






















ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS.

REFER	DESCRIPTION
—E(NAME)—	EXISTING PIPING TO REMAIN
	POSITIVE PRESSURE (SUPPLY) DUCT UP
	POSITIVE PRESSURE (SUPPLY) DUCT UP
	NEGATIVE PRESSURE (RETURN) DUCT UP
	POSITIVE PRESSURE (SUPPLY) DUCT DOWN
	POSITIVE PRESSURE (SUPPLY) DUCT DOWN
	NEGATIVE PRESSURE (RETURN) DUCT DOWN
	EXISTING DUCTWORK TO BE REMOVED
	EXISTING DUCTWORK TO REMAIN
	NEW DUCTWORK
	SUPPLY AIR DIFFUSER (SQUARE)
	SUPPLY AIR DIFFUSER (ROUND)
	SIDEWALL GRILLE
	RETURN/EXHAUST GRILLE
	FULL RADIUS DUCT CONNECTION
	TAP-IN DUCT CONNECTION
	ROUND DUCT CONNECTION
	TURNING VANES
	FIRE DAMPER
	EXISTING FIRE DAMPER
MD	MOTORIZED DAMPER
EXMD	EXISTING MOTORIZED DAMPER
AD	ACCESS DOOR
BD	BALANCING DAMPER
OBBD	OPPOSED BLADE BALANCING DAMPER
OED	OPEN ENDED DUCT
	THERMOSTAT
CAP 	CAP

ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS.

REFER	DESCRIPTION
—E—	EXISTING PIPING
----	DOMESTIC COLD WATER PIPING
-----	DOMESTIC HOT WATER PIPING
-----	DOMESTIC HOT WATER RECIRC. PIPING
---v---	VENT PIPING
-----	SANITARY PIPING ABOVE FLOOR
-----	SANITARY PIPING BELOW GRADE OR FLOOR
~~~~~	PIPING TO BE REMOVED
~~~~~	HEAT TRACED PIPING
—E—	CONNECTION OF NEW AND EXISTING PIPING
—┐	CAPPED PIPE
○FD	FLOOR DRAIN
●FFD	FUNNEL FLOOR DRAIN
○HD	HUB DRAIN
○RD	ROOF DRAIN
●RD	ROOF DRAIN ABOVE
—□CO	CLEANOUT IN FLOOR
—  CO	CLEANOUT IN LINE OR STACK
○M	WATER METER
○X	ISOLATION VALVE
○X	CIRCUIT BALANCING VALVE
— —	CHECK VALVE
— —	STRAINER
—R—RBPB	REDUCED PRESSURE BACKFLOW PREVENTER
○X	3-WAY VALVE
○X	TEMPERATURE & PRESSURE RELIEF VALVE
CTE	CONNECT TO EXISTING
— —	UNION
○PG	PRESSURE GAUGE
— T	THERMOMETER
●	PUMP
—○	PIPE DOWN
—○	PIPE UP
—●	PIPE UP & DOWN
—T—	PIPE TEE
E	DENOTES EXISTING
—E—	EXISTING PIPING
●FEX	FIRE EXTINGUISHER — SURFACE MOUNTED

## MECHANICAL DRAWING LIST

M1.0	MECHANICAL LEAD SHEET SCHEDULES AND KEY PLAN
M1.1	MECHANICAL SCHEDULES
M1.2	N&E SCHEDULE
M2.0	PROPOSED DRAINAGE LAYOUT
M3.0	PROPOSED PLUMBING LAYOUT-PRS
M3.1	PROPOSED PLUMBING LAYOUT-FIRE STATION
M4.0	PROPOSED HVAC LAYOUT-PRS
M4.1	PROPOSED HVAC LAYOUT-FIRE STATION
M4.2	PROPOSED GAS PIPING
M4.3	PROPOSED GAS PIPE LAYOUT-SITE
M5.0	PROPOSED HEATING PLAN- FIRE STATION
M6.0	MECHANICAL DETAILS-1
M6.1	MECHANICAL DETAILS-2
M7.0	CONTROL SCHEMATICS - PRS
M7.1	CONTROL SCHEMATICS - FIRE
M7.2	CONTROL SCHEMATICS - FIRE

## GENERAL NOTES

REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR COORDINATION OF GRILLES, DIFFUSERS AND OTHER ELEMENTS.

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IN ALL INSTANCES THE NEED FOR ACCESS DOORS IN GWB CEILINGS SHOULD BE AVOIDED IF POSSIBLE. WHERE INSTALLATION OF COMPONENTS WHICH REQUIRE ACCESS CANNOT BE AVOIDED, SUBMIT (DIMENSIONED) DRAWINGS FOR ARCHITECTURAL REFLECTED CEILING PLANS TO CONSULTANTS FOR APPROVAL PRIOR TO INSTALLATION OF COMPONENT.

EXISTING ITEMS TO BE REMOVED REMAIN THE PROPERTY OF THE OWNER AND SHALL BE DELIVERED TO A LOCATION ON SITE DESIGNATED BY THE OWNER. IF THE OWNER DECLARES NO INTEREST IN THE REMOVED ITEMS, ASSUME OWNERSHIP AND REMOVE THE ITEMS FROM THE SITE.







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REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATION FOR PHASING AND STAGING.

## PLUMBING NOTES

1. CONTRACTOR IS TO VERIFY CONNECTION POINTS TO SERVICES WITH OTHER TRADES ON SITE.
2. CONTRACTOR IS TO CLEAR DUCTWORK WHEN INSTALLING NEW PIPING.  
CEILING IS TO BE VENTED ON SITE.
3. PROVIDE A CLEANOUT AT THE BOTTOM OF EVERY SOIL AND WASTE STACK THAT CONNECTS TO A HORIZONTAL DRAINAGE PIPE.
4. PROVIDE A CLEANOUT FROM EACH PLUMBING FIXTURE WHERE REQUIRED BY BUILDING CODE, PART 7 – PLUMBING.
5. CHECK AND VERIFY LOCATION OF ALL PIPES, DUCTS AND EQUIPMENT WITH ALL OTHER TRADES TO PREVENT INTERFERENCE, REMOVAL OR REDUCTION OF ANY SUCH WORK INTERFERING WITH WORK OF OTHER TRADES IS THE RESPONSIBILITY OF THE MECHANICAL TRADE CONCERNED UNLESS OTHERWISE APPROVED IN WRITING.
6. ALL PLUMBING FIXTURES INCLUDING FLOOR DRAINS (HUB, FUNNEL, FLOOR DRAIN, TRICKLE DRAIN) ARE TO BE TRAPPED AND VENTED AS REQUIRED BY BUILDING CODE, PART 7 – PLUMBING.
7. FOR MOUNTING HEIGHT OF ALL PLUMBING FIXTURES REFER TO ARCHITECTURAL DRAWINGS.
8. PROVIDE ACCESS DOOR FOR ALL VALVES LOCATED ABOVE DRY WALL CEILING.
9. PROVIDE ACCESS DOOR FOR ALL CLEANOUTS LOCATED ABOVE DRY WALL CEILING.
10. IN ALL INSTANCES THE NEED FOR ACCESS DOOR IN GWB CEILINGS SHOULD BE AVOIDED IF POSSIBLE, HOWEVER INSTALLATION OF COMPONENTS WHICH REQUIRE ACCESS CANNOT BE AVOIDED, SUBMIT (ONLY) LAYOUT ON ARCHITECTURAL REFLECTED CEILING PLANS TO CONSULTANTS FOR APPROVAL PRIOR TO INSTALLATION OF COMPONENT.
11. ALL DISTURBED SERVICES AFTER PIPE REMOVAL OR REROUTING TO BE CULLED WITH APPROVED METHOD TO MAINTAIN FIRE SEPARATION AND PATCHED TO MATCH EXISTING OR NEW FINISHES.
12. CONTRACTOR IS TO REMOVE ALL OBSOLETE PIPING WHEREVER POSSIBLE.
13. CONTRACTOR IS TO ENSURE THAT ALL EXISTING PIPING SERVING EXISTING AREAS REMAIN IN SERVICE UNTIL THESE AREAS ARE REROUTED TO NEW SERVICES, ONLY THEN OBSOLETE PIPING IS TO BE REMOVED AS SHOWN.
14. BEFORE CUTTING ANY HOLES THROUGH THE EXISTING SLAB REFER TO EXISTING STRUCTURAL DRAWINGS FOR GENERAL REQUIREMENTS.
15. AFTER PIPE REMOVAL ALL EXISTING OPENINGS IN FIRE SEPARATION ARE TO BE FILLED-IN TO MAINTAIN INTEGRITY OF THAT FIRE SEPARATION.
16. RECONNECT VENTS FROM EXISTING EQUIPMENT AND PLUMBING FIXTURES WHICH ARE TO REMAIN TO NEW VENTS AS REQUIRED.
17. PROVIDE SIGN IDENTIFYING LOCATION OF ALL VALVES INSTALLED IN CEILING.
18. ALL WATER, SANITARY, SEWER AND VENT COPPER PIPING WITH SOLDER JOINTS SHALL BE LEAD FREE. DO NOT INSTALL WATER LINES IN OUTSIDE WALL WHERE THEY MAY FREEZE, UNLESS BOTH THE WALL AND THE PIPES ARE PROPERLY INSULATED.
19. INSTALL SHUT-OFF VALVES AT EACH PLUMBING FIXTURE AND EACH EQUIPMENT CONNECTION.
20. REFER TO ARCHITECTURAL FOR OWNER SUPPLIED EQUIPMENT, CONFIRM ALL MECHANICAL REQUIREMENTS AND PROVIDE TO SUIIT.

DIFFUSER    SCHEDULE

SYMBOL	SIZE MM x MM (IN. x IN.)	APPLICATION	NECK SIZE INSP	AIRFLOW RANGE CFM	NC RANGE	MANUFACTURER AND MODEL (BASIS OF DESIGN; E.H. PRICE)
 S-1 CFM	600x600 (24x24)	4 WAY CEILING DIFFUSER	6"	~135	<30	SCD
 S-2 CFM	600x600 (24x24)	4 WAY CEILING DIFFUSER	8"	136~250	<30	SCD
 S-3 CFM	600x600 (24x24)	4 WAY CEILING DIFFUSER	10"	251~350	<30	SCD
 S-4 CFM	600x600 (24x24)	4 WAY CEILING DIFFUSER	12"	351~471	<30	SCD
 S-5 CFM	300x200 (12x8)	DUCT MOUNTED GRILLE	-	~345	<30	520D
 S-6 CFM	#200 (ø8")	4 CONE ROUND DUCT DIFFUSER	8"	0~315	<30	RCD

NOTE(S): 1. ACCEPTABLE ALTERNATES SUBJECT TO SHOP DRAWING REVIEW: TITUS, METALAIRE, KRUEGER.

## LOUVRE SCHEDULE

TAG	SIZE	WH(N)	APPLICATION	AIR FLOW (CFM)	MANUFACTURER, MODEL, NOTES
LOUVRE -1	24"x24"		INTAKE	1250	GREENHECK EAD-635 ADJUSTABLE BLADE, C/W ACTUATOR, BIRDSCREEN
LOUVRE -2	36"x24"		INTAKE	2000	GREENHECK EAD-635 ADJUSTABLE BLADE, C/W ACTUATOR, BIRDSCREEN
LOUVRE ~3	36"x24"		INTAKE	2000	GREENHECK EAD-635 ADJUSTABLE BLADE, C/W ACTUATOR, BIRDSCREEN
LOUVRE -4,5	20"x12"		INTAKE/ EXHAUST	450	GREENHECK EAD-635 ADJUSTABLE BLADE, C/W ACTUATOR, BIRDSCREEN

NOTE(S): 1. ACCEPTABLE ALTERNATES SUBJECT TO SHOP DRAWING REVIEW: EH PRICE, TITUS, METALAIRE, KRUEGER, RUSKIN

## BOILER SCHEDULE

TAG	MANUFACTURER & MODEL	FUEL	CAPACITY INPUT MBH	OUTPUT (MBH)	VENT CONNECTION	FLUID TEMPERATURE (IN)(F)	FLUID TEMPERATURE (OUT)(F)	ELECTRICAL	DIMENSIONS (LXWXHX) (IN.)	WEIGHT(LBS)	REMARKS
B-1,B-2	NTI TFIN08S-110	NATURAL GAS	85	79	3"ø	130	150	120/1/60	20"x18"x35"	107	TSSA APPROVAL IS CONTRACTOR'S RESPONSIBILITY C/W WITH CONTROLLER, SAFETY CONTROLS, WALL MOUNTING FRAME.

NOTE(S): 1. ACCEPTABLE ALTERNATES SUBJECT TO SHOP DRAWING REVIEW: PK, CLEVER BROOKS

## EXPANSION TANK SCHEDULE

TAG	SERVICE	ORIENTATION	TYPE	MANUFACTURER	MODEL	TANK VOLUME (USGAL)	ACCEPTANCE VOLUME (GAL)	DIAMETER (IN)	HEIGHT / LENGTH (IN)	SYSTEM CONNECTIONS (IN)	PRE CHARGE	WORKING PRESSURE	SHIPPING WEIGHT (LBS)	REMARKS
EXP-1	HYDRONIC HEATING	VERTICAL	DIAPHRAGM	ARMSTRONG	AX-40V	25	20.2	16	33	1	12 PSI	150 PSI	93	GALVANIZED, C/W SIGHT GLASS, SUPPORTS
EXP-2, EXP-3	DOMESTIC WATER HEATING	VERTICAL	DIAPHRAGM	WATTS	DETA-42	22	14.5	16	31	1	40 PSI	150 PSI	57	STEEL EXPANSION TANK, C/W SIGHT GLASS, SUPPORTS

NOTE(S): 1. ACCEPTABLE ALTERNATES SUBJECT TO SHOP DRAWING REVIEW: BELL & GOSSETT, TACO, WATTS

### PLUMBING FIXTURE CONNECTION SCHEDULE

TAG	FIXTURE NAME	SANITARY		VENT		DOWS		DHWS		TEMPERED		REMARKS
		MM	INS	MM	INS	MM	INS	MM	INS	MM	INS	
W1	BARRIER FREE FLOOR MOUNTED FLUSH VALVE WATER CLOSET	100	4	38	1.50	30	1.25	—	—	—	—	
L1	BARRIER FREE WALL HUNG LAVATORY	100	4	38	1.50	15	0.50	15	0.5	15	0.5	
L2	COUNTER MOUNTED LAVATORY	100	4	38	1.50	15	0.50	15	0.5	15	0.5	
SH1	BARRIER FREE SHOWER HEADS	100	4	38	1.50	19	0.75	19	0.75	19	0.75	
S1	2 COMPARTMENT SINK	100	4	38	1.50	19	0.75	19	0.75	—	—	
MS1	MOP SINK	100	4	38	1.50	19	0.75	19	0.75	—	—	
DS	DEACON SINK	100	4	38	1.50	15	0.50	15	0.50	—	—	
EW	EYE WASH STATION	100	4	38	1.50	15	0.50	15	0.5	—	—	
WD	WASHER	100	4	38	1.50	15	0.50	15	0.5	—	—	
HR	HOSE REELS/ BIB	—	—			15	0.50	15	0.50			
BFS	BOTTLE FILL STATION	50	2			15	0.50	15	0.50			
FD	FLOOR DRAIN	100	4	38	1.50	19	0.75	—	—	—	—	

## ROOF TOP UNIT SCHEDULE

UNIT NO	LOCA TION	APPLICAT ION	MANUFA-CTURER, MODEL & TYPE	SUPPLY FAN DATA				RETURN FAN				ELECTRICAL			ENERGY RECOVERY					HEAT PUMP							GAS HEAT SECTION					DIMENSIONS (LXHXW)	AIR DISCHARGE	FILTER	WEIGHT (LBS)	REMARKS			
				MODEL& TYPE	CAPACITY (CFM)	ESP (IN OF WC)	MOTOR HP	MODEL TYPE	CAPACITY (CFM)	ESP (IN OF WC)	MOTOR HP	VOLTAGE (V/Hz/PHASE)	MCA (A)	MOP (A)	MIN SUPPLY AIR CFM	WHEEL PRESSURE DROP(IN OF WC)	COOLING (BTU/HR)	HEATING (BTU/HR)	REFRIGERANT TYPE	COOLING					HEATING				PHYSICAL		CAPACITY (BTU/HR)						ENTERING AIR TEMPERATURE (DB)(F)	LEAVING AIR TEMPERATURE (DB)(F)	
																				COIL CAPACITY TOTAL (BTU/HR)	COIL CAPACITY SENSIBLE (BTU/HR)	ENTERING AIR TEMPERATURE (DB/MB)(F)	LEAVING AIR TEMPERATURE (DB/MB/DP)(F)	AMBIENT AIR TEMPERATURE DB(F)	COIL CAPACITY TOTAL (BTU/HR)	ENTERING AIR TEMPERATURE (DB)(F)	LEAVING AIR TEMPERATURE (DB)(F)	AMBIENT AIR TEMPERATURE DB(F)	AIR FLOW (CFM)	SIZE (MEH)									
RTU-1	ROOF	FIRE STATION	DAIKIN DPH151H1 HEAT PUMP	SWSI AF SERIES II, DIRECT DRIVE	6,000	1.5	5.54	SWSI AF SERIES II, DIRECT DRIVE	6,000	1.0	2.66	208/3/60	124.1	175.0	12000	0.52	34471	93992	R32	176853	141355	75.4/63.4	53.0/53.0	90.0	123241	67.6	86.6	17.0	3000	200	160000		37.0	86.2	121.6"x85.9"x73.4"	BOTTOM	MERV 8	2886	C/W 24" ROOF CURB, ECONOMIZER WITH DRY BULB SENSOR, SINGLE DISCONNECT, POWERED 115V GFI OUTLET, VARIABLE AIR VOLUME UNIT

NOTES:  
BASIS OF DESIGN IS DAIKIN. EQUIVALENT PRODUCT MATCHING THE SPECIFICATIONS BY CARRIER, TRANE TO BE TREATED AS EQUAL

### SPLIT AIR CONDITIONING SCHEDULE

AREA	INDOOR UNIT						OUTDOOR UNIT						SEER 2	REFRIGERANT	ELECTRICAL			NOTES
	REFER	MAKE/ MODEL	TOTAL (BTU/ HR)	SOUND LEVEL(DB)	DIMENSIONS	WEIGHT (LBS)	REFER	MAKE/ MODEL	TOTAL (BTU/ HR)	SOUND LEVEL(DB)	DIMENSIONS	WEIGHT (LBS)			POWER SUPPLY (V/HZ/PH)	MCA (A)	MOCP (A)	
IT ROOM EMS	IU-1	DAIKIN FAQ18TAVJU	18,000	43	11-3/8" X 41-3/8"X 9-1/4"	21.4	CU-2	DAIKIN DAIKIN RZR18TAVJUA	18,000	49	39"X37"X12-5/8"	60	21	R 410A	208/60/1	9.15	15	WALL MOUNTED INDOOR UNIT, C/W CONCRETE PAD FOR OUTDOOR UNIT, INTEGRAL CONDENSATE PUMP, REVERSE ACTING THERMOSTAT

NOTES:  
BASIS OF DESIGN IS DAIKIN. EQUIVALENT PRODUCT MATCHING THE SPECIFICATIONS BY MITS AIR, CARRIER, TRANE TO BE TREATED AS EQUAL

## RETURN/ EXHAUST GRILLE SCHEDULE

SYMBOL		SIZE MM x MM (IN. x IN.)	APPLICATION	NECK SIZE MMø (NPS)	AIRFLOW RANGE CFM	NC RANGE	MANUFACTURER AND MODEL (BASIS OF DESIGN- E.H. PRICE)
R-1 CFM	E-1 CFM	300x300 (12x12)	CEILING GRILLE	—	<450	<30	800
R-2 CFM	E-2 CFM	600x300 (24x12)	CEILING GRILLE	—	<800	<30	800
R-3 CFM	E-3 CFM	600x600 (24x24)	CEILING GRILLE	—	<2000	<30	800
R-4 CFM		500x500 (20x20)	CEILING GRILLE	—	<1500	<30	800
R-5 CFM		850x400 (34x16)	WALL GRILLE	—	<1083	<30	530(45)DEFLECTION, 3/4"SPACING
R-6 CFM		600x600 (24x24)	WALL GRILLE	—	<2000	<30	530(45)DEFLECTION, 3/4"SPACING

NOTE(S): 1. ACCEPTABLE ALTERNATES SUBJECT TO SHOP DRAWING REVIEW: TITUS, METALAIRE, KRUEGER

## DE-STRATIFICATION FAN SCHEDULE

SYMBOL	AREA SERVED	LOCATION	ELECTRICAL		MOTOR	OPERATING WEIGHT LBS	MODEL
			MOTOR HP	VOLTAGE			
DF-1 DF-2	APPARATUS BAY	CEILING SUSPENDED	1.0	120/1/60	ONBOARD VFD CONTROLLER	124	BIG ASS BASIC 6, FAN DIAMETER 2400MM, C/W WALL-MOUNTED KEYPAD, SAFETY CABLE. INSTALLATION HEIGHT TO BE CONFIRMED ON SITE. INSTALLED BY ELECTRICAL, PROVIDED BY MECHANICAL

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## ISSUE OR REVISION

NO.	ISSUED FOR	(dd.mm.yy)
1	REVIEW	23.10.2024
2	REVIEW	01.10.2024
3	60% CD	21.02.2025
4	90% CD & BUILDING PERMIT	13.06.2025
5	BUILDING PERMIT	01.08.2025
6	ADDENDUM ME-1	05.09.2025
7	ADDENDUM ME-2	11.09.2025

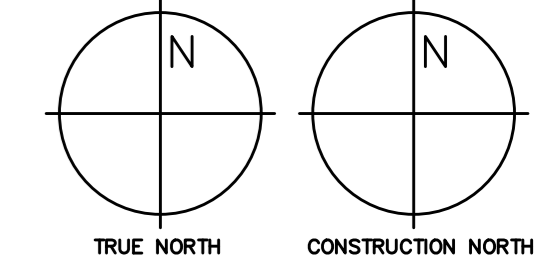
PROJECT : TOWN OF WS FIRE STATION & YORK  
REGION PRS  
4902 AURORA ROAD, WHITCHURCH-STOUFFVILLE, ONTARIO



DATE TITLE

MECHANICAL LEAD  
SHEET, SCHEDULES  
AND KEY PLAN

## ORIENTATI



DATE 2024-06-06

PROJECT No. 0001 1 1 0

2024-440

DRAWING No. M1 0-A-2 REVISION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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WALLFIN SCHEDULE											
TAG	AREA SERVING	MANUFACTURER MODEL	DESIGN CAPACITY MBH	ACTUAL FLOW GPM	ELEMENT	ELEMENT LENGTH (MM)	SUPPLY WATER TEMPERATURE (F)	LEAVING WATER TEMPERATURE (F)	ENCLOSURE LENGTH (MM)	ENCLOSURE W X H (MM)	REMARKS
WF 13	AREA OF REFUGE	SIGMA SWE-24S	3.0	0.3	24C075	930	150	130	1530	133 X 610	2 ROW , SLOPED TOP STANDARD WIDTH ENCLOSURE
WF 12	B/F WASHROOM	SIGMA SWE-24S	2.3	0.3	24C075	680	150	130	1220	133 X 610	2 ROW , SLOPED TOP STANDARD WIDTH ENCLOSURE
WF-1	MEETING ROOM	SIGMA SWE-24S	3.7	0.4	24C075	1104	150	130	1524	133 X 610	2 ROW , SLOPED TOP STANDARD WIDTH ENCLOSURE
WF 2	FIRE PREVENTION	SIGMA SWE-24S	4.6	0.5	24C075	3870	150	130	4572	133 X 610	2 ROW , SLOPED TOP STANDARD WIDTH ENCLOSURE
WF 3	STORAGE 4-F	SIGMA SWE-24S	1.0	0.1	24C075	1370	150	130	1990	133 X 610	2 ROW , SLOPED TOP STANDARD WIDTH ENCLOSURE
WF 4	MEETING ROOM	SIGMA SWE-24S	4.5	0.5	24C075	1340	150	130	1990	133 X 610	2 ROW , SLOPED TOP STANDARD WIDTH ENCLOSURE
WF 6	CORRIDOR D-F	SIGMA SWE-24S	1.6	0.2	24C075	470	150	130	1078	133 X 610	2 ROW , SLOPED TOP STANDARD WIDTH ENCLOSURE
WF 7	LOCKER ROOM 16-F	SIGMA SWE-24S	3.1	0.3	24C075	930	150	130	1524	133 X 610	2 ROW , SLOPED TOP STANDARD WIDTH ENCLOSURE
WF 8	WASHROOM 19-F	SIGMA SWE-24S	1.2	0.1	24C075	340	150	130	920	133 X 610	2 ROW , SLOPED TOP STANDARD WIDTH ENCLOSURE
WF 9	KITCHEN AND DAY ROOM 14Q	SIGMA SWE-24S	7.0	0.7	24C075	1930	150	130	2538	133 X 610	2 ROW , SLOPED TOP STANDARD WIDTH ENCLOSURE
WF 10	KITCHEN AND DAY ROOM 14Q	SIGMA SWE-24S	7.0	0.7	24C075	1930	150	130	2538	133 X 610	2 ROW , SLOPED TOP STANDARD WIDTH ENCLOSURE
WF 11	DINING ROOM 21-F	SIGMA SWE-24S	5.2	0.5	24C075	1560	150	130	2168	133 X 610	2 ROW , SLOPED TOP STANDARD WIDTH ENCLOSURE
NOTE: ACCEPTABLE ALTERNATES SUBJECT TO SHOP DRAWING REVIEW: ENGINEERED AIR, TRANE, RUNTAL											

HYDRONIC UNIT HEATER SCHEDULE															
TAG	AREA SERVING	MANUFACTURER MODEL	DESIGN CAPACITY MBH	DESIGN FLOW GPM	SUPPLY WATER TEMPERATURE (F)	LEAVING WATER TEMPERATURE (F)	ENTERING AIR TEMPERATURE (F)	FAN CFM	ELECTRICAL			PRESSURE DROP (FT)	DIMENSIONS LXWXH (MM)	WEIGHT (LBS)	REMARKS/ ORIENTATION
									VOLTAGE (V/P/HZ)	MOTOR HP	AMPS(A)				
UH 2	OUTDOOR STORAGE	SIGMA 015H	7.00	0.7	150	130	65	340	120/1/60	1/20	0.68A	0.2	483X370X350	52	HORIZONTAL UNIT HEATERS, C/W MOUNTING SUPPORTS
UH 3	HOSE TOWER	SIGMA 015H	7.00	0.7	150	130	65	340	120/1/60	1/20	0.68A	0.2	483X370X350	52	HORIZONTAL UNIT HEATERS, C/W MOUNTING SUPPORTS
NOTE: ACCEPTABLE ALTERNATES SUBJECT TO SHOP DRAWING REVIEW: ENGINEERED AIR, TRANE, RUNTAL															

FORCE FLOW HEATER SCHEDULE											
TAG NUMBER	AREA SERVED	MODEL NUMBER	MOUNTING	MANUFACTURER	ELECTRICAL		HEATING MEDIUM	HEATING CAPACITY BTU/ HR	DIMENSIONS (LXWXH) (MM)	WEIGHT (LBS)	NOTES
					VOLTAGE V/PHASE/HZ	WATTS					
FFH-1	VESTIBULE	OAC01502-T	WALL HUNG RECESSED	OUELLET	120/1/60	1500	ELECTRIC	5123	410X55X561	24	STANDARD COLOR, BUILT IN THERMOSTAT, MIN. CLEARANCE FROM FLOOR AND WALL 10"
FFH-2	VESTIBULE 1-F	OAC01502-T	WALL HUNG RECESSED	OUELLET	120/1/60	1500	ELECTRIC	5123	410X55X561	24	STANDARD COLOR, BUILT IN THERMOSTAT, MIN. CLEARANCE FROM FLOOR AND WALL 10"
NOTE: ACCEPTABLE ALTERNATES SUBJECT TO SHOP DRAWING REVIEW: ENGINEERED AIR, TRANE, RUNTAL											

VAV SCHDULE						REHEAT COIL SCHEDULE						MANUFACTURER
TAG	AREA SERVING	MIN CFM	MAX CFM	INLET SIZE(IN.)	VAV MODEL	HEATING DESIGN AIR FLOW (CFM)	REHEAT COIL CAPACITY (MBH)	REHEAT COIL FLOW (GPM)	AIR PRESSURE DROP (IN OF WC)	SUPPLY WATER TEMP(F)	RETURN WATER TEMP(F)	
VAV-1	MEETING ROOM	180	600	7	SDV5	300	6.3	0.63	0.15	140	120	E.H. PRICE SDV C/W 3"-0" ATTENUATOR AND ALUMINUM FOIL LINER C/W 1 ROW STANDARD CAPACITY REHEAT COIL
VAV-2	FIRE PREVENTION, STORAGE	135	450	7	SDV5	225	3.6	0.37	0.06	140	120	E.H. PRICE SDV C/W 3"-0" ATTENUATOR AND ALUMINUM FOIL LINER C/W 1 ROW STANDARD CAPACITY REHEAT COIL
VAV-3	TRAINING OFFICE	60	200	4	SDV5	100	2.6	0.26	0.03	140	120	E.H. PRICE SDV C/W 3"-0" ATTENUATOR AND ALUMINUM FOIL LINER C/W 1 ROW STANDARD CAPACITY REHEAT COIL
VAV-4	CORRIDOR	45	150	4	SDV5	75	3.3	0.33	0.05	140	120	E.H. PRICE SDV C/W 3"-0" ATTENUATOR AND ALUMINUM FOIL LINER C/W 1 ROW STANDARD CAPACITY REHEAT COIL
VAV-5	DORM ROOM 11-F,14-F,CORRIDOR D-F	78	260	5	SDV5	130	4.0	0.41	0.08	140	120	E.H. PRICE SDV C/W 3"-0" ATTENUATOR AND ALUMINUM FOIL LINER C/W 1 ROW STANDARD CAPACITY REHEAT COIL
VAV-6	DORM ROOM 10-F,9-F,12-F,13-F	96	320	4	SDV5	160	3.8	0.39	0.07	140	120	E.H. PRICE SDV C/W 3"-0" ATTENUATOR AND ALUMINUM FOIL LINER C/W 1 ROW STANDARD CAPACITY REHEAT COIL
VAV-7	RADIO ROOM	54	180	4	SDV5	90	2.6	0.26	0.03	140	120	E.H. PRICE SDV C/W 3"-0" ATTENUATOR AND ALUMINUM FOIL LINER C/W 1 ROW STANDARD CAPACITY REHEAT COIL
VAV-8	CAPTAIN'S OFFICE	63	210	4	SDV5	105	2.9	0.30	0.04	140	120	E.H. PRICE SDV C/W 3"-0" ATTENUATOR AND ALUMINUM FOIL LINER C/W 1 ROW STANDARD CAPACITY REHEAT COIL
VAV-9	LOCKER ROOM 16-F	180	600	8	SDV5	300	6.9	0.71	0.19	140	120	E.H. PRICE SDV C/W 3"-0" ATTENUATOR AND ALUMINUM FOIL LINER C/W 1 ROW STANDARD CAPACITY REHEAT COIL
VAV-10	CORRIDOR B-F, WASHROOMS 17-F,18-F,19-F	105	350	5	SDV5	175	4.4	0.45	0.10	140	120	E.H. PRICE SDV C/W 3"-0" ATTENUATOR AND ALUMINUM FOIL LINER C/W 1 ROW STANDARD CAPACITY REHEAT COIL
VAV-11	EXERCISE ROOM	234	780	8	SDV5	390	7.3	0.74	0.23	140	120	E.H. PRICE SDV C/W 3"-0" ATTENUATOR AND ALUMINUM FOIL LINER C/W 1 ROW STANDARD CAPACITY REHEAT COIL
VAV-12	DINING ROOM, KITCHEN AND DAY ROOM	462	1540	12	SDV5	770	16.2	1.64	0.29	140	120	E.H. PRICE SDV C/W 3"-0" ATTENUATOR AND ALUMINUM FOIL LINER C/W 1 ROW STANDARD CAPACITY REHEAT COIL
VAV-13	LAUNDRY ROOM, BUNKER GEAR ROOM, TOOL ROOM	129	430	7	SDV5	215	2.3	0.24	0.0	140	120	E.H. PRICE SDV C/W 3"-0" ATTENUATOR AND ALUMINUM FOIL LINER C/W 1 ROW STANDARD CAPACITY REHEAT COIL
NOTE(S): 1. ACCEPTABLE ALTERNATES SUBJECT TO SHOP DRAWING REVIEW: TITUS, METALAIRE, KRUEGER.												

IR HEATER SCHEDULE										REMARKS/ ORIENTATION
TAG	AREA SERVING	MANUFACTURER MODEL	MODEL	INPUT BTU/HR	HEATER LENGTH (FT)	GAS LINE INLET PRESSURE (IN W.C.)	FLUE AIR VENT (IN)	ELECTRICAL		
IR 1	VEHICLE BAY	SCHWANK	STS-JZ-130	60,000	30.0	5-14	4	120/1/60		C/W TRUE TEMPERATURE IR THERMOSTAT. HEATERS ARE TO BE MOUNTED AT A 45° ANGLE, EACH RADIANT TUBE HEATER TO BE CONTROLLED BY INFRARED THERMOSTAT
IR 2	VEHICLE BAY	SCHWANK	STS-JZ-130	60,000	30.0	5-14	4	120/1/60		C/W TRUE TEMPERATURE IR THERMOSTAT. HEATERS ARE TO BE MOUNTED AT A 45° ANGLE, EACH RADIANT TUBE HEATER TO BE CONTROLLED BY INFRARED THERMOSTAT
IR 3	APPARATUS BAY	SCHWANK	STS-JZ-200	175,000	60.0	5-14	4	120/1/60		C/W TRUE TEMPERATURE IR THERMOSTAT. HEATERS ARE TO BE MOUNTED AT A 45° ANGLE, EACH RADIANT TUBE HEATER TO BE CONTROLLED BY INFRARED THERMOSTAT
IR 4	APPARATUS BAY	SCHWANK	STS-JZ-150	150,000	60.0	5-14	4	120/1/60		C/W TRUE TEMPERATURE IR THERMOSTAT. HEATERS ARE TO BE MOUNTED AT A 45° ANGLE, EACH RADIANT TUBE HEATER TO BE CONTROLLED BY INFRARED THERMOSTAT
IR 5	APPARATUS BAY	SCHWANK	STS-JZ-60	60,000	30.0	5-14	4	120/1/60		C/W TRUE TEMPERATURE IR THERMOSTAT. HEATERS ARE TO BE MOUNTED AT A 45° ANGLE, EACH RADIANT TUBE HEATER TO BE CONTROLLED BY INFRARED THERMOSTAT
NOTE(S): ALTERNATES SUBJECT TO SHOP DRAWING REVIEW: BRANT RADIANT HEATERS, SUPERIOR RADIANT HEATERS										

FURNACE UNIT SCHEDULE											
REFER	AIRFLOW (CFM)	E.S.P. (IN.W.C.)	COOLING			HEATING TOTAL MBH	ELECTRICAL MOTOR SIZE HP	VOLTAGE	M.C.A.	M.O.C.P.	MANUFACTURER, MODEL AND ACCESSORIES
			TOTAL MBH	SENSIBLE KW (MBH)	EER						
F-1	2000	0.5	60	-	-	100	1.0	120V/1/60Hz	12	20	CARRIER 59M7A100V21-22 AND CASED COIL CNVP6024ALA WITH VENT KIT KGAVT0801CVT AND THERMOSTATIC EXPANSION VALVE KSATX0501PUR. THERMOSTAT: SYSTXCOTIN01-A, C/W 4" THICK MERV 8 FILTER
CU-1			-	-	-	-	-	208V/1/60Hz	38.7	60	CARRIER 24ANB160A003
NOTES: 1. ACCEPTABLE ALTERNATES SUBJECT TO SHOP DRAWING REVIEW: TRANE, YORK. 2. REFER TO THE CONTROL SCHEMATICS AND SEQUENCES OF OPERATION.											

ENERGY RECOVERY VENTILATOR										
SYMBOL/AREA	SUPPLY FAN		EXHAUST FAN		ELECTRICAL			WEIGHT (LBS)	DIMENSIONS (LXWXH)	REMARKS
	AIR VOLUME (CFM)	EXT. S.P. (IN.WG.)	AIR VOLUME (CFM)	EXT. S.P. (IN.WG.)	VOLTAGE	MCA	MOP			
ERV-1	450	0.8	450	0.8	208/3/60	38	40	527	106"x37.5"x20"	GREENHECK ERV-10-HE-RHE, C/W ECM MOTOR, 2 SPEED CONTROLLED BY BAS
NOTE: ACCEPTABLE ALTERNATES SUBJECT TO SHOP DRAWING REVIEW: LIFEBREATH, RUSKIN										

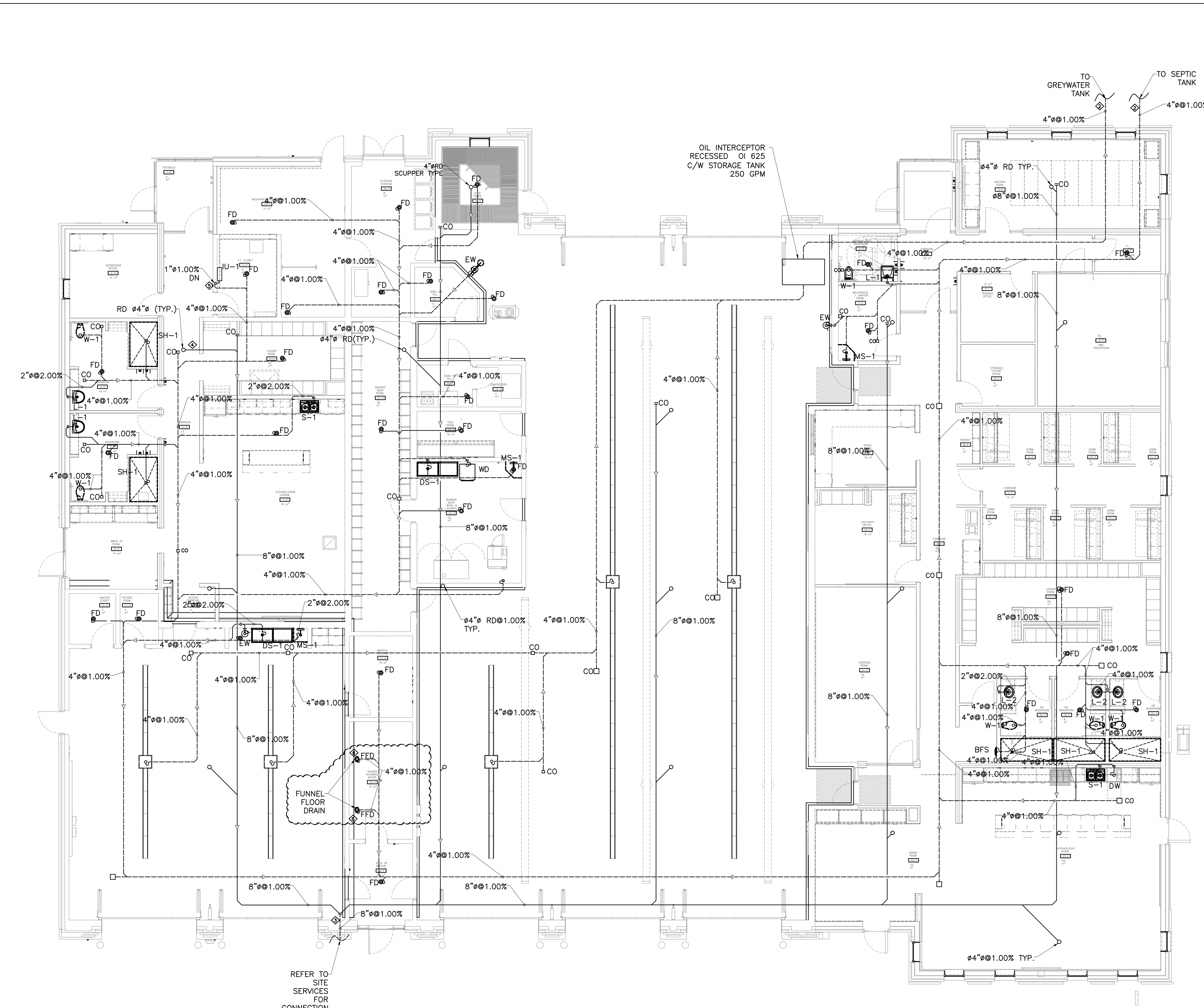
ELECTRIC UNIT HEATER SCHEDULE								
TAG	AREA SERVING	MANUFACTURER MODEL	DESIGN CAPACITY KW	FAN CFM	ELECTRICAL	DIMENSIONS LxWxH (IN)	WEIGHT (LBS)	REMARKS/ ORIENTATION
					VOLTAGE (V/P/HZ)			
UH 1	MECHANICA/ELECTRICAL ROOM	OUELLET OAE3000AM-EO-TB6	3.00	250	208/1/60	16"x12"x10"	20	HORIZONTAL UNIT HEATERS, C/W MOUNTING SUPPORTS
NOTE: ACCEPTABLE ALTERNATES SUBJECT TO SHOP DRAWING REVIEW: TRANE, CARRIER								

RANGE HOOD SCHEDULE						
TAG	MANUFACTURER & MODEL	QUANTITY	AIR FLOW CFM	ELECTRICAL	SOUND (SONNES)	NOTES
RH-1	KITCHEN -FIRE SIDE	1	600	120/1/60	13	34.53"x21.97"x7" 8"ø PROLINE PLSW 185, STAINLESS STEEL BAFFLES SS 430, DIGITAL TOUCH CONTROL, LED
NOTES: BASIS OF DESIGN IS PROLINE, EQUIVALENT APPROVAL ON SHOP DRAWING REVIEW						

EXHAUST FAN SCHEDULE												
TAG NO	AREA SERVED	MANUFACTURER & MODEL	AIR FLOW (CFM)	ESP (IN. OF WC)	ELECTRICAL		DRIVE	FAN SPEED (RPM)	NOISE (SONN ES)	WEIGHT (LBS)	CONTROL	NOTES
					MOTOR SIZE (HP/WATTS)	VOLTAGE (V/HZ/P)						
EF-1	SCBA COMPRESSOR ROOM	GREENHECK CUE-160-VG	2450	0.5	¾ HP	115/60/1	DIRECT	1200	12.4	78	RAT	ROOF MOUNTED CENTRIFUGAL EXHAUST FAN, C/W VARI GREEN EC MOTOTR, ROOF CURB, ALUMINIUM CURB
EF-2	BUNKER GEAR WASH & LAUNDRY, TOOL ROOM	GREENHECK CSP-A510-VG	270	0.5	1/15 HP	115/60/1	DIRECT	1500	1.1	36	BAS	INLINE CABINET FAN, CORROSION RESISTANT GALVANIZED STEEL HOUSING, C/W VARI GREEN ECM MOTOTR, VIBRATION ISOLATORS, TIE RODS TO MOUNT IN CEILING SPACE.
EF-3	VEHICLE BAY_PRS	GREENHECK CUE-100-VG	1250	0.3	1/4 HP	115/60/1	DIRECT	1623	11.5	53	CO/NOX SENSOR	SIDEWALL MOUNT CENTRIFUGAL EXHAUST FAN,C/W VARI GREEN EC MOTOTR,WALL OPENING OF 15"x15",C/W GALVANIZED WALL BRACKET, BACKDRAFT DAMPER, VIBRATION ISOLATORS
EF-4	HOSE TOWER	GREENHECK CUE-070-VG	100	0.3	1/15 HP	115/60/1	DIRECT	1341	2.3	27	RAT	SIDEWALL MOUNT CENTRIFUGAL EXHAUST FAN,C/W VARI GREEN EC MOTOTR,WALL OPENING OF 13"x13",C/W GALVANIZED WALL BRACKET, BACKDRAFT DAMPER, VIBRATION ISOLATORS
EF-5	BUNKER GEAR ROOM	GREENHECK CUE-090-VG	580	0.3	1/10 HP	115/60/1	DIRECT	1451	6.6	34	BAS/OCCUPANCY	ROOF MOUNTED CENTRIFUGAL EXHAUST FAN, C/W VARI GREEN EC MOTOTR, ROOF CURB, ALUMINIUM CURB CAP SIZE 19 SQUARE INCH.
EF-6	STORAGE 4-F_FIRE	GREENHECK SP-B110	70	0.3	80 WATTS	115/60/1	DIRECT	712	0.7	11	BAS	CEILING MOUNTED EXHAUST FAN, C/W WHITE PLASTIC GRILLE, INTEGRAL BACKDRAFT DAMPER AND ISOLATOR KIT.
EF-7	BARRIER FREE WASHROOM, MECHANICAL/JANITOR ROOM	GREENHECK CSP-A390-VG	180	0.3	24 WATTS	115/60/1	DIRECT	992	0.8	24	BAS/OCCUPANCY	INLINE CABINET FAN, CORROSION RESISTANT GALVANIZED STEEL HOUSING, C/W VARI GREEN ECM MOTOTR, VIBRATION ISOLATORS, BACKDRAFT DAMPER, TIE RODS TO MOUNT IN CEILING SPACE.
EF-8	WASHROOMS 17-F,18-F,19-F	GREENHECK CSP-A510-VG	390	0.3	76 WATTS	115/60/1	DIRECT	1081	1.0	36	BAS/OCCUPANCY	INLINE CABINET FAN, CORROSION RESISTANT GALVANIZED STEEL HOUSING, C/W VARI GREEN ECM MOTOTR, VIBRATION ISOLATORS, TIE RODS TO MOUNT IN CEILING SPACE, BACKDRAFT DAMPER
EF-9	APPARATUS BAY	GREENHECK CUE-140-VG	2000	0.3	3/4 HP	115/60/1	DIRECT	1231	11.9	71	CO/NOX SENSOR	SIDEWALL MOUNT CENTRIFUGAL EXHAUST FAN,C/W VARI GREEN EC MOTOTR,WALL OPENING OF 15"x15",C/W GALVANIZED WALL BRACKET, BACKDRAFT DAMPER, VIBRATION ISOLATORS
EF-10	APPARATUS BAY	GREENHECK CUE-140-VG	2000	0.3	3/4 HP	115/60/1	DIRECT	1231	11.9	71	CO/NOX SENSOR	SIDEWALL MOUNT CENTRIFUGAL EXHAUST FAN,C/W VARI GREEN EC MOTOTR,WALL OPENING OF 18"x18",C/W GALVANIZED WALL BRACKET, BACKDRAFT DAMPER, VIBRATION ISOLATORS
EF-11	LOCKER ROOM_FIRE	SP-B150	130	0.3	128 WATTS	115/60/1	DIRECT	900	2.0	11	BAS/OCCUPANCY	CEILING MOUNTED EXHAUST FAN, C/W WHITE PLASTIC GRILLE, INTEGRAL BACKDRAFT DAMPER AND ISOLATOR KIT.
EF-12	HMSC	SP-B110	90	0.3	80 WATTS	115/60/1	DIRECT	950	2.0	10	TOD SCHEDULE BAS	CEILING MOUNTED EXHAUST FAN, C/W WHITE PLASTIC GRILLE, INTEGRAL BACKDRAFT DAMPER AND ISOLATOR KIT.
EF-13	MEDICAL STORAGE PRS	GREENHECK SP-B110	50	0.3	80 WATTS	115/60/1	DIRECT	950	2.0	10	RAT	CEILING MOUNTED EXHAUST FAN, C/W WHITE PLASTIC GRILLE, INTEGRAL BACKDRAFT DAMPER AND ISOLATOR KIT.
NOTES: 1. ALL FANS SHALL INCLUDE VIBRATION ISLOATION AND STARTERS. 2. REFER TO THE CONTROL SCHEMATICS AND SEQUENCES OF OPERATION. 3. ACCEPTABLE ALTERNATES SUBJECT TO SHOP DRAWING REVIEW: COOK, CARNES, REVERSOMATIC, BROAN, PENNBARRY												

MECHANICAL EQUIPMENT WIRING SCHEDULE-1																																				
DESCRIPTION			POWER						STARTER					ACCESSORIES		ISOLATING DEVICE		CONTROL										INTERLOCKED WITH		INTERLOCKED BY		REMARKS				
NUMBER	ITEM NUMBER	ITEM	SUPPLIED BY	VOLTAGE	PHASE	H.P./KW/AMPS	MOCP (A)	FEEDER SIZE	PANEL & CCT.	MANUAL	MAGNETIC	COMBINATION	CONTACTOR	CONTROL VOLTAGE	VFD	HAND/OFF/AUTO	ON/OFF SELECTOR	PILOT LIGHT	WATERPROOF DISCONNECT	DISCONNECT	WIRED BY	MOTOR RATED SWITCH	OCCUPANCY SENSOR	VFD	TIMER	TIME CLOCK	R.A. THERMOSTAT	THERMOSTAT	SCF CONTROLLER	VARIABLE SPEED	WIRED BY	INTERLOCKED WITH	INTERLOCKED BY	REMARKS		
1	DHWT-1	DOMESTIC HOT WATER TANK	23	208	3	24 KW	70A 3P	4#3+GRD-.41mmC													26	26											25		26 - SUPPLIED/INSTALLED BY DIV. 26. 23 - SUPPLIED/INSTALLED BY DIV. 23. 25 - SUPPLIED/INSTALLED BY DIV. 25. O - SUPPLIED BY OWNER/OTHERS GC - SUPPLIED/INSTALLED BY GENERAL CONTRACTOR * - REFER TO REMARKS	
2	DHWT-2	DOMESTIC HOT WATER TANK	23	208	3	75 KW	210A 3P	4#250MCM+GRD-.78mmC													26	26											25		INTEGRAL THERMOSTAT	
3	RTU-1	ROOFTOP UNIT RTU-1	23	208	3	124.1 A	175 A 3P	4#30+GRD-.63MMMC													26	26											25		INTEGRAL THERMOSTAT	
4	B-1	BOILER	23	120	1	KW	20A 1P	2#12+GRD-.18MMMC													26	26											25		BAS CONTROL WIRING BY DIV 25	
5	B-2	BOILER	23	120	1	KW	20A 1P	2#12+GRD-.18MMMC													26	26											25		BAS CONTROL WIRING BY DIV 25	
6	P-1	HEATING PUMPS	23	208	3	0.75 HP	15A 3P	4#12+GRD-.21MMMC													26	26		Yes							Yes	25		VFD, BAS WIRING BY DIV 25.		
7	P-2	HEATING PUMPS	23	208	3	0.75 HP	15A 3P	4#12+GRD-.21MMMC													26	26		Yes							Yes	25		VFD, BAS WIRING BY DIV 25.		
8	P-3	RECIRCULATION PUMPS	23	120	1	97 W	15A 1P	2#12+GRD-.18MMMC													26	26									Yes	25		PUMP CONTROLLED BY OEM CONTROLLER		
9	P-4	RECIRCULATION PUMPS	23	120	1	97 W	15A 1P	2#12+GRD-.18MMMC													26	26											25		PUMP CONTROLLED BY OEM CONTROLLER	
10	CU-1	CONDENSING UNIT	23	208	1	38 MCA	60, 2P	2#6+GRD-.27mmC													26	26											23		BAS CONTROL WIRING BY DIV 25	
11	CU-2	CONDENSING UNIT	23	208	1	9 MCA	15A 2P	2#12+GRD-.16mmC													26	26												23		BAS CONTROL WIRING BY DIV 25
12	EF-1	EXH. FAN	23	115	1	3/4 HP	15A 1P	2#12+GRD-.16mmC													26	26												26		SWITCH
13	EF-2	EXH. FAN	23	115	1	1/15 HP	15A 1P	2#12+GRD-.16mmC													26	26												26		BAS CONTROL WIRING BY DIV 25
14	EF-3	EXH. FAN	23	115	1	1/4 HP	15A 1P	2#12+GRD-.16mmC													26	26												26		BAS CONTROL WIRING BY DIV 25
15	EF-4	EXH. FAN	23	115	1	1/15 HP	15A 1P	2#12+GRD-.16mmC													26	26												26		BAS CONTROL WIRING BY DIV 25
16	EF-5	EXH. FAN	23	115	1	1/10 HP	15A 1P	2#12+GRD-.16mmC													26	26												26		SWITCH
17	EF-6	EXH. FAN	23	115	1	80 Watts	15A 1P	2#12+GRD-.16mmC													26	26												26		CONTROLLED BY CO/NOX SENSOR.
18	EF-7	EXH. FAN	23	115	1	24 Watts	15A 1P	2#12+GRD-.16mmC													26	26												26		CONTROLLED BY CO/NOX SENSOR.
19	EF-8	EXH. FAN	23	115	1	76 Watts	15A 1P	2#12+GRD-.16mmC													26	26												26		CONTROLLED BY RAT
20	EF-9	EXH. FAN	23	115	1	3/4 HP	15A 1P	2#12+GRD-.16mmC													26	26												26		CONTROLLED BY RAT
21	EF-10	EXH. FAN	23	115	1	3/4 HP	15A 1P	2#12+GRD-.16mmC													26	26												26		SWITCH
22	EF-11	EXH. FAN	23	115	1	0.125 HP	15A 1P	2#12+GRD-.16mmC													26	26												26		CONTROLLED BY RAT
23	EF-12	EXH. FAN	23	115	1	128 Watts	15A 1P	2#12+GRD-.16mmC													26	26												26		CONTROLLED BY RAT
24	EF-13	EXH. FAN	23	115	1	80 Watts	15A 1P	2#12+GRD-.16mmC													26	26												26		SWITCH
25	RH-1	RANGE HOOD	23	115	1		20A 1P	2#12+GRD-.16mmC													26	26												26		SWITCH
NOTES: 1. ISOLATION AND CONTROL DEVICES MAY NOT BE SHOWN ON PLANS FOR CLARITY PURPOSES AND SHALL BE PROVIDED AS INDICATED. COORDINATE LOCATIONS ON SITE WITH OWNER AND CONSTRUCTION MANAGER. 2. COORDINATE EXACT ELECTRICAL REQUIREMENTS FOR ALL EQUIPMENT WITH SHOP DRAWINGS AND ACTUAL NAMEPLATE DATA, REVISE ELECTRICAL REQUIREMENTS TO SUIT ACCORDINGLY. 3. ALL CONTROLS VOLTAGE SHALL BE PROVIDED FROM A PROPER CONTROLS TRANSFORMER MOUNTED INTEGRALLY WITH THE CORRESPONDING DEVICE/STARTER. 4. ON/OFF CONTROL SWITCH SHALL BE MOTOR RATED FOR LOAD. 5. ALL STATUS CONTACTS FOR ALARM AND DEVICE STATE, ETC. SHALL BE INTEGRAL WITH CONTROL DEVICE ENCLOSURE UNLESS NOTED OTHERWISE. 6. ALL MECHANICAL EQUIPMENT FEEDERS SHALL BE RATED TO MATCH THE OVERCURRENT PROTECTION DEVICE SPECIFIED AND/OR THE FLA RATING OF THE MOTOR. 7. PROVIDE SUITABLE NORMALLY CLOSED (ENERGIZED) RELAY IN A RATED ENCLOSURE TO OPEN ON FIRE ALARM SIGNAL. MOUNT IN EQUIPMENT HOUSING AS DIRECTED BY DIV. 23 CONTRACTOR. 8. PROVIDE PILOT LIGHTS AT OPERATOR CONTROL IN FACE OF ENCLOSURE AS FOLLOWS: GREEN - RUNNING RED - FAILED AMBER - MANUAL 9. ABSENCE OF ANY ILLUMINATED LIGHTS INDICATES MOTOR IS OFF AND/OR AVAILABLE FOR USE. 10. ALL FANS AND MOTORS SHALL BE PROVIDED C/W LOCAL ISOLATION SWITCH (NOT SHOWN ON DRAWINGS). 11. TIME CLOCK CONTROL: ELECTRONIC CONTROL OFF AT USER SELECTABLE TIME ON ANY OR ALL DAYS OF THE WEEK. SET DEFAULT FOR OWNER AS PER THEIR DIRECTION. CONTROL SHALL BE CAPABLE OF 48 ON AND OFF SET POINTS WITH MINIMUM SETTINGS OF 1 MINUTE. CONTROL SHALL AUTOMATICALLY ADJUST FOR DAYLIGHT SAVINGS AND LEAP YEARS. BATTERY BACK-UP SHALL RETAIN SCHEDULE DURING POWER OUTAGE. YORK MODEL HDG100 OR APPROVED EQUAL. 12. REFER TO PANEL SCHEDULES AND FLOOR PLAN FOR CIRCUITING. 13. DIVISION 23-MECHANICAL, DIVISION 25 -BUILDING AUTOMATION SYSTEM, DIVISION 26- ELECTRICAL.																																				

MECHANICAL EQUIPMENT WIRING SCHEDULE-2																																				
DESCRIPTION						POWER						STARTER			ACCESSORIES			ISOLATING DEVICE					CONTROL												REMARKS	
NUMBER	ITEM NUMBER	ITEM	SUPPLIED BY	VOLTAGE	PHASE	H.P./KW/AMPS	MOCP (A)	FEEDER SIZE	PANEL & CCT. NOS.	MANUAL	MAGNETIC	COMBINATION	CONTACTOR	CONTROL VOLTAGE	VFD	HAND OFF/AUTO	ON/OFF SELECTOR	PILOT LIGHT	WATERPROOF DISCONNECT	DISCONNECT	WIRED BY	MOTOR RATED SWITCH	OCCUPANCY SENSOR	VFD	TIMER	TIME CLOCK	R.A. THERMOSTAT	THERMOSTAT	SCM CONTROLLER	VARIABLE SPEED	WIRED BY	INTERLOCKED WITH	INTERLOCKED BY	REMARKS		
31	FFH-1	FORCE FLOW HEATER	23	120	1	1.5 KW	15A, 1P	2#12-GRD-18MMMC													26	26										23			BAS CONTROL WIRING BY DIV 25	
32	FFH-2	FORCE FLOW HEATER	23	120	1	1.5 KW	15A, 1P	2#12-GRD-18MMMC													26	26										23			BAS CONTROL WIRING BY DIV 25	
33	UH-1	ELECTRIC UNIT HEATER	23	208	1	3 KW	15A, 1P	2#12-GRD-18MMMC													26	26										23			BAS CONTROL WIRING BY DIV 25	
34	BB-1	ELECTRIC BASEBOARD	23	120	1	750 W	15A, 1P	2#12-GRD-18MMMC													26	26										23			BAS CONTROL WIRING BY DIV 25	
35	BB-2	ELECTRIC BASEBOARD	23	120	1	500 W	15A, 1P	2#12-GRD-18MMMC													26	26										23			BAS CONTROL WIRING BY DIV 25	
36	BB-3	ELECTRIC BASEBOARD	23	120	1	500 W	15A, 1P	2#12-GRD-18MMMC													26	26										23			BAS CONTROL WIRING BY DIV 25	
37	BB-4	ELECTRIC BASEBOARD	23	120	1	500 W	15A, 1P	2#12-GRD-18MMMC													26	26										23			BAS CONTROL WIRING BY DIV 25	
40	IR-1	IR HEATER	23	120	1		15A, 1P	2#12-GRD-18MMMC													26	26										23			BAS CONTROL WIRING BY DIV 25	
41	IR-2	IR HEATER	23	120	1		15A, 1P	2#12-GRD-18MMMC													26	26										23			BAS CONTROL WIRING BY DIV 25	
42	IR-3	IR HEATER	23	120	1		15A, 1P	2#12-GRD-18MMMC													26	26										23			BAS CONTROL WIRING BY DIV 25	
43	IR-4	IR HEATER	23	120	1		15A, 1P	2#12-GRD-18MMMC													26	26										23			BAS CONTROL WIRING BY DIV 25	
44	IR-5	IR HEATER	23	120	1		15A, 1P	2#12-GRD-18MMMC													26	26										23			BAS CONTROL WIRING BY DIV 25	
45	UH-2	UNIT HEATER	23	120	1	1 /20 HP	15A, 1P	2#12+GRD-18MMMC													26	26										23			BAS CONTROL WIRING BY DIV 25	
46	UH-3	UNIT HEATER	23	120	1	1 /20 HP	15A, 1P	2#12+GRD-18MMMC													26	26										23			BAS CONTROL WIRING BY DIV 25	
47	F-1	FURNACE	23	120	1	12 A	20A, 1P	2#12-GRD-18MMMC													26	26										23			BAS CONTROL WIRING BY DIV 25	
52	DF-1	DESTRATIFICATION FAN	26	120	1		15A, 1P	2#12+GRD-16mmnC													26	26										26			SWITCH	
53	DF-2	DESTRATIFICATION FAN	26	120	1		15A, 1P	2#12+GRD-16mmnC													26	26										26			SWITCH	
54	DF-2	DESTRATIFICATION FAN	26	120	1		15A, 1P	2#12+GRD-16mmnC													26	26										26			SWITCH	
55	DF-2	DESTRATIFICATION FAN	26	120	1		15A, 1P	2#12+GRD-16mmnC													26	26										26			SWITCH	
56	DF-2	DESTRATIFICATION FAN	26	120	1		15A, 1P	2#12+GRD-16mmnC													26	26										26			SWITCH	
57	DF-2	DESTRATIFICATION FAN	26	120	1		15A, 1P	2#12+GRD-16mmnC													26	26										26			SWITCH	
58	ERV-1	ENERGY RECOVERY VENTILATOR	26	208	3	38 A	40 A	4#8+GRD-27mmnC													26	26										26			BAS CONTROL WIRING BY DIV 25	
NOTES:																																				
1. ISOLATION AND CONTROL DEVICES MAY NOT BE SHOWN ON PLANS FOR CLARITY PURPOSES AND SHALL BE PROVIDED AS INDICATED. COORDINATE LOCATIONS ON SITE WITH OWNER AND CONSTRUCTION MANAGER.																																				
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12. REFER TO PANEL SCHEDULES AND FLOOR PLAN FOR CIRCUITING.																																				
13. DIVISION 23-MECHANICAL, DIVISION 25-BUILDING AUTOMATION SYSTEM, DIVISION 26-ELECTRICAL.																																				



DRAWING NOTES	
1	PROVIDE AND INSTALL NEW 4" Ø DRAIN PIPING AS SHOWN AND CONNECT TO THE FIXTURES.
2	CONNECT THE SANITARY PIPING TO THE SEPTIC TANK AND GREYWATER TANK AS INDICATED.
3	PROVIDE AND INSTALL NEW 8"Ø BELOW GRADE STORM PIPE AS SHOWN, CONNECT TO THE MAIN AS INDICATED.
4	PROVIDE AND INSTALL NEW 4"Ø ROOF DRAINS, PROVIDE 8"Ø STORM PIPING ABOVE GRADE AS SHOWN TO CONNECT ALL THE DRAIN PIPING.
5	PROVIDE & INSTALL CONDENSATE DRAIN PIPING FROM THE SPLIT A/C, DROP DOWN TO THE FLOOR AND CONNECT TO THE SANITARY DRAIN PIPING.
6	PROVIDE AND INSTALL A DEDICATED FUNNEL FLOOR DRAIN WITH A MINIMUM 1-INCH AIR GAP FOR THE RELIEF VALVE DISCHARGE OF EACH BACKFLOW PREVENTER.

1 PROPOSED DRAINAGE PLAN  
M2.0-A-2 Scale: 1:75

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1	REVIEW	23.10.2024
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5	BUILDING PERMIT	01.08.2025
6	ADDENDUM ME-1	05.09.2025
7	ADDENDUM ME-2	11.09.2025

PROJECT :

CLIENT :

CONSULTANT :

PROFESSIONAL SEAL :

TOWN OF WS FIRE STATION & YORK REGION PRS

4902 AURORA ROAD, WHITCHURCH-STOUFFVILLE, ONTARIO

Stouffville

York Region

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO COMMENCEMENT OF THE WORK. ANY DISCREPANCIES ARE TO BE REPORTED TO THE CONSULTANT.

RCEI

DESIGN CONSULTING ENGINEERS INC.

DATE : 2024-06-06

PROJECT No. : 2024-448

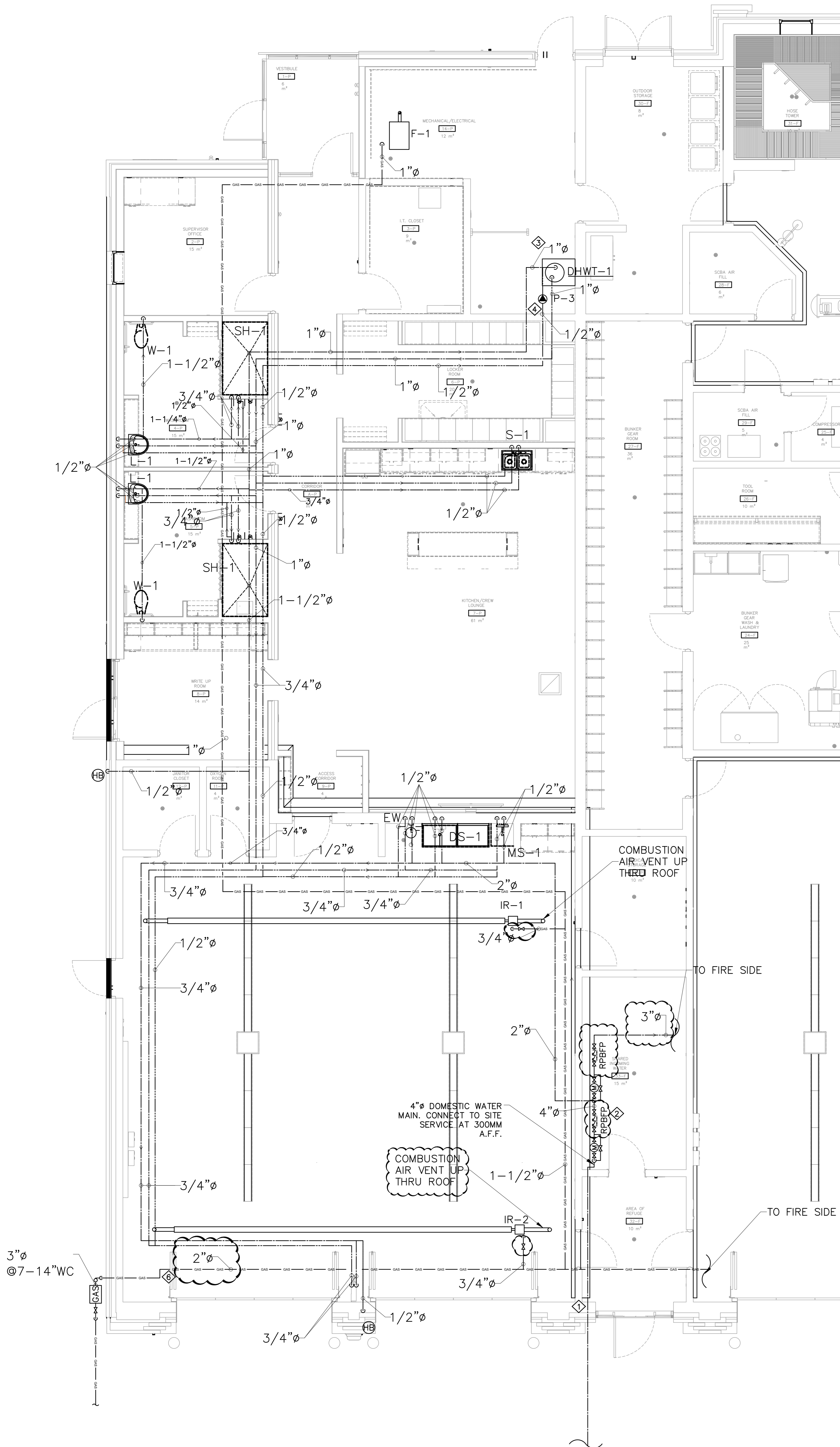
DRAWING No. : M2.0-A-2

REVISION :

ORIENTATION

TRUE NORTH

CONSTRUCTION NORTH

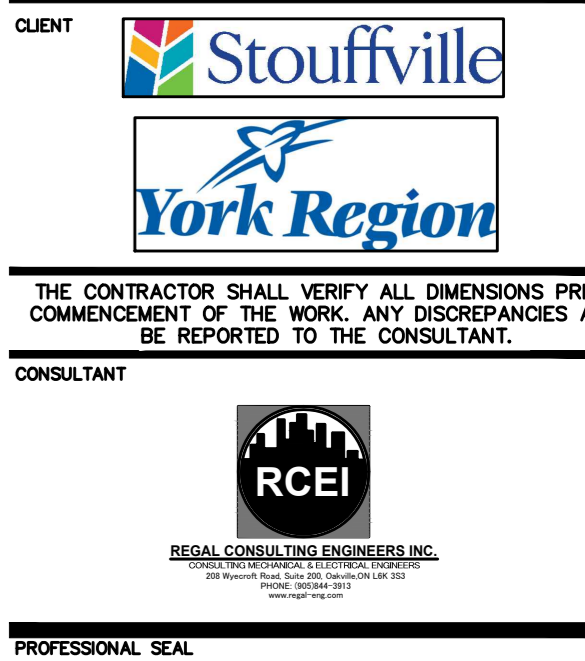


DRAWING NOTES	
1	CONNECT THE DOMESTIC COLD WATER MAIN TO THE INCOMING WATER MAIN TERMINATED OUTSIDE THE EXTERNAL WALL. SEE SITE SERVICES PLAN DRAWING FOR CONTINUATION.
2	PROVIDE AND INSTALL BACKFLOW PREVENTER ASSEMBLY AND WATER METER IN COMPLIANCE WITH THE REQUIREMENTS OF OBC, LOCAL AUTHORITY HAVING JURISDICTION AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. SEE DETAILS OF INSTALLATION ON DWG M7.1
3	PROVIDE AND INSTALL NEW ELECTRIC DOMESTIC HOT WATER HEATERS, DHWT-1 PIPE THE PRESSURE RELIEF VALVE TO THE NEAREST HUB DRAIN. PROVIDE CONCRETE PAD FOR THE HOT WATER HEATERS.
4	PROVIDE AND INSTALL DOMESTIC HOT WATER RE-CIRCULATING PUMP P-3 AS SHOWN.
5	PROVIDE AND INSTALL DOMESTIC COLD WATER, HOT WATER AND RE-CIRCULATING PIPES IN THE CEILING SPACE AS SHOWN. COORDINATE WITH OTHER SERVICES IN THE CEILING SPACE. INSULATE THE PIPES AS SPECIFIED. PROVIDE IDENTIFICATION LABEL ON EACH OF THE SERVICES AS SPECIFIED.
6	PROVIDE AND INSTALL A NEW GAS LINE AS INDICATED AND CONNECT TO THE SERVICES. REFER TO THE DETAILS FOR THE GAS METER ASSEMBLY
7	PROVIDE ISOLATION VALVES AT ALL THE BRANCHES AND THE FIXTURES.

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5	BUILDING PERMIT	01.08.2025
6	ADDENDUM ME-1	05.09.2025
7	ADDENDUM ME-2	11.09.2025

PROJECT : TOWN OF WS FIRE STATION & YORK REGION PRS  
4902 AURORA ROAD, WHITCHURCH-STOUFFVILLE, ONTARIO



CLIENT: Stouffville, York Region

CONSULTANT: RCEI

PROFESSIONAL SEAL

DWG TITLE: PROPOSED PLUMBING LAYOUT-PRS

ORIENTATION: TRUE NORTH, CONSTRUCTION NORTH

DATE: 2024-06-06

PROJECT No.: 2024-448

DRAWING No.: M3.0-A-1

REVISION

### DRAWING NOTES

- CONNECT THE DOMESTIC COLD WATER MAIN TO THE INCOMING WATER MAIN TERMINATED OUTSIDE THE EXTERNAL WALL. SEE SITE SERVICES PLAN DRAWING FOR CONTINUATION.
- PROVIDE AND INSTALL BACKFLOW PREVENTER ASSEMBLY AND WATER METER IN COMPLIANCE WITH THE REQUIREMENTS OF OBC, LOCAL AUTHORITY HAVING JURISDICTION AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. SEE DETAILS OF INSTALLATION ON DWG M7.1
- PROVIDE AND INSTALL NEW ELECTRIC DOMESTIC HOT WATER HEATERS, DHWT-2, PIPE THE PRESSURE RELIEF VALVE TO THE NEAREST HUB DRAIN. PROVIDE CONCRETE PAD FOR THE HOT WATER HEATERS.
- PROVIDE AND INSTALL DOMESTIC HOT WATER RE-CIRCULATING PUMP, P-4 AS SHOWN.
- PROVIDE AND INSTALL DOMESTIC COLD WATER, HOT WATER AND RE-CIRCULATING PIPES IN THE CEILING SPACE AS SHOWN. COORDINATE WITH OTHER SERVICES IN THE CEILING SPACE. INSULATE THE PIPES AS SPECIFIED. PROVIDE IDENTIFICATION LABEL ON EACH OF THE SERVICES AS SPECIFIED. PROVIDE AND INSTALL NEW PLUMBING FIXTURES AND CONNECT THE PIPING.
- PROVIDE AND INSTALL A NEW GAS LINE AS INDICATED AND CONNECT TO THE SERVICES. REFER TO THE DETAILS FOR THE GAS METER ASSEMBLY
- PROVIDE ISOLATION (BALL TYPE) VALVES AT ALL THE BRANCHES AND THE FIXTURES.
- PROVIDE 2-1/2" COLD WATER CONNECTION FOR THE FIRE TRUCK FILL STATION, PROVIDE REDUCED PRESSURE BACKFLOW PREVENTER AND FILL VALVE.

## TOWN OF WS FIRE STATION & YORK REGION PRS

4902 AURORA ROAD, WHITCHURCH-STOUFFVILLE, ONTARIO

PROJECT :

CLIENT



THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO COMMENCEMENT OF THE WORK. ANY DISCREPANCIES ARE TO BE REPORTED TO THE CONSULTANT.

CONSULTANT

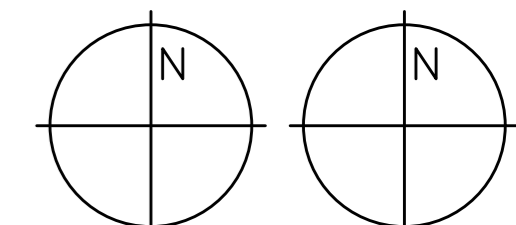


PROFESSIONAL SEAL

DWG TITLE

PROPOSED  
PLUMBING  
LAYOUT-FIRE

ORIENTATION



DATE

2024-06-06

PROJECT No.

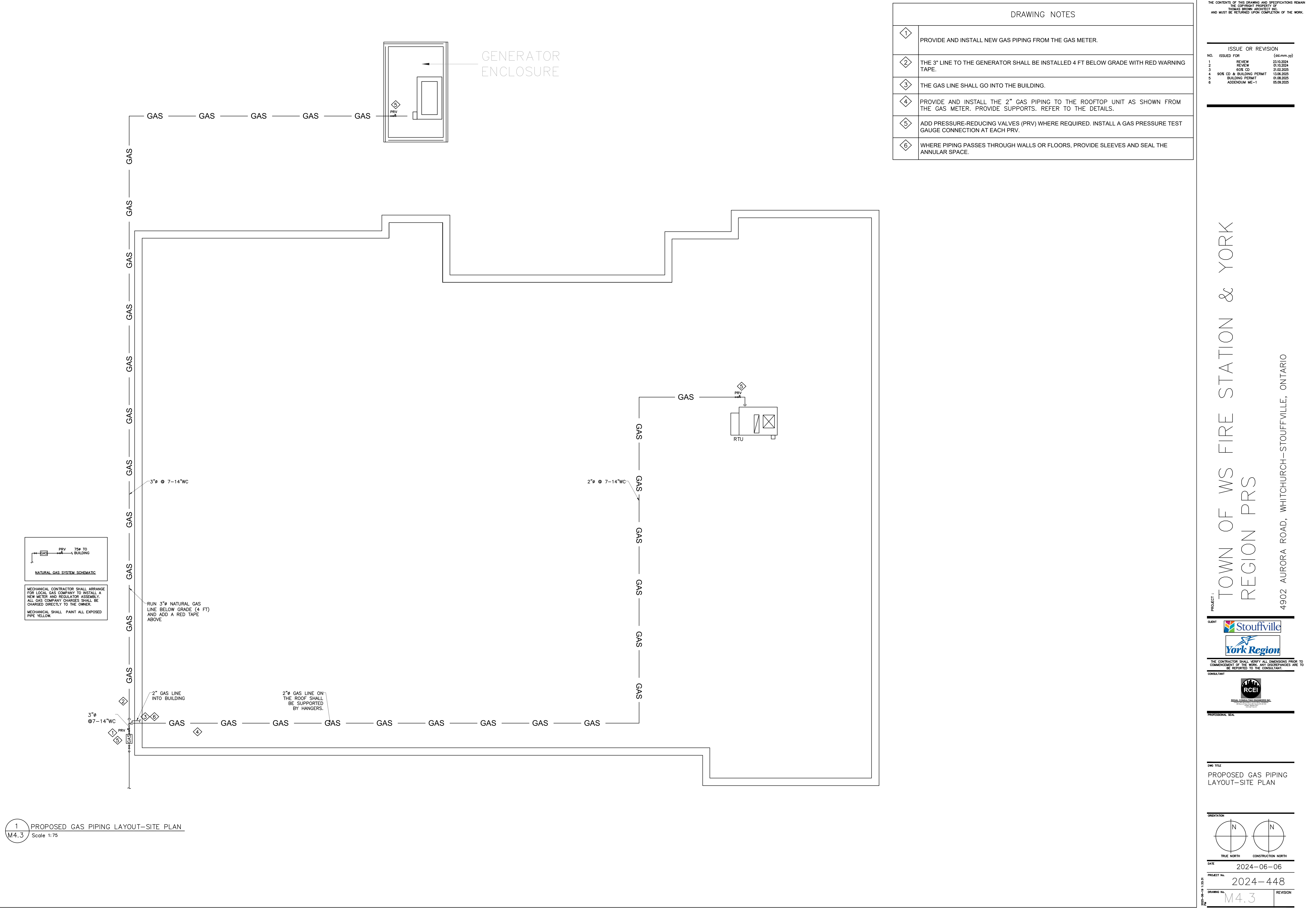
2024-448

DRAWING No.

M3.1-A-1

REVISION

1 PROPOSED PLUMBING PLAN-FIRE  
Scale: 1:50



DRAWING NOTES	
1	PROVIDE AND INSTALL NEW GAS PIPING FROM THE GAS METER.
2	THE 3" LINE TO THE GENERATOR SHALL BE INSTALLED 4 FT BELOW GRADE WITH RED WARNING TAPE.
3	THE GAS LINE SHALL GO INTO THE BUILDING.
4	PROVIDE AND INSTALL THE 2" GAS PIPING TO THE ROOFTOP UNIT AS SHOWN FROM THE GAS METER. PROVIDE SUPPORTS. REFER TO THE DETAILS.
5	ADD PRESSURE-REDUCING VALVES (PRV) WHERE REQUIRED. INSTALL A GAS PRESSURE TEST GAUGE CONNECTION AT EACH PRV.
6	WHERE PIPING PASSES THROUGH WALLS OR FLOORS, PROVIDE SLEEVES AND SEAL THE ANNULAR SPACE.

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ISSUE OR REVISION	
NO.	ISSUED FOR (s.d.m.m.yy)
1	REVIEW 23.10.2024
2	REVIEW 01.10.2024
3	60% CD 21.02.2025
4	90% CD & BUILDING PERMIT 13.06.2025
5	BUILDING PERMIT 01.08.2025
6	ADDENDUM ME-1 05.09.2025

PROJECT : TOWN OF WS FIRE STATION & YORK REGION PRS  
4902 AURORA ROAD, WHITCHURCH-STOUFFVILLE, ONTARIO

CLIENT:

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CONSULTANT:

PROFESSIONAL SEAL

OWN TITLE: PROPOSED GAS PIPING LAYOUT-SITE PLAN

ORIENTATION:

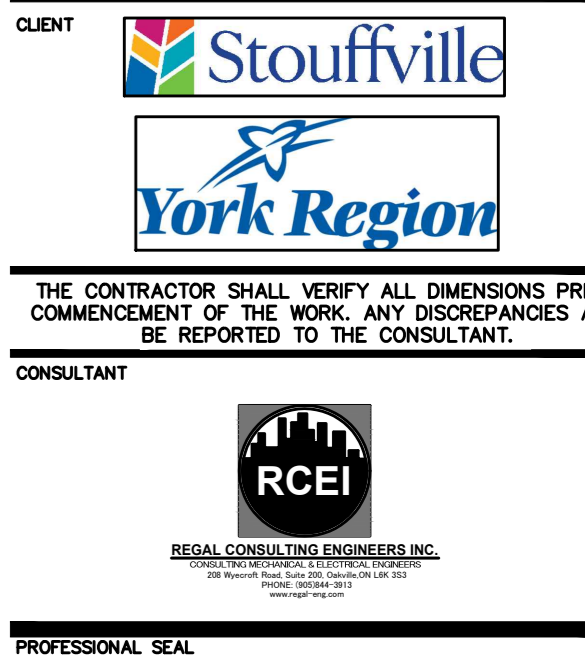
DATE: 2024-06-06

PROJECT No.: 2024-448

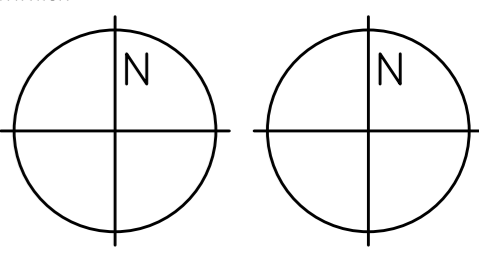
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ISSUE OR REVISION			
NO.	ISSUED FOR	(dd.mm.yy)	
1	REVIEW	23.10.2024	
2	REVIEW	01.10.2024	
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6	ADDENDUM ME-1	05.09.2025	

PROJECT : TOWN OF WS FIRE STATION & YORK REGION PRS  
4902 AURORA ROAD, WHITCHURCH-STOUFFVILLE, ONTARIO



OWN TITLE  
PROPOSED HYDRONIC HEATING LAYOUT- FIRE STATION

ORIENTATION  


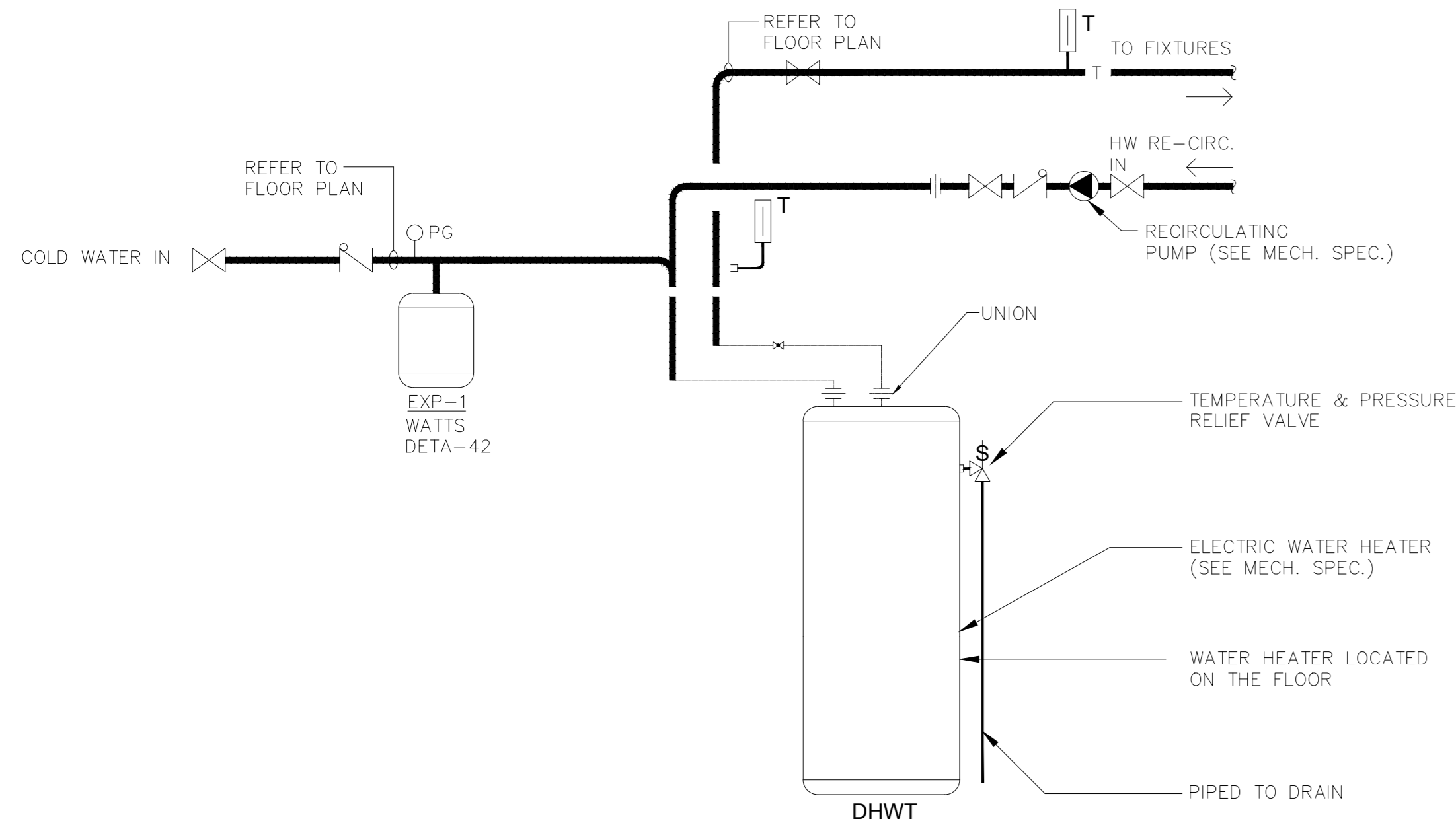
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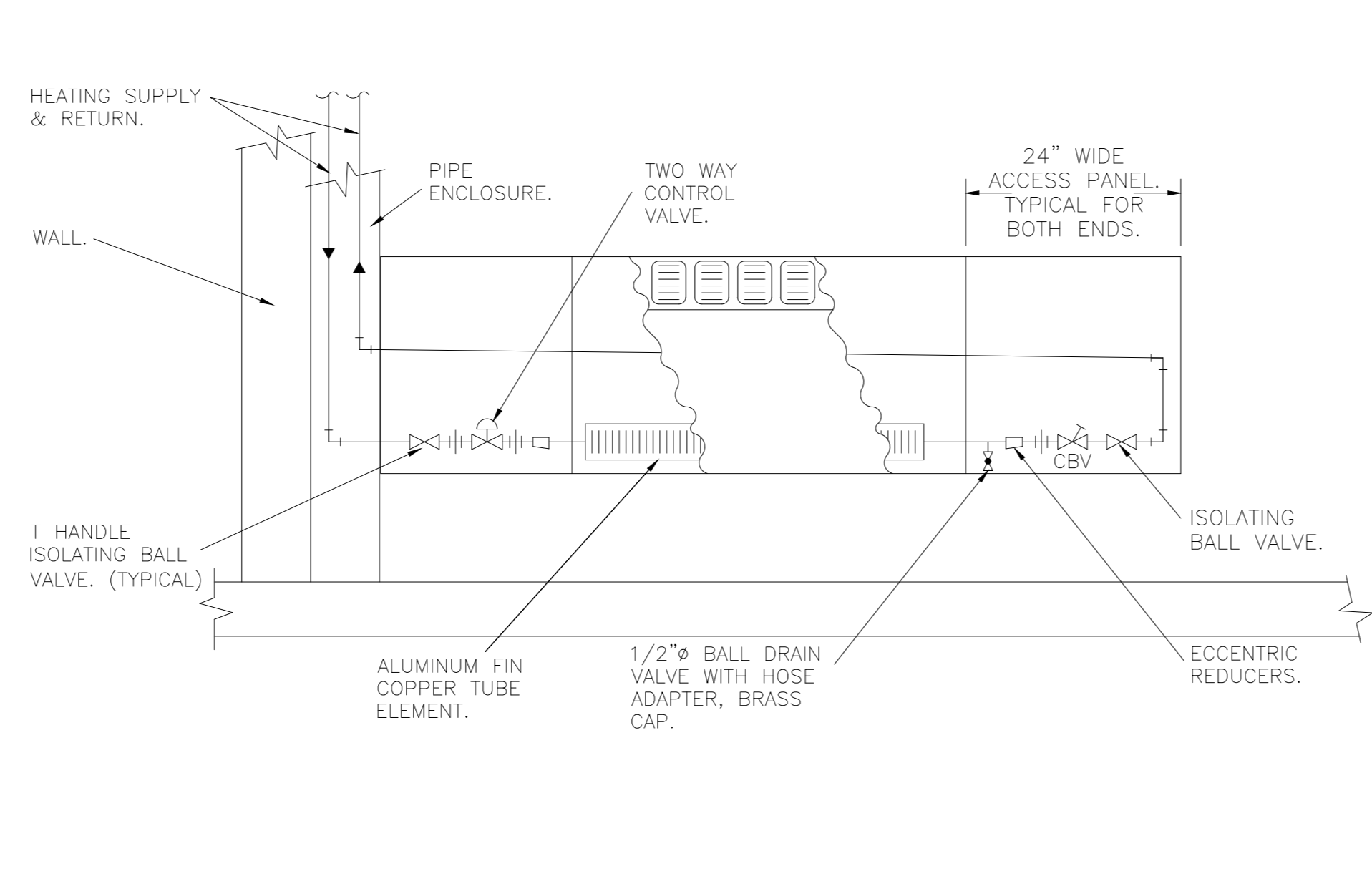
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REVISION  
1

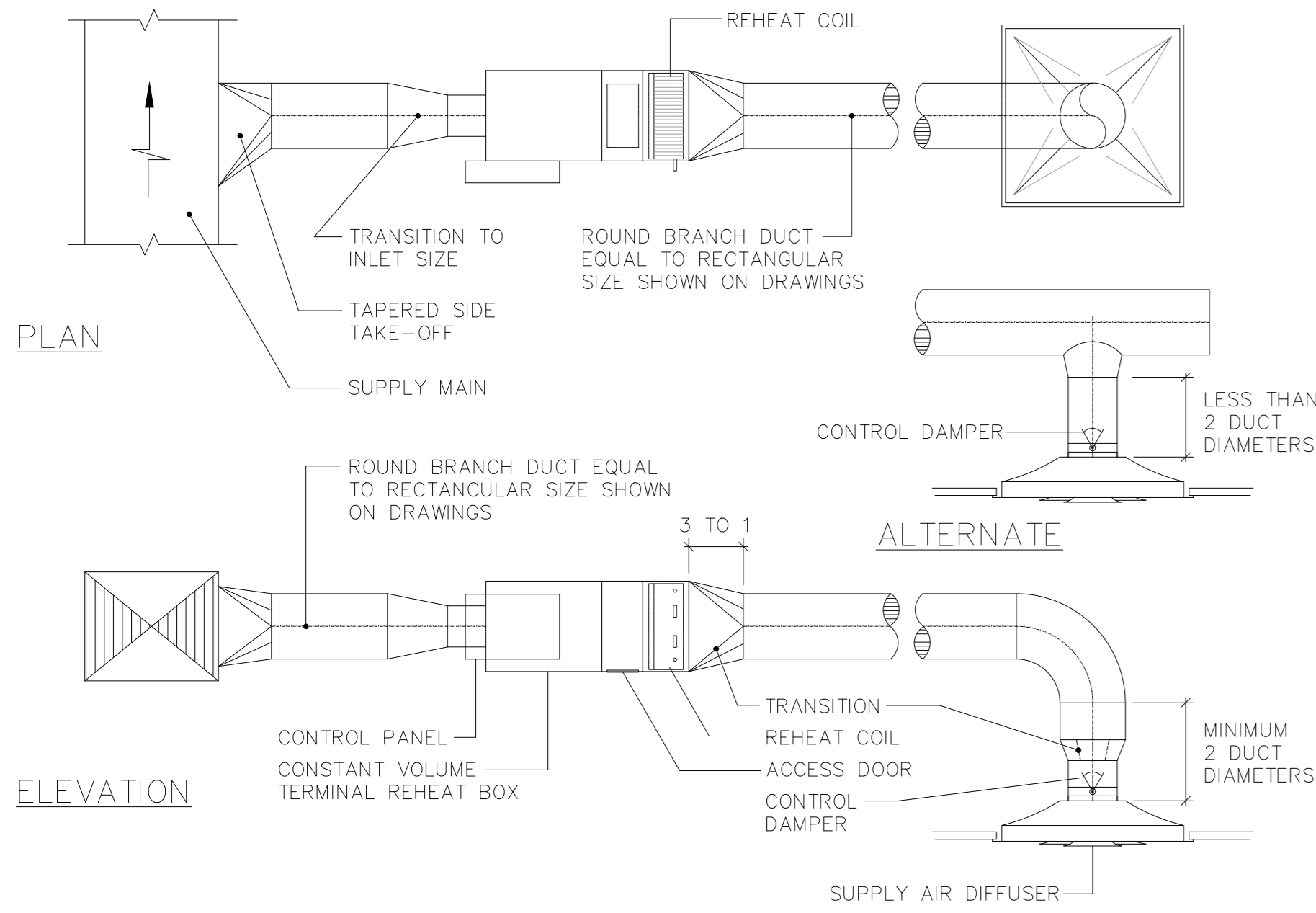
DRAWING NOTES	
1	PROVIDE AND INSTALL WALLFINS, UNIT HEATERS AND VAV BOXES WITH THE REHEAT COIL AS SHOWN. REFER TO THE SCHEDULE FOR THE HEATING CAPACITY AND LENGTHS OF THE WALLFINS.
2	PROVIDE A NEW HEATING SUPPLY AND RETURN PIPING TO ALL THE TERMINAL DEVICES AS SHOWN. PROVIDE AND INSTALL ALL THE ACCESSORIES AND THE VALVES AS SHOWN IN DETAILS.
3	PROVIDE NEW ELECTRIC FORCE FLOW HEATER FFH-2 FOR VESTIBULE.
4	PROVIDE AND INSTALL NEW BOILERS B-1 AND B-2. THE BOILERS ARE WALL HUNG. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL THE CLEARANCES FOR THE BOILERS AS PER THE MANUFACTURER'S INSTRUCTION. PROVIDE ALL THE ACCESSORIES, CONNECT THE EXHAUST VENT AND COMBUSTION AIR VENT AS INDICATED. REFER TO THE MANUFACTURER FOR INSTALLATION.
5	PROVIDE & INSTALL NEW HEATING PUMPS P-1,2, CONCRETE PAD WITH ALL REQUIRED ACCESSORIES AND SUPPORTS TO MOUNT ON FLOOR, PROVIDE AND INSTALL NEW VFD'S SUPPORTED OFF THE WALL FOR THE HEATING PUMPS. COORDINATE SIZE AND LOCATION OF NEW CONCRETE PAD WITH GENERAL CONTRACTOR. COORDINATE WITH ELECTRICAL TRADE FOR POWER SUPPLY & CONSTRUCTION.
6	PROVIDE & INSTALL NEW HOT WATER HEATING PIPING, AIR SEPARATOR, VALVES ACCESSORIES AND SUPPORTS IN THE MECHANICAL ROOM.
7	PROVIDE & INSTALL NEW EXPANSION TANK\EXP-1 ALONG WITH ASSOCIATED PIPING, HANGERS & SUPPORTS. PROVIDE AND INSTALL THE CONCRETE PAD TO PLACE TANK AS PER THE MANUFACTURER'S INSTRUCTIONS. CONNECT THE DRAINS TO THE EXISTING NEAREST FLOOR DRAIN.
8	NEW MAKEUP WATER ASSEMBLY SUPPORTED OFF WALL, MOUNTED 5'-0" ABOVE FINISHED FLOOR. PIPE BACKFLOW PREVENTER DRAIN TO EXISTING FLOOR DRAIN. REFER TO BOILER SCHEMATICS FOR ALL ACCESSORIES AND PIPE CONNECTIONS.
9	PROVIDE AND INSTALL AUTO AIR VENTS AT ALL HIGH POINTS.
10	PROVIDE & INSTALL NEW CHEMICAL POT FEEDER AND FILTER C/W PIPING, SUPPORTED OFF WALL. MOUNT POT FEEDER 48" ABOVE FINISHED FLOOR. REFER TO BOILER SCHEMATIC
11	PROVIDE AND INSTALL NEW VALVES, SENSORS , DP SENSORS AS PER THE CONTROLS SCHEMATIC.



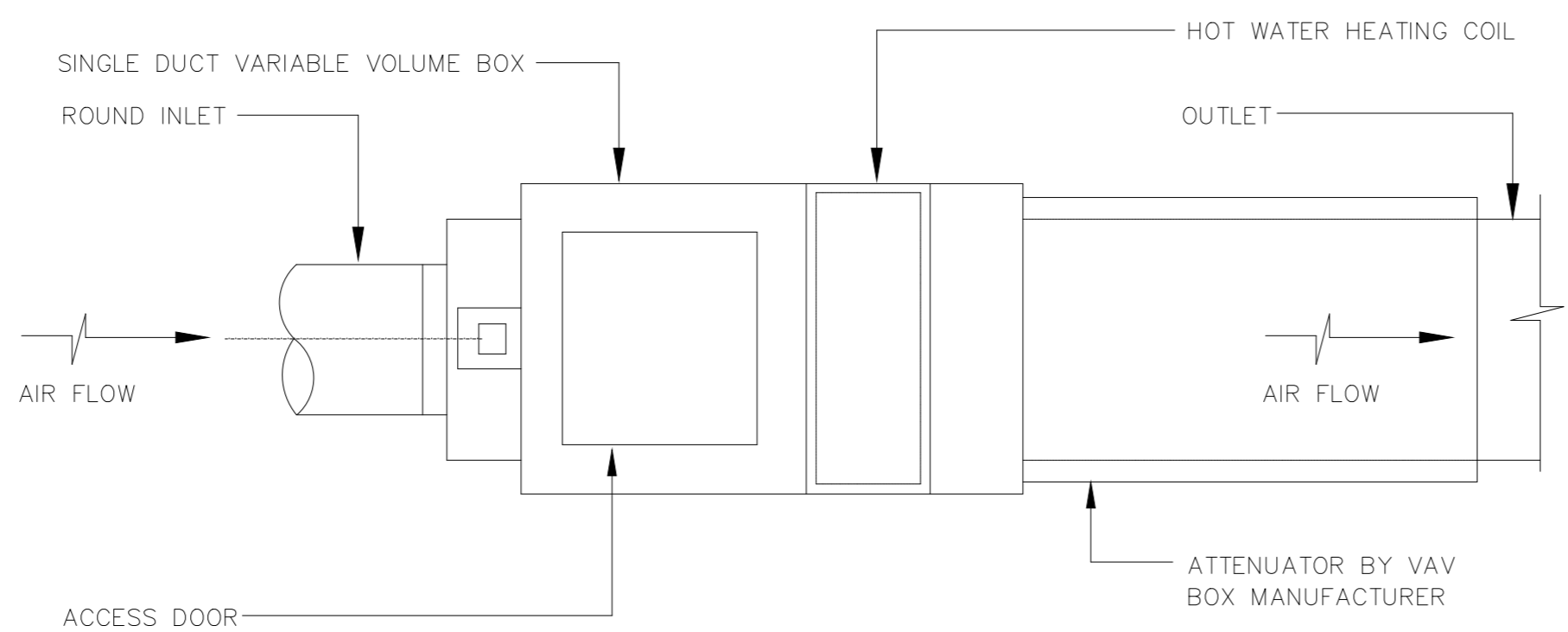
TITLE: SCHEMATIC OF ELECTRIC WATER HEATER



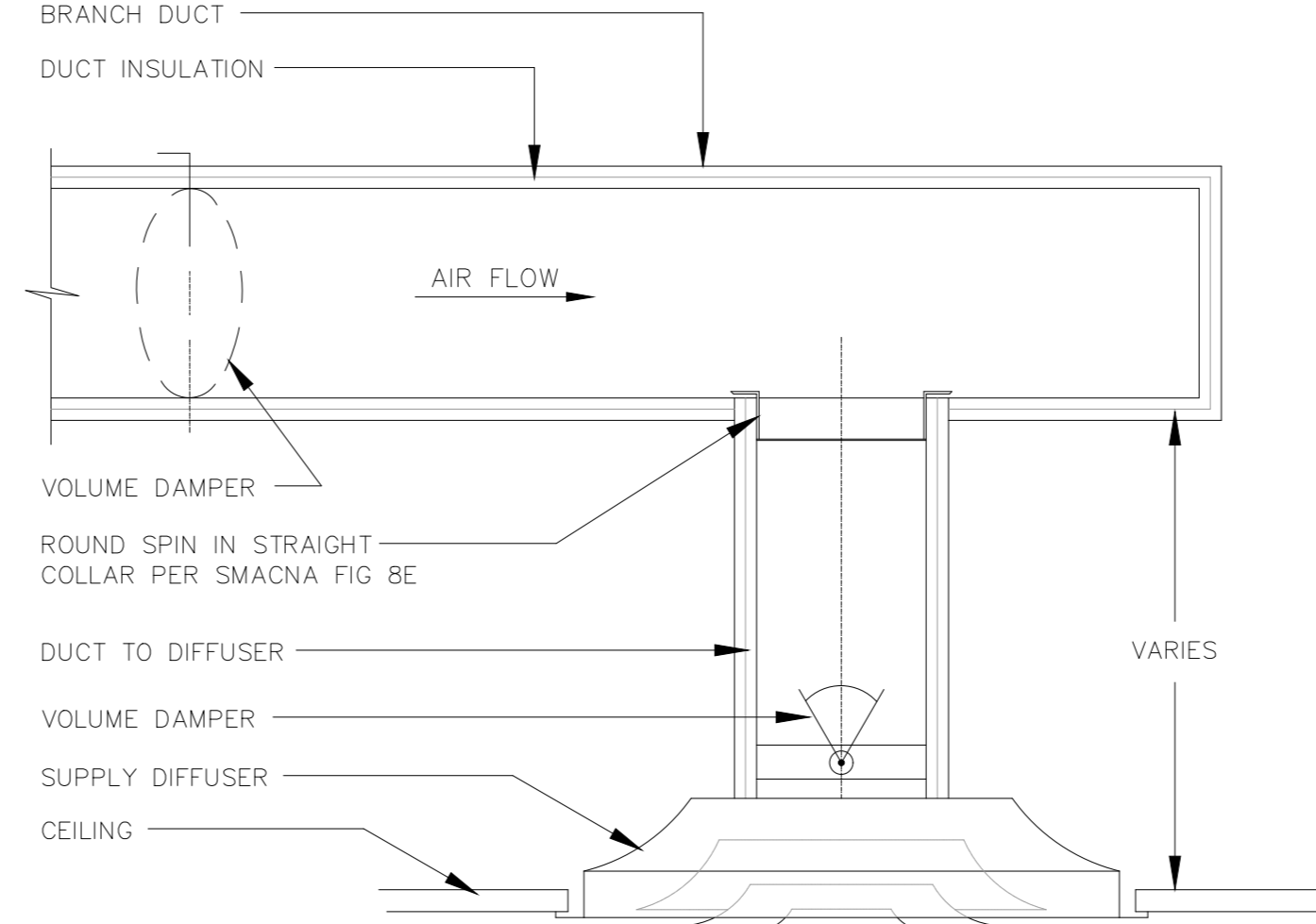
TITLE: SINGLE ELEMENT WALL FIN DETAIL C/W ACCESS PANELS



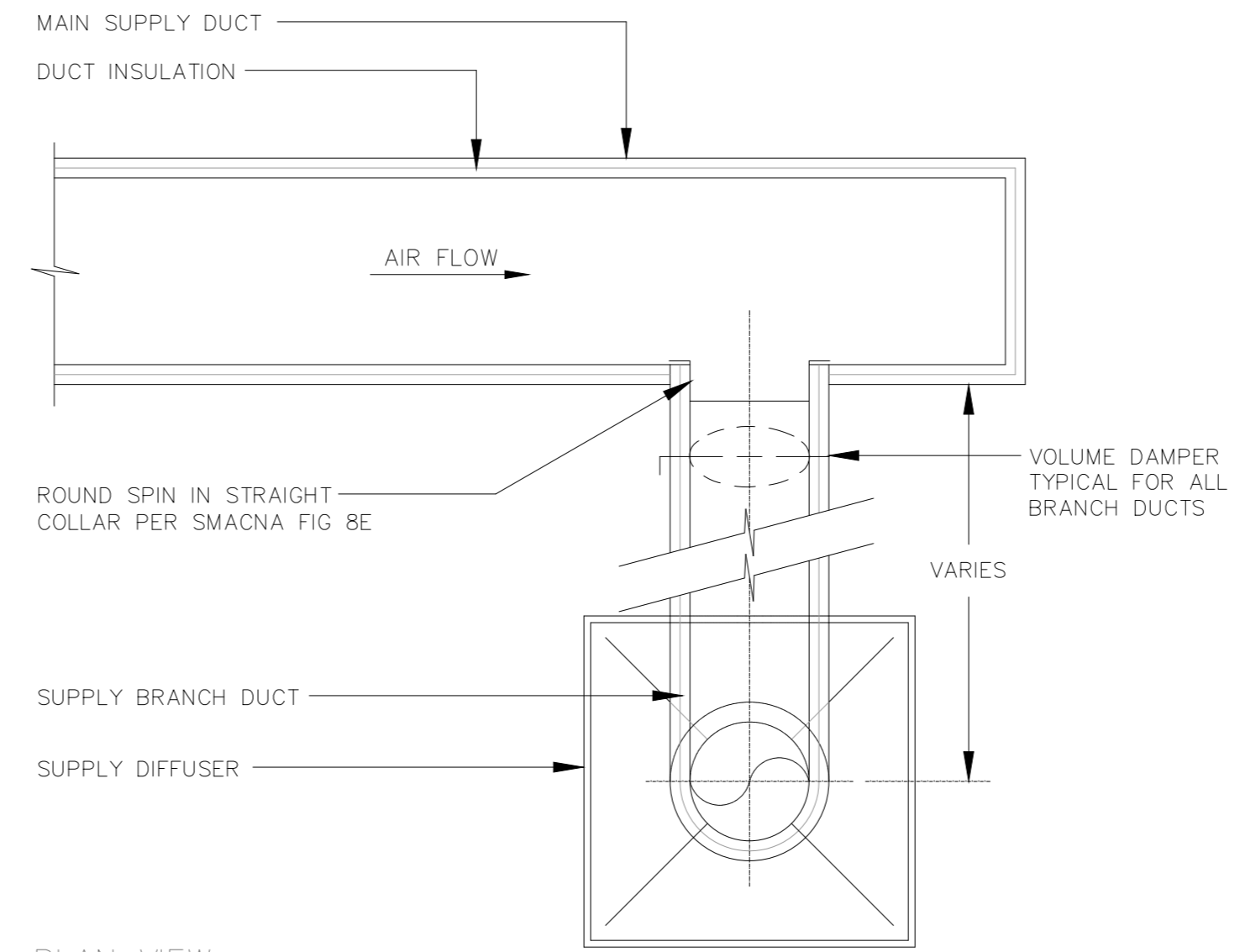
DETAIL OF TERMINAL REHEAT BOX (ROUND DUCTWORK ALTERNATE)



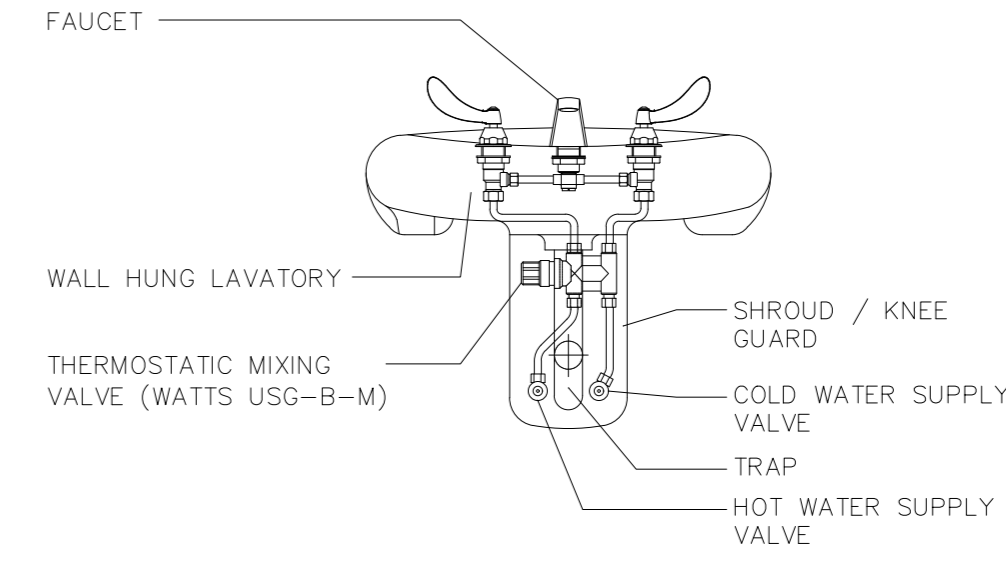
DETAIL OF TERMINAL REHEAT BOX  
NOT TO SCALE



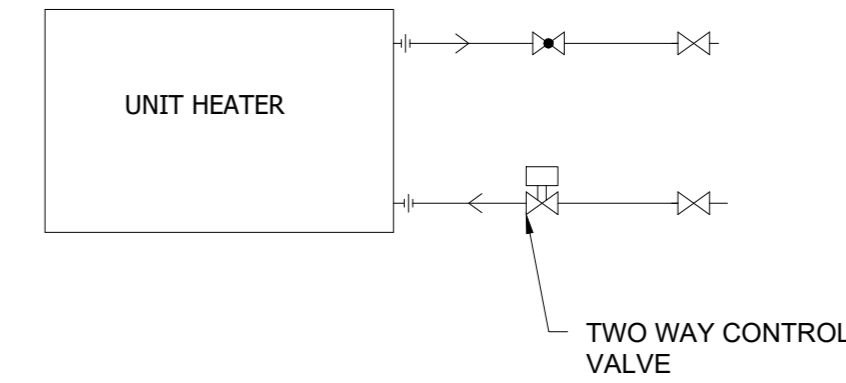
SECTIONAL VIEW  
TITLE:DETAILS OF DIFFUSER CONNECTION WITH SPIN IN COLLAR



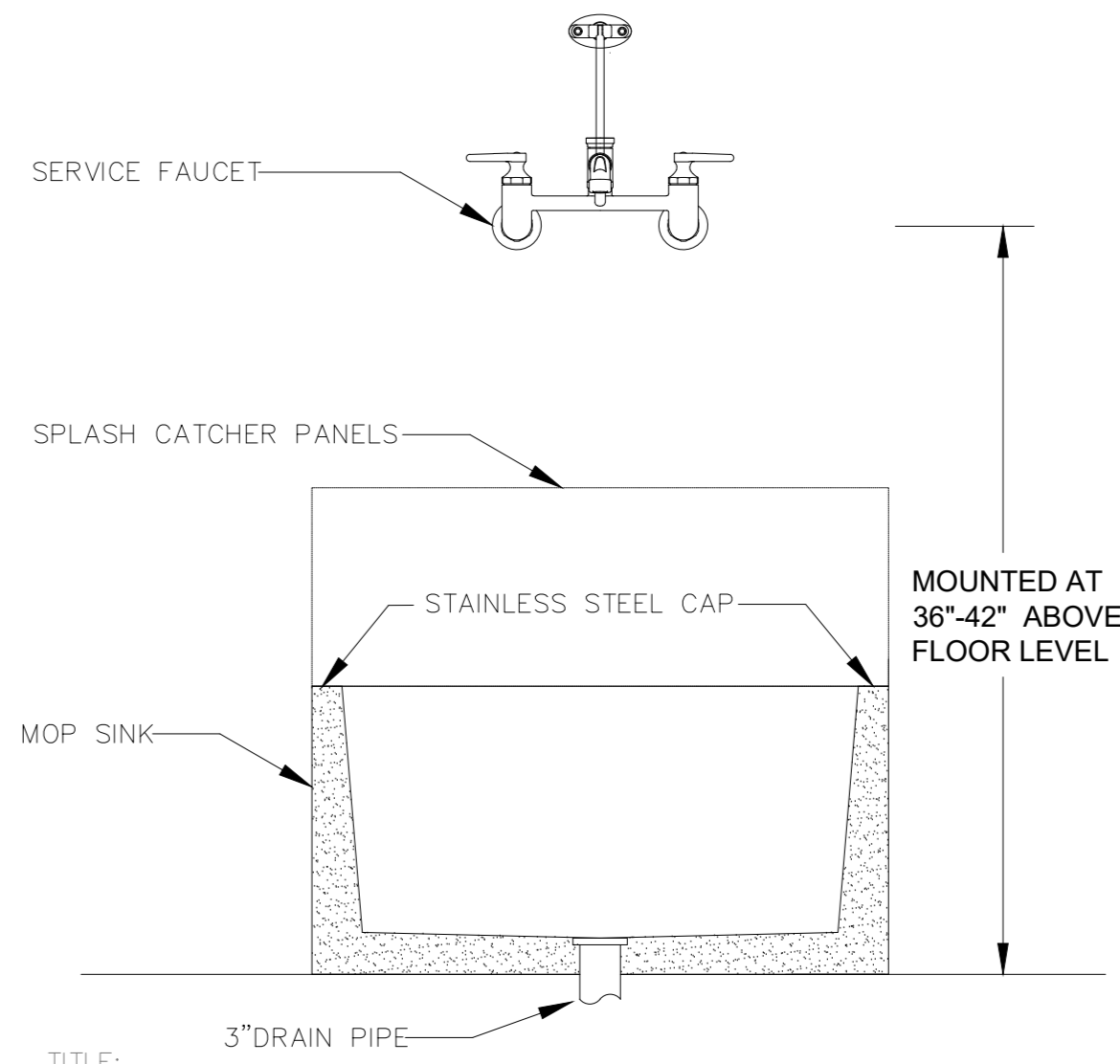
PLAN VIEW  
TITLE: DETAILS OF DIFFUSER CONNECTION WITH SPIN IN COLLAR



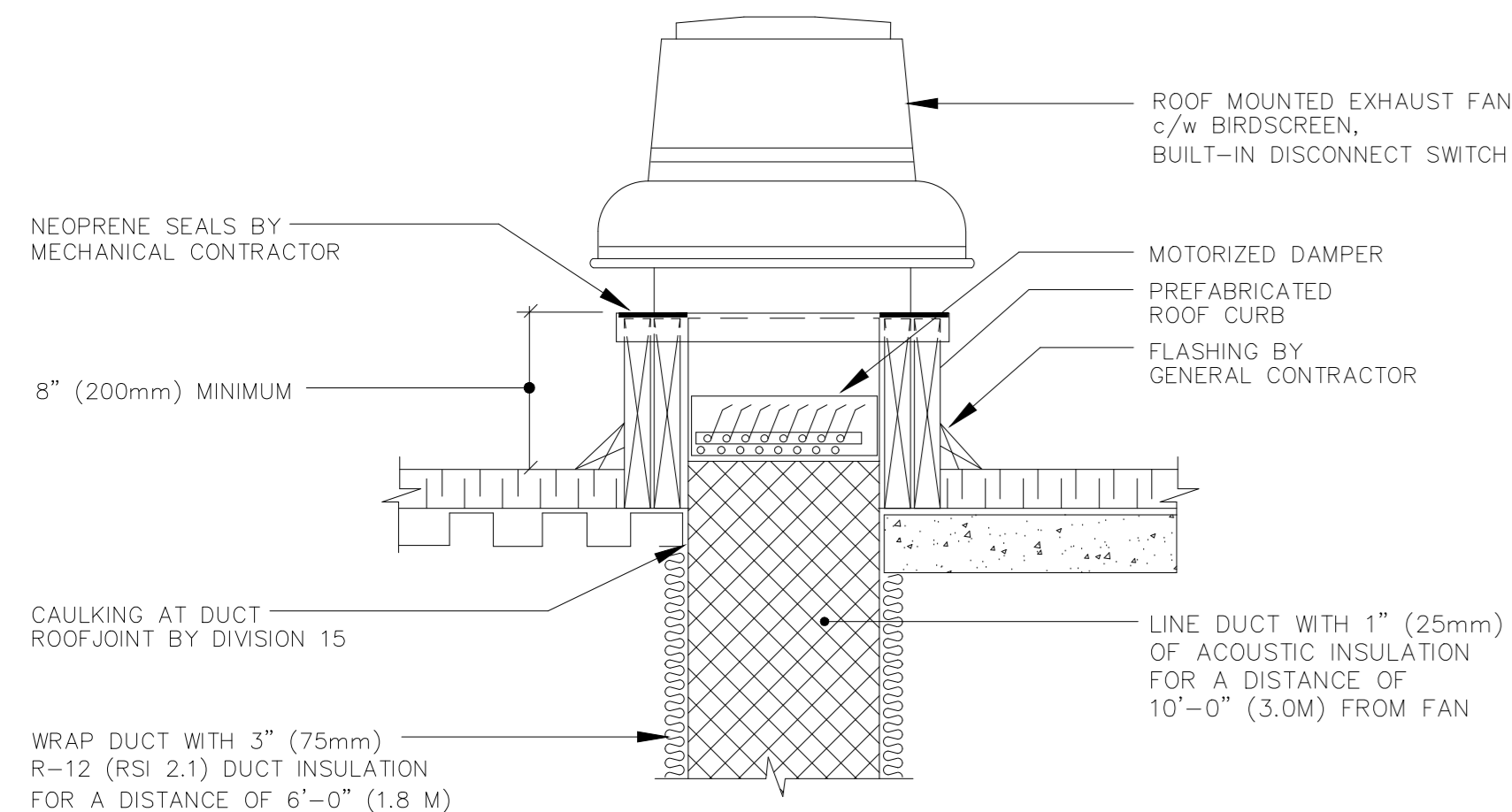
TITLE: DETAILS OF UNDER LAVATORY THERMOSTATIC MIXING VALVE



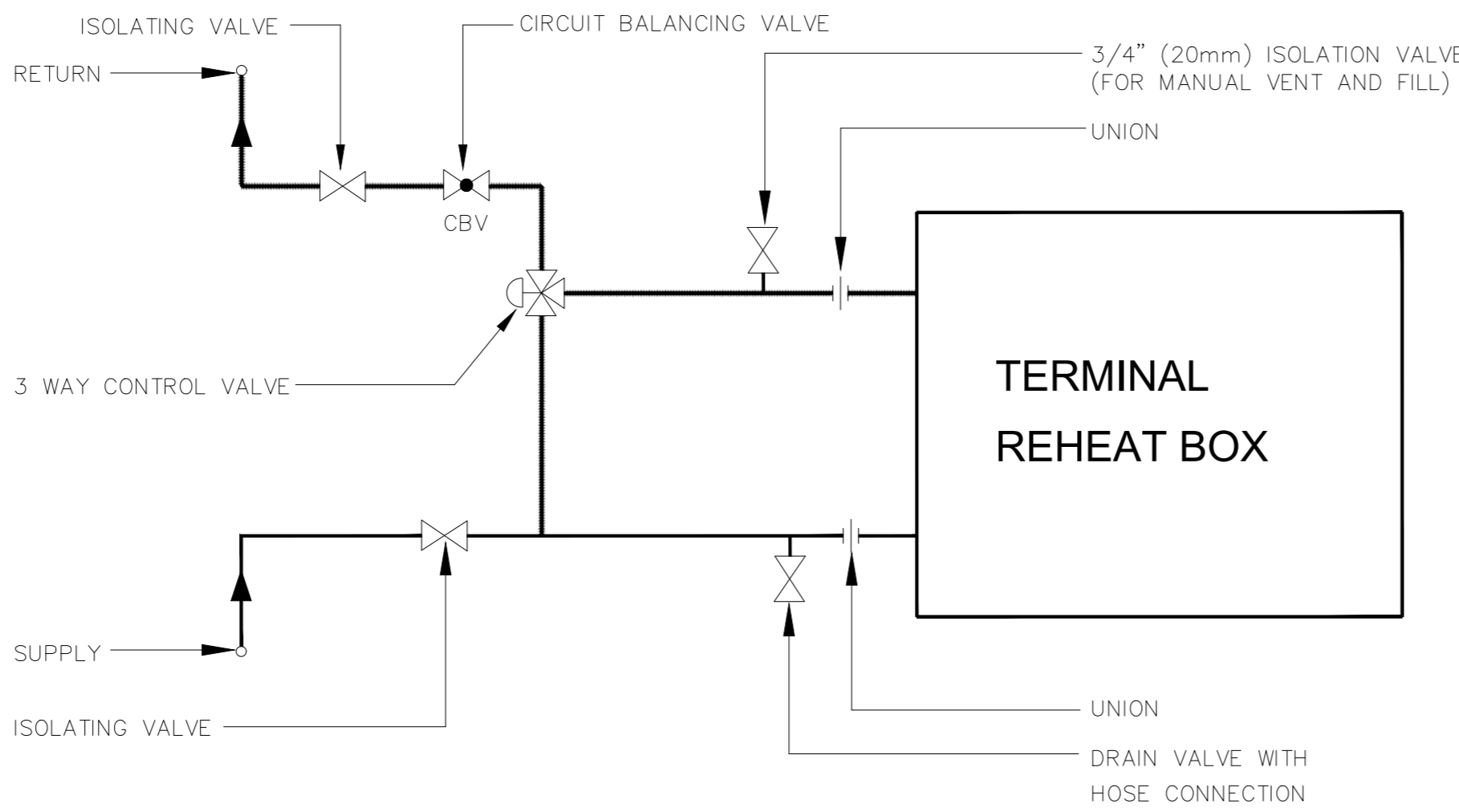
TITLE: UNIT HEATER PIPING DETAIL



TITLE: MOP SINK AND SERVICE FAUCET

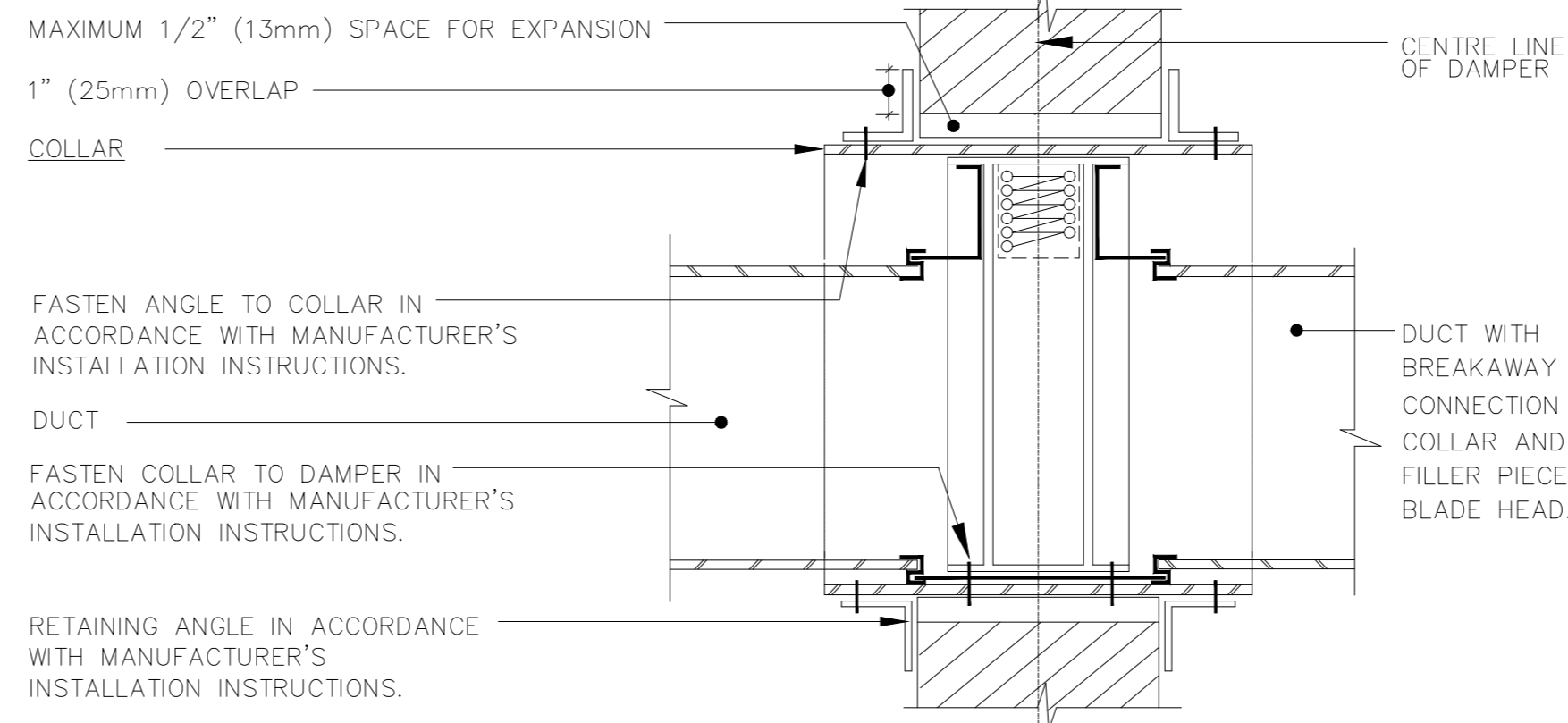


DETAIL OF ROOF MOUNTED EXHAUST FAN



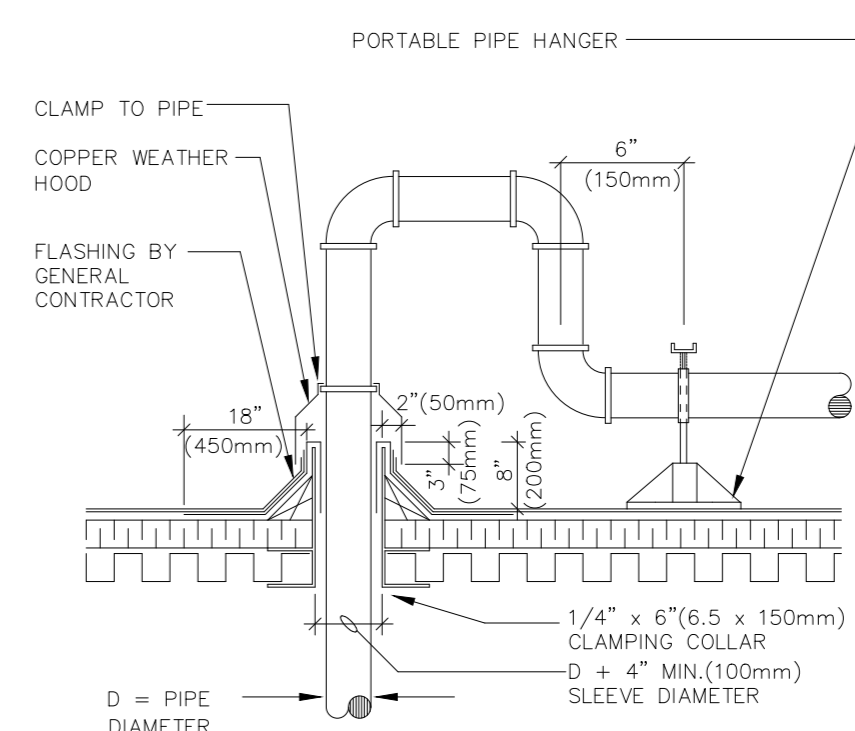
NOTE:  
PROVIDE 3-WAY VALVE ON 25% OF REHEAT COILS

DETAIL OF PIPING TO TERMINAL REHEAT BOX  
(3 WAY CONTROL VALVE)  
NOT TO SCALE

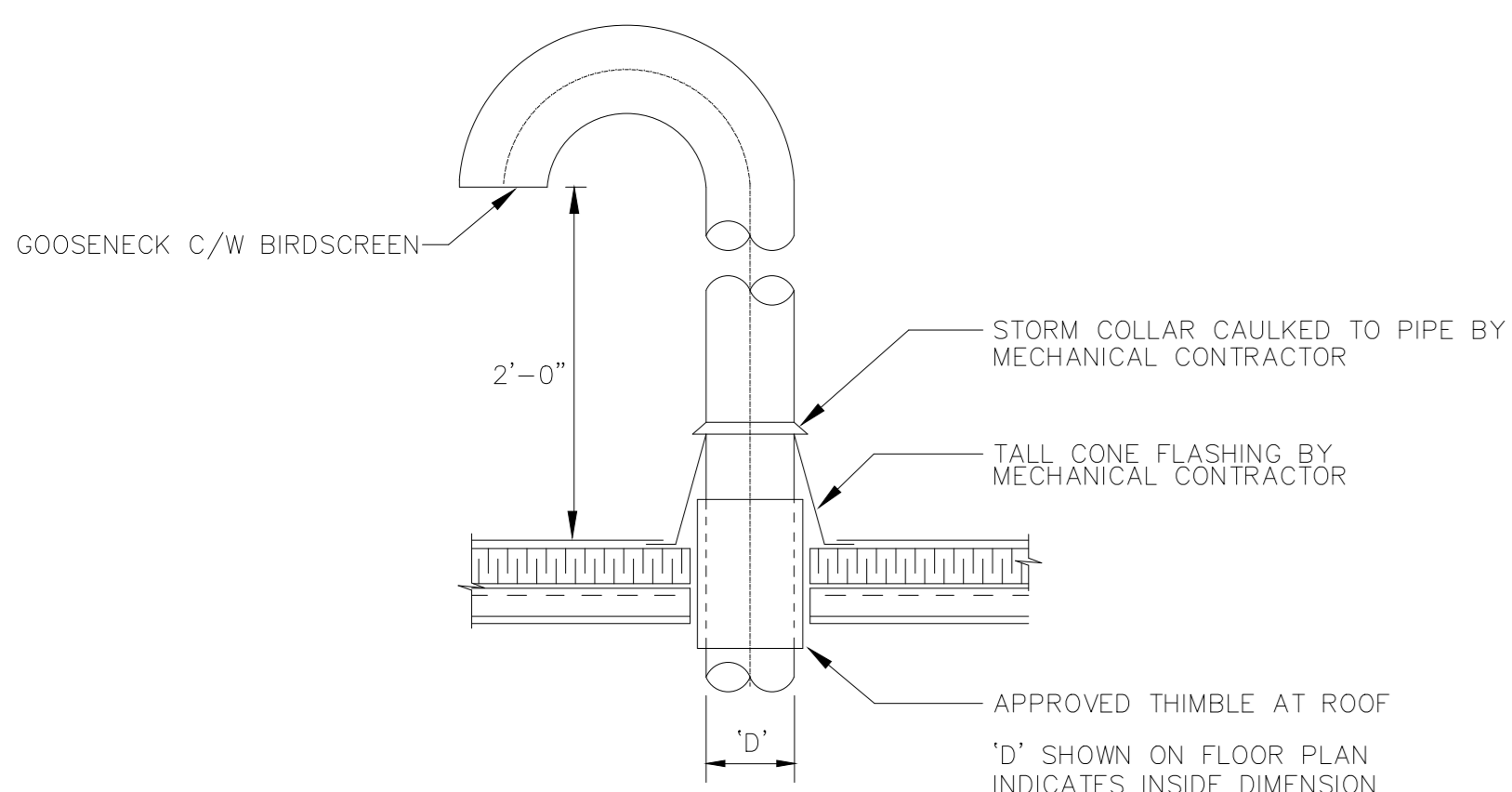


- NOTES:
1. FIRE DAMPERS TO BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.
  2. INSPECT WALL OPENINGS PRIOR TO DAMPER INSTALLATION TO VERIFY SIZE OF OPENING AND PROPER PREPARATION. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS
  3. INSTALL DAMPER IN PLANE OF FIRE SEPARATION. FOR PREPARATION OF OPENINGS IN STUD FRAMED PARTITIONS OR WALLS.
  4. INSTALL DAMPER SQUARE AND PLUMB.
  5. DO NOT CAST DAMPER IN PLACE.
  6. DO NOT CAULK OR SEAL DAMPER TO WALL. ENSURE THAT EXPANSION CLEARANCES ARE KEPT.
  7. DO NOT FASTEN RETAINING ANGLES OR DAMPER DIRECTLY TO WALL.
  8. CYCLE DAMPER AFTER INSTALLATION TO ENSURE FREE MOVEMENT.

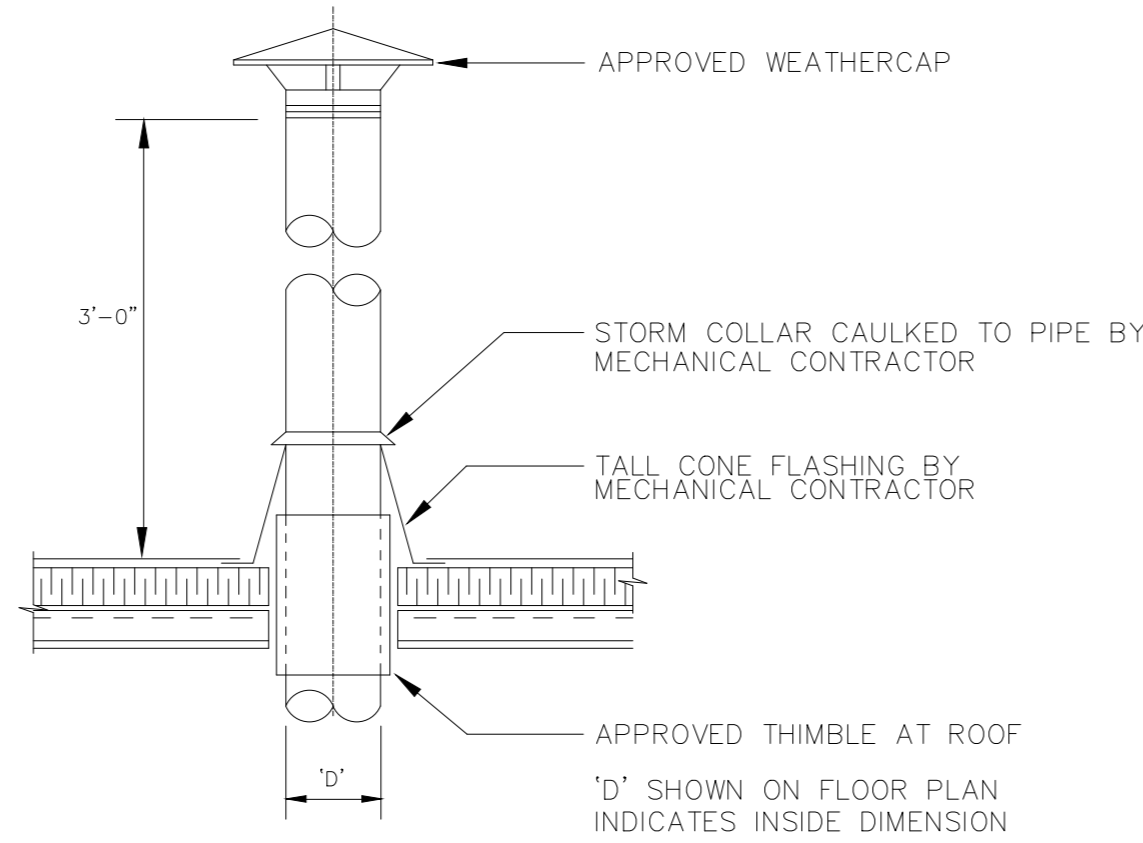
TITLE: DETAIL OF TYPE B FIRE DAMPER INSTALLATION- VERTICAL



TITLE: DETAIL OF GAS PIPING THROUGH ROOF AND PIPE SUPPORT



DETAIL OF COMBUSTION AIR FOR RADIANT HEATERS  
(AS PER MANUFACTURER'S RECOMMENDATION)

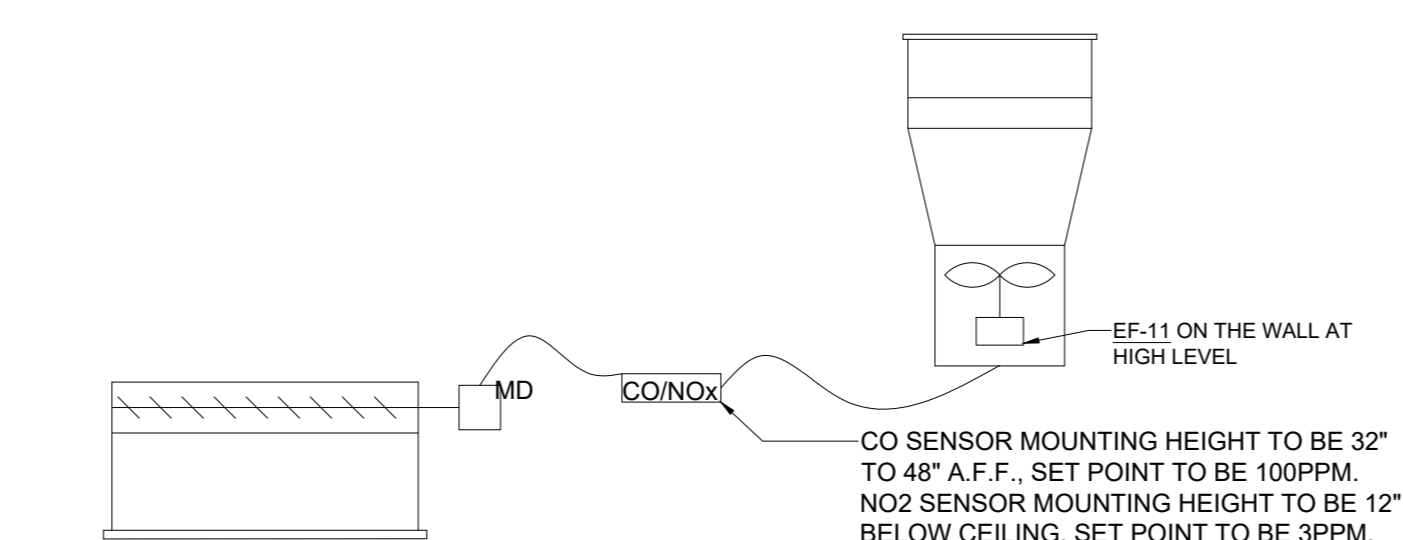
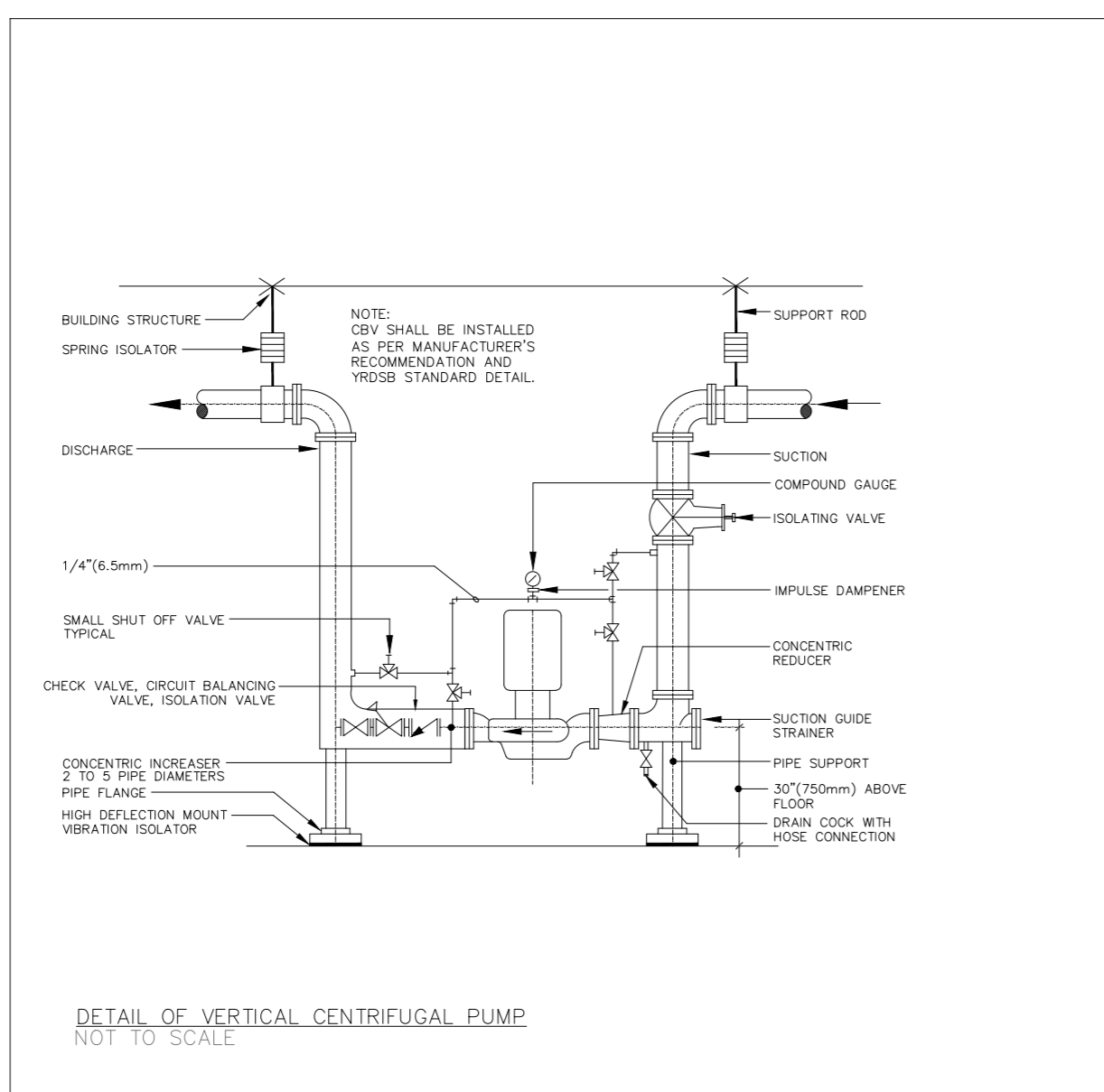
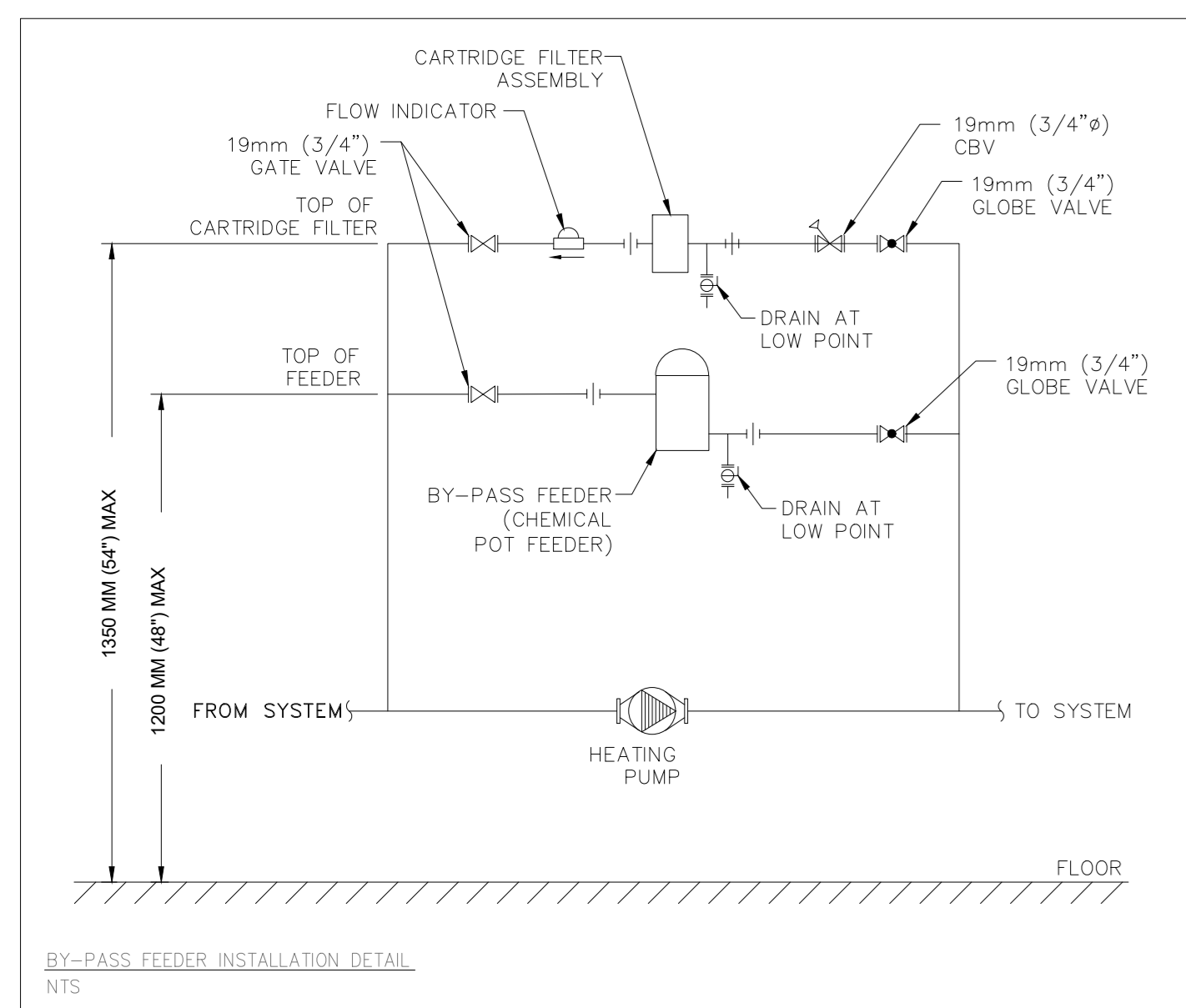


DETAIL OF GAS VENT FROM RADIANT HEATERS  
(AS PER MANUFACTURER'S RECOMMENDATION)

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2		REVIEW	01.10.2024
3		60% CD	21.02.2025
4	90% CD & BUILDING PERMIT		13.06.2025
5	BUILDING PERMIT		01.08.2025
6	ADDENDUM ME-1		05.09.2025

PROJECT : TOWN OF WS FIRE STATION & YORK REGION PRS  
CLIENT : Stouffville  
York Region  
CONSULTANT : RCEI  
PROFESSIONAL SEAL  
ORIENTATION :  
DATE : 2024-06-06  
PROJECT No. : 2024-448  
DRAWING No. : M6.0-A-2  
REVISION :  
2024-06-19 1:53:31

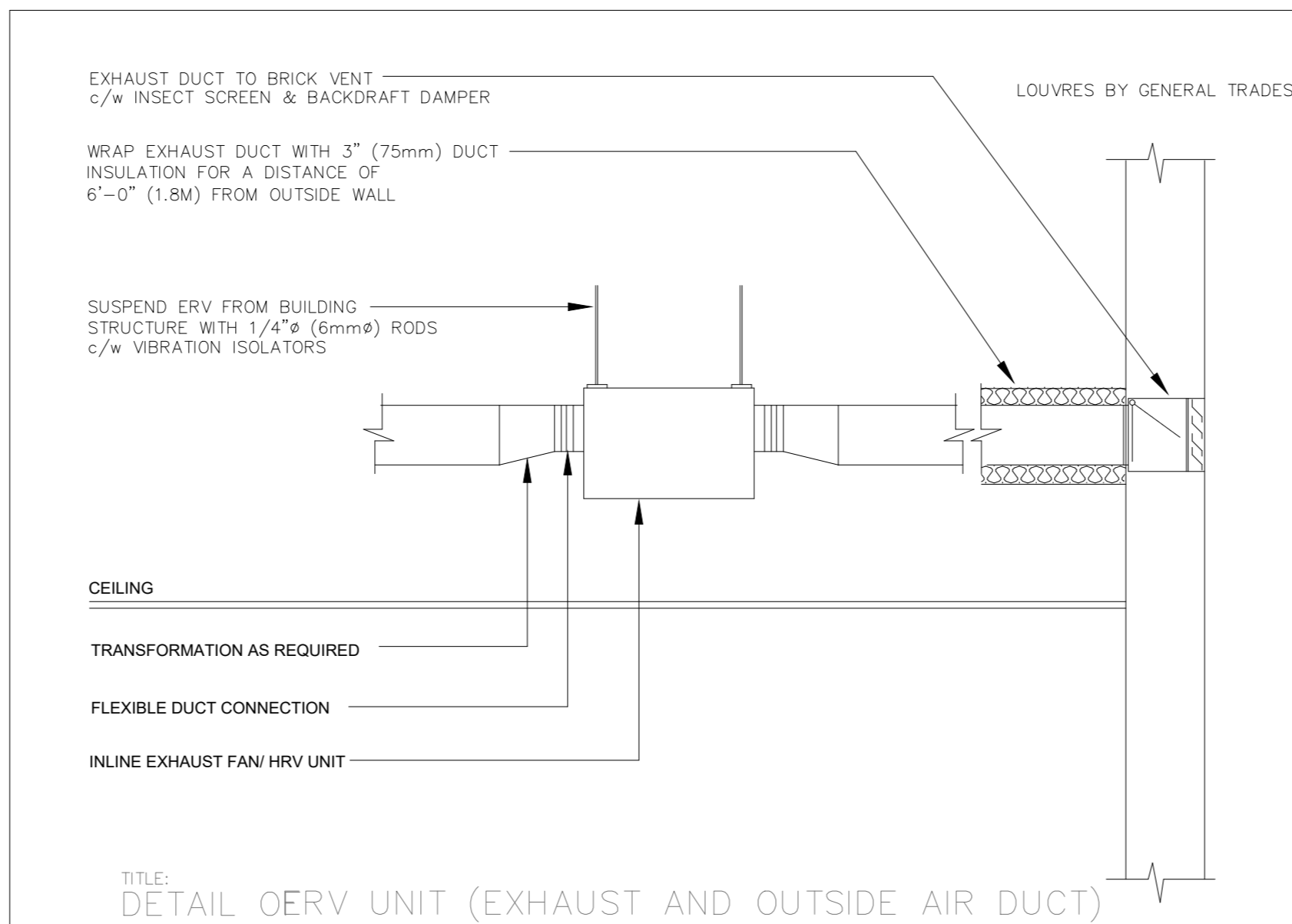
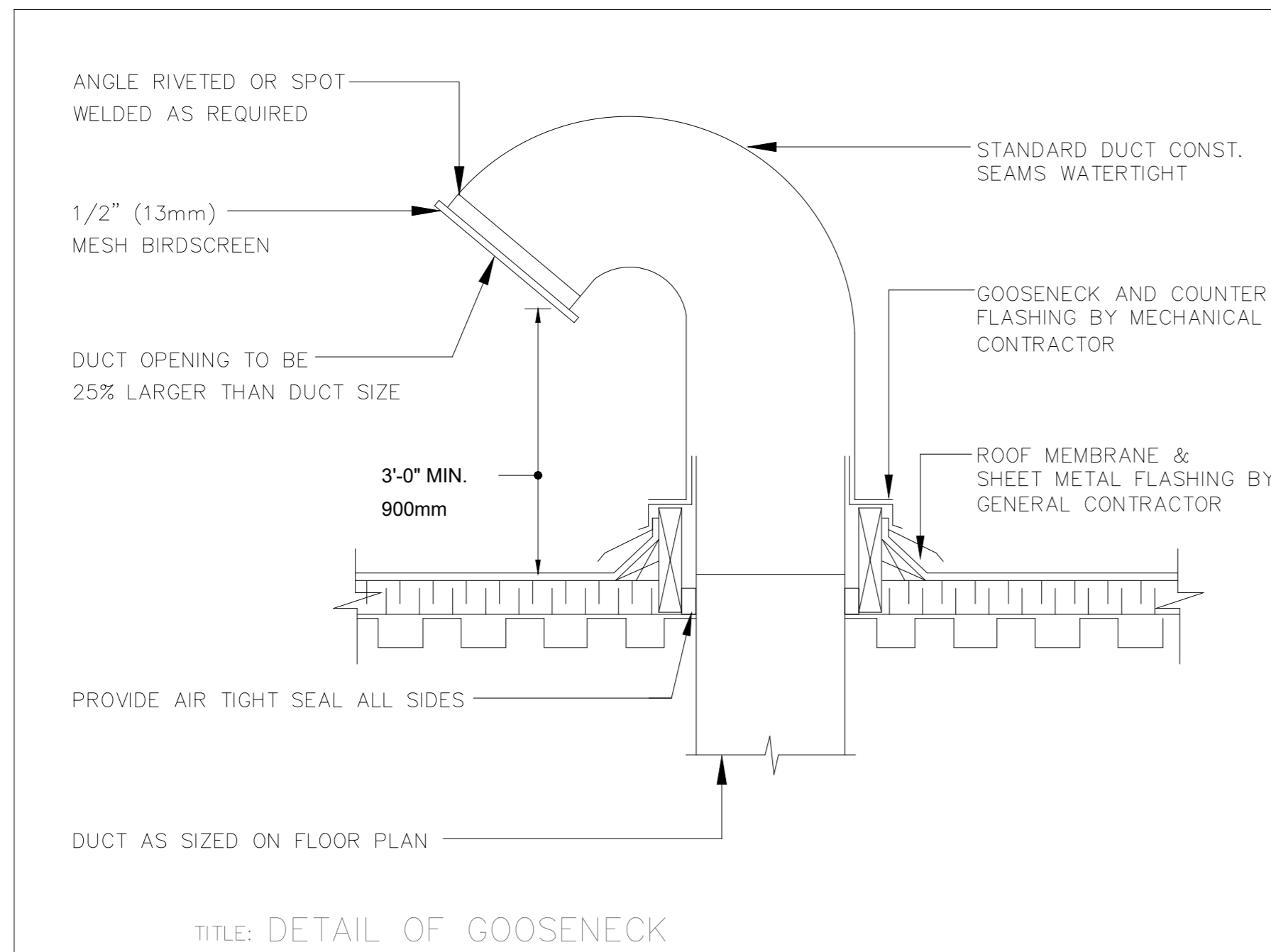
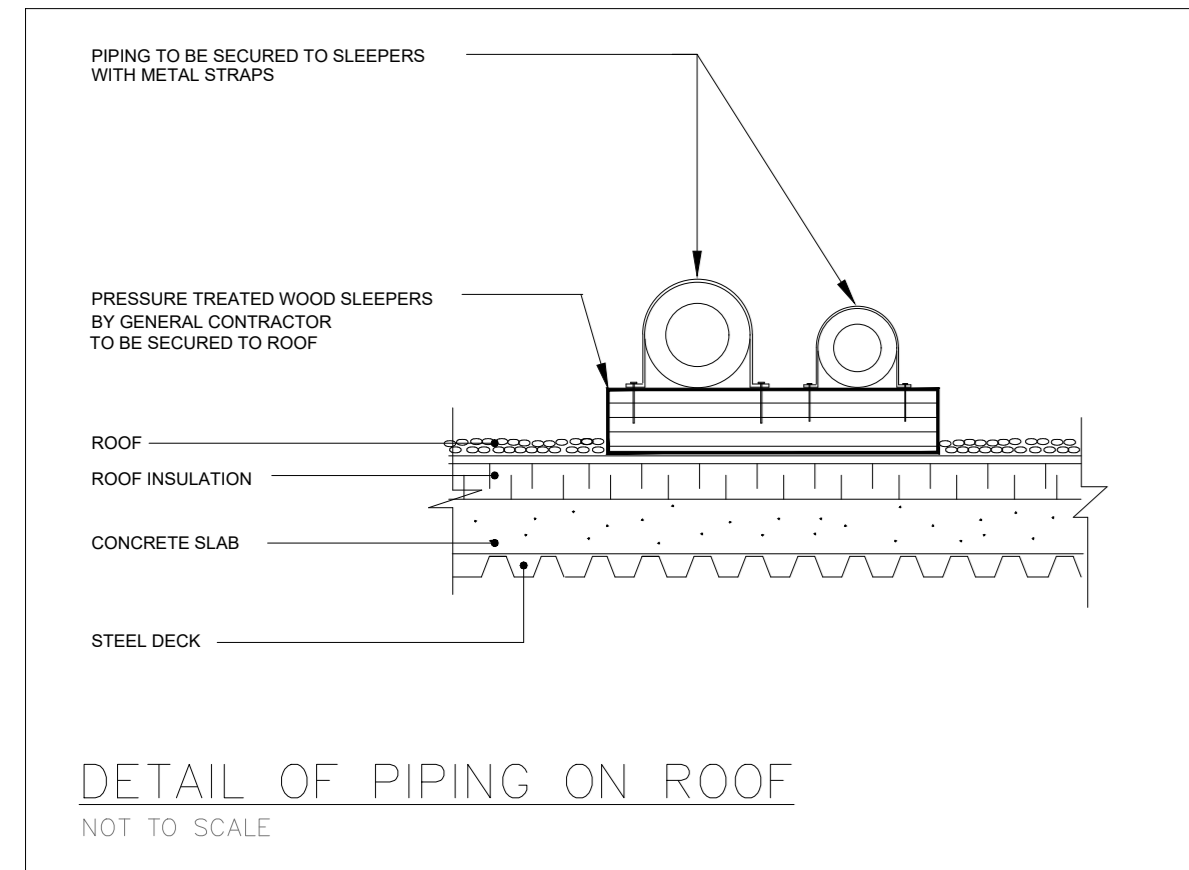
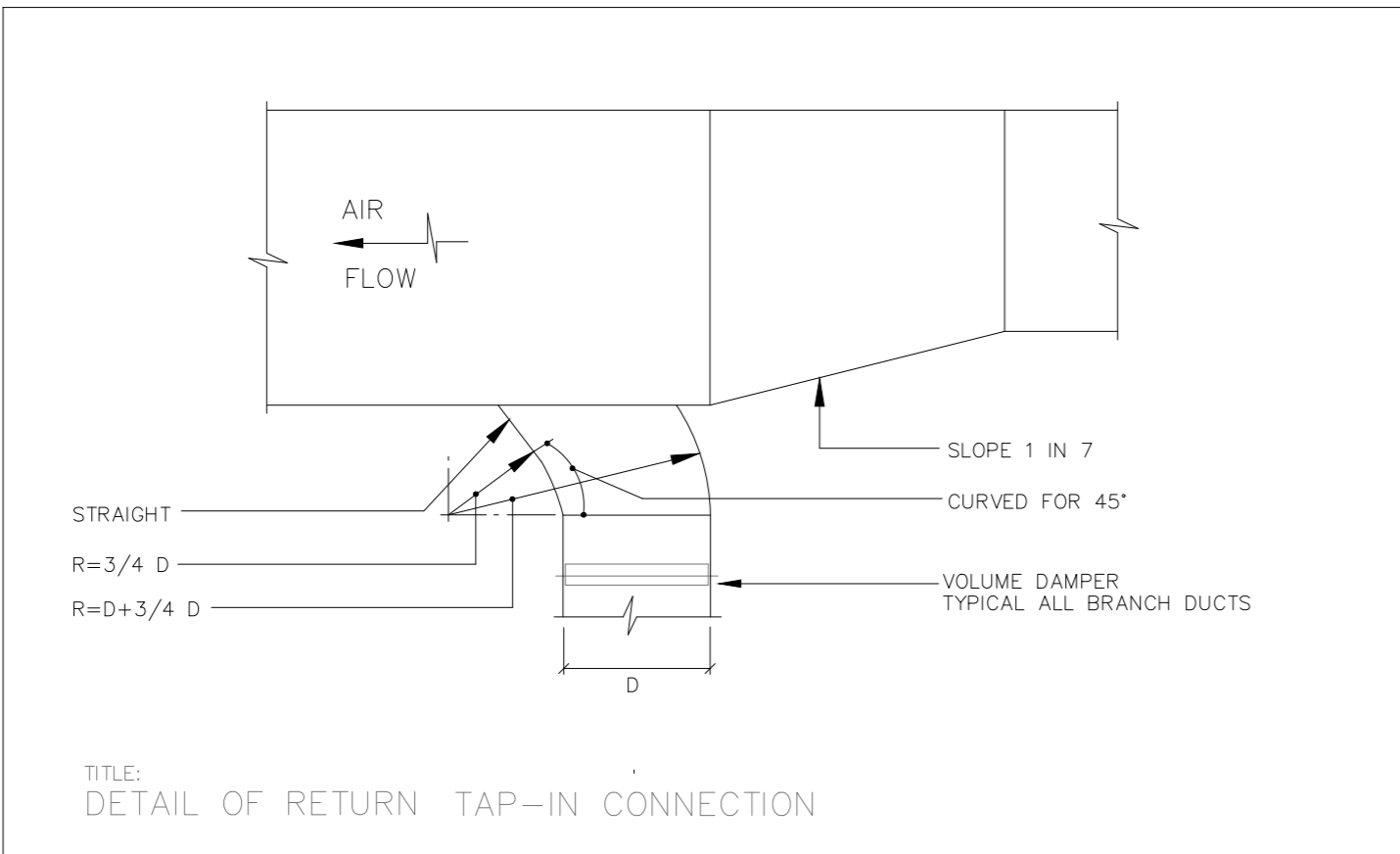
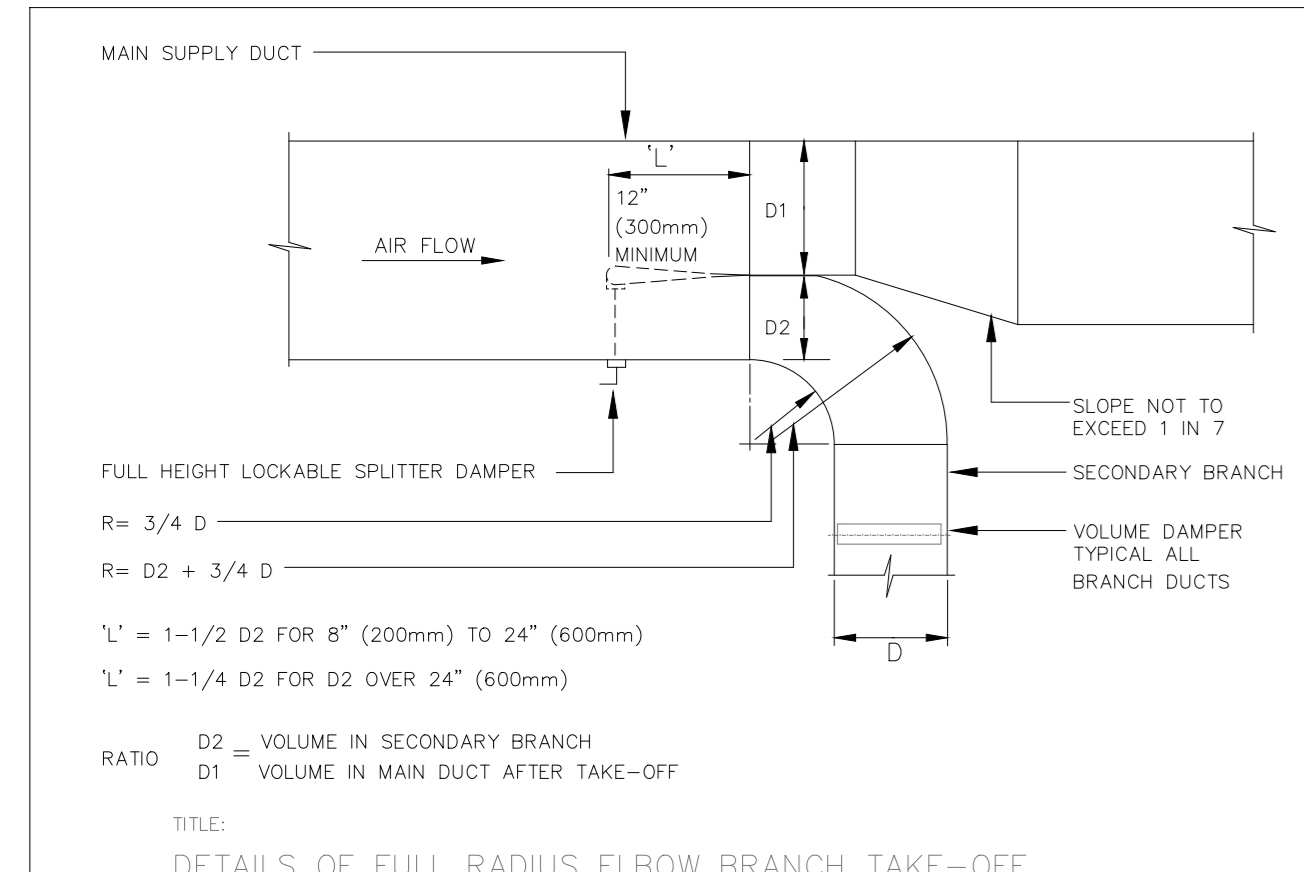
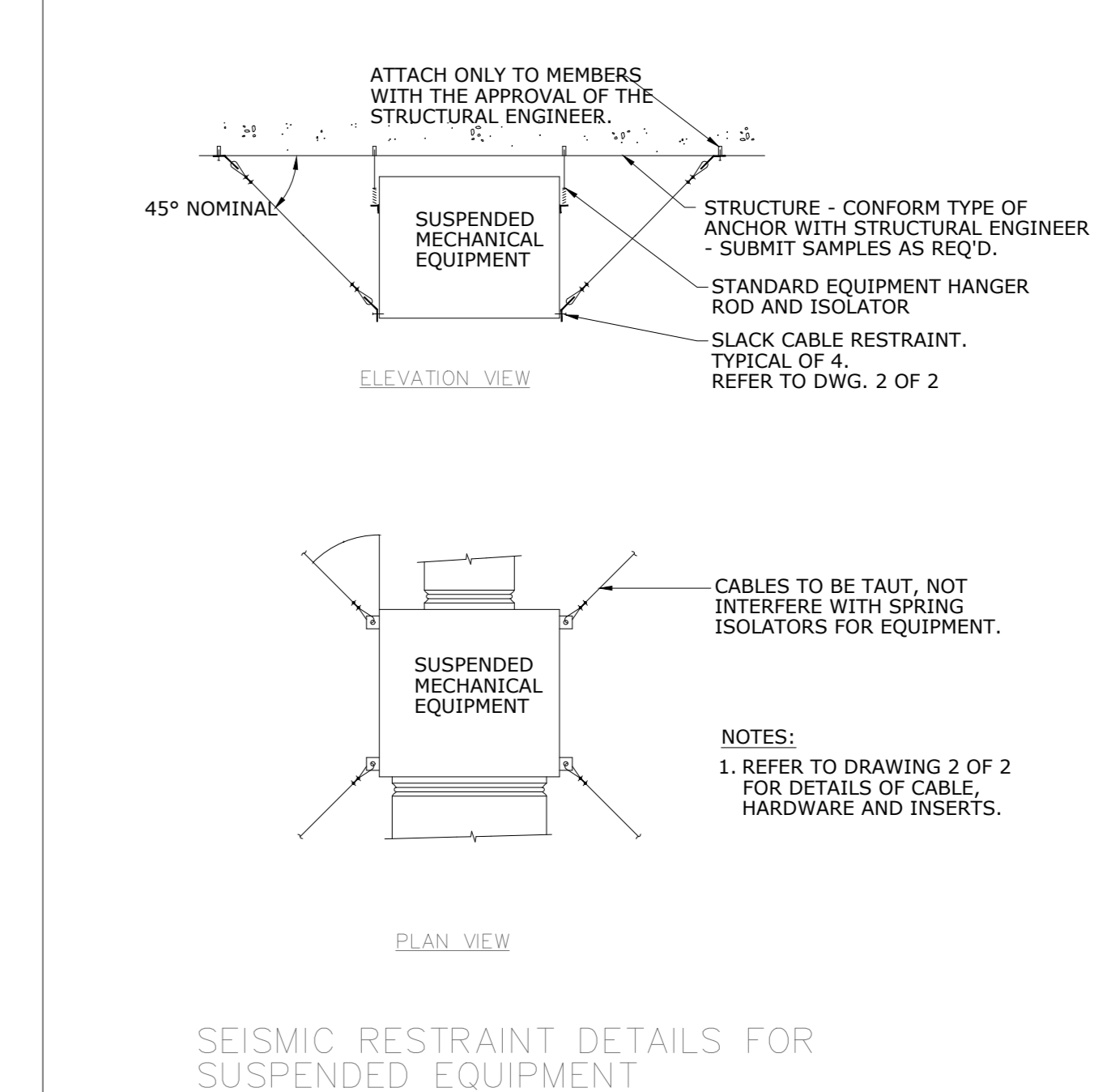
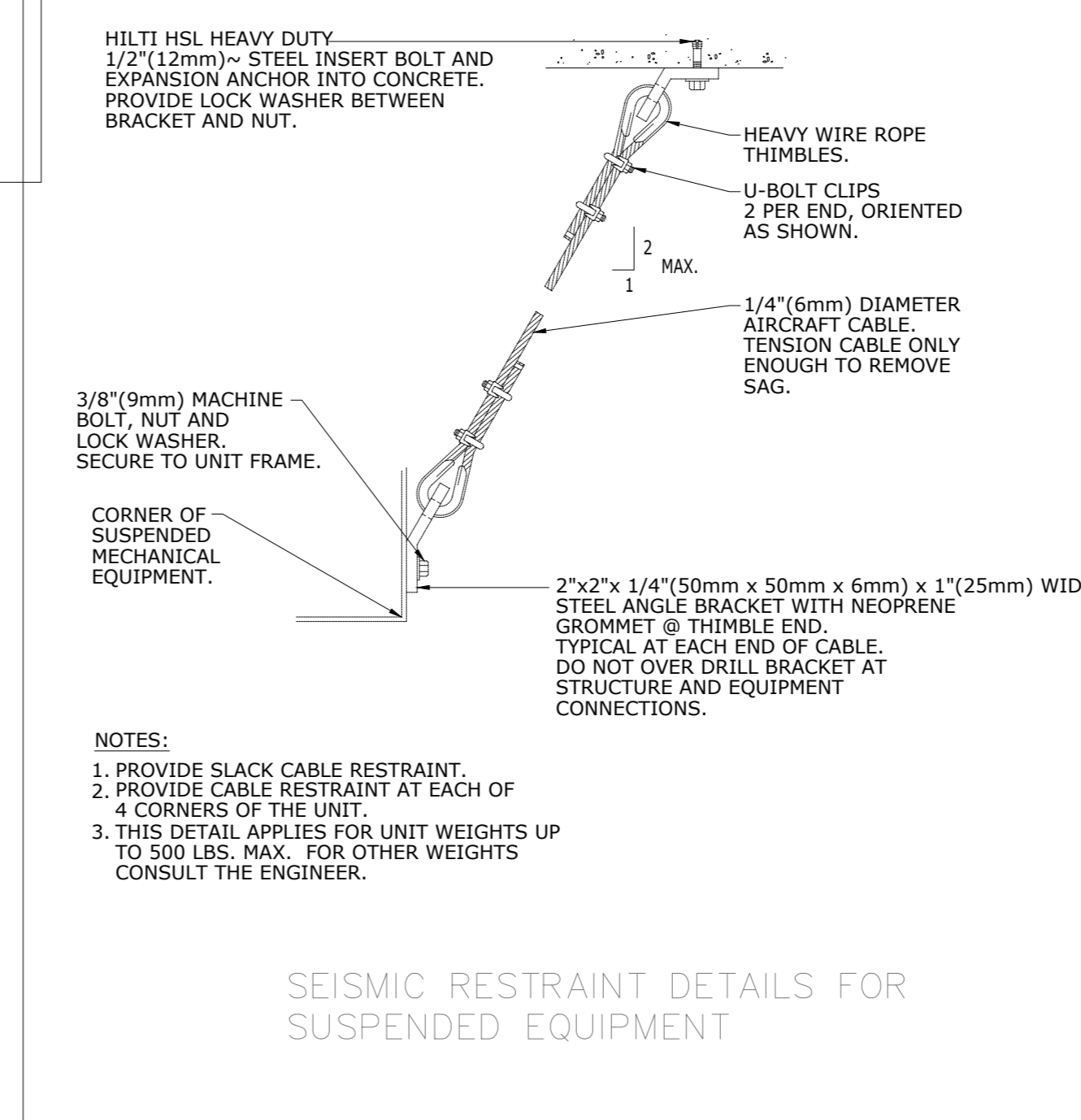
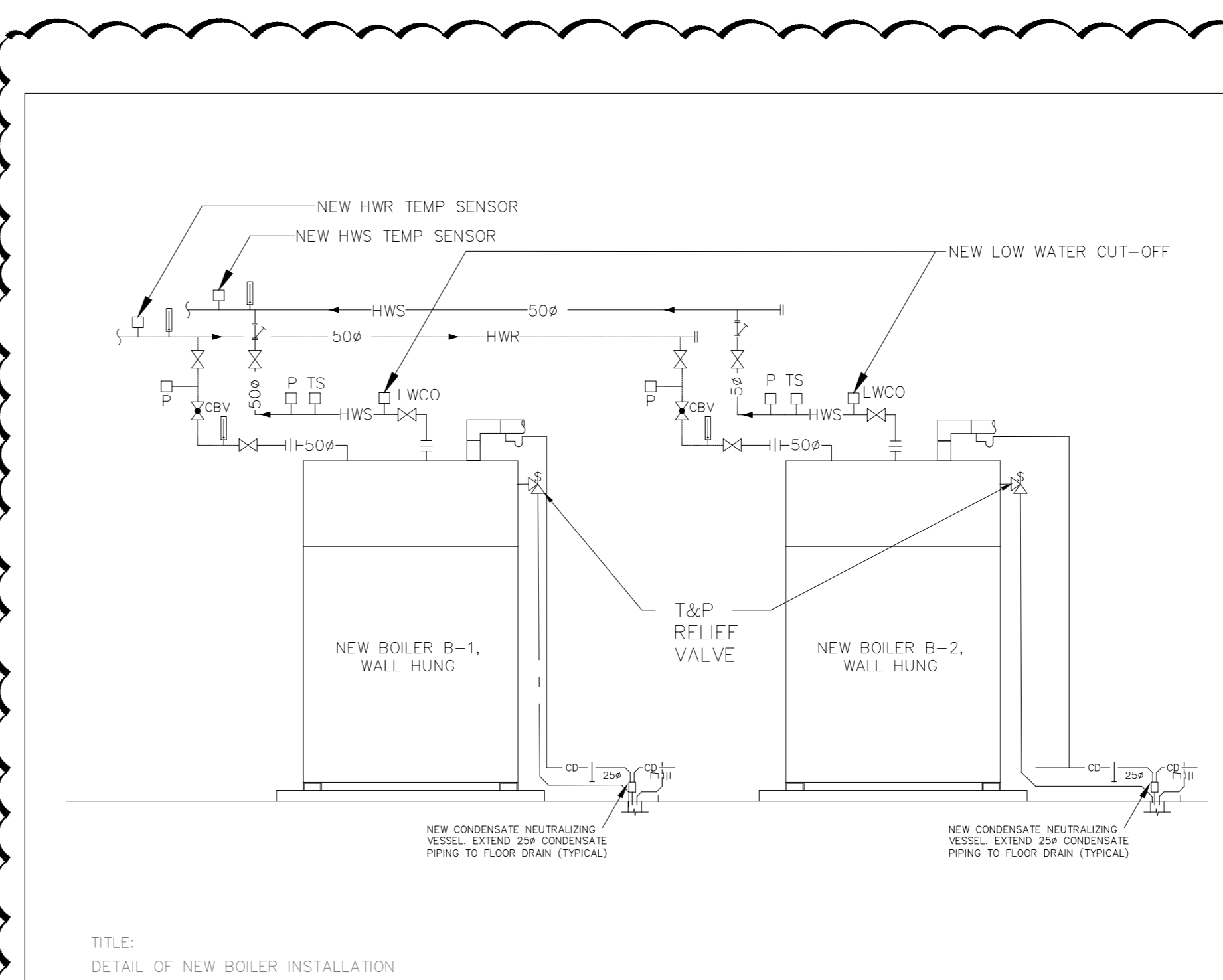
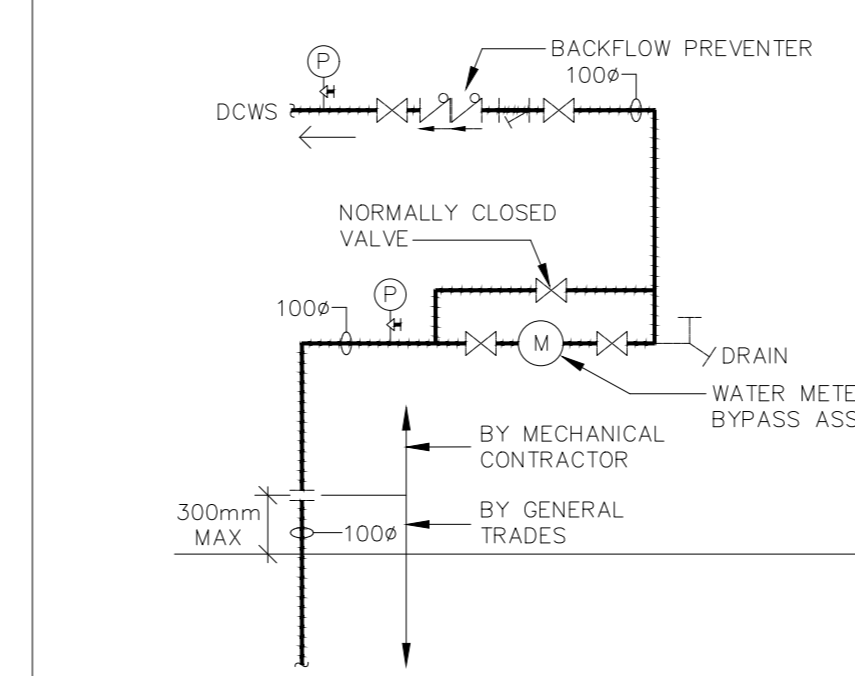
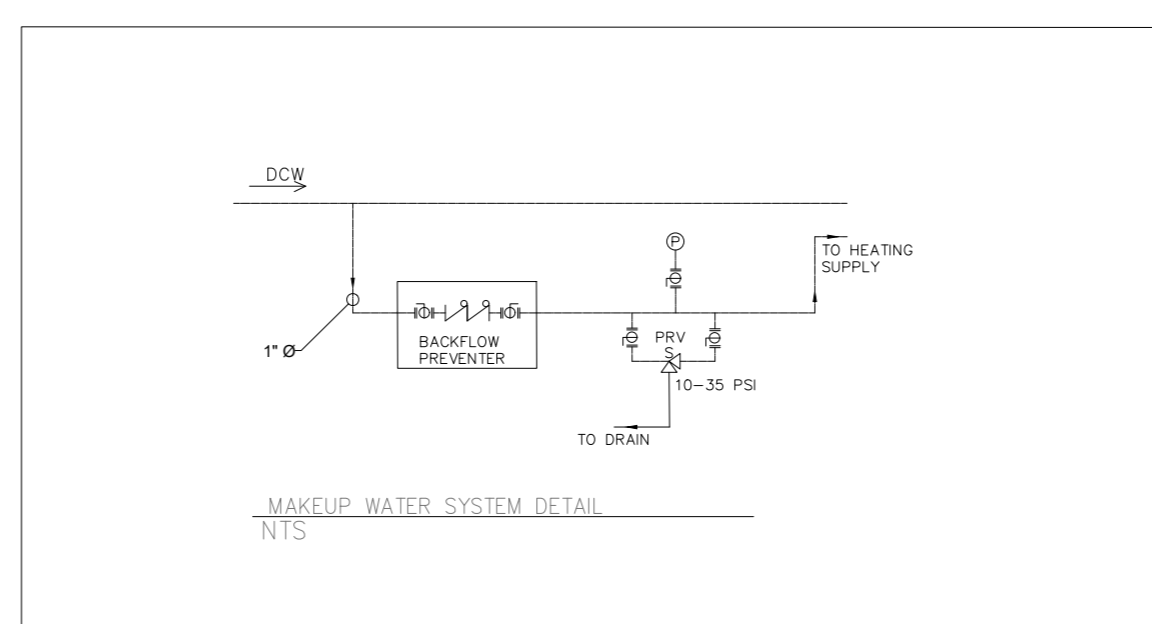
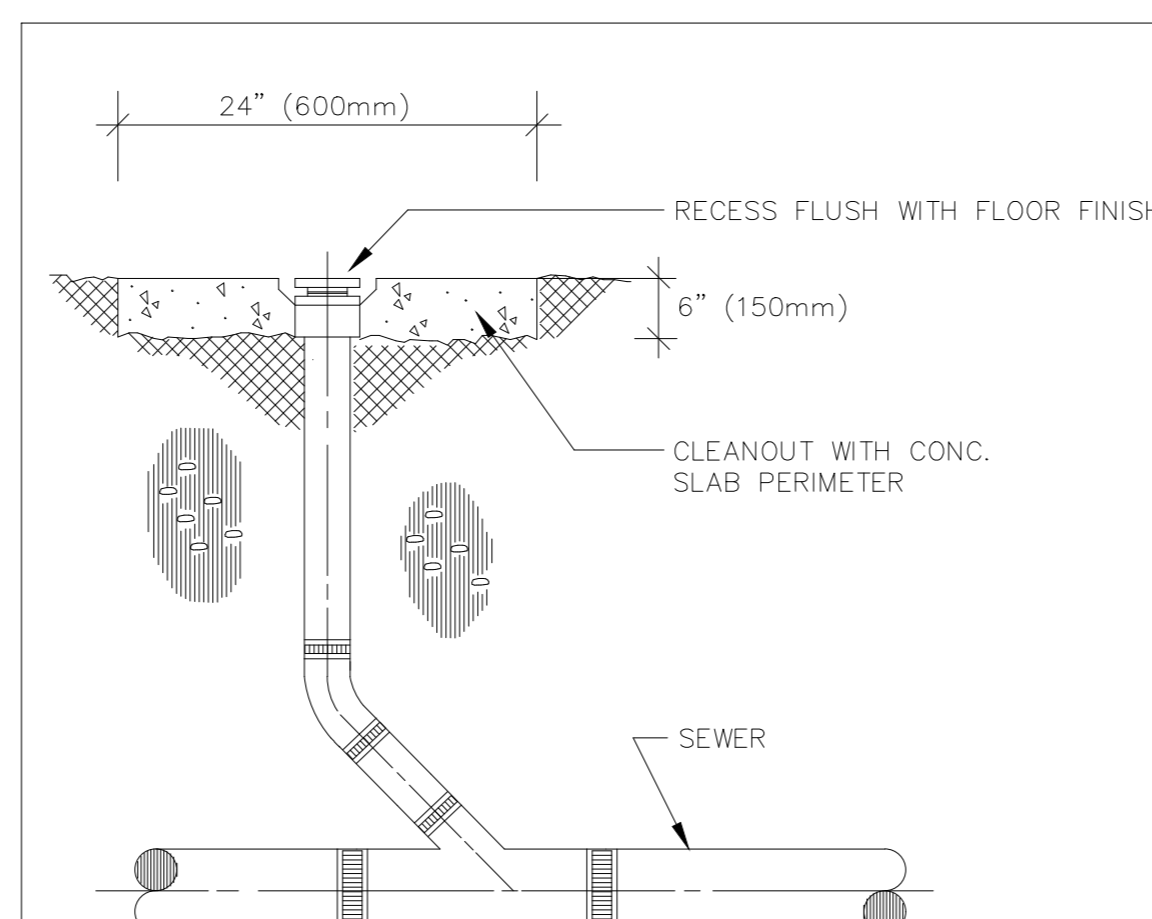
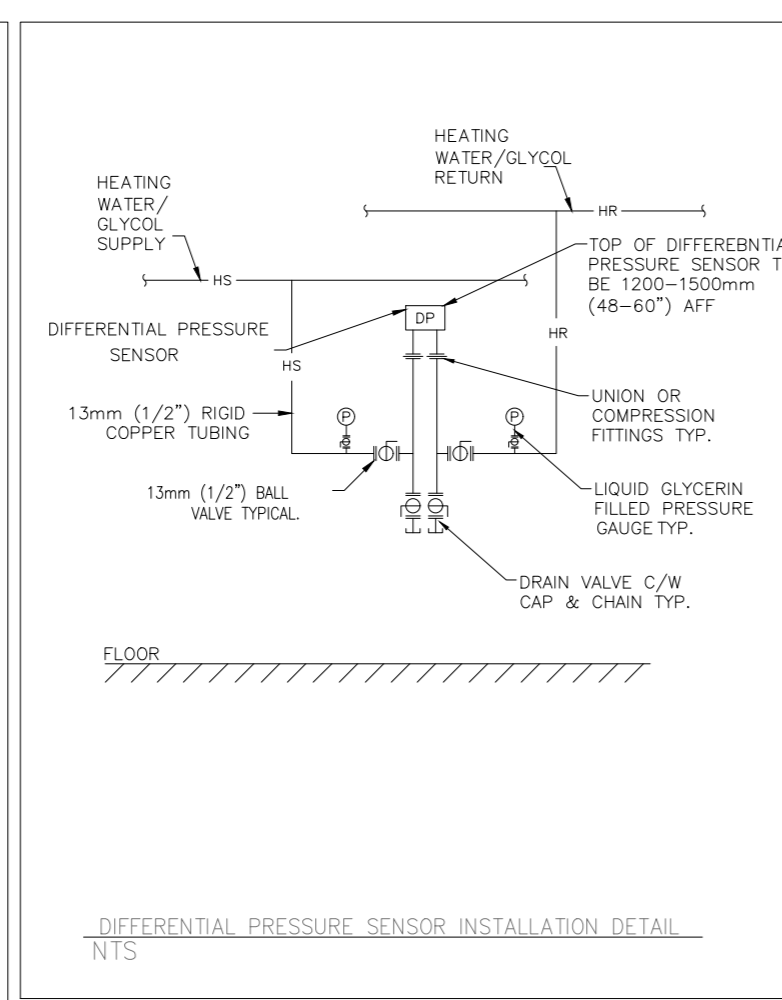
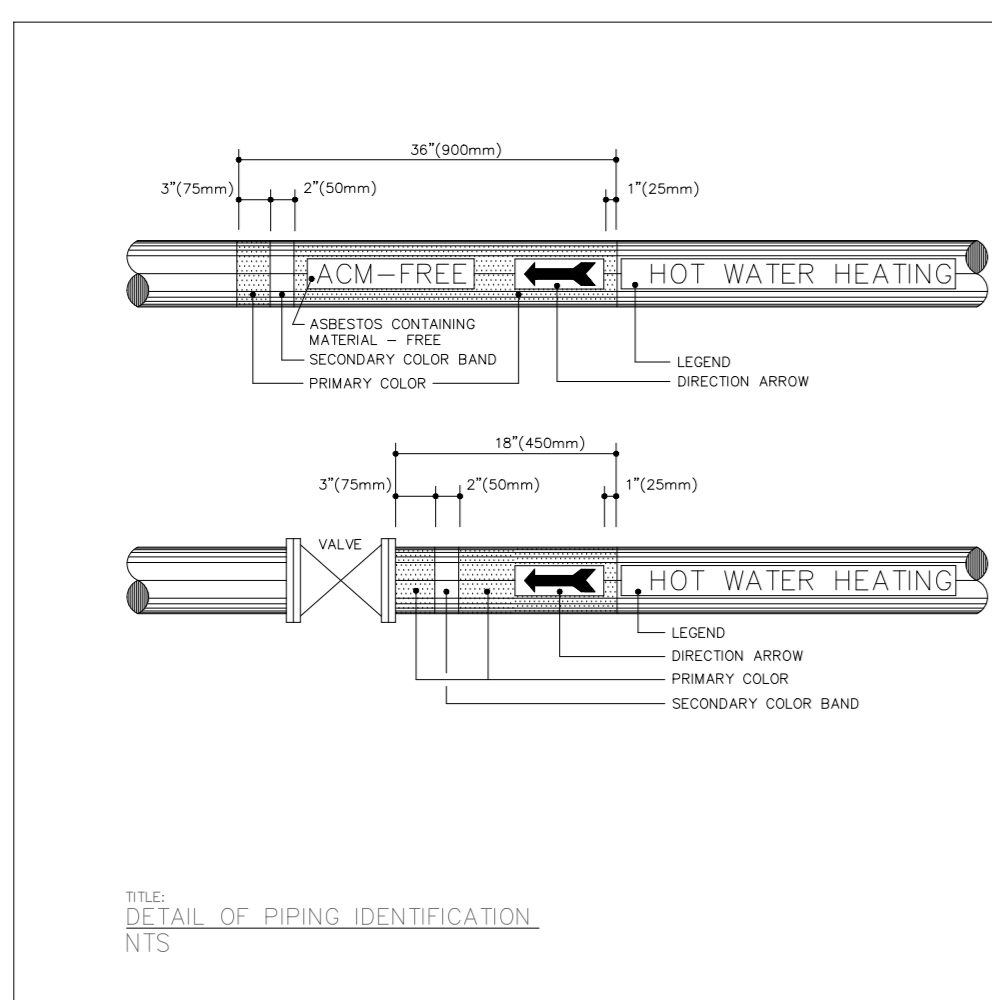
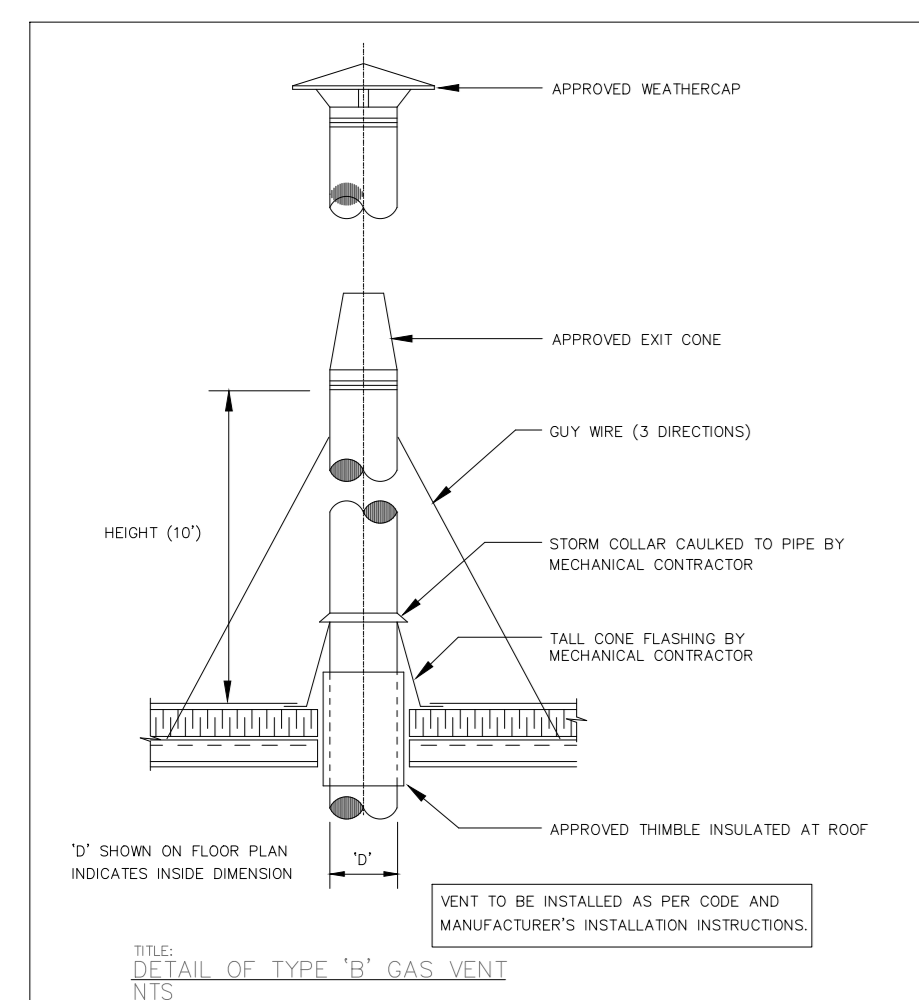
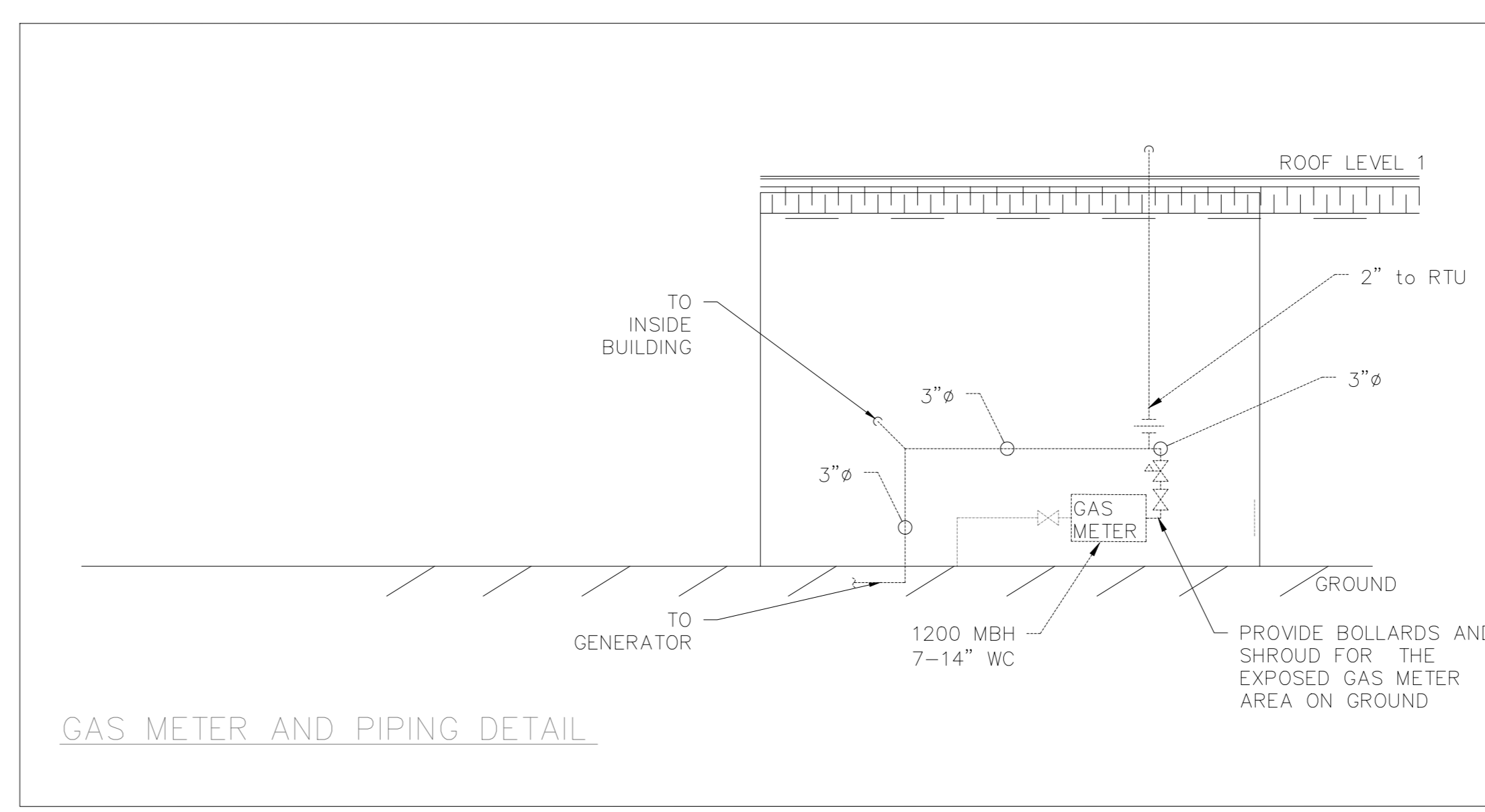


CO/NOX CONTROL CONSOLE

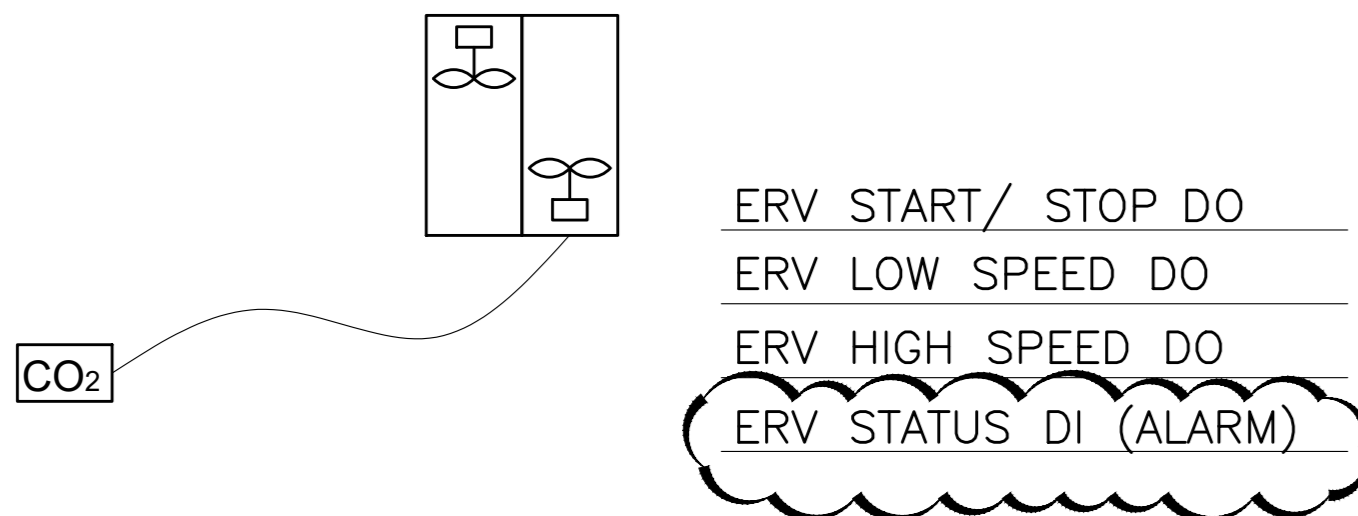
HONEYWELL CO/NOX CONTROL TRANSMITTER WITH SENSORS

- E334H - TRANSMITTER
- E33CO - CARBON MONOXIDE SENSOR
- E33RMNO2 - NITROGEN DIOXIDE SENSOR

MECHANICAL CONTRACTOR TO ALLOW FOR VERIFICATION AND COMMISSIONING OF THE DETECTION SYSTEM, DAMPERS AND EXHAUST FAN.



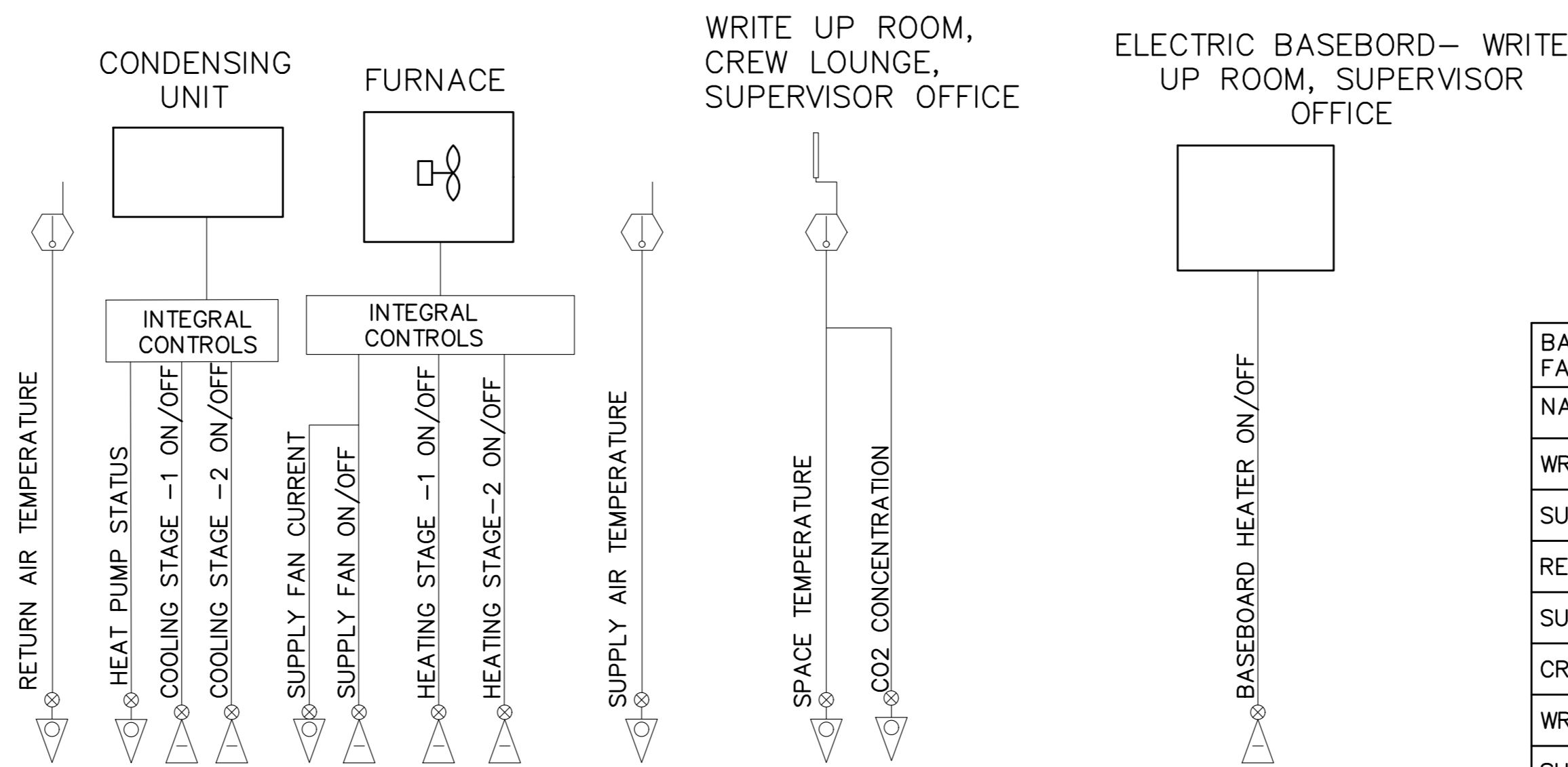
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6	ADDENDUM ME-1	05.09.2025
7	ADDENDUM ME-2	11.09.2025



CO<sub>2</sub> CONCENTRATION AI

- SINGLE OCCUPANCY SENSOR TO OPERATE LIGHTING AND ERV. ERV IS INTERLOCKED WITH THE MOTORIZED DAMPER AT INTAKE AND EXHAUST LOUVERS.
- ERV FAN SPEED (LOW/ HIGH) TO BE CONTROLLED BY BAS THROUGH CO<sub>2</sub> SENSOR.
- ERV TO HAVE HIGH SPEED OVERRIDE IN WASHROOMS WITH A DELAY OF 5 MINUTES.
- CONTRACTOR TO COORDINATE WITH MANUFACTURER FOR CONTROL CONNECTIONS ON THE UNIT.

## ERV CONTROL SCHEMATIC



NOTE: INSTALL SOLID STATE RELAY FOR THE BASEBOARD HEATERS AT WRITE UP ROOM AND SUPERVISOR ROOM, IN THE CONTROL PANEL. UPON CALL FOR HEATING RELAY WILL ENERGIZE TO TURN THE POWER ON FOR THE BASEBOARD HEATERS.

## FURNACE CONTROL SCHEMATIC

BAS POINTS LIST EXHAUST FANS	
NAME	POINT TYPE
WRITE UP ROOM TEMP	AI
SUPPLY AIR TEMP	AI
RETURN AIR TEMP	AI
SUPERVISOR OFFICE TEMP	AI
CREW LOUNGE TEMP	AI
WRITE UP ROOM CO2	AI
SUPERVISOR OFFICE CO2	AI
CREW LOUNGE CO2	AI
FURNACE SUPPLY FAN ON/OFF	DO
SUPPLY FAN CURRENT	AI
HEATING STAGE 1	DO
HEATING STAGE 2	DO
COOLING STAGE 1	DO
COOLING STAGE 2	DO
BASEBOARD BB-1	DO
BASEBOARD BB-4	DO

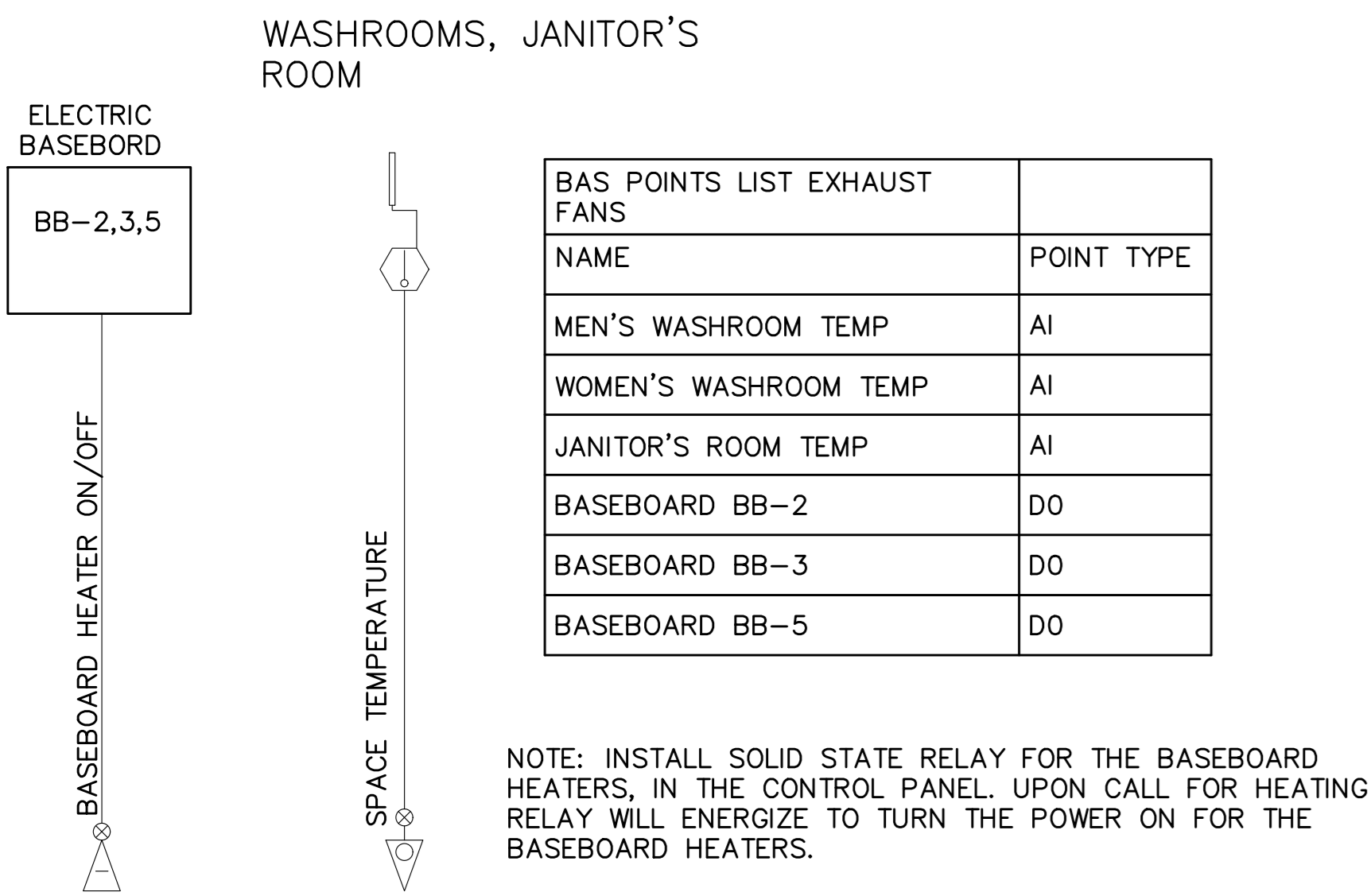
PHOTOSENSOR AI  
EXTERIOR LIGHTING DO (TYP.)

PC  
NEW

NOTE: TYP. OUTSIDE LIGHTING SCHEMATICS, REFER TO ELECTRICAL FOR DETAILS

## EXTERIOR LIGHTING CONTROL

BAS POINTS LIST EXHAUST FANS	
NAME	POINT TYPE
PHOTOCELL	DI
OUTSIDE LIGHTING	DO

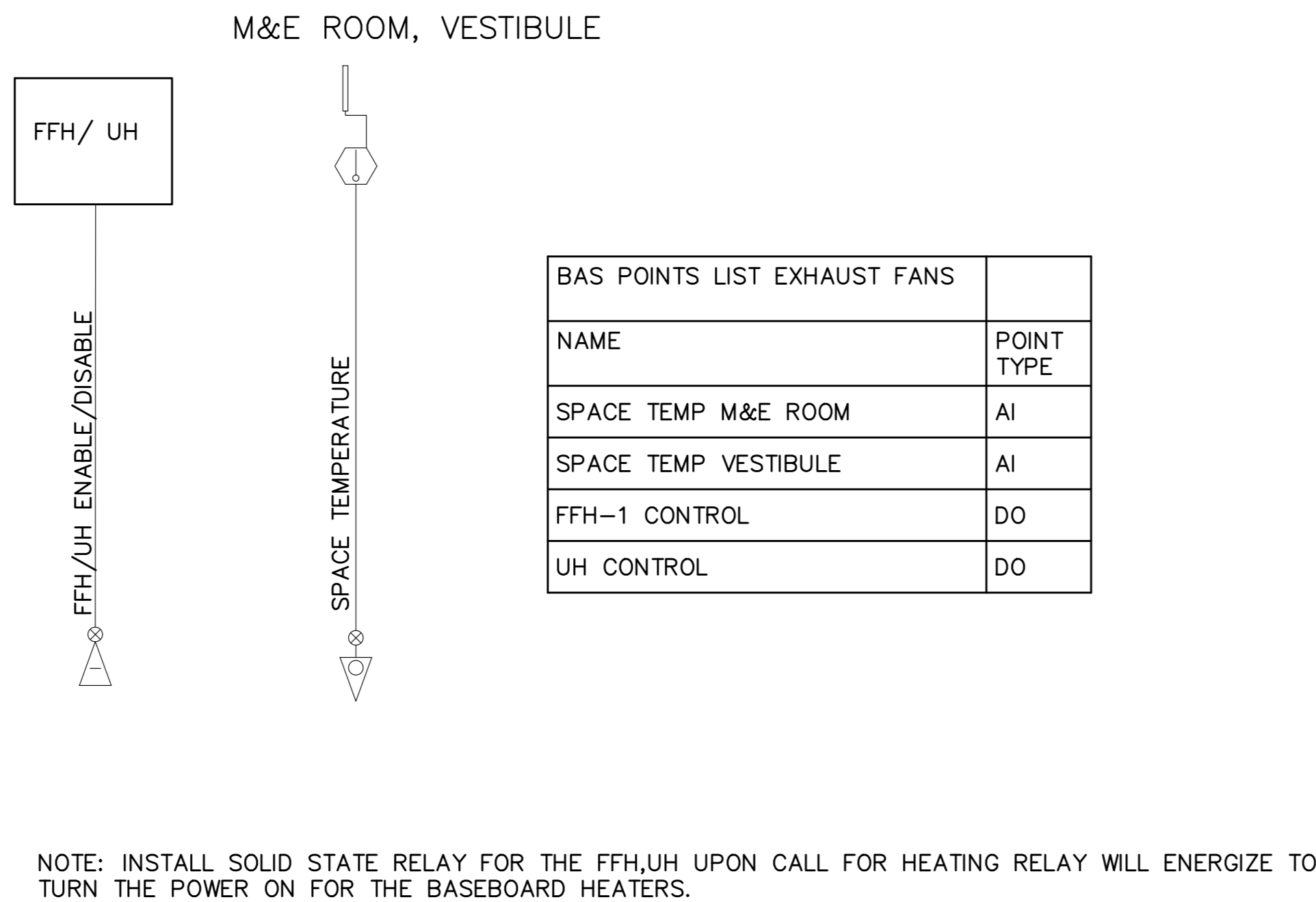


NOTE: INSTALL SOLID STATE RELAY FOR THE BASEBOARD HEATERS, IN THE CONTROL PANEL. UPON CALL FOR HEATING RELAY WILL ENERGIZE TO TURN THE POWER ON FOR THE BASEBOARD HEATERS.

## BASEBOARD HEATERS CONTROL

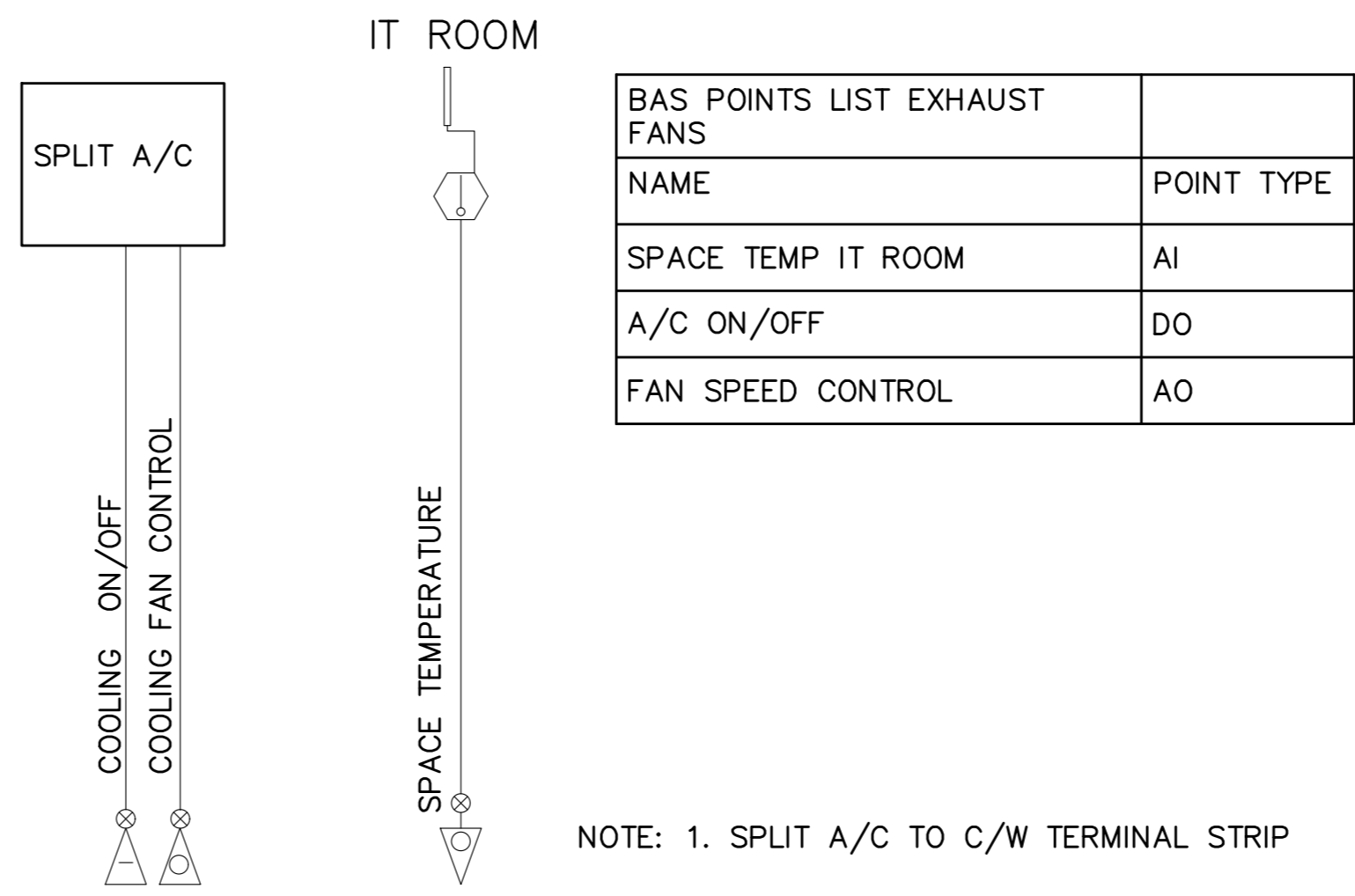
NOTE: PREFERRED BAS VENDOR:  
1. RELIABLE CONTROLS  
2. DELTA CONTROLS

NOTE:  
1. ALL BAS CONTROLS SHALL BE HARDWIRED STRIP  
2. BACNET FOR MONITORING ONLY



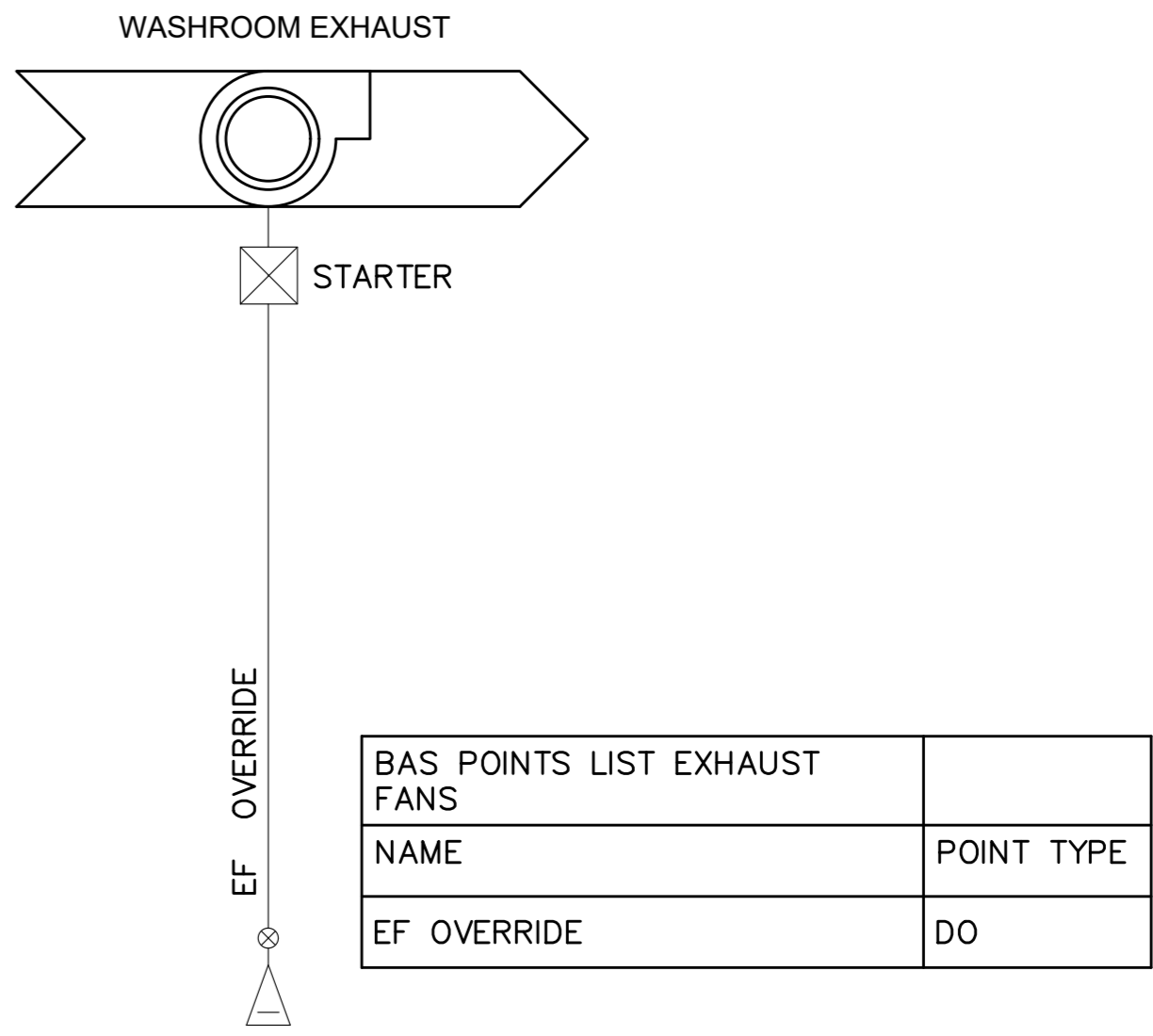
NOTE: INSTALL SOLID STATE RELAY FOR THE FFH,UH UPON CALL FOR HEATING RELAY WILL ENERGIZE TO TURN THE POWER ON FOR THE BASEBOARD HEATERS.

## MISC. CONTROL SCHEMATICS



NOTE: 1. SPLIT A/C TO C/W TERMINAL STRIP

## IT ROOM CONTROL SCHEMATICS



## EF CONTROL SCHEMATICS

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7	ADDENDUM ME-2 11.09.2025

PROJECT : TOWN OF WS FIRE STATION & YORK REGION PRS  
4902 AURORA ROAD, WHITCHURCH-STOUFFVILLE, ONTARIO



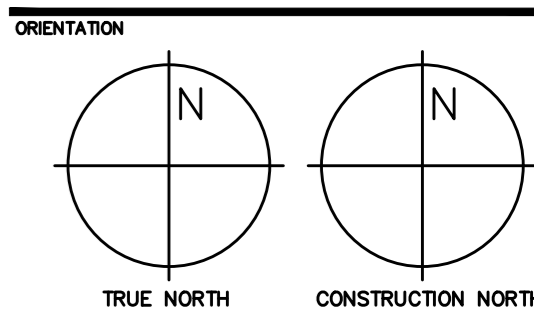
THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO COMMENCEMENT OF THE WORK. ANY DISCREPANCIES ARE TO BE REPORTED TO THE CONSULTANT.

CONSULTANT



PROFESSIONAL SEAL

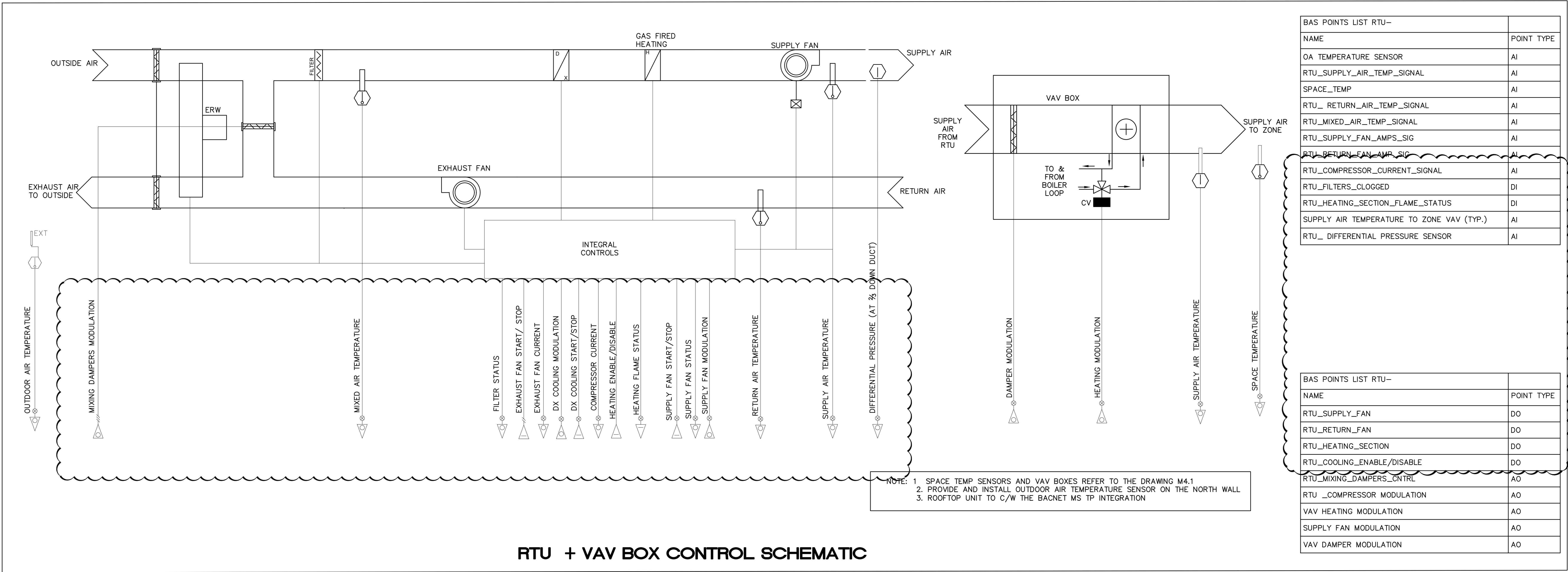
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CONTROL SCHEMATICS- PRS



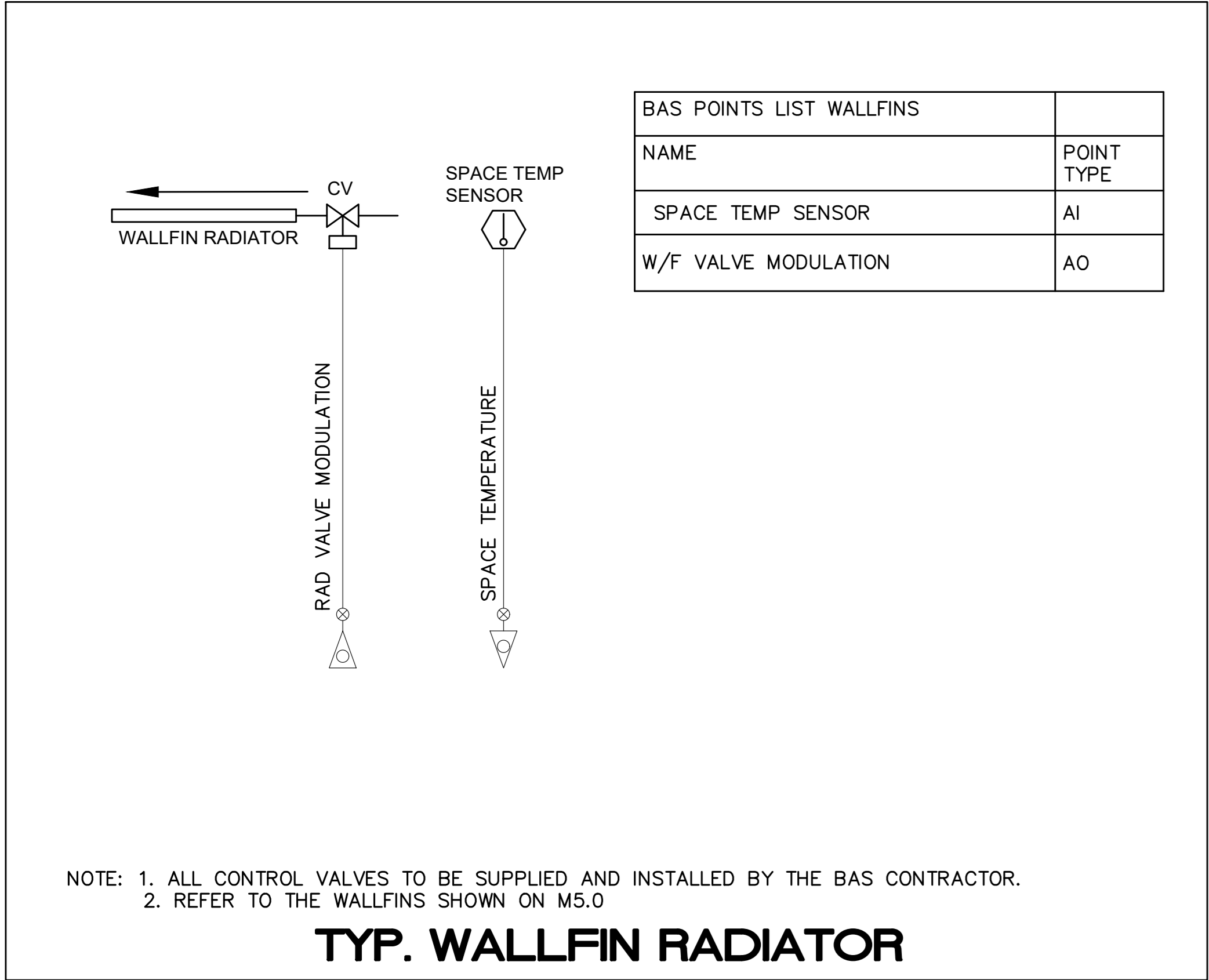
DATE 2024-06-06

PROJECT No. 2024-448

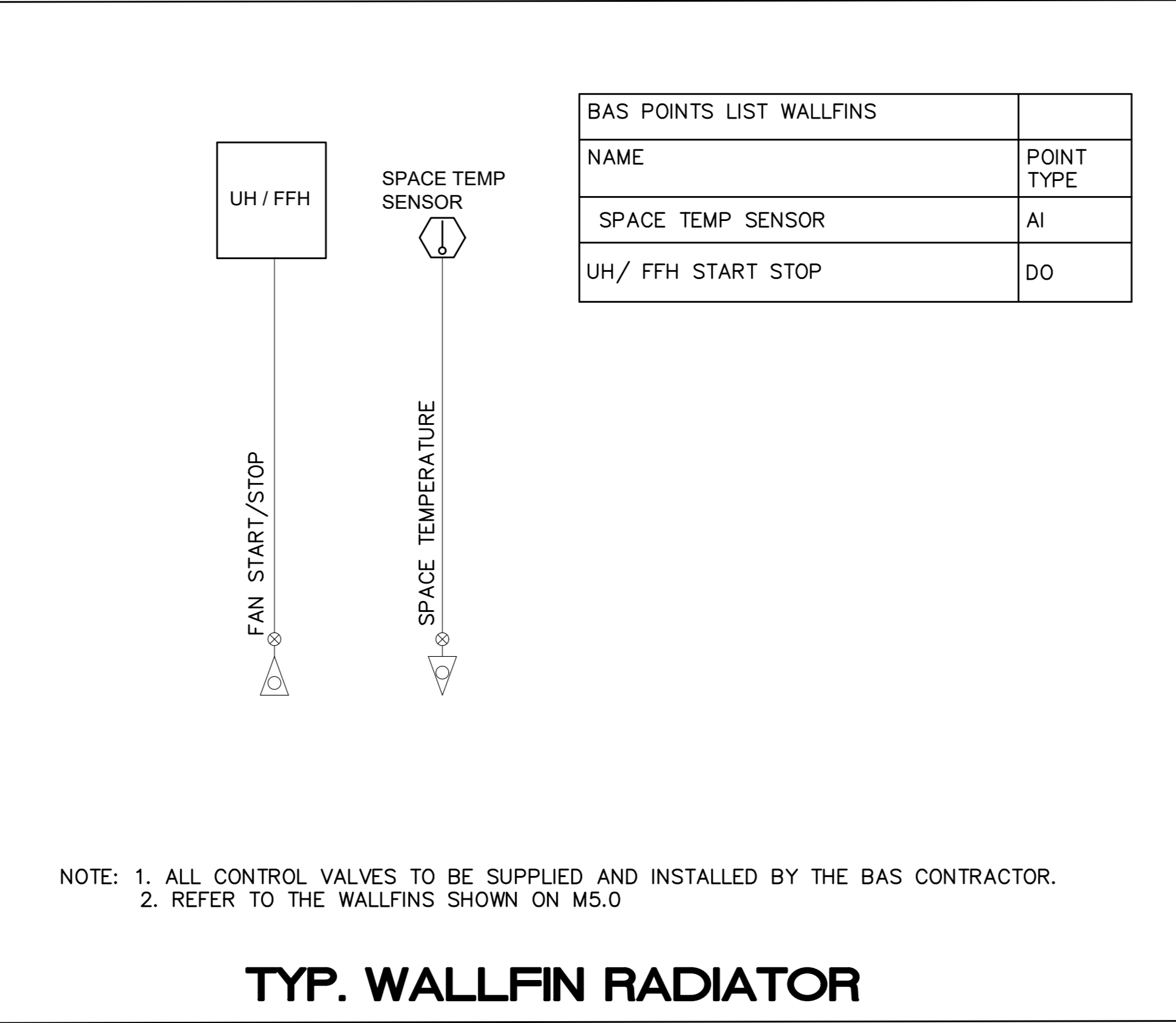
DRAWING No. M7.0-A-2 REVISION



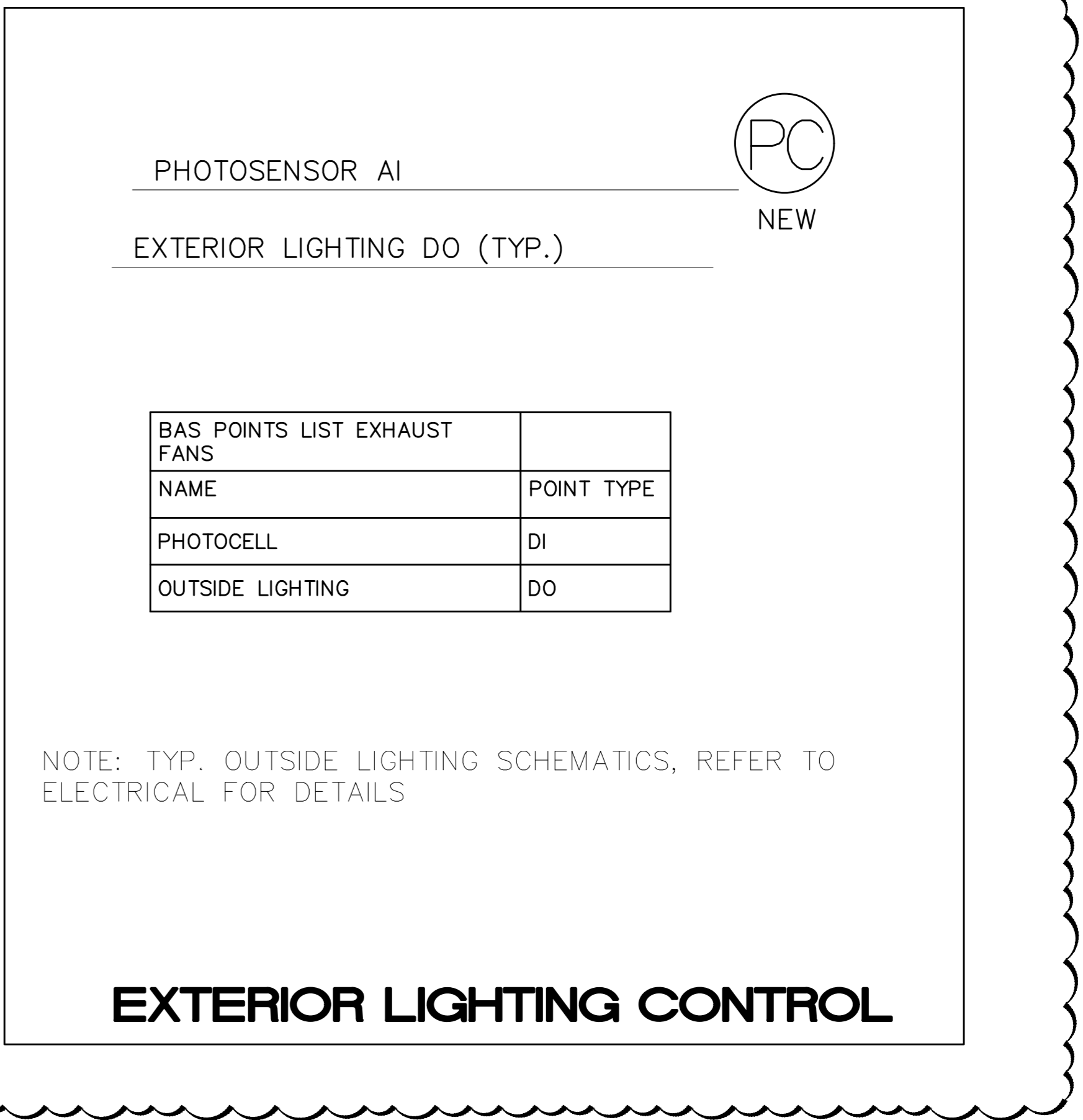
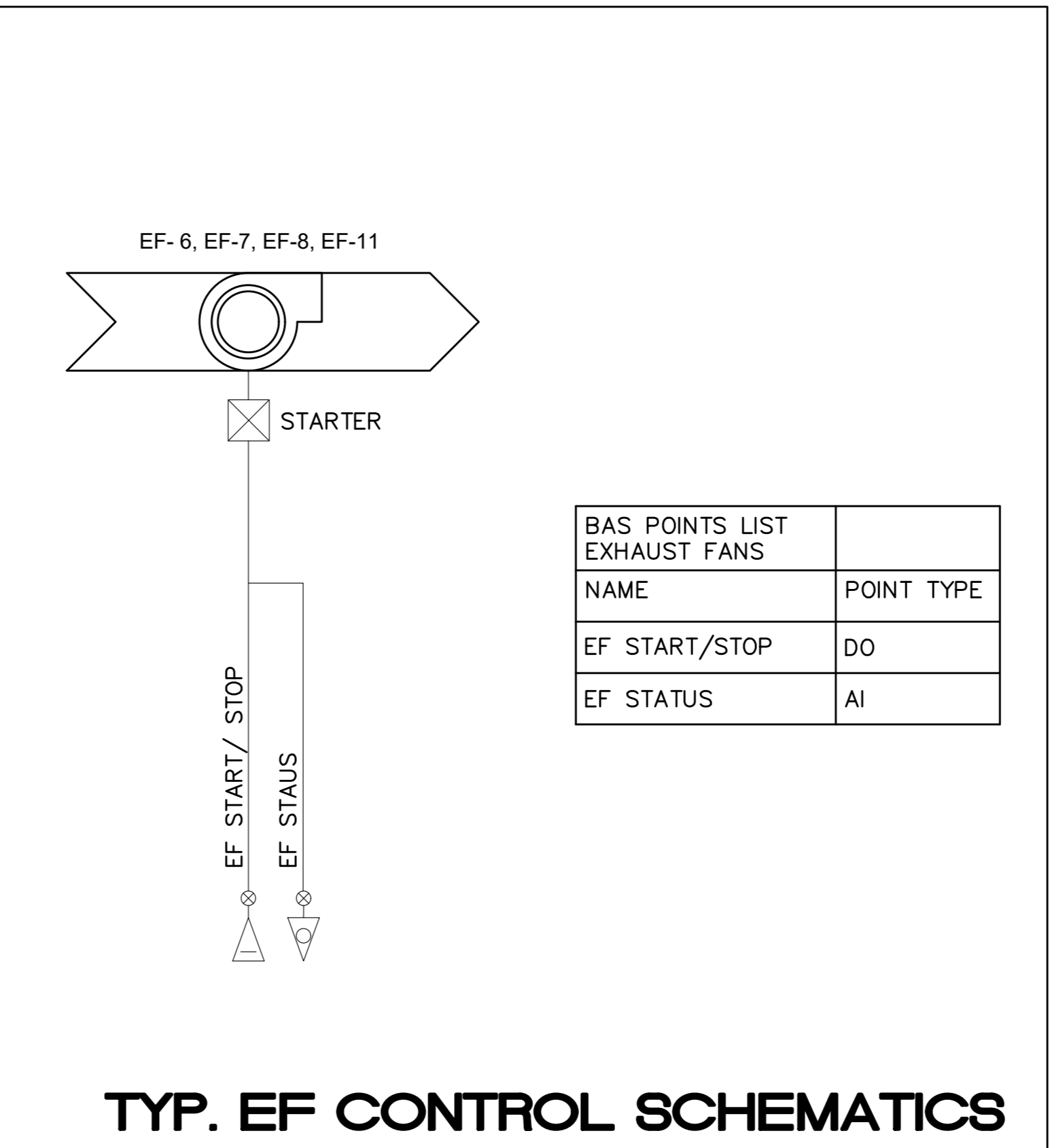
RTU + VAV BOX CONTROL SCHEMATIC



TYP. WALLFIN RADIATOR



TYP. EF CONTROL SCHEMATICS



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PROJECT : TOWN OF WS FIRE STATION & YORK REGION PRS  
CLIENT : Stouffville  
York Region  
CONSULTANT : RCEI  
PROFESSIONAL SEAL :  
DATE : 2024-06-06  
PROJECT No. : 2024-448  
DRAWING No. : M7.2-A-1  
REVISION :  
ORIENTATION : TRUE NORTH  
CONSTRUCTION NORTH