALL BE GUARANTEED AGAINST ALL DEFECTIVE MATERIALS & WORKMANSHIP FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE. THE CONTRACTOR SHALL MAKE ALL NECESSARY CORRECTIONS WITHOUT COST TO THE OWNER.





NOTES:
1. EACH BOILER REQUIRES A MINIMUM GAS PRESSURE OF 4"WC & A MAXIMUM OF 14"WC.

- 2. THE GAS PRESSURE REGULATOR SHALL BE A MINIMUM OF 10 FEET UPSTREAM OF THE BOILER CONNECTION.
- REMOVE UNUSED GAS PIPING & ACCESSORIES; PROVIDE NEW REGULATOR & EXTEND VENT LINE
  TO EXTERIOR OF BLDG IF NOT VENTLESS; EXISTING REGULATORS MAY BE REUSED IF OF PROPER
  SIZE & IN GOOD CONDITION.
- 4. FIELD VERIFY EXISTING GAS PRESSURE BEFORE ORDERING REGULATORS

# PLUMBING LEGEND



INDICATES CONNECTION OF NEW PIPING TO EXISTING

APPROXIMATE LOCATION (IN

BASEMENT) OF HW LOOP CONNECTION TO 1953\_ CLASSROOM WING WSHP SYSTEM TRUE NO ROBERTSVILLE SCHOOL

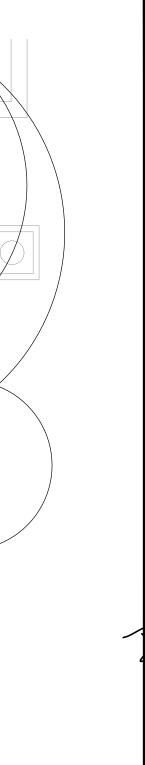
USU TS NN

WATER & NATURAL GAS

	no.	date	rev. description
	DE	SIGNED E	BY: BMc
	DR	AWN BY:	ВМс
OM	СН	ECKED B	Y: DB
RO	DA	TE: AF	PRIL 15, 2024
BOILER ROOM	PR	OJECT N	O: 24032
ВС			

1953 CAFETERIA & AUDITORIUM WING

APPROXIMATE LOCATION
(ABOVE CORIDOR CLG) OF HW
LOOP CONNECTION TO 1994
ADDITION WSHP SYSTEM



FURNISH & INSTALL NEW GAS

# Boiler Replacement at Robertsville Middle School TFM # 04167 TFM Project # 2024-04-17-05 Addendum #2 – Response to TSFMO comments dated 5/2/2024 May 3, 2024

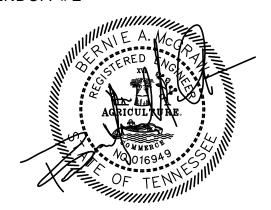
# Refer to Cover Sheet:

- Contact information for City of Oak Ridge Fire Department added.
- TFM number & Project number added.
- Index of Drawings updated to show most current revisions.

# Refer to Sheet M2, "Partial Floor Plan - Piping"

• Added more specific information regarding location & termination of boiler flues & combustion air openings.

# **END OF ADDENDUM #2**



# Boiler Replacement at Robertsville Middle School Addendum #1 April 19, 2024

Refer to Sheet M1, "CONTROLS - GENERAL":

Delete the paragraph in its entirety & replace with the following: CONTROLLER IS EXISTING TO BE REUSED (AUTOMATED LOGIC). ALL CONTROL WIRING & SENSORS FURNISHED & INSTALLED BY MECHANICAL OR CONTROL CONTRACTOR; POWER WIRING & ALL CONTROL CONDUIT BY MECHANICAL OR CONTROL CONTRACTOR. NEW 2-WAY PRESSURE INDEPENDENT CONTROL VALVES SIZED & FURNISHED BY MECHANICAL OR CONTROL CONTRACTOR & INSTALLED BY MECHANICAL CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL OBTAIN THE SERVICES OF ENERGY SERVICES MANAGEMENT (BOB VLASTOS – 865.964.0150 – BOB@ENERGYSERVICESMGMT.COM) TO PROVIDE REPROGRAMMING OF THE EXISTING CONTROLLER & VERIFICATION OF INSTALLATION. INTEGRATION POINTS LIST FOR BOTH THE BOILERS AND PUMPING SYSTEM TO BE INCLUDED IN EQUIPMENT SUBMITTAL.

Refer to Sheet M1, "HOT WATER BOILERS & PUMPS – DECRIPTION OF OPERATION":

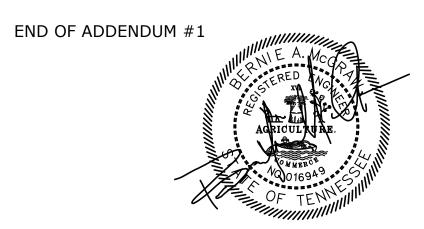
Add the following paragraph:

THE MECHANICAL CONTRACTOR SHALL PROVIDE CONDUIT AND COMMUNICATIONS CABLE BETWEEN THE TWO BOILERS AS REQUIRED.

Refer to Sheet M2, "NEW HEATING WATER SYSTEM PIPING DIAGRAM":
Delete the note to the differential pressure sensor & replace with the following:
DIFFERENTIAL PRESSURE SENSOR TO CONTROL SPEED OF SECONDARY PUMPS
- THE PUMP CONTROLLER MANUFACTURER SHALL DETERMINE EXACT LOCATION
OF SENSOR IN THE FIELD WITH THE CONTROL & MECHANICAL CONTRACTORS

Refer to Sheet M2, "PUMP SCHEDULE":

Add "BACNET" to the items in Note(2) that the pump controller shall be furnished with.



# **Submission Requirements:**

- 1. A detailed bid form, which includes quantity and unit cost must be included in the bid package. Please include specification sheets on all products/terms.
- 2. Two full copies of the proposal must be submitted, with original Bid Forms included with each copy.
- 3. A detailed description of all warranties and support for equipment and software must be included.
- 4. Any license and renewal costs (if any) shall be included in notes on the Bid Form. Specifically, anticipated annually recurring costs for maintenance, support, software updates and upgrades, if any, must be listed.
- 5. The amount listed on the Bid Form should reflect the total implementation costs of this project as submitted.
- 6. A copy of your W-9 should be included with bid documents.
- 7. Any questions should be directed to Mary Ann Riley via email: <a href="mailto:orspurchasing@ortn.edu">orspurchasing@ortn.edu</a>

# Schedule:

- There will be a mandatory walk-thru on Wednesday, May 22, 2024, at 2:30 pm EDT. All interested bidders will meet at the entrance to Robertsville Middle School, 245 Robertsville Road, Oak Ridge, TN 37830.
- 2. Sealed bids will be opened at the School Administration Building, 304 New York Avenue, Oak Ridge, TN 37830 at 2:00 PM EDT May 29, 2024.

# **Bidding Procedures**

Location: All bids must be submitted to the Oak Ridge Schools Business Department at or before the announced deadline.

Mary Ann Riley,
Purchasing Specialist
RMS Boiler Replacement
(RFP 24-010)
304 New York Ave.
Oak Ridge, TN 37830

Award of Contract: The owner (Oak Ridge Schools) further reserves the right to reject any and all bids, to waive any and all informalities and to negotiate contract terms with the successful bidder, and the right to disregard all non-conforming, non-responsive, or conditional bids. Oak Ridge Schools may conduct such investigations, as it deems necessary, to assist in the evaluation of any bid to establish the responsibility, qualifications, and financial ability of the bidder, proposed subcontractors and other persons and organizations to perform the work in accordance with the contract documents to the bidder who does not pass any such evaluation to the owner's satisfaction. The contract shall be awarded to the bidder, evaluation by the owner indicates to the owner that the award will be in the best interest of Oak Ridge Schools. whose It is also understood that the "apparent low bidder" will be announced at the bid opening; however, the "successful bidder," who may or may not be the lowest bidder, will not be announced until all issues, which include, but are not limited to quality, service, conformity to specifications, etc. have been resolved and until a period of review has been completed by the owner. Price will be the primary factor when determining the successful bidder assuming all bid specifications are met. Oak Ridge Schools does not enter into contracts that provide for mediation or arbitration. The owner (Oak Ridge Schools) further reserves the right to reject any and all bids, to waive any and all informalities, and to negotiate contract terms with the successful bidder (e.g., product line-item deletions or adjustments), and the right to disregard all non-conforming, non-responsive, or conditional bids.

**Bid Document:** For certain projects the Owner will supply a bid form to be completed by the bidder. When such forms are issued, only bids returned with the proper forms will be accepted. Envelopes must be sealed and marked as a bid document. Any bid may be withdrawn prior to the date and time as set forth in the "bid invitation."

**Criminal Background Compliance**: Bidders shall be required to complete the attached Criminal Background Compliance Affidavit Form in compliance with the provisions of Tennessee Code Annotated 49-5-413.

**EDGAR Certification:** The EDGAR certifications and provisions are required and applied when Oak Ridge Schools expends federal funds for any contract resulting from this procurement process. Pursuant to 2 C.F.R. § 200.326, all contracts, including small purchases, awarded by the District and the District's subcontractors shall contain the procurement provisions of Appendix II to Part 200, as applicable.

**Errors in Bids:** When an error is made in extending total prices, the unit bid price will govern. Carelessness in quoting prices or in preparation of bid otherwise, will not relieve the bidder. Erasures or changes to bids must be initialed. Any alteration, erasure, addition to or omission of required information, change of the specifications, or bidding schedule, is made at the risk of the bidder.

**Facsimile transmissions:** Electronic transmissions will not be accepted, except when in the course of the bidding process addendums or other notifications of errors on behalf of the owner places an undue hardship upon prospective bidders. Written notification by the owner must precede the acceptance of Facsimile transmissions.

Hold Harmless Agreement: Bidders shall be required to complete the attached Hold Harmless Agreement.

Laws and Regulations: The bidder's attention is directed to the fact that all applicable state laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full

**Legal Issues:** Contracts with Oak Ridge Schools will be subject to the laws of Tennessee. Disputes will be tried in the State of Tennessee and in the Court of Anderson County. Bids will be denied if these provisions are not included in the contract.

**Non-Boycott of Israel Affidavit**: Concerning the Non-Boycott of Israel Act (TCA 12-4-1 et seq.), by submission of this bid/quote/proposal, each supplier and each person signing on behalf of any supplier certifies, and in the case of a joint bid/quote/proposal, each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each supplier is not boycotting Israel pursuant to TCA 12-4-1 and will not during the term of any award. Note: Applicable only to contracts of \$250,000 or more and to suppliers with 10 or more employees.

Non-Collusion Affidavit: Bidder shall be required to complete the attached Non-Collusion Affidavit.

**Payments:** Invoices that are submitted by the awarded bidder are required to provide accurate and current addresses. Payment terms shall be specified in the bid response, including any discounts for early payment. The Oak Ridge Schools Business Department discourages the practice of picking up checks in person unless there is an emergency situation.

**Purchase**: No purchase or contract is authorized or valid until the issuance of a Purchase Order from Oak Ridge Schools and the Board of Education approval of project in accordance with Oak Ridge Schools Policy. No employee is authorized to purchase equipment, supplies or services prior to the issuance of such Purchase Order and Board of Education approval.

**Sub-contracts:** The Bidder is specifically advised that any person, firm, or other party to whom it is proposed to award a sub-contract under this contract must be acceptable to the Owner.

**Subcontractors and employees:** If work is to be performed during regular school hours when children are present, the BOE reserves the right to require background checks, dress codes, and certain ethical standards of all employees on school property.

Taxes: Oak Ridge Schools is tax exempt.

**Tie Bids:** If two or more bidders submit identical bids and is equally qualified; selection shall be made at the discretion of the owner.

**Title VI of the Civil Rights Act of 1964:** All interested parties, without regard of race, color, or national origin, shall be afforded the opportunity to bid and shall receive equal consideration. Title VI states "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program activity receiving Federal financial assistance." Oak Ridge Schools strives to protect individuals' civil rights through active compliance with the requirements of Title VI.

Vendor Indemnify: Oak Ridge Schools will indemnify vendor to the extent Tennessee law allows.

**Warranty:** The vendor shall provide warranty information on the equipment, components and items bid with the bid submittal.

# **Bid Form**

Owner:	Oak Ridge Schools Board Mary Ann Riley, Purchasi School Administration Bu 304 New York Ave Oak Ridge, TN 37830	ng Specialist	
Project:	RMS Boiler Replacement RFP 24-010		
Bid Opening:	2:00 PM EDT, May 29,	2024	
Company Na	me:		
Address:			
Phone Numb	er:		
Email:			
Signature:			
Title:			
Date:			
Main Bid:	This price is to be for the complet as outlined within this RFP 24-010 THE FINAL PRICE.		
Bid Amount:	RMS Boiler Replacement	\$	USD

# **HOLD HARMLESS AGREEMENT**

This Hold Harmless Agreement is between
Name of Contractor
(Hereinafter Contractor), and Oak Ridge Schools named in this bid.
Contractor agrees that as a condition precedent to "Contractor" being awarded a contract from Oak Ridge Schools, "Contractor" agrees to indemnify, protect, defend, and hold harmless Oak Ridge Schools, its Board Members, agents, and employees from all judgments, claims, demands for payment, suits or actions of every nature and description brought against Oak Ridge Schools, its Board Members, agents, and employees alleging injuries or damages sustained by any person arising out of or in the course of "Contractor's" providing goods or services to Oak Ridge Schools.
Name of Contractor:
By:
Title:
STATE OF
County of
personally appeared
before me, the undersigned, with whom I am personally acquainted and who, upon oath, acknowledged that he/she/it executed the within instrument for the purposes therein contained, and who further acknowledge that he/she/it is authorized to execute this interment on behalf of
Character and the second secon
Signature
Witness by hand and Notaries seal at office thisday of, year of
Notary Public
My Commission Expires:

# **NON-COLLUSION AFFIDAVIT**

NON-COLLUSION AFFIDAVIT TO BE EXECUTED	)
BY CONTRACTOR	
State of	
County of	
that he or she is of the party making the foregoing bundisclosed person, partnership, company, associated genuine and not collusive or sham; that the bidder employee of the District which may be involved in the received or solicited either directly or indirectly any which would give the bidder an advantage over any indirectly induced or solicited any other bidder to prindirectly colluded, conspired, connived, or agreed that anyone shall refrain from bidding; that the bidder to prindirectly communication, or conference with bidder, or to fix any overhead, profit, or cost elements secure any advantage against the public body award contract; that all statements contained in the bid and the statements contained in the statements contained in the bid and the statements contained in the statements con	neither possesses a business relationship with any he award or administration of the project nor has inside information from an employee of the District other bidder; that the bidder has not directly or ut in a false or sham bid, and has not directly or with any bidder or anyone else to put in a sham bid, or der has not in any manner, directly or indirectly, sought anyone to fix the bid price of the bidder or any other not of the bid price, or of that of any other bidder, or to ding the contract or any interested in the proposed re true; and, further, that the bidder has not, directly reakdown thereof, or the contents thereof, or divulged ill not pay, any fee to any corporation, partnership,
Subscribed and sworn to (or affirmed) before	e me thisday
of	
Signature of Officer	Notary Signature
Typed Name of Officer	
Office	 Notary Seal

WARNING! PROPOSALS WILL NOT BE CONSIDERED UNLESS THIS AFFIDAVIT IS COMPLETED AND EXECUTED, INCLUDING THE AFFIDAVIT OF THE NOTARY AND THE NOTORIAL SEAL.

# IRAN DIVESTMENT ACT REQUIREMENTS

Pursuant to Tennessee Code Annotated § 12-12-106 (as enacted by Chapter 817 of the Public Acts of 2016) the chief procurement officer for the State of Tennessee shall publish a list of persons determined to be engaging in investment activities in Iran. The list is posted on the website of the Tennessee General Services Department's Central Procurement Office\*. When competitive bidding is required, Tennessee Code Annotated § 12-12-111 requires every bid or proposal submitted to a local government for goods or services to include the following statement, subscribed or affirmed by the bidder as true under the penalty of perjury:

# **CERTIFICATION**

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to *T.C.A.* § 12-12-106.

Signature	Date	
Printed Name	Title	
	<u>_</u>	
Name of Firm/Company		

<sup>\*</sup>https://tn.gov/assets/entities/generalservices/cpo/attachments/List\_of\_persons\_pursuant\_to\_Tenn.\_Co de\_An n.\_12-12-106.\_Iran\_Divestment\_Act-July.pdf

# **CRIMINAL BACKGROUND COMPLIANCE AFFIDAVIT**

STATE OF	
COUNTY O	PF
Oak Ridge	signed, principal officer of, an Employer contracting with the School Board of Education to provide services having direct contact with children or access to an Oak Ridge public school while students are on grounds, hereby states under oath as
1.	The undersigned is a principal officer of(hereafter referred to as the "Company") and is duly authorized to execute this Affidavit on behalf of the Company.
2.	The Company submits this Affidavit pursuant to T.C.A. § 49-5-413 as amended effective September 1, 2007, for entities entering into contracts with a local board of education where the Company's employees will have direct contact with school children or access to the grounds of a school when children are present. It is the duty of the Company to require applicants supply a fingerprint sample and submit to a criminal history records check to be conducted by the Tennessee Bureau of Investigation and the Federal Bureau of Investigation prior to permitting the person to have contact with such children or enter school grounds and to take certain other actions based upon the results of the records check.
3.	The Company is in compliance with the terms of T.C.A. § 49-5-413.
	iant saith naught. ncipal Officer
STATE OF	
COUNTY O	F
Be	fore me personally appearedwith whom I am personally acquainted (or proved to me on the basis of satisfactory evidence), and who acknowledged that he/she is theofand is authorized to execute this instrument on behalf of the principal for the purposes therein contained.
	tness my hand and seal at office thisday of,  20
	itary Public ission expires:

# **DRUG-FREE WORKPLACE AFFIDAVIT**

STATE OF	COUNTY OF
	signed, principal officer of,
	yer of five (5) or more employees contracting with Oak Ridge School District to onstruction services, hereby states under oath as follows:
1.	The undersigned is a principal officer of
	(hereafter referred to as the
	"Company") and is duly authorized to execute this Affidavit on behalf of the Company.
2.	The Company submits this Affidavit pursuant to T.C.A. § 50-9-113 which requires each employer with no less than five (5) employees receiving pay who contracts with the state or any local government to provide construction services to submit an affidavit stating that such employer has a drug-free workplace program that complies with Title 50, Chapter 9, of the Tennessee Code Annotated. The Company is in compliance with the terms of T.C.A. § 50-9-113.
Further af	fiant saith naught.
Principal C	Officer:
STATE OF	
COUNTY	DF
Before me	e personally appeared
	with whom I am personally acquainted
	I to me on the basis of satisfactory evidence), and who acknowledged that he/sheof
	and is authorized to execute this
instrumen	t on behalf of the principal for the purposes therein contained.
Witness m 20	y hand and seal at office thisday of,
Notary Pu	blic:
	ission expires