

KEYED NOTE

- DISCONNECT AND REMOVE ELECTRIC BASEBOARD AT LOCATIONS SHOWN. DISCONNECT AND REMOVE ASSOCIATED BASEBOARD TEMPERATURE SENSORS. REPLACE BASEBOARD WITH HOT WATER HEATED FIN TUBE. EXTEND HOT WATER SUPPLY AND RETURN PIPING FROM VEHICLE BAY TO FIN TUBE IN OFFICE SPACES.
- DISCONNECT AND REMOVE MULTI-SPLIT SYSTEM TO ITS ENTIRETY, INCLUDING BOTH INSIDE UNITS, OUTSIDE ACCU, REFRIGERANT PIPING AND ASSOCIATED CONTROLS. DISCONNECT CONDENSATE PIPING FOR INSIDE UNITS. CONDENSATE PIPING IS TO REMAIN AND BE REUSED FOR INSTALLATION WORK.

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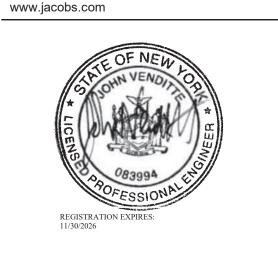
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# NUFSD BOND PROJECT PHASE 5 -MAINTENANCE

☐ SED#50-01-08-03-0-002-020 (HIGHVIEW ES)
■ SED#50-01-08-03-7-007-002 (Maintenance)
☐ SED#50-01-08-03-7-012-004 (OEC)
☐ SED#50-01-08-03-0-001-026 (MILLER ES)
☐ SED#50-01-08-03-0-004-022 (BARR MS)

Highview Elementary School
24 Highview Ave
Nanuet, NY 10954

OEC Building
135 Convent Rd

Nanuet, NY 10954

Maintenance Building
103 Church St.
Nanuet, NY 10954

Miller Elementary School
50 Blauvelt Rd Unit1
Nanuet, NY 10954

A MacArthur Barr Middle School
143 Church St

Nanuet, NY 10954 KEY PLAN

**ISSUED:** BID SET **DATE:** 06/21/2024

SCALE: 1/4" = 1'-0"

SHEET NAME:

FIRST FLOOR REMOVALS

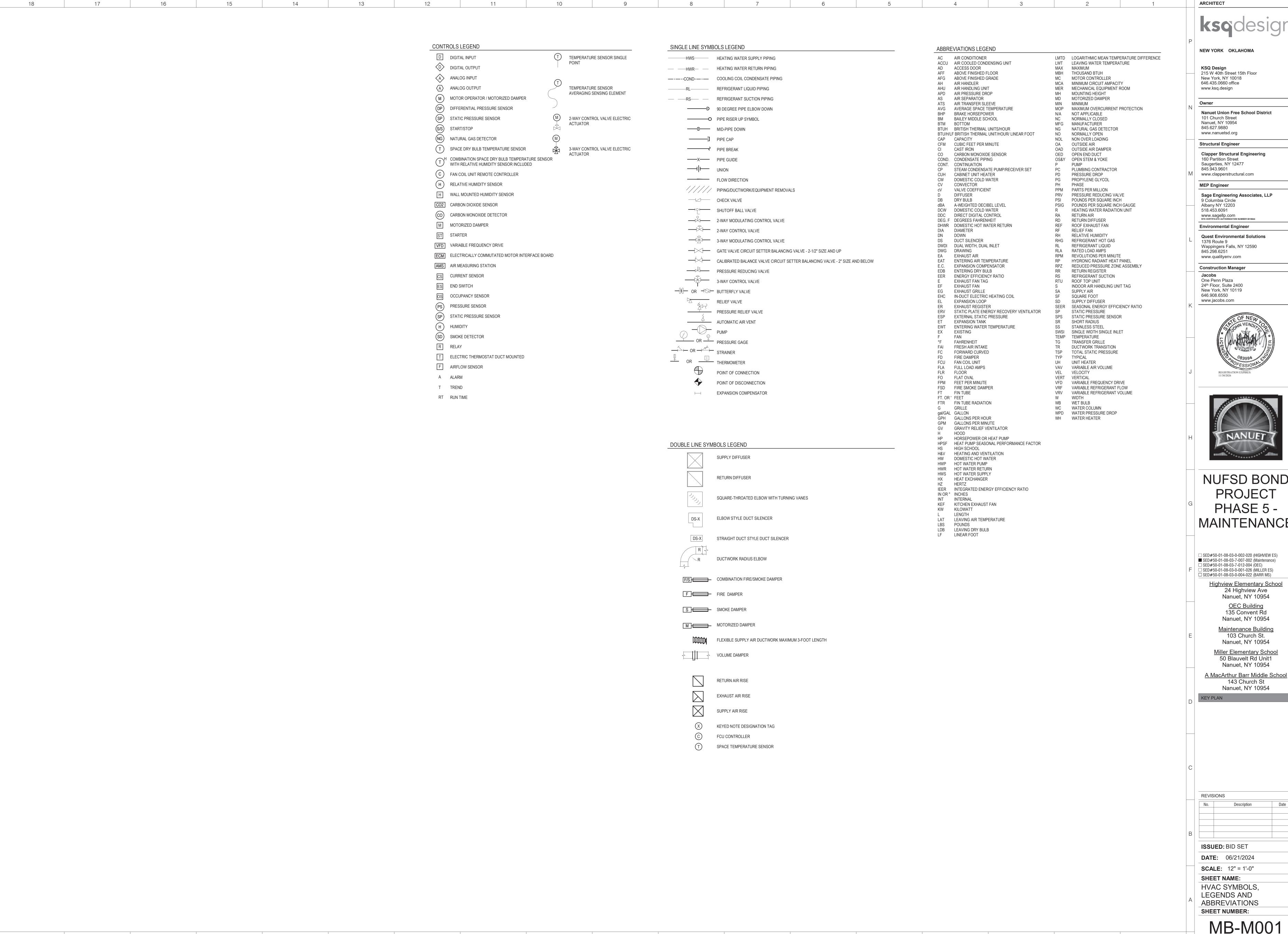
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☐ SED#50-01-08-03-0-004-022 (BARR MS) Highview Elementary School 24 Highview Ave Nanuet, NY 10954 OEC Building 135 Convent Rd

> Nanuet, NY 10954 Maintenance Building 103 Church St. Nanuet, NY 10954

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143 Church St Nanuet, NY 10954

**ISSUED:** BID SET

**DATE:** 06/21/2024

SHEET NAME: HVAC SYMBOLS, LEGENDS AND **ABBREVIATIONS** 

MB-M001

### MULTI-ZONE INVERTER HEAT PUMP SCHEDULE

1.PROVIDE HEAT PUMP WITH MODEL QSTD3000 18" HIGH STAND AND MOUNT HEAT PUMP STAND ON TOP OF EXISTING EXTERIOR CONCRETE PAD. PROVIDE HEAT PUMP WITH DRAIN PAN HEATER AND INTAKE AND OUTLET SNOW HOODS. 2.PROVIDE EACH INDOOR UNIT WITH INLINE CONDENSATE PUMP (MODEL DACA-CP1-1) THAT FITS INSIDE THE FCU AND IS WIRED FROM THE INDOOR UNIT'S POWER SOURCE AND WIRED CONTROLLER (MODEL BRC944B2). 3.PROVIDE POWER CONNECTION AND ALL REQUIRED WIRING FOR INDOOR UNIT FROM OUTDOOR UNIT POWER SOURCE. PROVIDE ALL REQUIRED CONTROL WIRING PER MANUFACTURER'S INSTALLATION INSTRUCTIONS BETWEEN OUTDOOR UNIT, INDOOR UNITS AND WIRED CONTROLLERS. PROVIDE WIRING FROM INDOOR FAN COIL UNIT TO INLINE CONDENSATE PUMP.

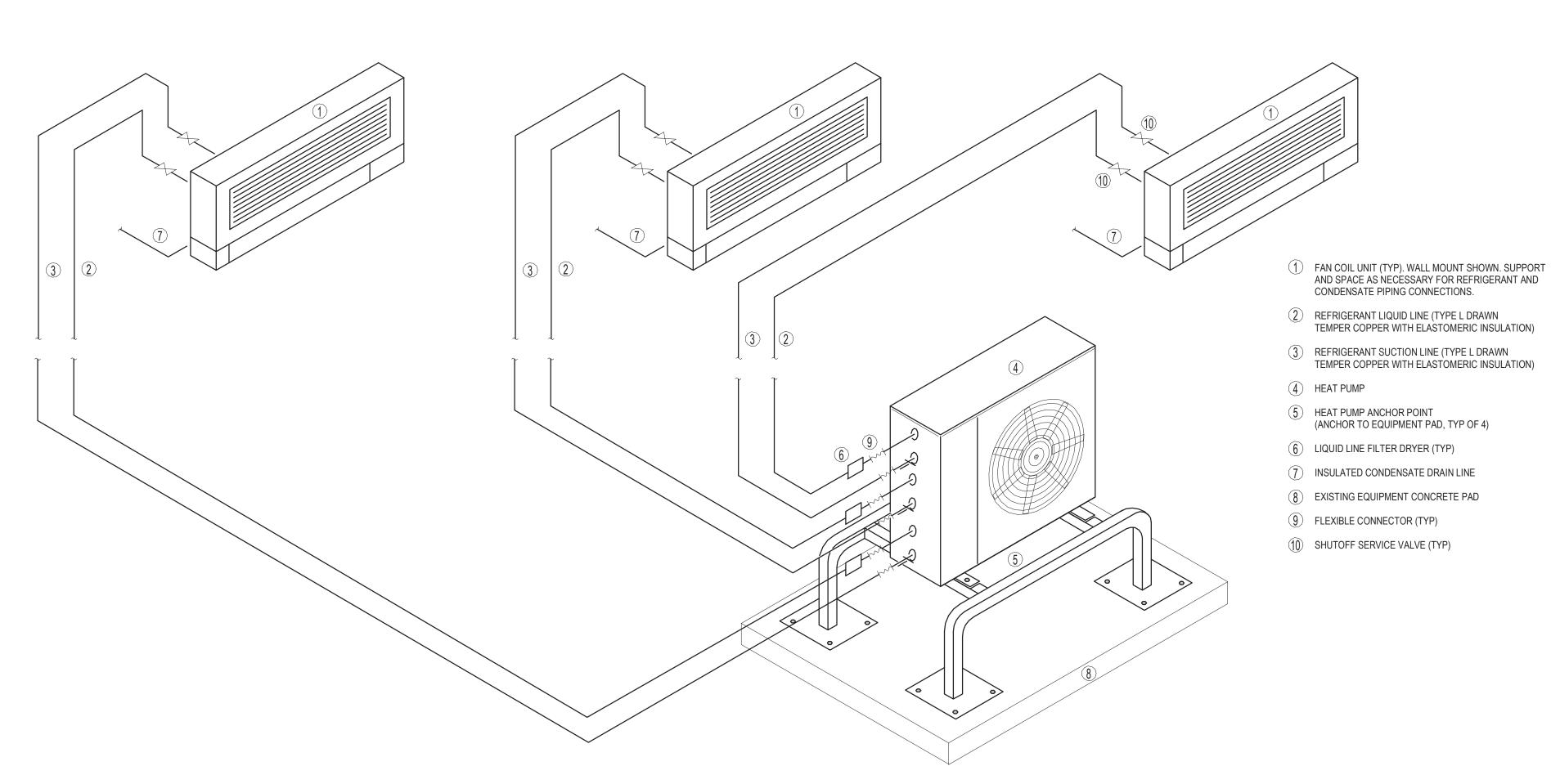
			COOLING		CFM			ELECTRICAL DATA						BASIS OF DESIGN MFG. AND	
Mark	SERVICE	DESCRIPTION	CAPACITY	CAPACITY HEATING	ні	MID	LO	VOLTS	PHASE	HERTZ	RATED RUNNING AMPS	RATED POWER CONSUMPTION	WEIGHT	MODEL MODEL	
FCU-MB-1	SECY'S 405	WALL MOUNTED	9,000 Btu/h	9,000 Btu/h	381	279	194	208 V	1	60 Hz	0.11 A	21 W	20 lb	DAIKIN FTXS09LVJU	
FCU-MB-2	OFFICE 401	WALL MOUNTED	18,000 Btu/h	18,000 Btu/h	583	484	385	208 V	1	60 Hz	0.32 A	38 W	31 lb	DAIKIN FTXS18LVJU	
FCU-MB-3	MAINTENANCE BREAK AREA	WALL MOUNTED	9,000 Btu/h	9,000 Btu/h	381	279	194	208 V	1	60 Hz	0.11 A	21 W	20 lb	DAIKIN FTXS09LVJU	

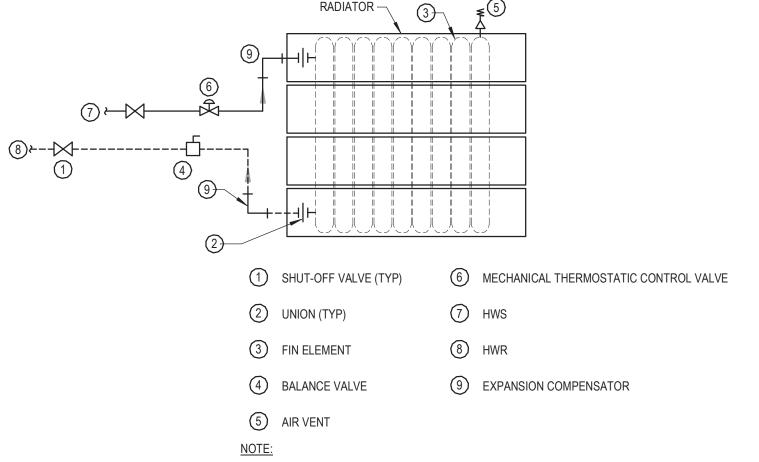
	Mark	COOLING OPERATING RANGE (DEGREE F DB)		CAPACITY HEATING (@ 5 DEGRESS F DB)	CAPACITY COOLING	VOLTS PH MCA MFA		REFRIGERANT	REFRIGERANT SEER	REFRIGERANT HSPF	WEIGHT	BASIS OF DESIGN MFG. AND MODEL	REMARKS		
$\neg$	HP-MB-1	14-115	-13-60	21,700 Btu/h	24,000 Btu/h	208	1	22.6	25	R-410A	18	12.5	140 lb	DAIKIN 3MXL24RMVJU	1,2,3
	•	•				•				•	•			•	

### VERTICAL RADIATOR SCHEDULE

1. PROVIDE WITH SAME END SERIES PIPING CONNECTIONS (SUPPLY AND RETURN CONNECTIONS ON SAME SIDE OF RADIATOR). 2. PROVIDE WITH OPPOSITE END SERIES PIPING CONNECTIONS (SUPPLY AND RETURN CONNECTIONS ON OPPOSITE SIDES OF RADIATOR). 3. PROVIDE WITH TYPE C LEFTHAND SUPPLY CONNECTIONS AND STANDARD, STRAIGHT MECHANICAL THERMOSTATIC CONTROL VALVE.

Mark	CAPACITY (BTU/HR PER LINEAL FOOT)	AVERAGE WATER TEMP.	HEIGHT	SIZE DEPTH	FLOW RATE (GPM)	SIZE LENGTH	WATER PRESSURE DROP	BASIS OF DESIGN MFG. AND MODEL	REMARKS
R-MB-1	998	170.0 °F	4.0 ft	2.0 in	0.5	1' - 11 1/8"	0.03 Feet	RUNTAL RV-8	3
R-MB-2	748	170.0 °F	3.0 ft	2.0 in	0.5	1' - 5 1/4"	0.04 Feet	RUNTAL RV-6	3
R-MB-3	748	170.0 °F	3.0 ft	2.0 in	0.5	1' - 5 1/4"	0.04 Feet	RUNTAL RV-6	3





1. DETAIL FOR PIPING TO RADIATION PIPED FROM THE SIDE TO SAME END CONNECTIONS ON RADIATOR.

A18 HOT WATER RADIATION PANEL DETAIL
NOT TO SCALE

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A12 DUCTLESS MULTI-SPLIT DETAIL WITH WALL MOUNTED FAN COIL UNIT

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REVISIONS

KEY PLAN

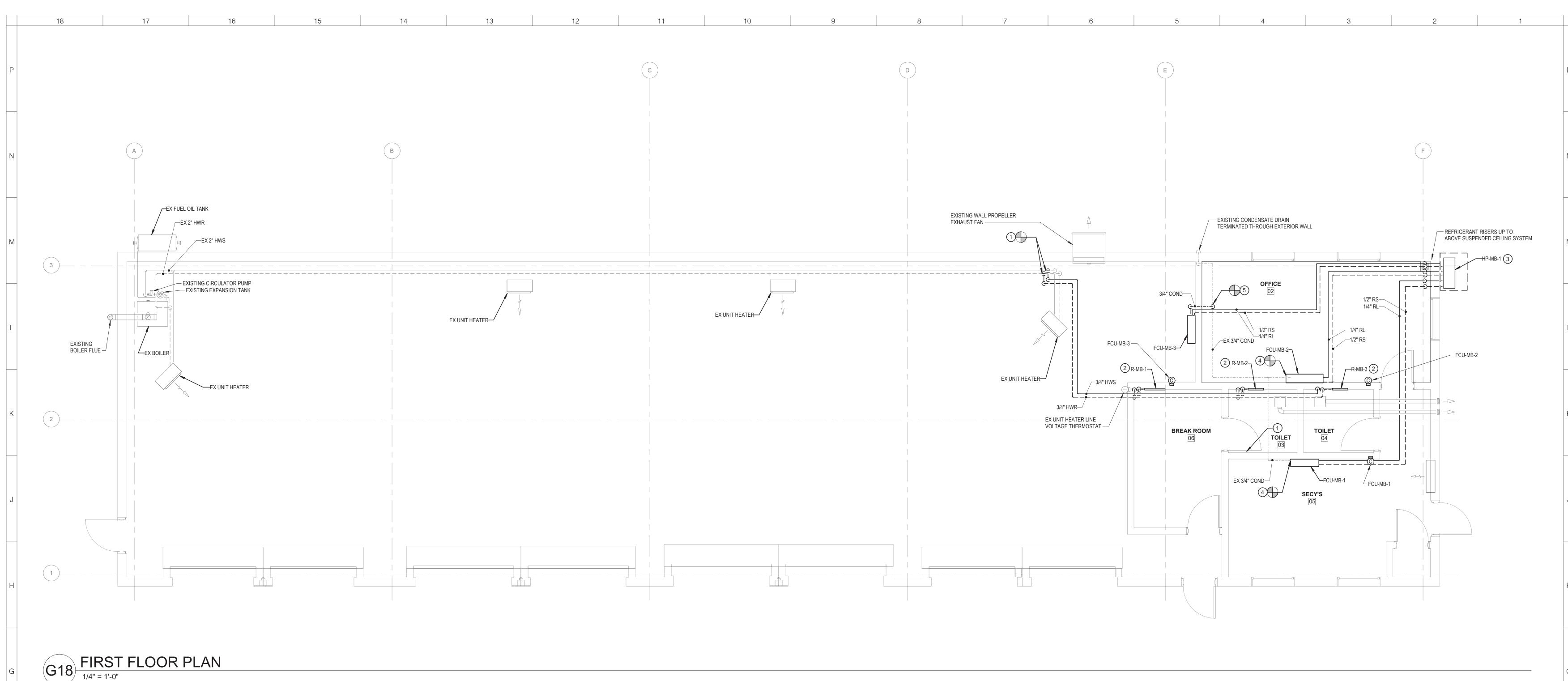
**ISSUED:** BID SET

**DATE:** 06/21/2024 SCALE: NOT TO SCALE

SHEET NAME: HVAC SCHEDULES AND **DETAILS** 

SHEET NUMBER:

MB-M002



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- (1) CONNECT TO EXISTING HWS/R PIPING AT LOCATIONS SHOWN AND ROUTE 3/4" HWS/R PIPING TO BREAK ROOM 402 EXPOSED THROUGH GARAGE BAY. PROVIDE PVC JACKETING OVER ALL EXPOSED, INSULATED PIPING AND FITTINGS.
- PROVIDE 3/4" PIPING TAPS OFF THE HORIZONTAL HWS/R PIPING LINES AND ROUTE 3/4" HWS/R DROPS TO WALL MOUNTED RADIATOR SUPPLY AND RETURN CONNECTIONS AS SHOWN. PROVIDE 3/4" MECHANICAL THERMOSTATIC CONTROL VALVE ON THE HWS UPSTREAM OF THE CONNECTION TO THE RADIATOR. THE CONTROL VALVE SHALL BE FURNISHED WITH THE RADIATOR BY THE RADIATOR
- MOUNT OUTDOOR HEAT PUMP ON TOP OF 18" STAND AND MOUNT STAND TO EXISTING CONCRETE PAD. BOLT STAND TO PAD AS REQUIRED. ROUTE INDIVIDUAL REFRIGERANT BRANCHES THROUGH EXTERIOR WALL BELOW BOTTOM OF EXISTING OFFICE 401 WINDOW, THEN ROUTE INDIVIDUAL REFRIGERANT PIPING BRANCHES TO ABOVE OFFICE 401 SUSPENDED CEILING SYSTEM WITHIN A VERTICAL CHASE, THEN ROUTE REFRIGERANT BRANCHES TO WALL MOUNTED FAN COIL UNIT CONNECTIONS PORTS AS REQUIRED.
- (4) PROVIDE CONNECTIONS FROM FCU INLINE CONDENSATE PUMP TO EXISTING CONDENSATE PIPING ROUTED ABOVE SUSPENDED CEILING SYSTEMS AS REQUIRED.
- ROUTE 3/4" CONDENSATE DRAIN PIPING FROM OUTLET OF FCU-MB-3 INLINE CONDENSATE PUMP TO EXISTING CONDENSATE DRAIN PIPING ABOVE OFFICE 401 SUSPENDED CEILING SYSTEM AT LOCATION SHOWN.

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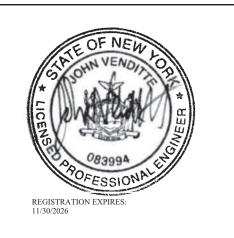
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**SCALE**: 1/4" = 1'-0"

SHEET NAME: FIRST FLOOR PLAN

SHEET NUMBER:

**DATE:** 06/21/2024

MB-M101