

File: H: DRAWINGS\MT_KISCO\SAW MILL PUMP STATION\SHPS_PUMP_STATION_HVAC REV2.DWG Saved: 1/21/2022 10:44:13 AM Plotted: 1/21/2022 3:48:36 PM User: Kyle Muller LastSavedBy: mullerk

HYDRONIC BOILER SCHEDULE												
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FUEL TYPE	INPUT CAPACITY (MBH)	NET RATING (MBH)	DOE RATING (MBH)	EFFICIENCY	WORKING FLUID	Design Temps		NOTES
										EWT (Df)	LWT (Df)	
B-1	WEIL MCLAIN EVERGREEN 220	BOILER RM	SS HIGH EFFICIENCY CONDENSING	LP GAS	220	179	206	95%	30% PROPYLENE GLYCOL	180	160	TACO 0014 120/60/1 1, 2

1. PROVIDE WEIL MCLAIN DIRECT VENT KIT
2. PROVIDE WEIL MCLAIN EASY-UP MANIFOLD KIT

HYDRONIC HEATER SCHEDULE															
ID	ROOM NUMBER	LOCATION	ZONE	MODEL	BTU/HR	FLOW RATE (GPM)	WORKING FLUID	DIMENSIONS			PIPE CONN SIZE (IN)	MOUNTING LOCATION	EWT (dF)	LWT (dF)	NOTES
								LENGTH (FT)	WIDTH (IN)	HEIGHT (IN)					
FTR-1		BATH	1	MODINE S 012	4,450	2	30% PROPYLENE GLYCOL	5	5.25	12	3/4	4" AFF	180	173.3	4.25" X 4.25" FINS @ 34/FT
FTR-2		BOILER ROOM	1	MODINE S 012	4,450	2	30% PROPYLENE GLYCOL	5	5.25	12	3/4	4" AFF	180	173.3	4.25" X 4.25" FINS @ 34/FT
FTR-3		STORAGE RM	1	MODINE S 012	7,120	2	30% PROPYLENE GLYCOL	8	5.25	12	3/4	4" AFF	180	169.3	4.25" X 4.25" FINS @ 34/FT

NOTE: PROVIDE ALL REQUIRED CONNECTIONS, ENCLOSURE EXTENSIONS, END CAPS, ETC TO PROVIDE A COMPLETE INSTALLATION.

VRF HEAT PUMP SYSTEM							
ID	MANUFACTURER	LOCATION	MODEL NUMBER	COOLING/HEATING CAPACITY (BTU/HR)	VOLT/PH/HZ	REFRIGERANT	
HP-1	DAIKIN	OUTDOOR	MXZ-3C24NAH22-U1	22,000/25,000	208-230/1/60	R410A	
HP-2	MITSUBISHI	OFFICE	MSZ-FH12NA-U1	12,000/12,300	208-230/1/60	R410A	1
HP-3	MITSUBISHI	ELECTRIC ROOM	MSZ-FH12NA-U1	12,000/12,300	208-230/1/60	R410A	1

HYPER-HEAT

NOTE 1: PROVIDE PAC-YT53CRAU-J CONTROLLER

Belt Drive Upblast Centrifugal Wall Exhaust Fan

MARK INFORMATION			FAN INFORMATION					MOTOR INFORMATION					
QTY	MARK	MODEL	VOLUME (CFM)	TOTAL EXTERNAL SP (IN WG)	FAN RPM	OPERATING POWER (HP)	WEIGHT (LB.)	SIZE (HP)	V/C/P	ENCLOSURE	MOTOR RPM	WINDINGS	NEC FLA*
1	EF1 - PUMP RM	CUBE-240-7	4,000	0.5	619	0.66	136	0.75	460/60/3	TF	1725	1	1.6

*NEC FLA - Based on table [430.250](#) or [430.248](#) of National Electrical Code 2017. Actual motor FLA may vary for sizing thermal overload, consult factory"

EF1 - PUMP RM : SELECTED OPTIONS AND ACCESSORIES
Standard Curb Cap Size - 34 in. Square Sidewall Mounting - Fan Configured for Wall-Mounted Applications Spark B Construction UL/cUL 705 Listed - "Power Ventilators" Switch, NEMA-1, Toggle, Shipped with Unit Coated with Permatector, Concrete Gray-RAL 7023, Fan And Attached Acc Hood Hasps Stainless Steel Shaft - 300 Series Wall Grille, Shipped Loose (PN 916480) Birdscreen: Aluminum, nom. 86% Free Area Bearings with Grease Fittings, L10 life of 100,000 hrs (L50 avg. life 500,000 hrs) Aluminum Rub Ring

Belt Drive Upblast Centrifugal Roof Exhaust Fan

MARK INFORMATION		FAN INFORMATION					MOTOR INFORMATION						
QTY	MARK	MODEL	VOLUME (CFM)	TOTAL EXTERNAL SP (IN WG)	FAN RPM	OPERATING POWER (HP)	WEIGHT (LB.)	SIZE (HP)	V/C/P	ENCLOSURE	MOTOR RPM	WINDINGS	NEC FLA*
1	EF2 - INFLUENT	CUBE-200-15	3,500	1	992	1.18	212	1.5	460/60/3	EX	1725	1	3

*NEC FLA - Based on table [430.250](#) or [430.248](#) of National Electrical Code 2017. Actual motor FLA may vary for sizing thermal overload, consult factory"

EF2 - INFLUENT : SELECTED OPTIONS AND ACCESSORIES
Standard Curb Cap Size - 30 in. Square Spark B Construction UL/cUL 705 Listed - "Power Ventilators" Switch, NEMA-7 and 9, Toggle, Shipped with Unit, Division1 Wiring Foam Curb Seal (Attached) Adapter-Alum., Curb Cap Adapted to 32 x 32 (Attached), Coated Coated with Permatector, Concrete Gray-RAL 7023, Fan And Attached Acc Non-Stick Coated Wheel (Teflon) Hood Hasps Stainless Steel Shaft - 300 Series Birdscreen: Aluminum, nom. 86% Free Area Bearings with Grease Fittings, L10 life of 100,000 hrs (L50 avg. life 500,000 hrs) Aluminum Rub Ring

PUMP SCHEDULE											
ID	ZONE	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FLUID	ELECTRICAL					NOTES
					FLOW RATE (GPM)	HEAD IN FT	CONSTRUCTION	MOTOR SIZE (HP)	MOTOR SPEED (RPM)	VOLT/PH/HZ	
P-1	1	TACO 009-IFC	MECHANICAL	CIRCULATOR	2	14	IRON	1/8	3450	120/1/60	
P-2	2	TACO 011-IFC	MECHANICAL	CIRCULATOR	6	18	IRON	1/8	3250	120/1/60	
P-3	3	TACO 2445	MECHANICAL	CIRCULATOR	8	35	IRON	1/3	3450	120/1/60	

PROVIDE BALL VALVES, CHECK VALVES, FLANGES AND OTHER APPURTENANCES TO MAKE A COMPLETE SYSTEM

UNIT HEATER SCHEDULE											
ID	LOCATION	MANUFACTURER AND MODEL NUMBER	TYPE	BTU	GPM	EWT (Df)	LWT (Df)	VOLT/PH/HZ	MAX MTG HGT (FT)	NOTES	
UH-1	1ST FLOOR	MODINE HC 47	HORIZONTAL	30,900	3.2	180	159.9	115/60/1	13		
UH-2	1ST FLOOR	MODINE HC 47	HORIZONTAL	30,900	3.2	180	159.9	115/60/1	13		
UH-3	MID LEVEL	MODINE HC 33	HORIZONTAL	21,700	2.3	180	160.3	115/60/1	11		
UH-4	MID LEVEL	MODINE HC 33	HORIZONTAL	21,700	2.3	180	160.3	115/60/1	11		
UH-5	LOWER LEVEL	MODINE HC 33	HORIZONTAL	21,700	2.3	180	160.3	115/60/1	11		
UH-6	LOWER LEVEL	MODINE HC 33	HORIZONTAL	21,700	2.3	180	160.3	115/60/1	11		

LOUVER SCHEDULE										
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	CFM	WIDTH (IN)	HEIGHT (IN)	DEPTH (IN)	NOTES		
LV-1	GREENHECK ECD-601	MAIN FLOOR	STATIONARY EXTRUDED, DRAINABLE BLADE	1250	24	24	6	1		
LV-2	GREENHECK ECD-601	MAIN FLOOR	STATIONARY EXTRUDED, DRAINABLE BLADE	1250	24	24	6	1		

NOTES:

1. PROVIDE WALL SLEEVE, CHANNEL FRAME, BAKED ENAMEL FINISH (COLOR TBD), BIRDSCREEN, 120V ACTUATOR

Belt Drive Upblast Centrifugal Wall Exhaust Fan

MARK INFORMATION		FAN INFORMATION					MOTOR INFORMATION						
QTY	MARK	MODEL	VOLUME (CFM)	TOTAL EXTERNAL SP (IN WG)	FAN RPM	OPERATING POWER (HP)	WEIGHT (LB.)	SIZE (HP)	V/C/P	ENCLOSURE	MOTOR RPM	WINDINGS	NEC FLA*
1	EF3	CUBE-240-4	2,500	0.29	431	0.23	147	0.25	115/60/1	TF	1725	1	5.8

*NEC FLA - Based on table [430.250](#) or [430.248](#) of National Electrical Code 2017. Actual motor FLA may vary for sizing thermal overload, consult factory"

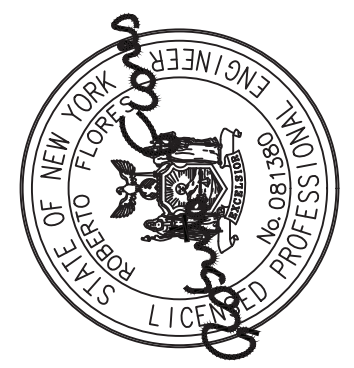
EF3 : SELECTED OPTIONS AND ACCESSORIES
Standard Curb Cap Size - 34 in. Square Sidewall Mounting - Fan Configured for Wall-Mounted Applications UL/cUL 705 Listed - "Power Ventilators" Switch, NEMA-1, Toggle, Shipped with Unit Damper Shipped Loose, WD-330-PB-24X24, Gravity Operated, Not Coated Coated with Permatector, Concrete Gray-RAL 7023, Fan And Attached Acc Hood Hasps Stainless Steel Fasteners - 300 Series Stainless Steel Shaft - 300 Series Wiring Pigtail, Internal, General, 9 ft from Unit of Flexible Metal Conduit Birdscreen: Aluminum, nom. 86% Free Area Bearings with Grease Fittings, L10 life of 100,000 hrs (L50 avg. life 500,000 hrs)

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PROJECT NO.: 19-1843
FILE: SHPS_PUMP_STATION_HVAC REV1.DWG

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REVISIONS		DESCRIPTION
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SAW MILL PUMP STATION
UPGRADES
VILLAGE OF MOUNT KISCO
WESTCHESTER COUNTY, NY

HVAC SCHEDULES

SHEET:
H1

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DIAGRAM	SYMBOL	LEGEND
DISPLAY	DESCRIPTION	
---	///	POWER WIRE
---	---	CONTROL WIRE
---	---	REF. PIPE

CONT.No		PAGE	
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PIPING AND CONTROLS	
SYMBOL	BRANCH PIPE MODEL NAME
J1	MAC-A455JP-E
SYMBOL	LIQUID PIPE/GAS PIPE SIZE
P1	1/4" / 3/8"
SYMBOL	MODEL NUMBER
CR	PAC-YT53CRAU-J
WAWR	stock controller

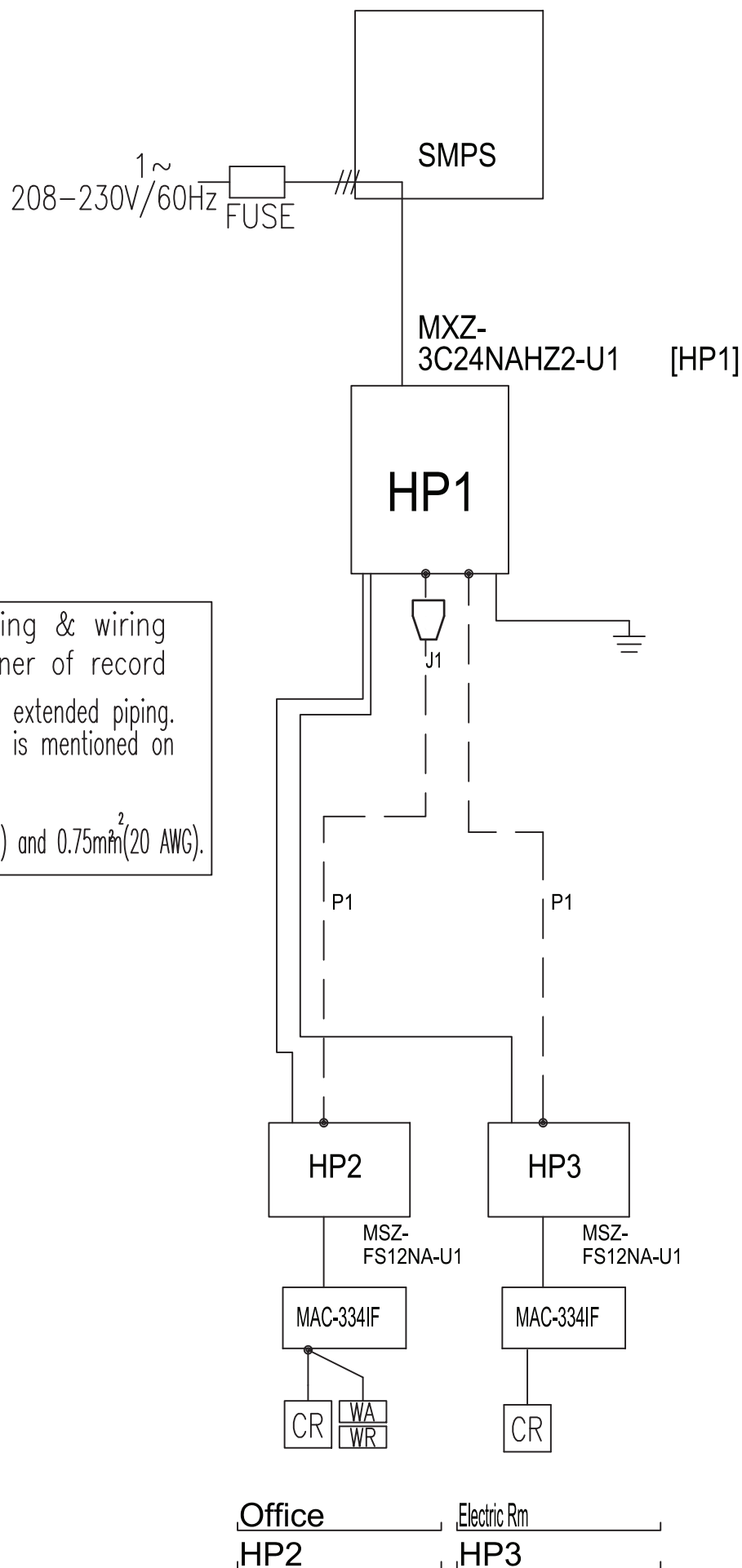
This drawing is schematic in nature. Final routing of piping & wiring shall be determined by the installing contractor and/or designer of record. Additional refrigerant charge is needed depending on the size and length of extended piping. Please refer the amount of pre-charge and the formula of calculation which is mentioned on the data book.

1.25mm²(16 AWG) : 1.25mm²(16 AWG) or more. 0.75mm²(20 AWG) : between 0.5mm²(24 AWG) and 0.75mm²(20 AWG).

Coded Notes:

NOTE 1: Install twinning Y's within 15 degrees of level and with 20 inches of straight pipe on converging connection - reference installation manual for additional details including but not limited to special trapping requirements when twinning, and pipe slope requirements

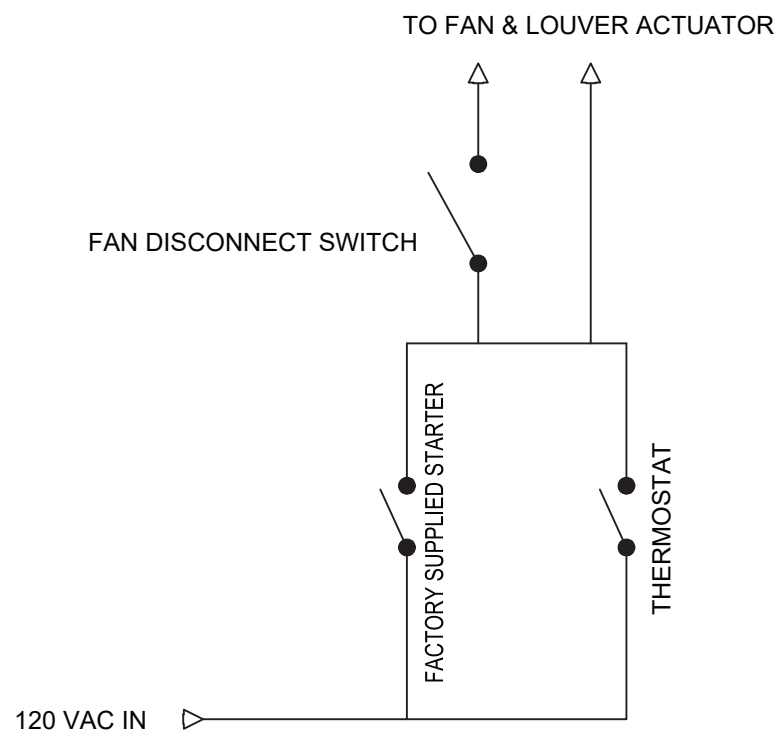
REMARKS
Comments:



Office _____ Electric Rm _____
HP2 _____ HP3 _____

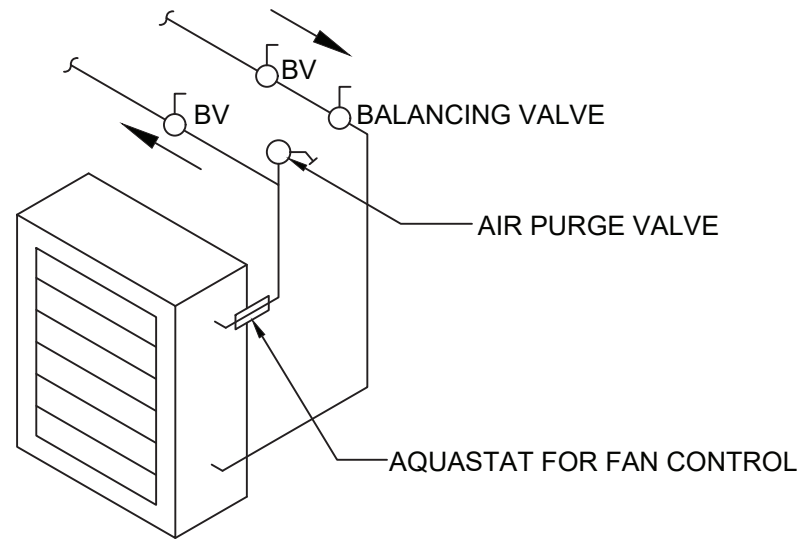
HEAT PUMP SYSTEM SCHEMATIC

NTS



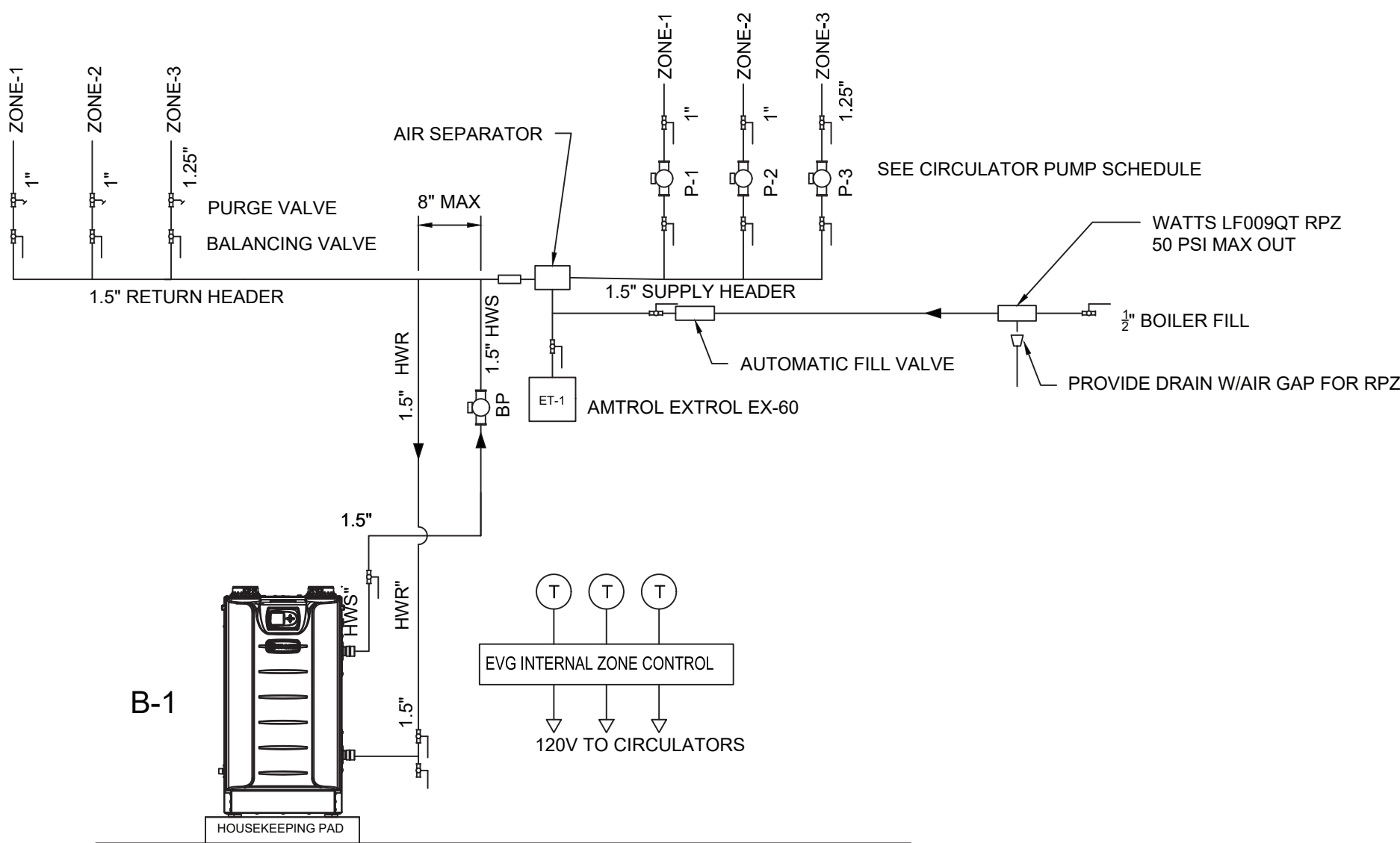
TYPICAL EXHAUST FAN CONTROL

NTS



NOTES:

- EXHAUST FANS AND LOUVERS SHALL BE GREENHECK OR APPROVED EQUAL.
- HYDRONIC HEATERS SHALL BE MODINE.
- EF3 SHALL HAVE A HONEYWELL T6051A1016/U COOLING THERMOSTAT AS SHOWN. GREENHECK MOTOR STARTER SHALL PROVIDE MANUAL OPERATION.
- ALL HYDRONIC HEAT ZONES SHALL HAVE HONEYWELL TH8110U1003 PROGRAMMABLE THERMOSTATS. AQUASTATS SHALL PROVIDE FAN CONTROL.
- EF1 AND EF2 SHALL OPERATE ON A PROGRAMMABLE TIMER AND A MANUAL COUNTDOWN TIMER. CONTROLS FOR EF2 BE MUST EXPLOSION PROOF (NEMA 7) UNLESS LOCATED OUTSIDE THE SPACE.
- ALL HWS AND HWR PIPING SHALL INSULATED TYPE L COPPER.



BOILER SCHEMATIC

NTS

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SAW MILL PUMP STATION
UPGRADES
VILLAGE OF MOUNT KISCO
WESTCHESTER COUNTY, NY

HVAC DETAILS

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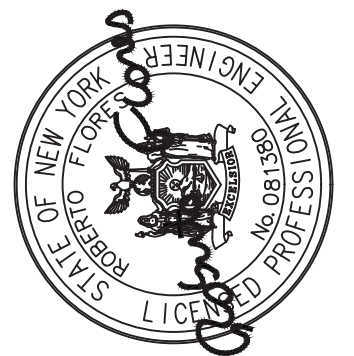
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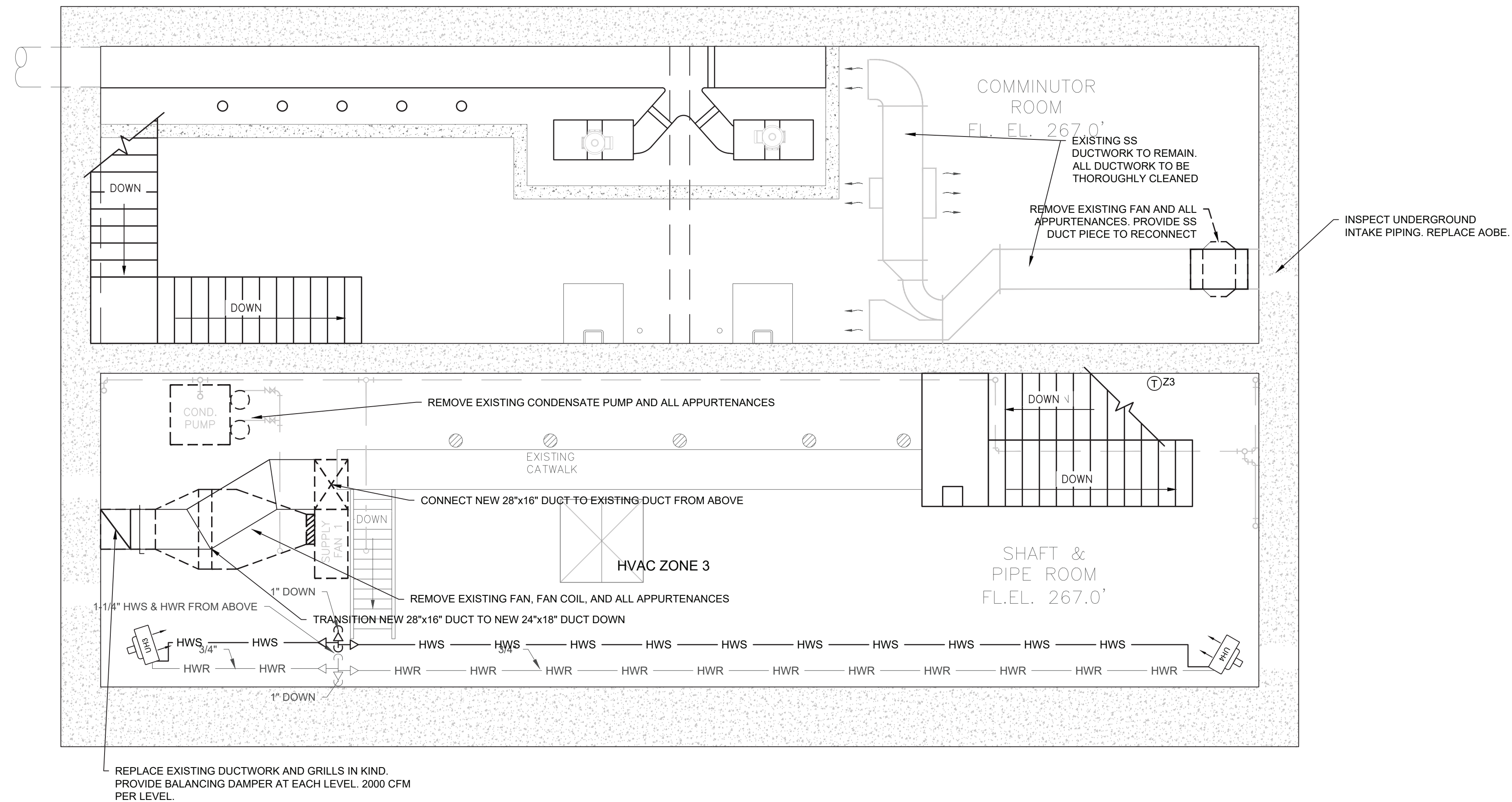


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BID PLANS

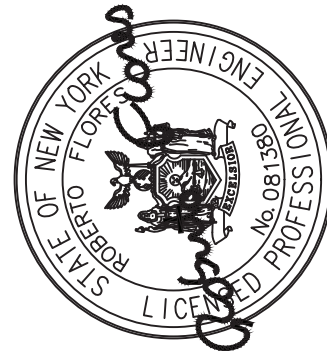
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BID PLANS

INTERMEDIATE LEVEL HVAC PLAN

SAW MILL PUMP STATION
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VILLAGE OF MOUNT KISCO
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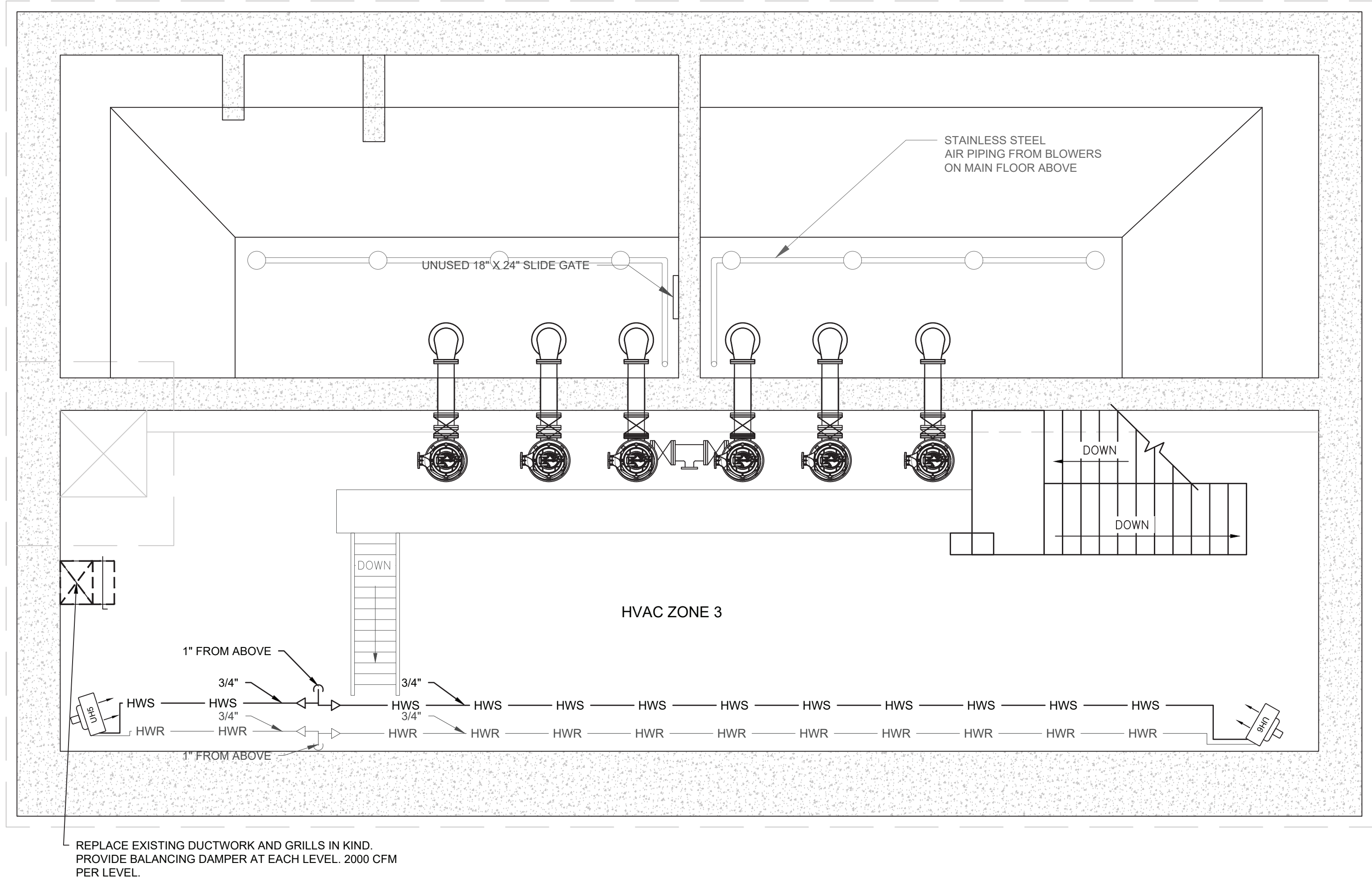
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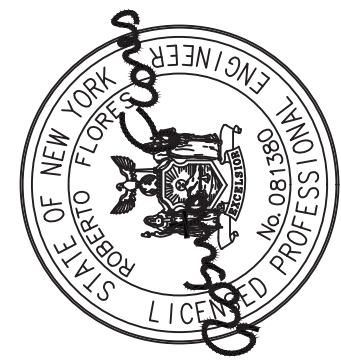
BID PLANS

SHEET:

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SAW MILL PUMP STATION
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