

**DISTRICT WIDE
 IMPROVEMENTS 2020
 PHASE II**

**YORKTOWN HIGH SCHOOL
 2727 CROMPOND RD.
 YORKTOWN HEIGHTS, NY 10598**

REVISIONS

No.	Description	Date
1	ADDENDUM NO.1	11/12/2021

ISSUED: BID ISSUE

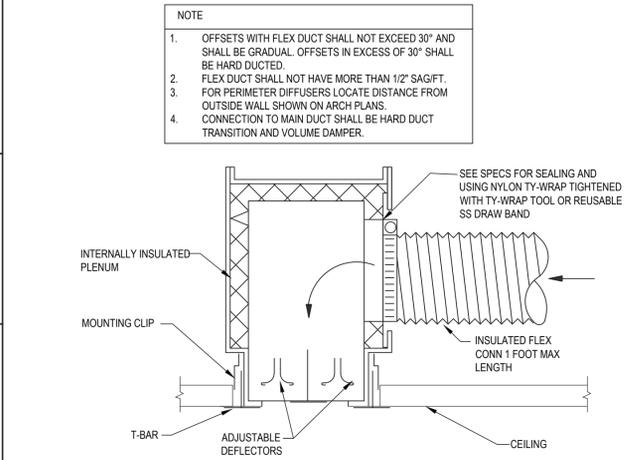
DATE: 10/25/2021

SCALE: AS NOTED

**SHEET NAME:
 DETAILS & SCHEDULES**

SHEET NUMBER:

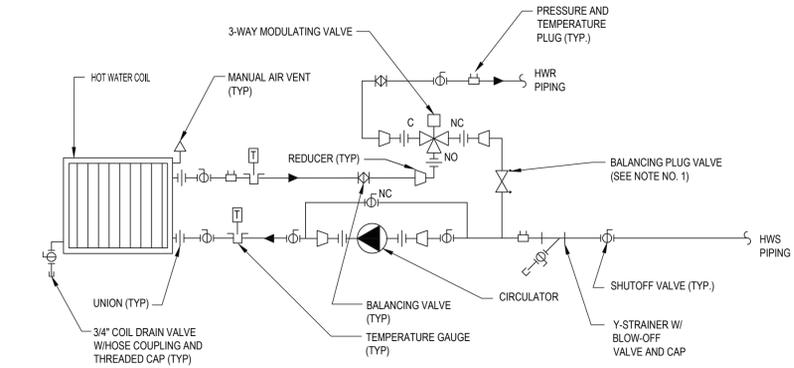
YHS-H501



5 LINEAR SLOT DIFFUSER DETAIL
 YHS-H501 SCALE: NOT TO SCALE

4 NOT USED
 YHS-H501 SCALE: NOT TO SCALE

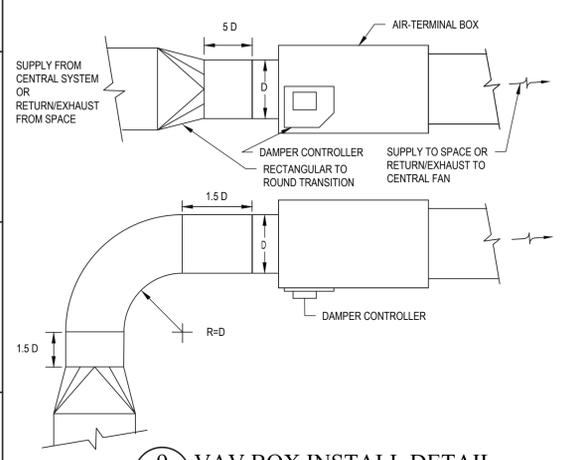
3 ROOF PIPING PENETRATION DETAIL
 YHS-H501 SCALE: NOT TO SCALE



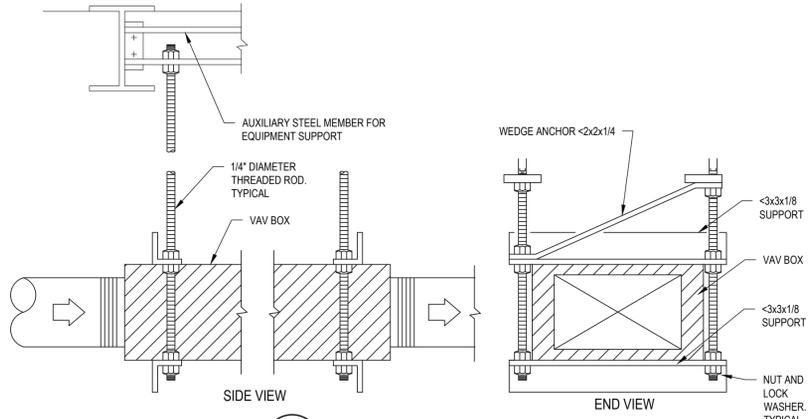
SEQUENCE OF OPERATION
 1. PUMP STARTS ON CALL FOR HEAT AND 3-WAY VALVE SHALL MODULATE TO MAINTAIN SPACE TEMPERATURE WITHOUT CYCLING.
 2. FREEZE PROTECTION OVERRIDE, OF O.A. TEMPERATURE <35° PUMP IS ON 3-WAY OPENS TO BYPASS IF NOT HEATING.

NOTE
 1. SET BALANCING VALVES TO EQUAL THE PRESSURE DROP ACROSS THE HYDRONIC COIL.

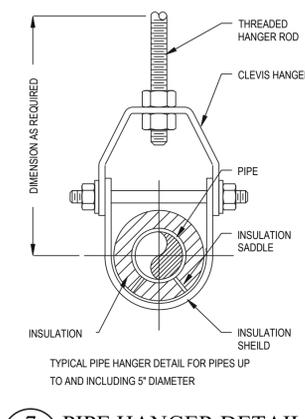
2 3-WAY COIL DETAIL
 YHS-H501 SCALE: NOT TO SCALE



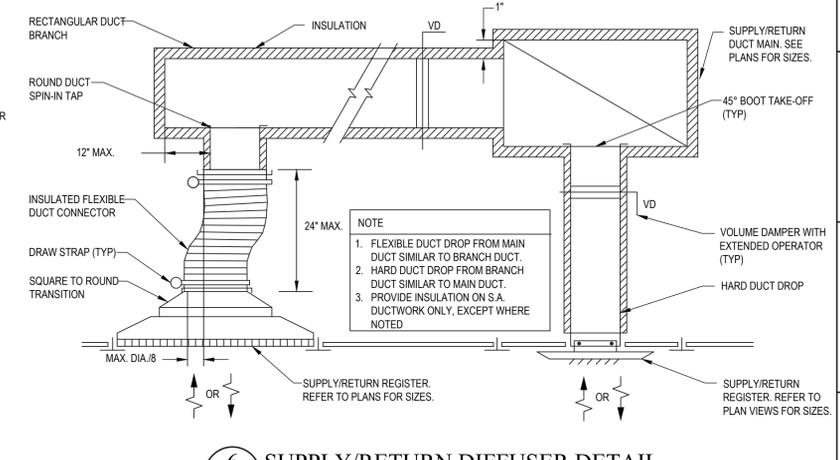
9 VAV BOX INSTALL DETAIL
 YHS-H501 SCALE: NOT TO SCALE



8 VAV BOX SUPPORT DETAIL
 YHS-H501 SCALE: NOT TO SCALE



7 PIPE HANGER DETAIL
 YHS-H501 SCALE: NOT TO SCALE



6 SUPPLY/RETURN DIFFUSER DETAIL
 YHS-H501 SCALE: NOT TO SCALE

VENTILATION REQUIREMENTS

Space Designation	Area Area SF	Occupants /1000 SF	Total Occupants	Ventilation Required		Uncorrected Ventilation	Efficiency Factor	Corrected CFM
				Per Occup.	Per SF			
HS Cafeteria	4,330	85	368	7.50	0.18	3,540	80%	4,430
HS Servery	1,660	12	20	7.50	0.18	450	80%	560
Total	5,990		388			3,990	80%	4,990

PUMP SCHEDULE

TAG	SERVICE	TYPE	FLUID	GPM	HEAD	RPM	ELECTRICAL		DISCONNECT			BASIS OF DESIGN	MODEL
							HP	VOLTS/PH/HZ	TYPE	FURNISHED BY	INSTALLED BY		
P-3	RTU-3	IN-LINE CIRC.	HW	35	23	1725	3/4	120/1/60	COMB STARTER	EC	EC	TACO	1615

CEILING DIFFUSER SCHEDULE

MARK	USE	TYPE	PATTERN	CORE STYLE	DUCT SIZE	PERFORMANCE				MOUNTING	FRAME	MATERIAL	FINISH	MAKE/MODEL
						CFM	TP	THROW	MAX. NC					
S1	SUPPLY	HIGH THROW	1-WAY	2G	18"	-	-	-	-	DUCT	-	STEEL	WHITE	MODEL RCD
S2	SUPPLY	DIRECTIONAL LOUVERED FACE	4-WAY	4A	12"	-	-	-	-	24/24 LAY-IN	3P	STEEL	WHITE	MODEL SPD
S3	SUPPLY	LINEAR SLOT DIFFUSER	1-WAY	1S	10"	-	-	-	-	48"	3P	STEEL	WHITE	MODEL SDS
R1	RETURN	DIRECTIONAL LOUVERED FACE	1-WAY	-	24/24	1375	-	-	-	24/24 PLENUM	3P	STEEL	WHITE	MODEL 96FH
R2	RETURN	DIRECTIONAL LOUVERED FACE	1-WAY	1S	12"	-	-	-	-	24/24 LAY-IN	3P	STEEL	WHITE	MODEL PDDR
R3	RETURN	DIRECTIONAL LOUVERED FACE	1-WAY	1S	18"	-	-	-	-	24/24 LAY-IN	3P	STEEL	WHITE	MODEL PDDR

ROOFTOP UNIT SCHEDULE

TAG	SERVICE	TYPE	AIRFLOW (CFM)	OUTSIDE AIR (CFM)	SUPPLY FAN				EXHAUST FAN				CAPACITY				DX COOLING				HOT WATER HEATING COIL				ELECTRICAL											
					ESP (IN. WG)	TOTAL SP (IN. WG)	FAN TYPE	DRIVE	HP	ESP (IN. WG)	TOTAL SP (IN. WG)	FAN TYPE	DRIVE	HP	IEER	NOMINAL TONNAGE	TOTAL (MBH)	SENS. (MBH)	LAT. (MBH)	DRY BULB (°F)	WET BULB (°F)	DRY BULB (°F)	WET BULB (°F)	ENTERING AIR DRY BULB (°F)	LEAVING AIR DRY BULB (°F)	MBH	SOURCE	GPM	WATER PRESS DROP (FT)	EWT	LWT	FLA	MCA	MOP	MOTOR VOL/PH/HZ	BASIS OF DESIGN
RTU-3	CAFETERIA	RTU	9,200	5,000	2.5	4.0	PLENUM	VFD	15	1.0	1.15	AXIAL	VFD	5	12	38	448	298	150	84	69	55	55	34	89	584	HEATING HOT WATER	40	1.5	180	150	197	208	250	208/3/60	AAON

NOTES:
 1. PROVIDE 2 STAGE FILTER, 2" MERV-8 & 4" MERV-14
 2. PROVIDE SMOKE DETECTOR IN RETURN
 3. VFD TO BE MOUNTED INTERNALLY BY MANUFACTURER
 4. PROVIDE FACTORY WIRED 115V CONVENIENCE OUTLET
 5. PROVIDE NON-FUSED DISCONNECT SWITCH
 6. PROVIDE WITH ECONOMIZER O.A. CAPABILITY
 7. PROVIDE WITH STAINLESS STEEL DRAIN PAN
 8. HEATING DESIGN CONDITIONS ARE AS FOLLOWS:
 8.1. O.A. TEMP 9°F DB, -1°F WB
 8.2. R.A. TEMP 75°F DB, 62°F WB