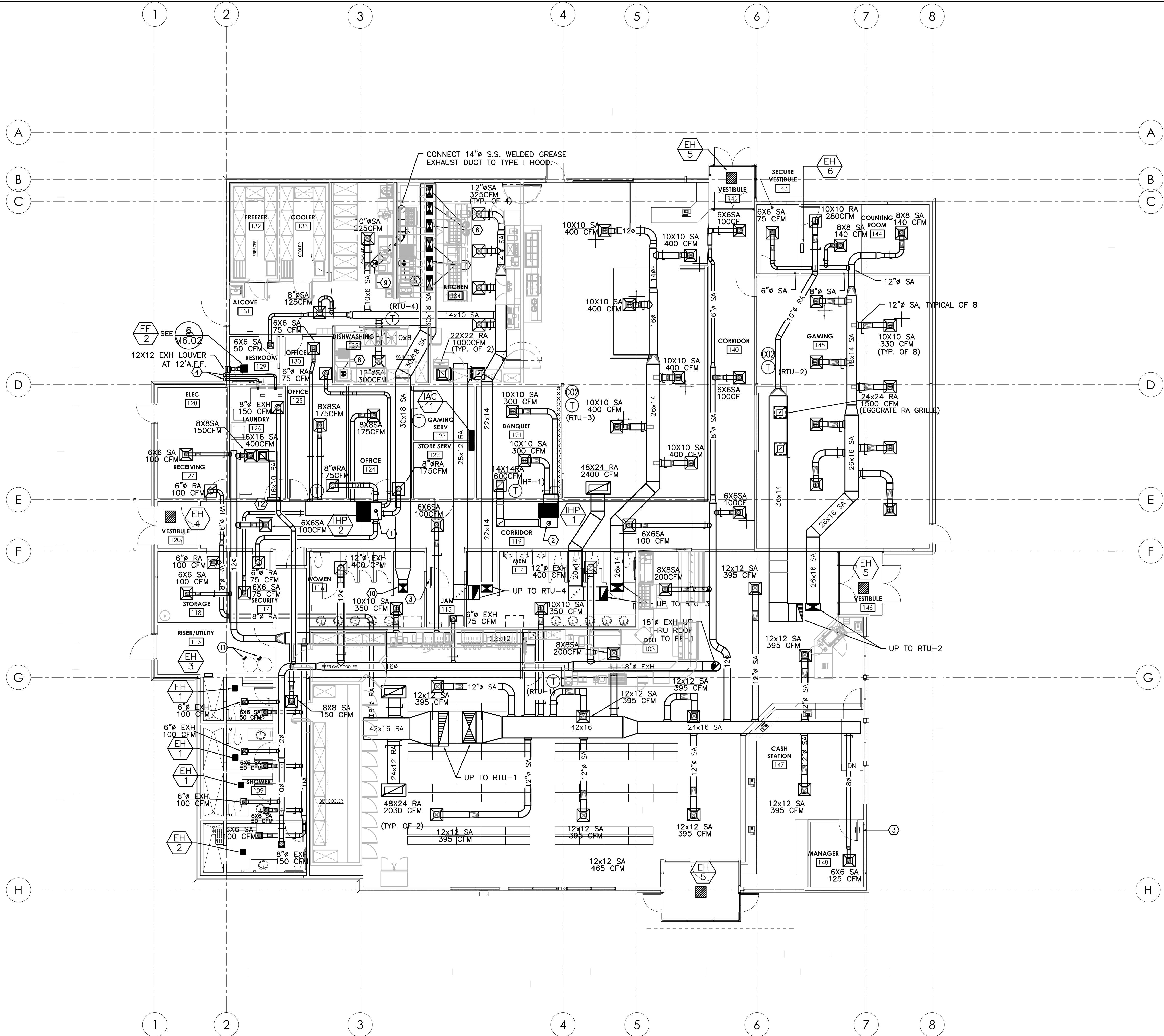


KEYED NOTES:

- 1 - 6" INSULATED OSA DUCT UP THRU ROOF WITH A MANUAL BALANCING DAMPER AND A 2-POS CONTROL DAMPER. SEE 8/M6.02 FOR DETAIL. SEE EQUIPMENT SCHEDULE FOR OSA AIRFLOW.
- 2 - 8" INSULATED OSA DUCT UP THRU ROOF WITH A MANUAL BALANCING DAMPER AND A 2-POS CONTROL DAMPER. SEE 8/M6.02 FOR DETAIL. SEE EQUIPMENT SCHEDULE FOR OSA AIRFLOW.
- 3 - UNDERCUT DOOR BY 3/4".
- 4 - TERMINATE 4" DRYER DUCT AT EXTERIOR WALL PER MFR'S INSTALLATION MANUAL.
- 5 - 14" WELDED S.S. GREASE DUCT UP THRU ROOF TO GREASE FAN.
- 6 - CONNECT 24X12 SA TO SUPPLY PLENUM ON THE GREASE HOOD. BALANCE AIRFLOW TO 560 CFM AT EACH CONNECTION.
- 7 - CONNECT 28X12 SA TO SUPPLY PLENUM ON THE GREASE HOOD. BALANCE AIRFLOW TO 662 CFM AT EACH CONNECTION.
- 8 - 10" EXHAUST DUCT FROM DISHWASHER HOOD. ROUTE UP THRU ROOF TO EXHAUST FAN.
- 9 - 14" WELDED S.S. GREASE EXHAUST DUCT UP THRU ROOF TO EXHAUST FAN.
- 10 - 18X16 SA UP THRU ROOF TO MAKE-UP AIR UNIT.
- 11 - 3" PP COMBUSTION AIR/ VENT FROM WATER HEATERS UP THRU ROOF. TERMINATE WITH A CONCENTRIC FITTING. SEE 7/M6.02.
- 12 - 24X12 TRANSFER GRILLE

GENERAL NOTES:

1. SEE 1/P6.01 FOR SEISMIC PIPE SUPPORT.
2. SEE 2/P6.01 FOR NON-SEISMIC PIPE SUPPORT.
3. SEE 3/P6.01 FOR ACOUSTICAL WALL PENETRATION DETAIL.



1 HVAC FLOOR PLAN
M2.01 SCALE: 1/8" = 1'-0"

WARM SPRINGS TRAVEL CENTER

Madras, OR

No.	Description	Date

Project Number	1519
Date	JAN. 12, 2016
Drawn By	TB
Checked By	TB

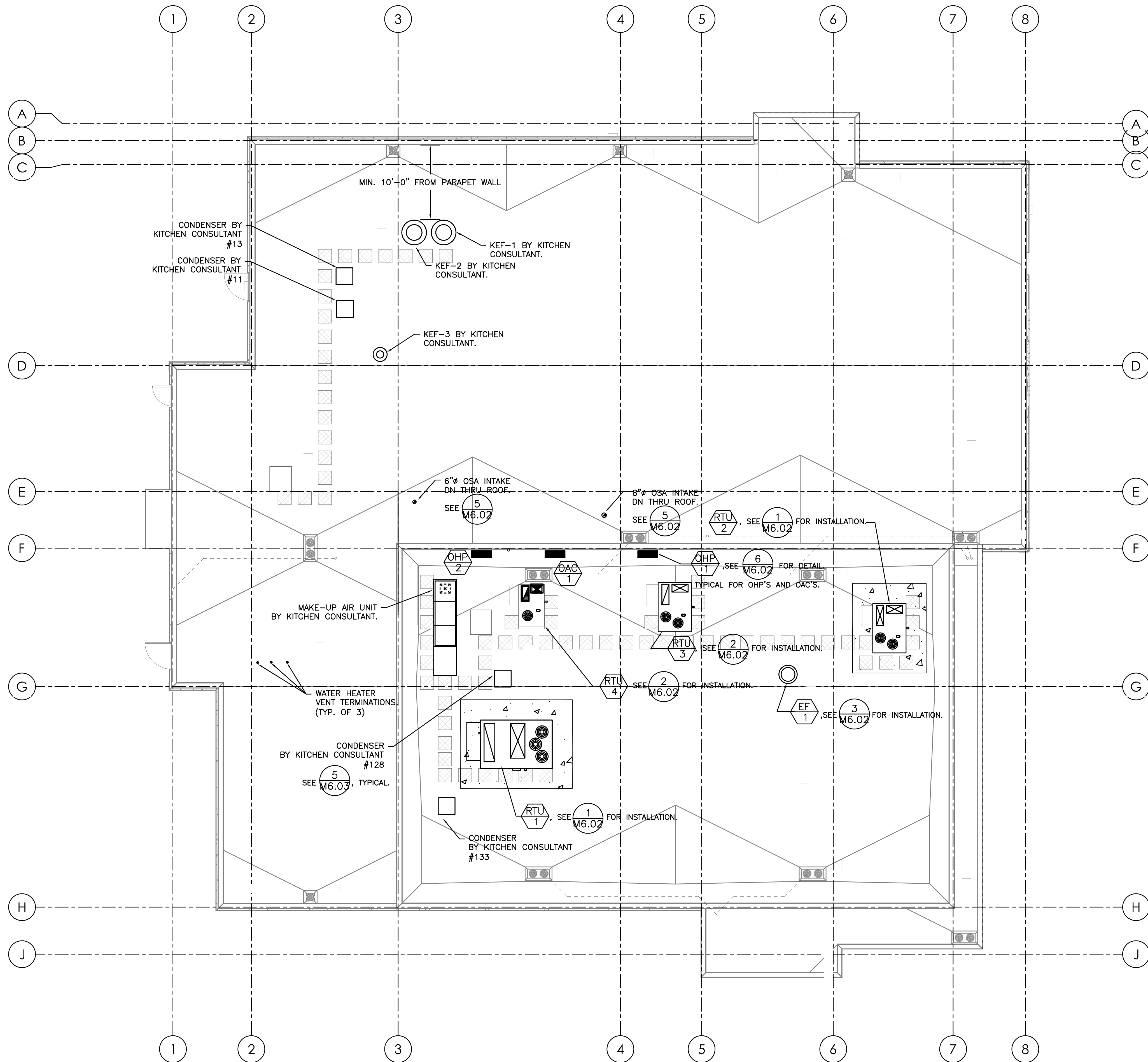
HVAC FLOOR PLAN

M2.01

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PRELIMINARY NOT FOR CONSTRUCTION



1 HVAC ROOF PLAN
M3.01 SCALE: 1/8" = 1'-0"

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WARM SPRINGS TRAVEL CENTER

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HVAC ROOF PLAN

M3.01

PRELIMINARY NOT FOR CONSTRUCTION

	SUPPLY AIR DIFFUSER
	RETURN AIR DIFFUSER
	EXHAUST AIR DIFFUSER
	DIRECTIONAL AIR FLOW
	MANUAL VOLUME DAMPER
	SUPPLY AIR DUCT UP & DOWN
	RETURN AIR DUCT UP & DOWN
	EXHAUST OR OUTSIDE AIR DUCT UP & DOWN
	SUPPLY AIR DUCT UP & DOWN
	RETURN AIR DUCT UP & DOWN
	EXHAUST OR OUTSIDE AIR DUCT UP & DOWN
	VAV TERMINAL UNIT W/ REHEAT COIL
(D)	DEMOLISH
(E)	EXISTING
	CONNECT TO EXISTING
T F-?	THERMOSTAT
S	TEMPERATURE SENSOR
?	NOTE
XX ?	EQUIPMENT DESIGNATOR
	GATE VALVE
	CHECK VALVE
	BALANCING VALVE
	THERMOMETER
	DIRECTION OF FLOW
	PUMP
	STRAINER
	PRESSURE GAUGE
T	PETE'S PLUG
	DOUBLE CHECK ASSEMBLY
	PRESSURE REDUCING VALVE
	UNION
	2-WAY CONTROL VALVE
	3-WAY CONTROL VALVE
	CAP
	MOTORIZED DAMPER
	BALL SHUT OFF VALVE
	FIRE DAMPER
	FIRE / SMOKE DAMPER
	SMOKE DAMPER
AHU	AIR HANDLING UNIT
B.D.	BOTTOM OF DUCT
BHP	BRAKE HORSEPOWER
BOG	BOTTOM OF GRILLE
BTU	BRITISH THERMAL UNITS
CFM	CUBIC FEET PER MINUTE
CONN.	CONNECTION
CONT.	CONTINUATION
CW	DOMESTIC COLD WATER
DB	DRY BULB
DIA.	DIAMETER
DIST.	DISTRIBUTION
EXH	EXHAUST AIR
EDB	ENTERING DRY BULB TEMPERATURE
EWB	ENTERING WET BULB TEMPERATURE
EWI	ENTERING WATER TEMPERATURE
FF	FINISH FLOOR
FIXT.	FIXTURE
F.O.B.	FLAT ON BOTTOM
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT.	FEET / FOOT
GA.	GAUGE
GEXH	GREASE EXHAUST AIR DUCT
GPM	GALLONS PER MINUTE
H	HEIGHT
HP	HORSEPOWER
I.D.	INSIDE DIAMETER
IN.	INCHES
L	LENGTH
LBS.	POUNDS
LDB	LEAVING DRY BULB
LWB	LEAVING WET BULB
LWT	LEAVING WATER TEMPERATURE
MA	MAKE UP AIR
MAX.	MAXIMUM
MBH	THOUSANDS OF BTUS PER HOUR
MD	MOTORIZED DAMPER
MIN.	MINIMUM
MVD	MANUAL VOLUME DAMPER
NC	NOISE CRITERIA
N.C.	NORMALLY CLOSED
N.I.M.	NOT IN MECHANICAL
NO.	NUMBER
N.O.	NORMALLY OPEN
O.A.	OUTSIDE AIR
P	PERSON
PSI	POUNDS PER SQUARE INCH
P/T	PRESSURE / TEMPERATURE
R.A.	RETURN AIR
RECT.	RECTANGULAR
REQ'D	REQUIRED
S.A.	SUPPLY AIR
S.P.	STATIC PRESSURE
SQ.	SQUARE
TEMP.	TEMPERATURE
TYP.	TYPICAL
VAV	VARIABLE AIR VOLUME
W	WIDTH
WB	WET BULB
WPD	WATER PRESSURE DROP
ø	DIAMETER
HWS	(HWS) HEATING WATER SUPPLY
HWR	(HWR) HEATING WATER RETURN
HWRR	(HWRR) HEATING WATER REVERSE RETURN
CHS	(CHS) CHILLED WATER SUPPLY
CHR	(CHR) CHILLED WATER RETURN
PC	PUMPED CONDENSATE
S	(HPS) HIGH PRESSURE STEAM
-/-	(HT) HEAT TRACED DOMESTIC HOT WATER

BOTTOM DUCT
TOP DUCT
DUCT CROSSING

TURNING VANES IN ALL SQUARE ELBOWS AND TEES

LINED DUCTWORK
DOUBLE WALL DUCT

RECT. TO RECT.
RECT. TO ROUND

TRANSITIONS

SPECIFICATION REFERENCE
SA = SUPPLY DIFFUSER
RA = MATCHED RETURN
EXH = EXH GRILLE

15° < α < 90°
SMOOTH RADIUS ELBOW, W/O VANES
R/W = 1.0

α ≤ 15°
MITERED ELBOW

ELBOWS
ROUND OR RECTANGULAR MAIN
ROUND DUCT W/ CONICAL FITTING

ROUND DUCT TEE

NECK SIZE
BALANCED AIRFLOW, CFM
SIDEWALL DIFFUSER
SEE PLANS
SOFFIT WALL
8" SA/RA - ROUND SA/RA DUCT
TRANSITION FROM RECTANGULAR TO ROUND (MIN. CROSS-SECTIONAL AREA TO MATCH ROUND)
MANUAL VOLUME DAMPER; LOCATE BY MAIN DUCT IN ACCESSIBLE LOCATION
ROUND DUCT TRANSITION W/ SPIN-IN FITTING OFF TOP OF RECTANGULAR MAIN

8X8 SA 200 CFM
RETURN AIR CEILING DIFFUSER PRICE PDDR OR APPROVED EQUAL
ARROWS INDICATE DIRECTION OF AIR FLOW
SUPPLY AIR CEILING DIFFUSER
PRICE SMCD OR APPROVED EQUAL BRANCH DUCT
SPIN-IN FITTING WHERE APPLICABLE, GENFLEX SM-1DEL (WITH DAMPER AND 45° EXTRACTOR) OR APPROVED EQUAL
10X6 SA (W" x "H") SA MAIN DUCT

AIR TERMINALS

MARK NUMBER		RTU 1	RTU 2	RTU 3	RTU 4
SYSTEM		DRY GOODS AND RESTROOMS	GAMING	DINING	KITCHEN
TYPE					
SUPPLY FAN	TOTAL CFM	5,495	2,995	2,400	2,000
	MIN. OSA (CFM)	1,740	1,185	1020	185
	EXTERNAL S.P., "H2O (EXCL. FILTER)	1.25"	1.0	1.0	1.0
	RPM	938	949	836	1,464
	BHP	3.53	1.63	1.77	1.62
	2-SPEED(VFD) (NOTE 2)	YES	NO	NO	NO
POWER EXH. FAN	YES	YES	YES	YES	
POWER EXH. FAN TYPE	CENTRIFUGAL	PROPELLER	PROPELLER	PROPELLER	
ECONOMIZER 100%	YES	YES	YES	YES	
FILTER TYPE	30%	30%	30%	30%	
HEATING	GAS HEATING INPUT, MBH	336/268	188/151	150/105	150/105
	HEATING STAGES	2	2	2	2
	THERMAL EFFICIENCY, %	81	81	82	82
COOLING	NOMINAL CAPACITY (TONS)	15	7.5	6	5
	STAGES	2	2	1	1
	NET TOTAL/SENSIBLE COOLING(MB/H)	169/150	86.5/81.7	69/68	57/46
	ENT. EVAP AIR TEMP (DB/WB.)	81/63	83/63	83/63	78/64
	AMBIENT AIR (°F)	95	95	95	95
	IEER	13.5	13.0	13.0	15.2 SEER
	REFRIGERANT TYPE	R-410A	R-410A	R-410A	R-410A
DESIGN WEIGHT WITH CURB (LBS.)	2,635	1,300	1,110	835	
SMOKE DETECTOR IN RETURN DUCT	YES	YES	YES	YES	
REMOTE CO2 SENSOR	NO	YES	YES	NO	
FLUE DEFLECTOR	YES	YES	YES	YES	
VIBRATION ISOLATION CURB	YES	YES	NO	NO	
BASIS OF DESIGN IS CARRIER 48HC	17B	08B	07B	06B	

NOTES:

1. CONTROLS SHALL BE PACKAGED THERMOSTATS;
2. PROVIDE FAN CONTROL TO REDUCE SUPPLY AIRFLOW TO 2/3 OF FULL FAN SPEED WHEN COOLING DEMAND IS LESS THAN OR EQUAL TO 50% PER OEEC 2014, 503.2.10.3.2.

TYPE	DUCTED	DUCTED
SYSTEM	BANQUET	OFFICES
INDOOR UNIT MARK NUMBER	IHP 1	IHP 2
OUTDOOR UNIT MARK NUMBER	OHP 1	OHP 2
NOMINAL CAPACITY (TON)	1.5	1.5
OUTSIDE AIR CFM	170	170
NOMINAL COOLING CAPACITY, BTUH	18,000	18,000
NOMINAL HEATING CAPACITY, BTUH	20,000	20,000
DRY AIRFLOW (LOW/MED/HIGH)	529/582/635	529/582/635
CONDENSATE PUMP	YES	YES
REFRIGERANT TYPE	R-410A	R-410A
SEER	17.5	17.5
HSPF	10.6	10.6
MAX PIPING LENGTH (FT.)	164	164
MAX PIPING ELEV. CHANGE (FT.)	98	98
INDOOR UNIT DESIGN WT.	80	80
OUTDOOR UNIT DESIGN WT.	150	150
OUTDOOR UNIT MOUNTING KIT	WALL	WALL
BASIS OF DESIGN: DAIKIN	RZQ18PVJU9/FBQ18PVJU	RZQ18PVJU9/FBQ18PVJU

GENERAL NOTES FOR OHP-1 & OHP-2 :

1. PROVIDE OUTDOOR HEAT PUMP WITH CRANKCASE HEATER, TXV, LOW AMBIENT CONTROL, WINTER START CONTROL, HI-LOW PRESSURE SWITCH, WIND BAFFLE AND ISOLATION RELAY.
2. PROVIDE WIRELESS WALL MOUNTED THERMOSTAT.

MARK NUMBER	EF 1	EF 2
DESIGN ELEVATION, FEET	3,200	3,200
TYPE	ROOF	CEILING
SYSTEM	RESTROOMS	RESTROOM 129
CFM	1,475	100
TOTAL S.P. (IN H2O)	0.5	0.3
DRIVE	DIRECT	DIRECT
SOLID STATE SPEED CONTROL	YES	YES
FAN RPM	1,443	704
MOTOR HP	1/2	48W
CONTROLLED BY	CONTINUOUS	LIGHT SWITCH
INTERLOCK WITH	RTU—1	---
WHEEL TYPE	B.I.	F.C.
MOTORIZED DAMPER	YES	BACKDRAFT ONLY
ISOLATION	YES	YES
DESIGN WEIGHT (LBS)	51	21
MOUNTING	ROOF CURB	CEILING
MAX. SONES	12.8	2
DISCHARGE/CONFIGURATION	DOWNBLAST/ROOF	WALL LOUVER
MOTOR OUT OF AIR STREAM	YES	NO
BASIS OF DESIGN: GREENHECK	G	SP

*

MARK NUMBER	EH 1	EH 2	EH 3	EH 4	EH 5	EH 6
TYPE	CEILING	CEILING	WALL**	CEILING	CEILING	WALL**
SYSTEM	SHOWER	SHOWER	RISER ROOM	VESTIBULE 120	VESTIBULE 141, 146, 101	COUNTING
KW (120V)	0.5	1.0	1.5	1.0	1.5	1.5
CONTROLLED BY:	TIMER SWITCH*	TIMER SWITCH*	BUILT IN THERMOSTAT	BUILT IN THERMOSTAT	BUILT IN THERMOSTAT	BUILT IN THERMOSTAT
SWITCH LOCATION	WALL (48"A.F.F.)	WALL (48"A.F.F.)	---	---	---	---
DESIGN WEIGHT (LBS)	10	10	10	XX	XX	XX
BASIS OF DESIGN: QMARK	QCH1101F	QCH1101F	CWH115	QCH1101F	QCH1151F	CWH115
ELECTRICAL CONNECTION	120V	120V	120V	120V	120V	120V

* 10 MINUTE TIMER SWITCH, SEE ELECTRICAL
** MOUNT ON WALL @ 6" A.F.F.

PRELIMINARY NOT FOR CONSTRUCTION

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WARM SPRINGS TRAVEL CENTER	
	Madras, OR

[illegible]

Project Number	1519
Date	JUNE 21, 2016
Drawn By	TB
Checked By	JVB

MECHANICAL LEGEND SCHEDULES & DETAILS

M6.00

By MFIA Inc

AHU Location	Description		$\sum V_{pz}$ cfm	Ps People	$\sum P_z$ People	D Ps / $\sum P_z$	Vou cfm	Vps cfm	Xs	Ev	Vot cfm	%OA Vol / Vps
Alternative 1												
Zone	RTU-2	Cooling	2,585	109	109	1.00	1,034	2,585	0.400	1.000	1,034	40.0
		Heating	2,585	109	109	1.00	1,034	2,585	0.400	0.900	1,149	44.4
Zone	Zone - 016	Cooling	368	3	3	1.00	34	368	0.093	1.000	34	9.3
		Heating	368	3	3	1.00	34	368	0.093	1.000	34	9.3
Zone	RTU-3	Cooling	1,957	88	88	1.00	901	1,957	0.460	1.000	901	46.0
		Heating	1,957	88	88	1.00	901	1,957	0.460	0.885	1,018	52.0
Zone	RTU-1	Cooling	3,436	47	47	1.00	695	3,436	0.202	0.402	1,728	50.3
		Heating	3,436	47	47	1.00	695	3,436	0.202	0.402	1,728	50.3
Zone	HP-3	Cooling	339	6	6	1.00	57	339	0.169	0.993	58	17.0
		Heating	339	6	6	1.00	57	339	0.169	0.950	60	17.8
Zone	RTU-4	Cooling	1,015	6	6	1.00	174	1,015	0.172	0.983	175	17.3
		Heating	1,015	6	6	1.00	174	1,015	0.172	0.949	184	18.1
Zone	HP-1	Cooling	300	17	17	1.00	170	300	0.567	1.000	170	56.7
		Heating	300	17	17	1.00	170	300	0.567	0.858	188	66.0
Zone	AC-1	Cooling	0	0	0	0.00	0	0	0.000	0.000	0	0.0
		Heating	0	0	0	0.00	0	0	0.000	0.000	0	0.0

* Apply Single Zone Ventilation Calculation

Project Name: WS TRAVEL CENTER.trn

TRACE® 700 v6.3.2 calculated at 03:26 PM on 08/02/2016
Alternative - 1 ASHRAE Standard 62.1-2004/2007 Report Page 1 of 7

By MFIA Inc

System Zone Room		Occupancy Category	Cooling—				Heating—			
			Rp cfm / p	Pz People	Ra cfm/m²	Az ft²	Vbz cfm	Min OA ach	— Voz cfm	— Voz cfm
Alternative 1										
145 GAMING	Game arcades	7.50	109.09	0.18	1,200	1,034	1.00	1,034	0.80	1,293
RTU-2		7.50	109.09	0.18	1,200	1,034	1.00	1,034	0.80	1,293
142 SECURE VESTIBULE	Corridors	0.00	0.26	0.06	76	5	1.00	5	0.80	6
144 COUNTING ROOM	Office space	5.00	3.01	0.06	241	30	1.00	30	0.80	37
HC-016		4.60	3.27	0.06	319	34	1.00	34	0.80	43
RTU-2		7.42	112.36	0.15	1,159	1,068	1.00	1,068	0.80	1,335
138 DINING	Restaurant dining rooms	7.50	88.33	0.18	1,325	901	1.00	901	0.80	1,126
RTU-3		7.50	88.33	0.18	1,325	901	1.00	901	0.80	1,126
102 DRY DISHES	Supermarket	7.50	88.33	0.18	1,325	901	1.00	901	0.80	1,126
119 CORRIDOR	Corridors	7.50	39.60	0.06	3,960	535	1.00	535	0.80	668
140 CORRIDOR	Corridors	0.00	2.48	0.06	745	45	1.00	45	0.80	56
112 HALL	Corridors	0.00	2.16	0.06	648	39	1.00	39	0.80	49
126 LAUNDRY	Laundry Rooms, Central	0.00	0.71	0.06	212	13	1.00	13	0.80	16
122 RECEIVING	Shipping/ receiving	5.00	0.51	0.12	154	21	2.0	1.00	51	80
118 STORAGE	Shipping/ receiving	0.00	0.47	0.12	142	17	1.00	17	0.80	21
148 MANAGER	Office space	0.00	0.45	0.12	135	16	1.00	16	0.80	20
RTU-1		5.00	0.92	0.06	92	10	1.00	10	0.80	13
RTU-1		6.43	47.31	0.06	6,088	695	1.00	695	0.80	884
125 OFFICE	Office space	5.00	2.10	0.06	168	21	1.00	21	0.80	26
117 SECURITY	Office space	5.00	0.83	0.06	83	9	1.00	9	0.80	11
130 OFFICE	Office space	5.00	0.65	0.06	65	7	1.00	7	0.80	9
123 IT OFFICE	Office space	5.00	1.96	0.06	176	20	1.00	20	0.80	25
HP-2		5.00	5.54	0.06	492	57	1.00	57	0.80	71
134 KITCHEN	Kitchen - cooking	5.00	5.54	0.06	492	57	1.00	57	0.80	71
121 ALCOVE	Corridors	0.00	0.53	0.06	160	10	1.00	10	0.80	12
RTU-4		6.81	5.23	0.12	1,205	174	1.00	174	0.80	218
RTU-4		6.81	5.76	0.11	1,205	174	1.00	174	0.80	218
HP-1		7.50	16.67	0.18	2,500	170	1.00	170	0.80	213
121 BANQUET	Restaurant dining rooms	7.50	16.67	0.18	2,500	170	1.00	170	0.80	213

Project Name: WS TRAVEL CENTER.trn

TRACE® 700 v6.3.2 calculated at 03:26 PM on 08/02/2016
Alternative - 1 ASHRAE Standard 62.1-2004/2007 Report Page 2 of 7

By MFIA Inc

System Zone Room	Occupancy Category	Rp cfm / p	Pz People	Ra cfm/ft ²	Az ft ²	Vbz cfm	Std 170 Min OA ach	—Cooling—		—Heating—	
								Ez	Voz cfm	Ez	Voz cfm
Alternative 1											
HP-1		7.50	16.67	0.18	250	170			170		213

Project Name: WS TRAVEL CENTER.tre

TRACE® 700 v6.3.2 calculated at 03:26 PM on 08/02/2016
Alternative - 1 ASHRAE Standard 62.1-2004/2007 Report Page 3 of 7

By MFIA Inc

System	Zone	Room	Box Type	Vpzm cfm	Vfan cfm	Vdz cfm	Vpzm-min cfm	Voz-clj cfm	Zd	Ep	Er	Fa	Fb	Fc	Evz		
Alternative 1																	
RTU-1	145 GAMING	Single Fan CV	2,585	2,585	2,585	0	1,034	0.400	1.00	1.00	1.00	1.00	1.00	1.00	1,000 *		
			2,585	2,585	2,585	0	1,034										
			144 SECURE VESTIBULE	Single Fan CV	64	64	64	0	5	0.073	1.00	1.00	1.00	1.00	1.00	1.00	1,000 *
			144 COUNTING ROOM	Single Fan CV	305	305	305	0	30	0.097	1.00	1.00	1.00	1.00	1.00	1.00	1,000 *
			Zone - 016		368	368	368	0	34								1,000
RTU-2	138 DINING	Single Fan CV	2,954	2,954	2,954	0	1,068								1,000		
RTU-3	139 CORRIDOR	Single Fan CV	1,957	1,957	1,957	0	901	0.460	1.00	1.00	1.00	1.00	1.00	1.00	1,000 *		
			1,957	1,957	1,957	0	901									1,000	
RTU-3	102 DRY GOODS	Single Fan CV	2,556	2,556	2,556	0	935	0.209	1.00	1.00	1.00	1.00	1.00	1.00	0.993		
			119 CORRIDOR	Single Fan CV	279	279	279	0	45	0.160	1.00	1.00	1.00	1.00	1.00	1.00	
			140 CORRIDOR	Single Fan CV	246	246	246	0	39	0.156	1.00	1.00	1.00	1.00	1.00	1.00	
			112 HALL	Single Fan CV	79	79	79	0	13	0.160	1.00	1.00	1.00	1.00	1.00	1.00	
			128 LAUNDRY	Single Fan CV	84	84	84	0	51	0.800	1.00	1.00	1.00	1.00	1.00	1.00	0.402 *
			127 RECEIVING	Single Fan CV	63	63	63	0	17	0.289	1.00	1.00	1.00	1.00	1.00	1.00	0.834
			118 STORAGE	Single Fan CV	60	60	60	0	16	0.272	1.00	1.00	1.00	1.00	1.00	1.00	0.833
			148 MANAGER	Single Fan CV	89	89	89	0	10	0.114	1.00	1.00	1.00	1.00	1.00	1.00	
			RTU-1	3,436	3,436	3,436	0	726									0.402
			RTU-1	3,436	3,436	3,436	0	726									0.402
HP-3	125 OFFICE	Single Fan CV	117	117	117	0	21	0.175	1.00	1.00	1.00	1.00	1.00	1.00	0.993 *		
	117 SECURITY	Single Fan CV	55	55	55	0	9	0.165	1.00	1.00	1.00	1.00	1.00	1.00			
	130 OFFICE	Single Fan CV	50	50	50	0	7	0.144	1.00	1.00	1.00	1.00	1.00	1.00			
HP-3	1241 OFFICE	Single Fan CV	117	117	117	0	20	0.174	1.00	1.00	1.00	1.00	1.00	1.00	0.994		
			339	339	339	0	57								0.993		
			339	339	339	0	57								0.993		
HP-2	134 KITCHEN	Single Fan CV	923	923	923	0	165	0.178	1.00	1.00	1.00	1.00	1.00	1.00	0.993 *		
	131 ALCOVE	Single Fan CV	93	93	93	0	10	0.103	1.00	1.00	1.00	1.00	1.00	1.00			
			1,015	1,015	1,015	0	174								0.993		
RTU-4			1,015	1,015	1,015	0	174								0.993		
			300	300	300	0	170								1,000 *		
	21 BANQUET	Single Fan CV	300	300	300	0	170								1,000		
HP-1			300	300	300	0	170								1,000		
HP-1			300	300	300	0	170								1,000		

Project Name:
Dataset Name: WS TRAVEL CENTER.trc

TRACE® 700 v6.3.2 calculated at 03:28 PM on 08/02/2016
Alternative - 1 ASHRAE Standard 62.1-2004/2007 Report Page 4 of 7

By MFIA Inc.

System Zone Room	Box Type	Vpz cfm	Vfan cfm	Vdz cfm	Vpz-min cfm	Voz-clg cfm	Zd	Ep	Er	Fa	Fb	Fc	Evz
Alternative 1													
AC-1		0	0	0	0	0							0.000

Project Name: WS TRAVEL CENTER.tro

TRACE® 700 v6.3.2 calculated at 03:26 PM on 08/02/2016
Alternative - 1 ASHRAE Standard 62.1-2004/2007 Report Page 5 of 7

By MFLA Inc.

System Zone Room	Box Type	Vpzn cm	Vfan cm	Vdz cm	Vpz-min cm	Voz-hlg cm	Zd	Ep	Er	Fa	Fb	Fc	Evz
Alternative 1													
RTU-1	145 GAMING	Single Fan CV	2,585	2,585	2,585	0	1,293	0.500	1.00	1.00	1.00	1.00	0.900 *
	RTU-2		2,585	2,585	2,585	0	1,293						0.900
	143 SECURE VESTIBULE	Single Fan CV	64	64	64	0	6	0.092	1.00	1.00	1.00	1.00	1.000
	144 COUNTING ROOM	Single Fan CV	305	305	305	0	37	0.121	1.00	1.00	1.00	1.00	1.000 *
	Zone 016		368	368	368	0	43						1.000
RTU-2		2,954	2,954	2,954	0	1,335							0.900
	138 DINING	Single Fan CV	1,957	1,957	1,957	0	1,126	0.575	1.00	1.00	1.00	1.00	0.885 *
RTU-3		1,957	1,957	1,125	0	1,125							0.885
		1,957	1,957	1,957	0	1,125							0.885
RTU-4	102 DRY GOODS	Single Fan CV	2,556	2,556	2,556	0	1,668	0.261	1.00	1.00	1.00	1.00	0.941
	140 CORRIDOR	Single Fan CV	279	279	279	0	56	0.200	1.00	1.00	1.00	1.00	0.941
	140 CORRIDOR	Single Fan CV	246	246	246	0	49	0.198	1.00	1.00	1.00	1.00	1.000
	112 HALL	Single Fan CV	79	79	79	0	16	0.200	1.00	1.00	1.00	1.00	1.000
	126 LAUNDRY	Single Fan CV	84	84	84	0	51	0.800	1.00	1.00	1.00	1.00	0.402 *
	127 RECEIVING	Single Fan CV	63	63	63	0	21	0.336	1.00	1.00	1.00	1.00	0.868
	118 STORAGE	Single Fan CV	60	60	60	0	20	0.340	1.00	1.00	1.00	1.00	0.863
	148 MANAGER	Single Fan CV	89	89	89	0	13	0.142	1.00	1.00	1.00	1.00	1.000
			3,436	3,436	3,436	0	894						0.402 *
			3,436	3,436	3,436	0	894						0.402 *
RTU-1	125 OFFICE	Single Fan CV	117	117	117	0	26	0.219	1.00	1.00	1.00	1.00	0.950 *
	130 SECURITY	Single Fan CV	55	55	55	0	11	0.206	1.00	1.00	1.00	1.00	0.900 *
	130 OFFICE	Single Fan CV	50	50	50	0	9	0.180	1.00	1.00	1.00	1.00	0.989
	124 IT OFFICE	Single Fan CV	117	117	117	0	25	0.218	1.00	1.00	1.00	1.00	0.951
HP-2		339	339	339	0	71							0.950
		339	339	339	0	71							0.950
	134 KITCHEN	Single Fan CV	93	93	93	0	206	0.223	1.00	1.00	1.00	1.00	0.949 *
RTU-1	131 AL COVE	Single Fan CV	923	923	923	0	12	0.129	1.00	1.00	1.00	1.00	1.000
		1,015	1,015	1,015	0	218							0.949
HP-1		1,015	1,015	1,015	0	218							0.949
		1,015	1,015	1,015	0	218							0.949
RTU-1	121 BANQUET	Single Fan CV	300	300	300	0	213	0.708	1.00	1.00	1.00	1.00	0.888 *
		300	300	300	0	213							0.850
HP-1		300	300	300	0	213							0.850
		300	300	300	0	213							0.850
AC-1		0	0	0	0	0							0.000

Project Name: WS TRAVEL CENTER.tro

TRACE® 700 v6.3.2 calculated at 03:26 PM on 08/02/2016
Alternative - 1 ASHRAE Standard 62.1-2004/2007 Report Page 6 of 7

By MFIA Inc

System	Zone	Room	Box Type	Vpz cfm	Vfan cfm	Vdz cfm	Vpz-min cfm	Voz-htg cfm	Zd	Ep	Er	Fa	Fb	Fc	Evz
Alternative 1															
AC-1				0	0	0	0	0							0.000

Project Name: WS TRAVEL CENTER.tro

TRACE® 700 v6.3.2 calculated at 03:26 PM on 08/02/2016
Alternative - 1 ASHRAE Standard 62.1-2004/2007 Report Page 7 of 7

WARM SPRINGS TRAVEL CENTER

Madras, OR

No.	Description	Date

Project Number	1519
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Date JUNE 21, 2016

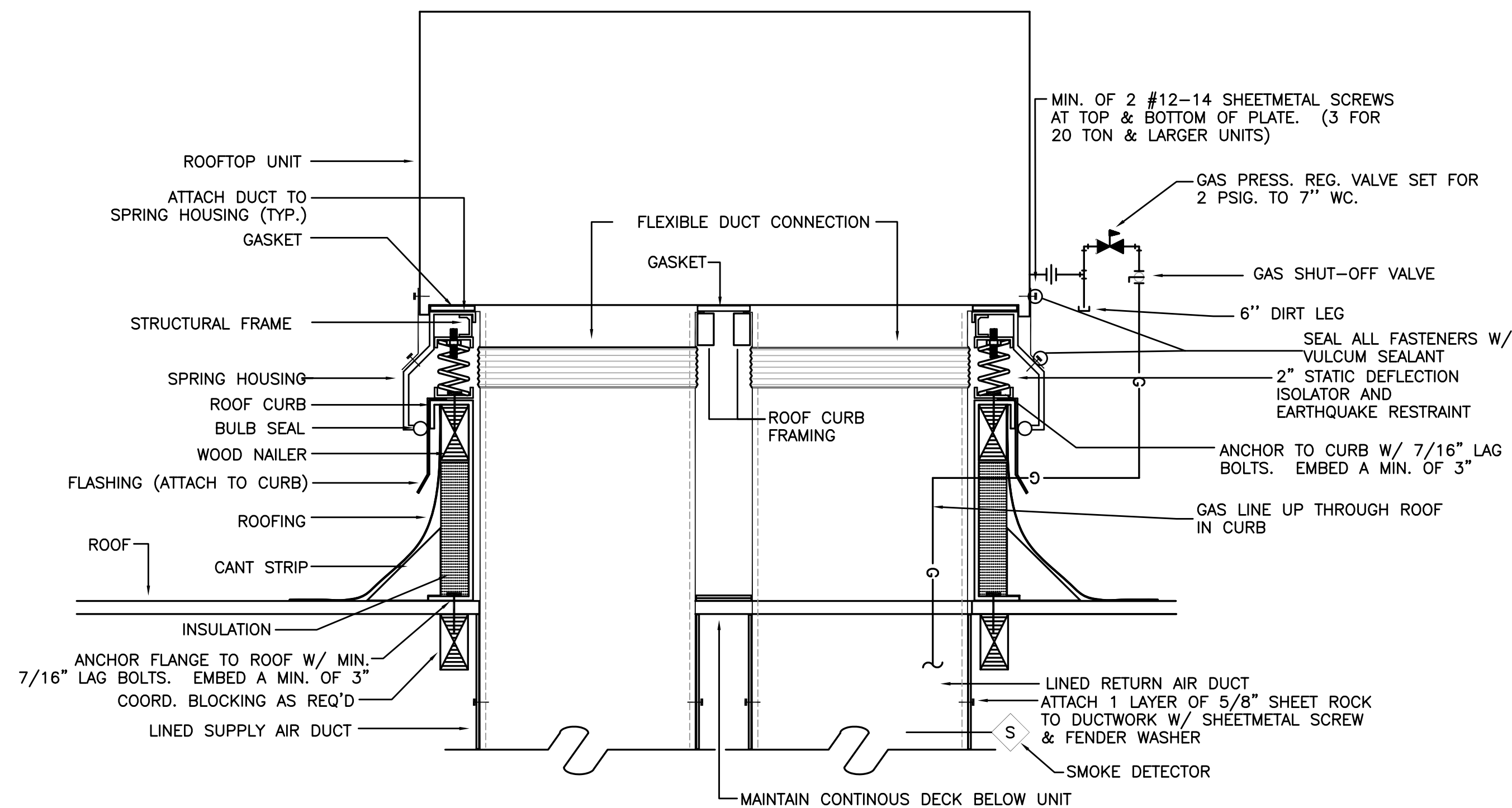
Drawn By _____ TE _____

Checked By JVE

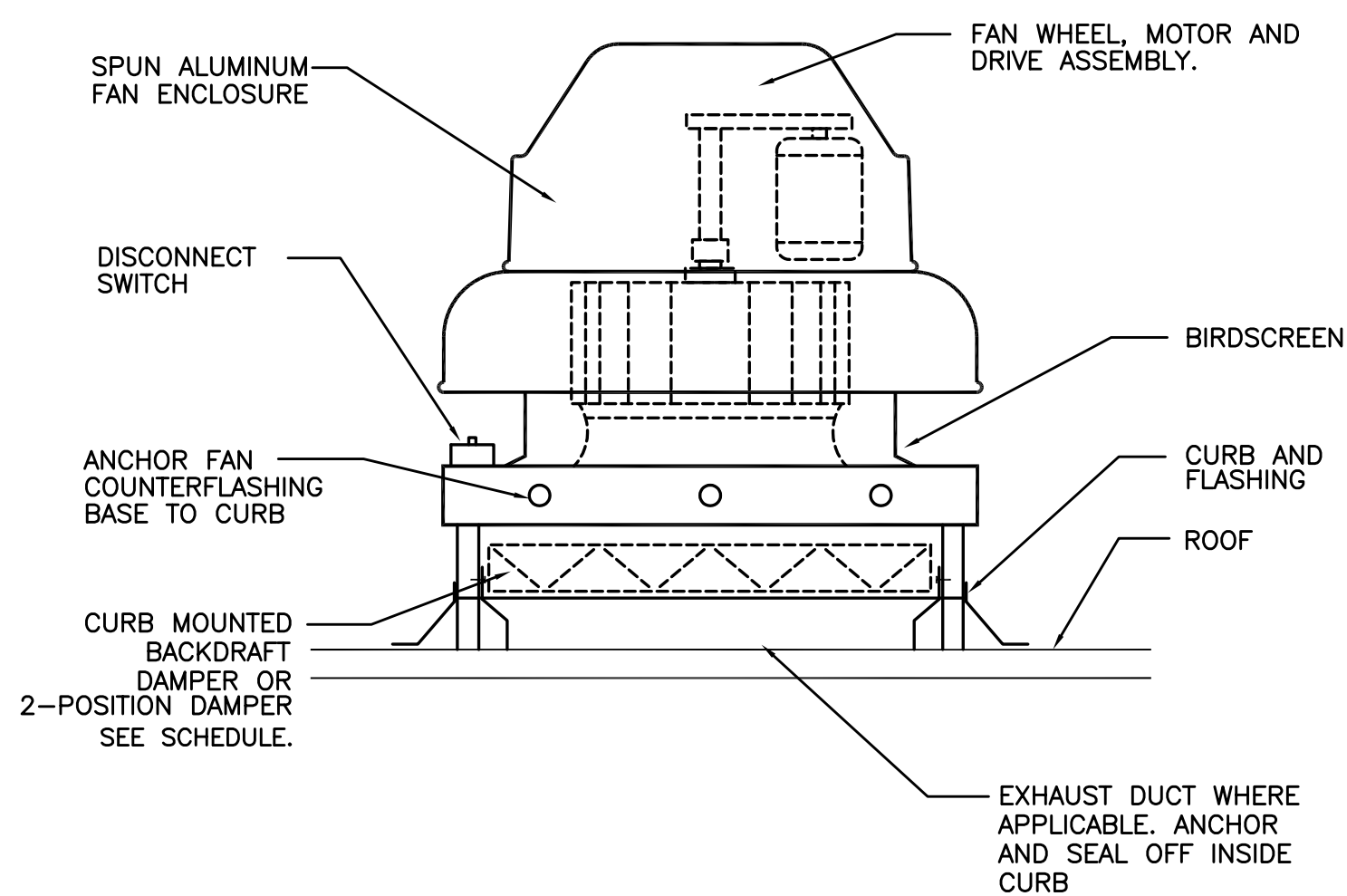
MECHANICAL SCHEDULES & DETAILS

M6.01

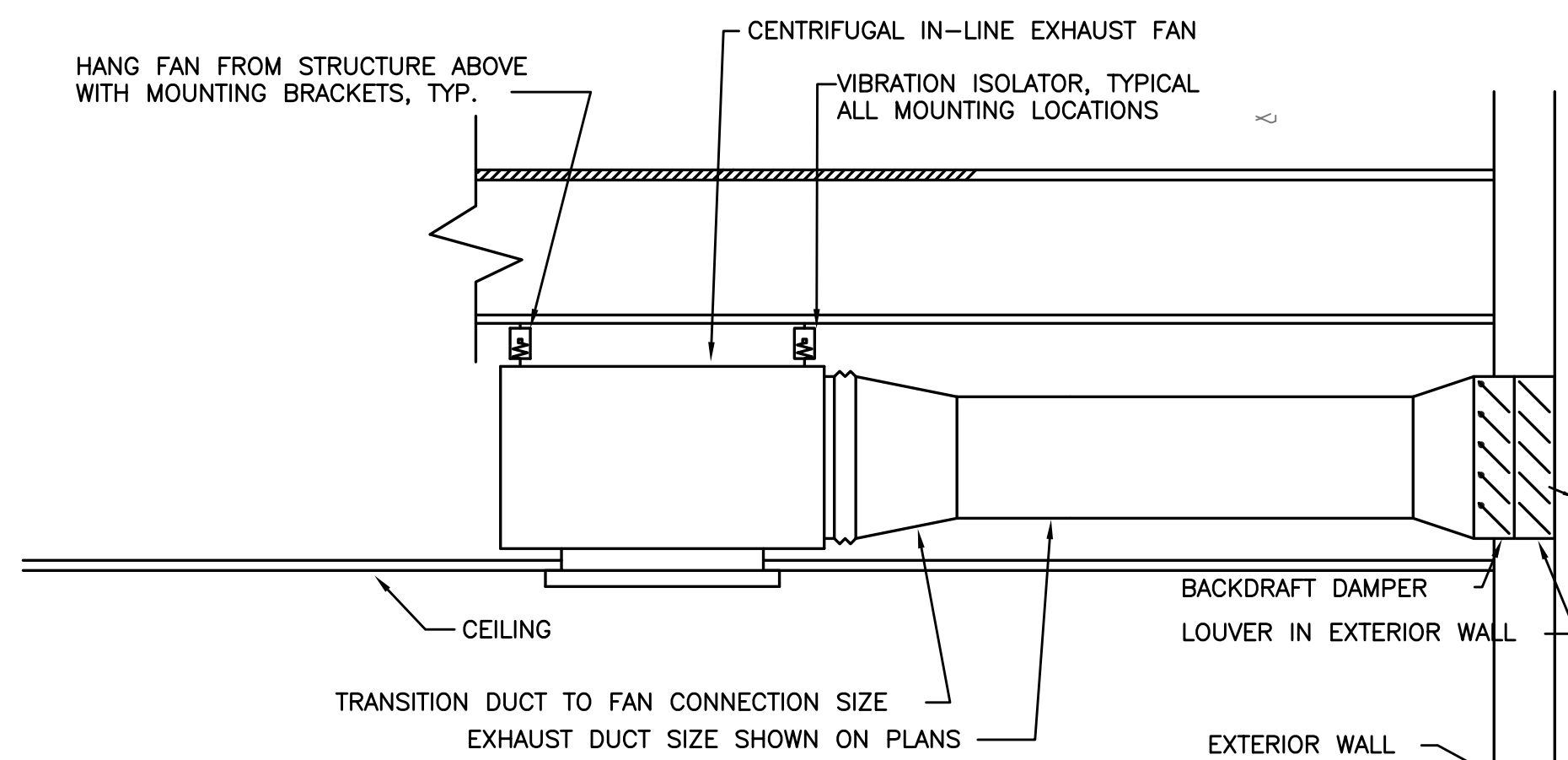
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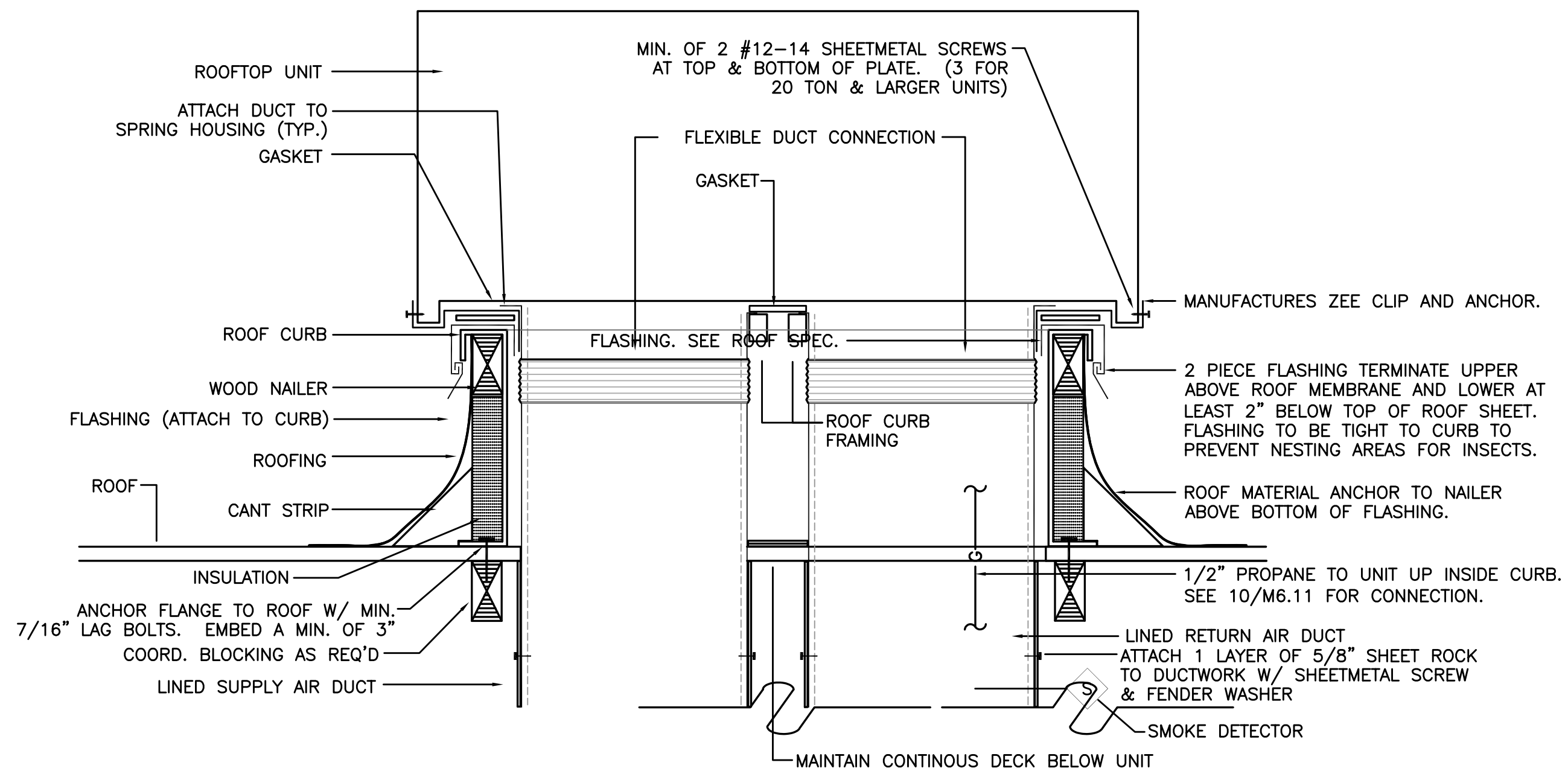
1 ROOF TOP UNIT W/ VIBRATION ISOLATION CURB
M6.02 SCALE: DETAIL



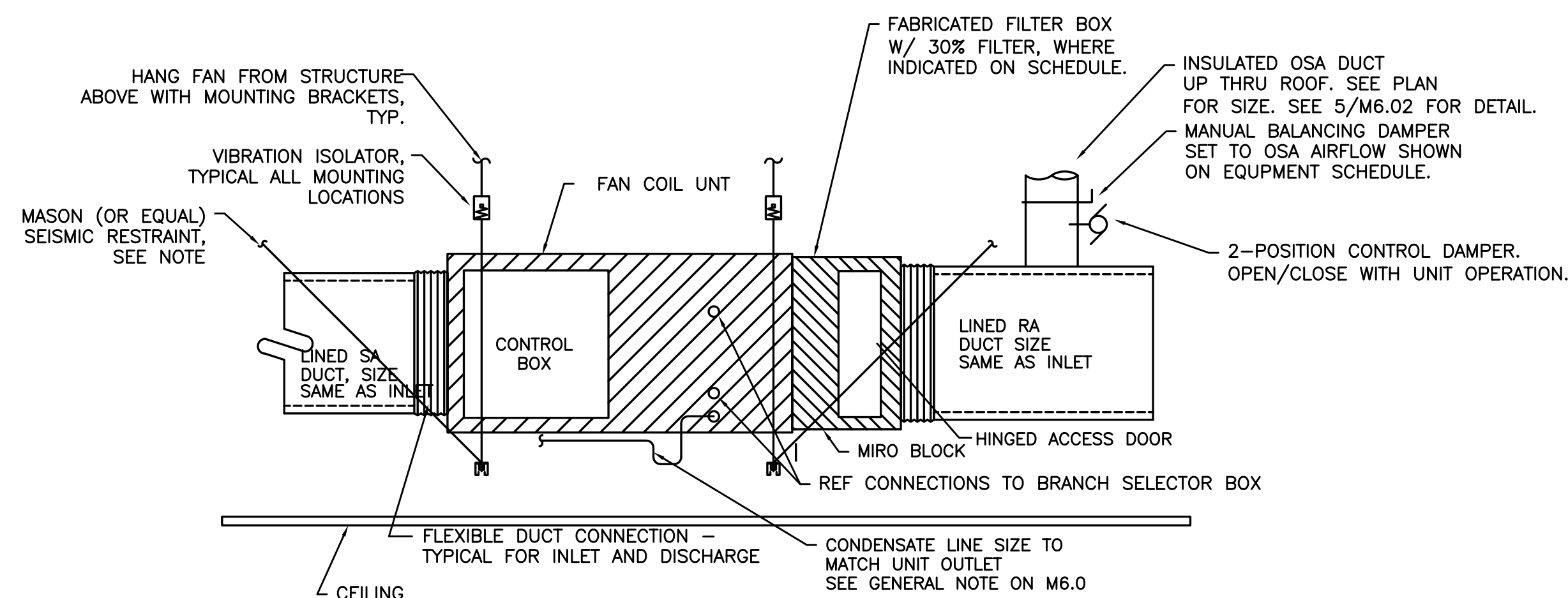
3 EXHAUST FAN
M6.02 DETAIL



6 RESTROOM EXHAUST FAN
M6.02 SCALE: DETAIL

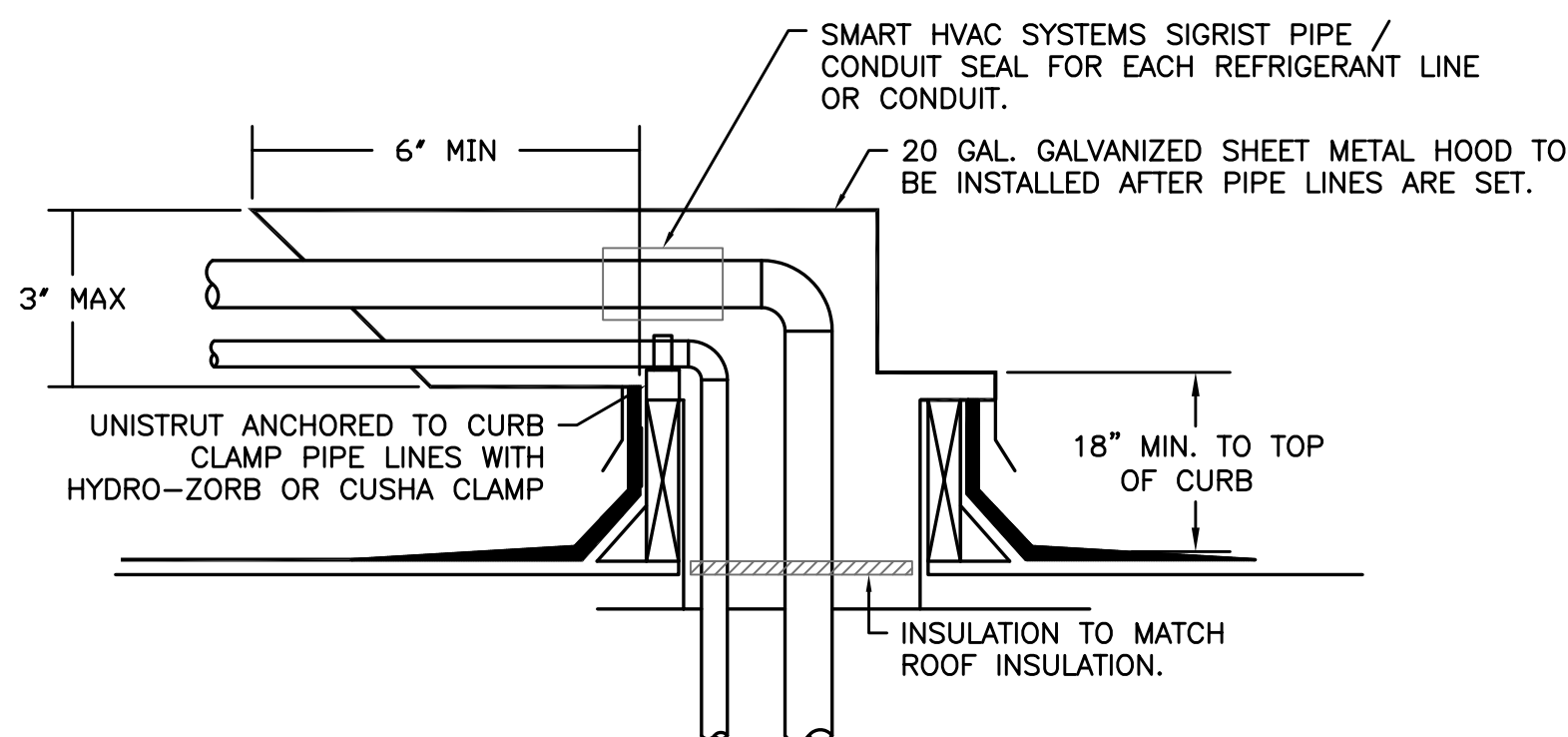


2 ROOF TOP UNIT W/ CURB
M6.02 SCALE: DETAIL

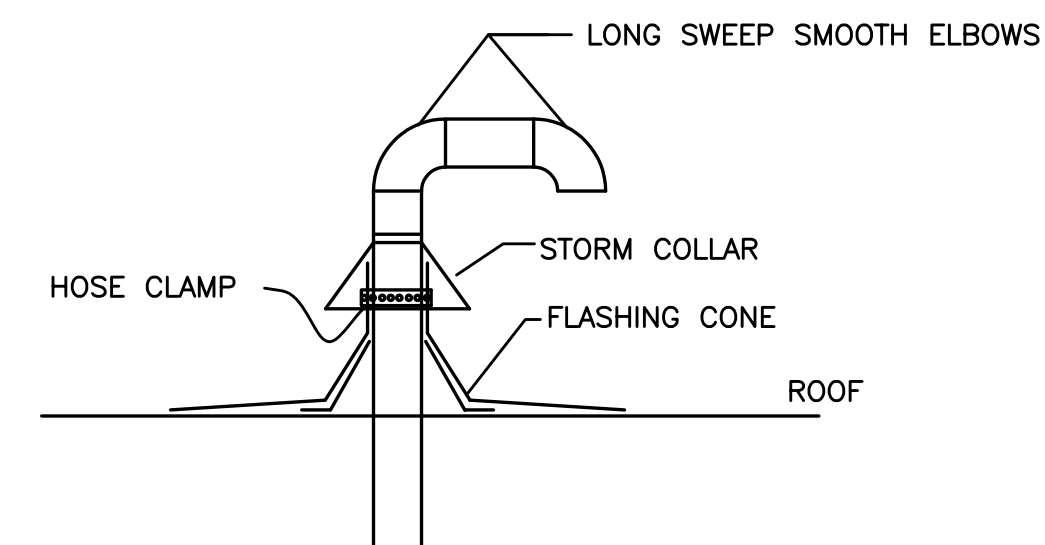


NOTE: LOCATE SUPPORT & SIESMIC TO MAINTAIN UNHINDERED ACCESS FOR MAINTENANCE OF UNIT.

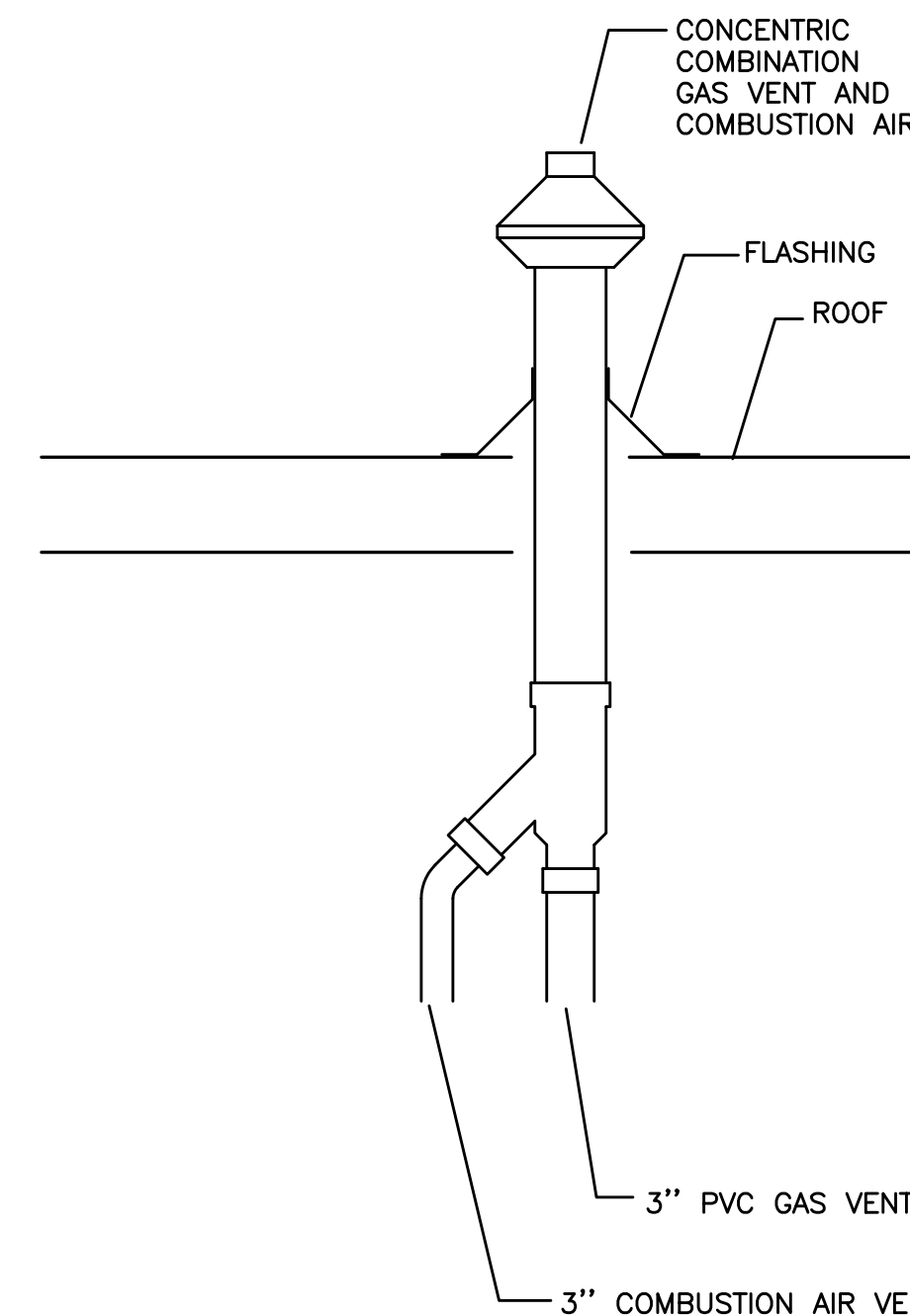
4 DUCTED FAN COIL (IHP)
M6.02 SCALE: DETAIL



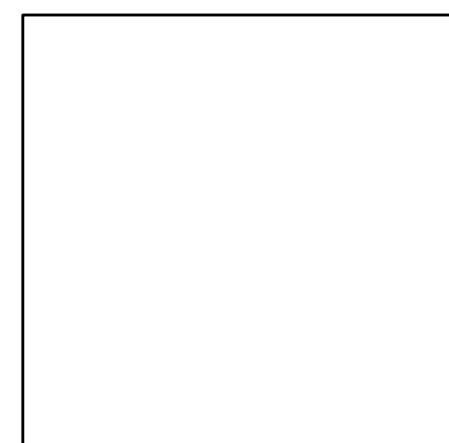
8 PIPE HOOD DETAIL
M6.02 SCALE: DETAIL



5 OSA INTAKE THRU ROOF
M6.02 DETAIL



7 CONCENTRIC GAS VENT
M6.02 SCALE: DETAIL



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WARM SPRINGS TRAVEL CENTER
Madras, OR

No.	Description	Date

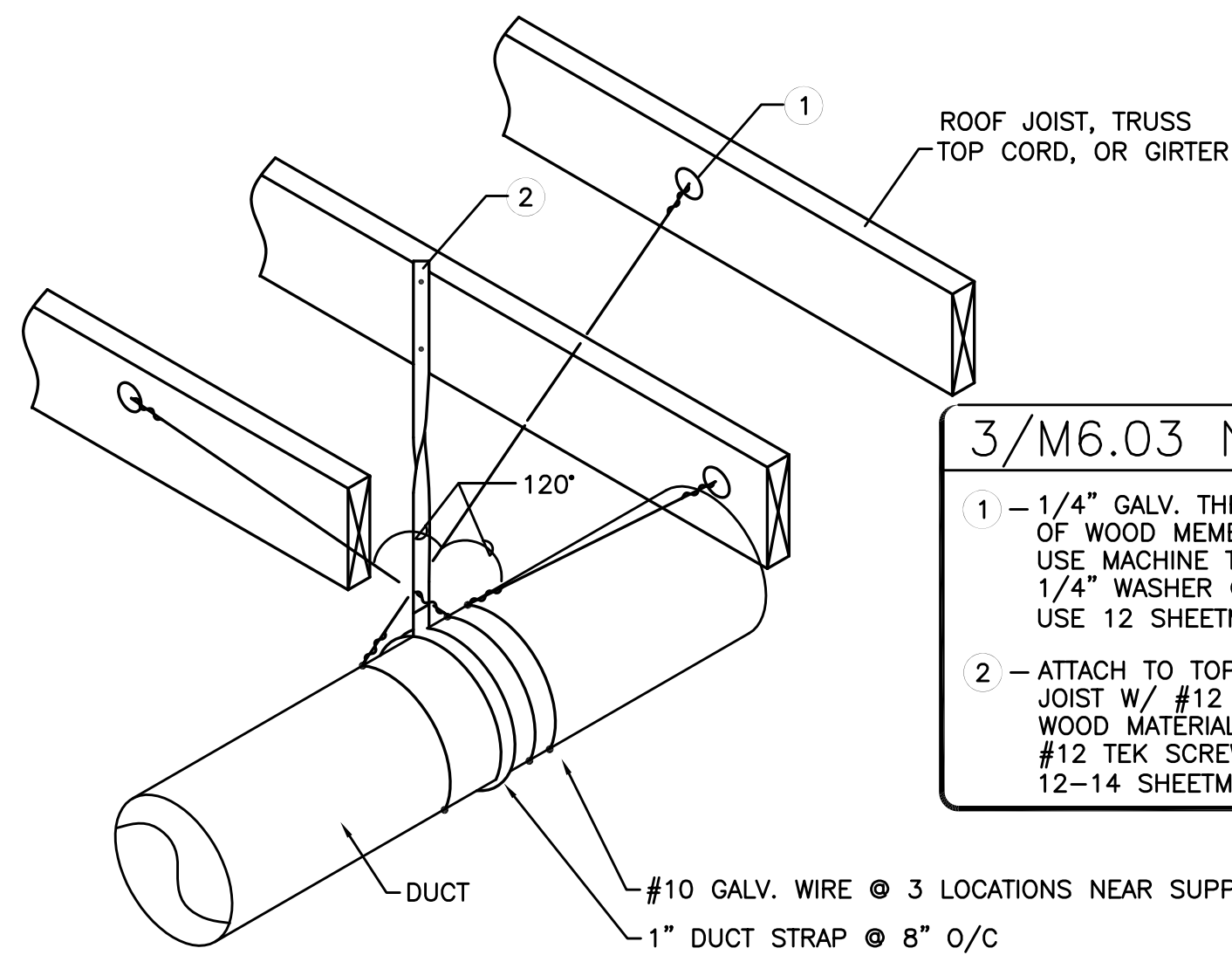
Project Number 1519
Date JUNE 21, 2016
Drawn By TB
Checked By JVB

MECHANICAL
DETAILS

M6.02

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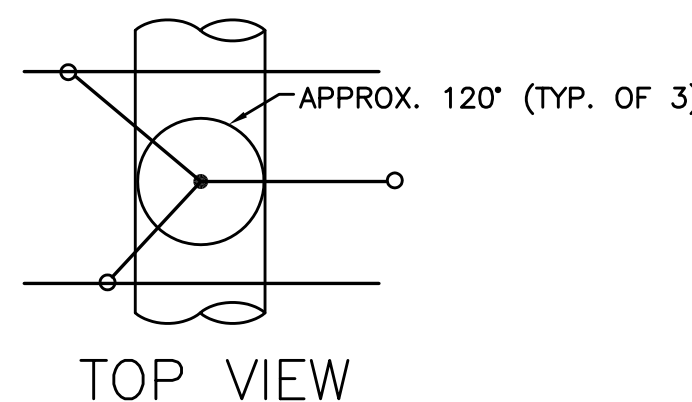
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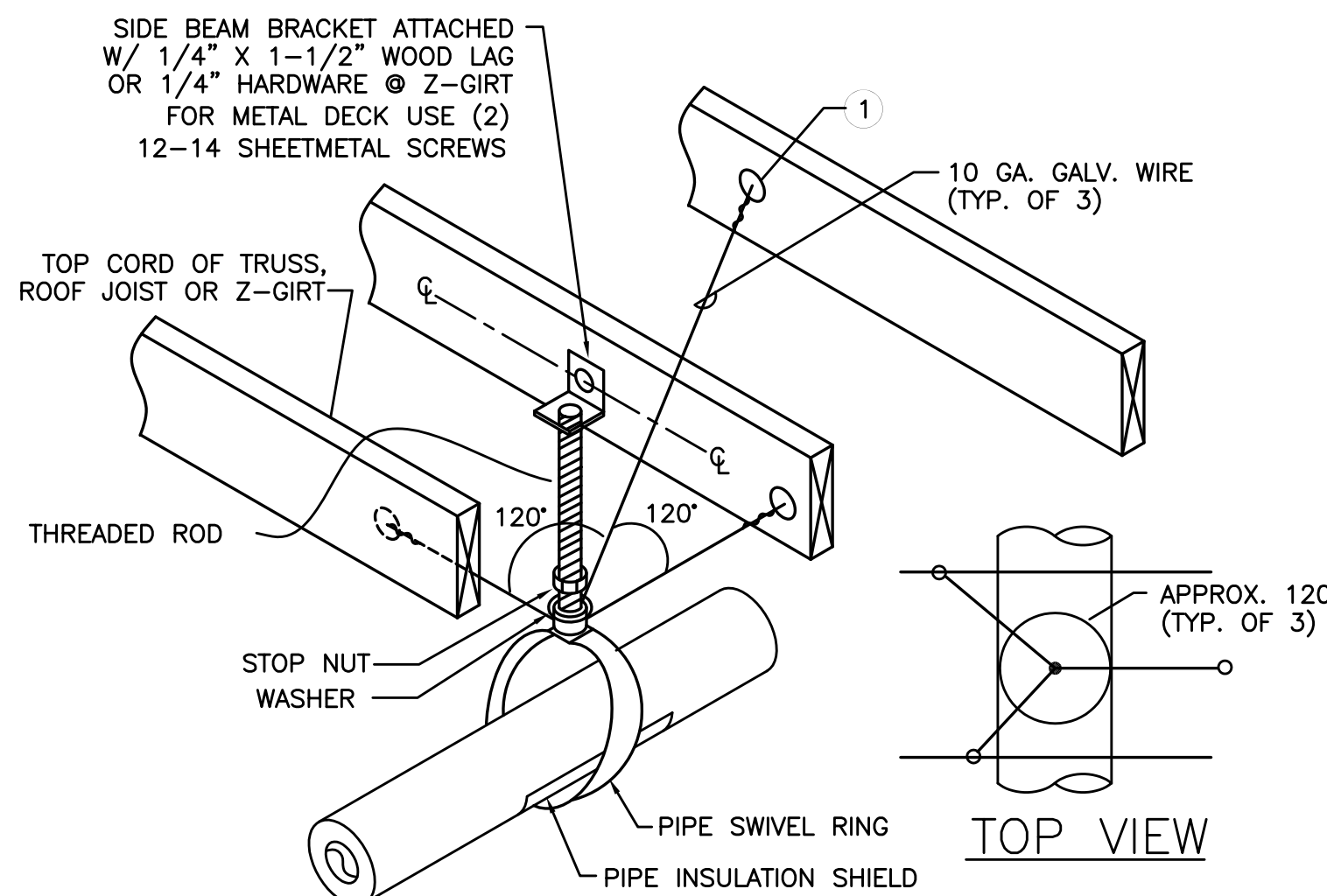
3/M6.03 NOTES

- 1 - 1/4" GALV. THREADED EYE BOLT @ CENTER OF WOOD MEMBER (TYP. OF 3). FOR Z-GIRT USE MACHINE THREAD EYE BOLT W/ JAMB NUT & 1/4" WASHER @ EACH SIDE OF GIRT. FOR METAL DECK USE 12 SHEETMETAL SCREWS & 16 GA. MIN STRUT ANGLE CLIP
- 2 - ATTACH TO TOP CORD OF TRUSS ONLY OR WOOD JOIST W/ #12 X 1-5/8 DECK SCREW @ MIN. 1" FROM WOOD MATERIAL EDGE. ATTACH TO Z-GIRT W/ (2) #12 TEK SCREWS. FOR METAL DECK USE (2) 12-14 SHEETMETAL SCREWS

- FOR SHEETMETAL DUCTS 11" TO 27" IN DIAMETER & ALL SQUARE OR RECTANGULAR DUCTS (STRAP ALONE IS SUFFICIENT FOR DUCTS SMALLER THAN 11" IN DIAMETER)
- STRAP INTERVAL MAY BE DECREASED (LESS THAN 96" O/C TO REDUCE THE NEED FOR WIRE TIES AS DETAILED. CONSULT ENGINEER OR SMACNA STANDARDS



1 DUCT SUPPORT
SCALE: DETAIL

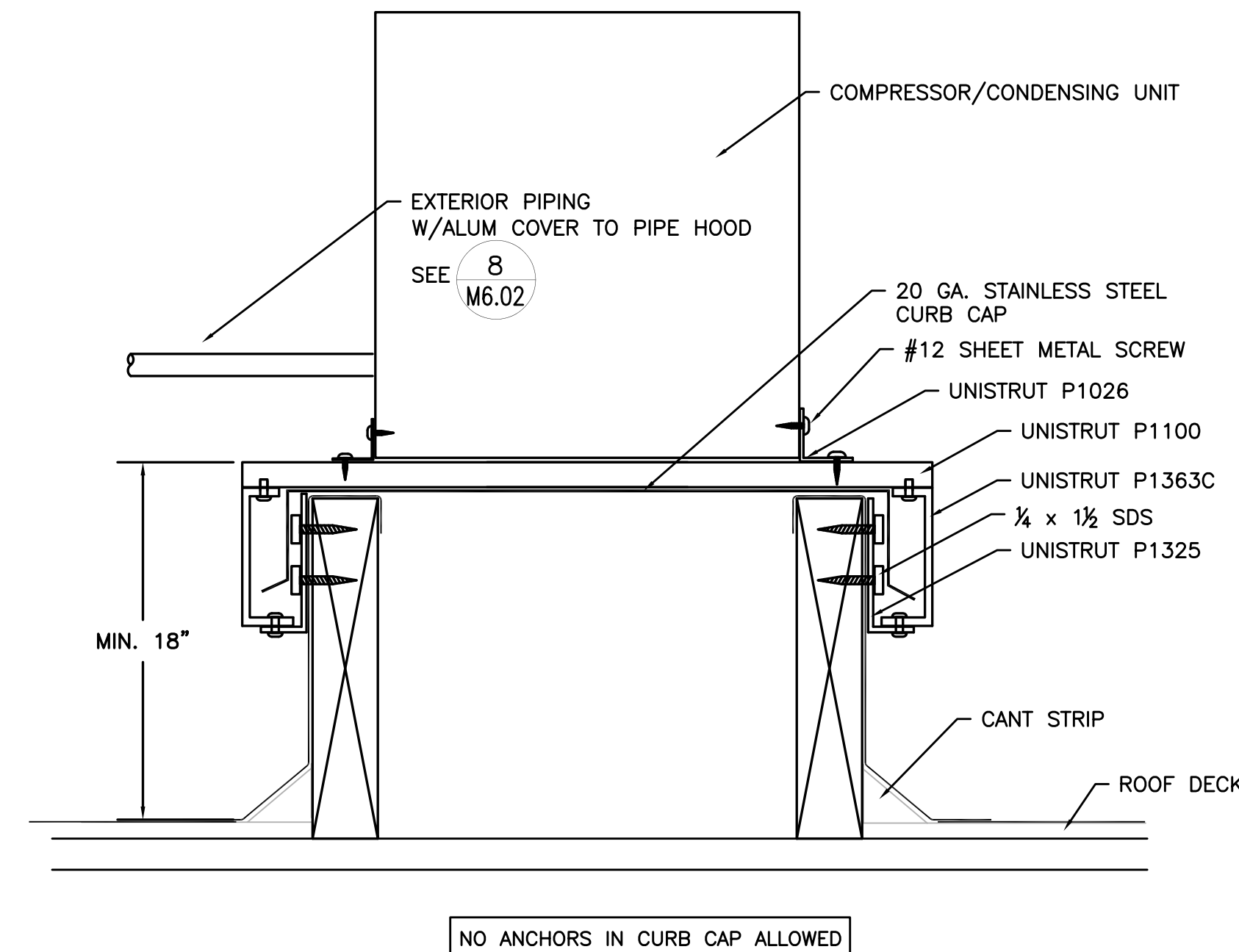


2/M6.03 NOTES

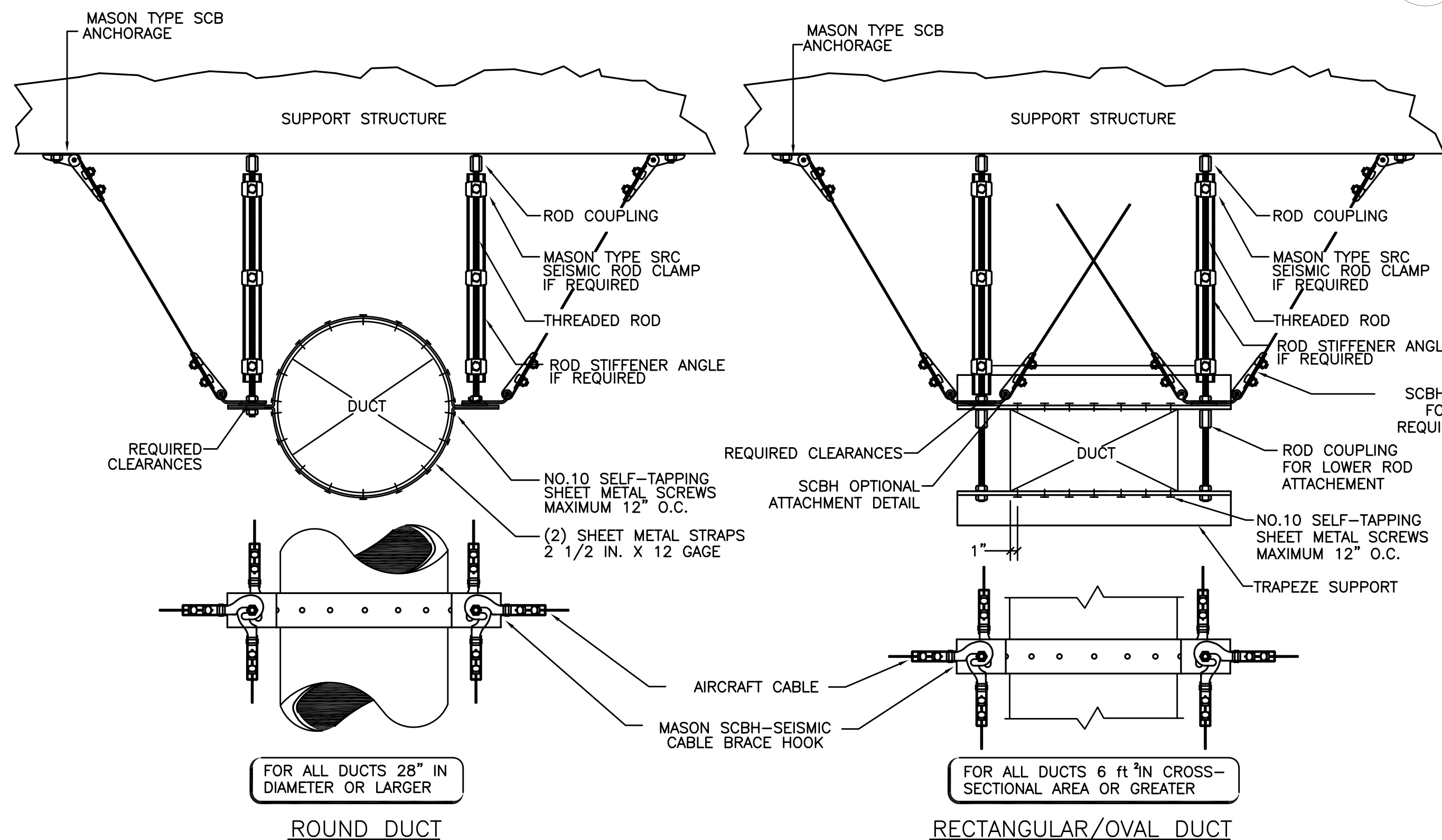
- 1 - 1/4" GALV. THREADED EYE BOLT @ CENTER OF WOOD MEMBER (TYP. OF 3). FOR 2 GIRT USE MACHINE THREAD EYE BOLT W/ JAMB NUT & 1/4" WASHER @ EACH SIDE OF GIRT. USE 12 SHEETMETAL SCREWS & 16 GA. MIN. 16 GA. MIN STRUT ANGLE CLIP

- FOR SINGLE 1-1/2" TO 3" STEEL LINES
- FOR SINGLE 2" COPPER LINES

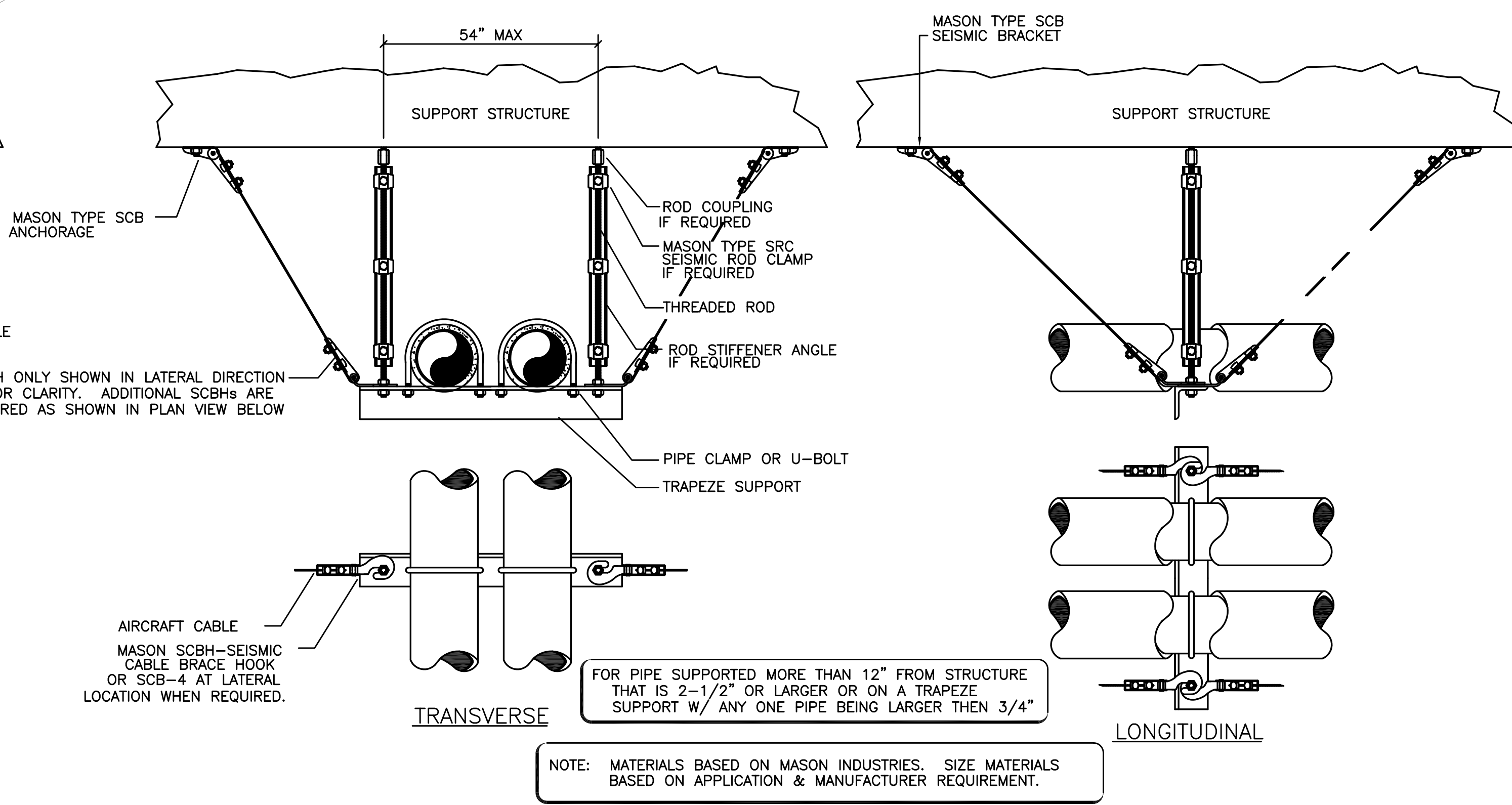
2 PIPE SUPPORT
SCALE: DETAIL



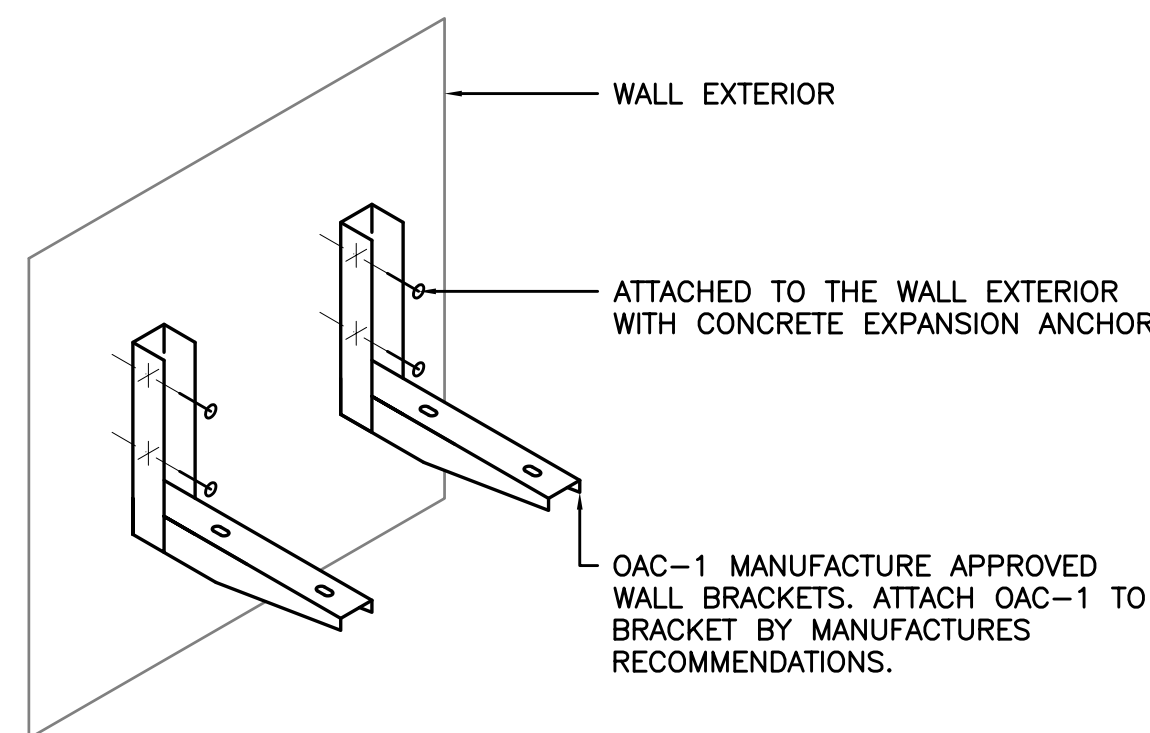
5 CONDENSER W/ CURB
SCALE: DETAIL



3 SEISMIC DUCT SUPPORT
SCALE: DETAIL



4 SEISMIC PIPE SUPPORT
SCALE: DETAIL



6 OAC MOUNTING DETAIL
SCALE: DETAIL

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WARM SPRINGS TRAVEL CENTER

Madras, OR

No.	Description	Date

Project Number	1519
Date	JUNE 21, 2016
Drawn By	TB
Checked By	JVB

MECHANICAL
DETAILS

M6.03

PRELIMINARY NOT FOR CONSTRUCTION

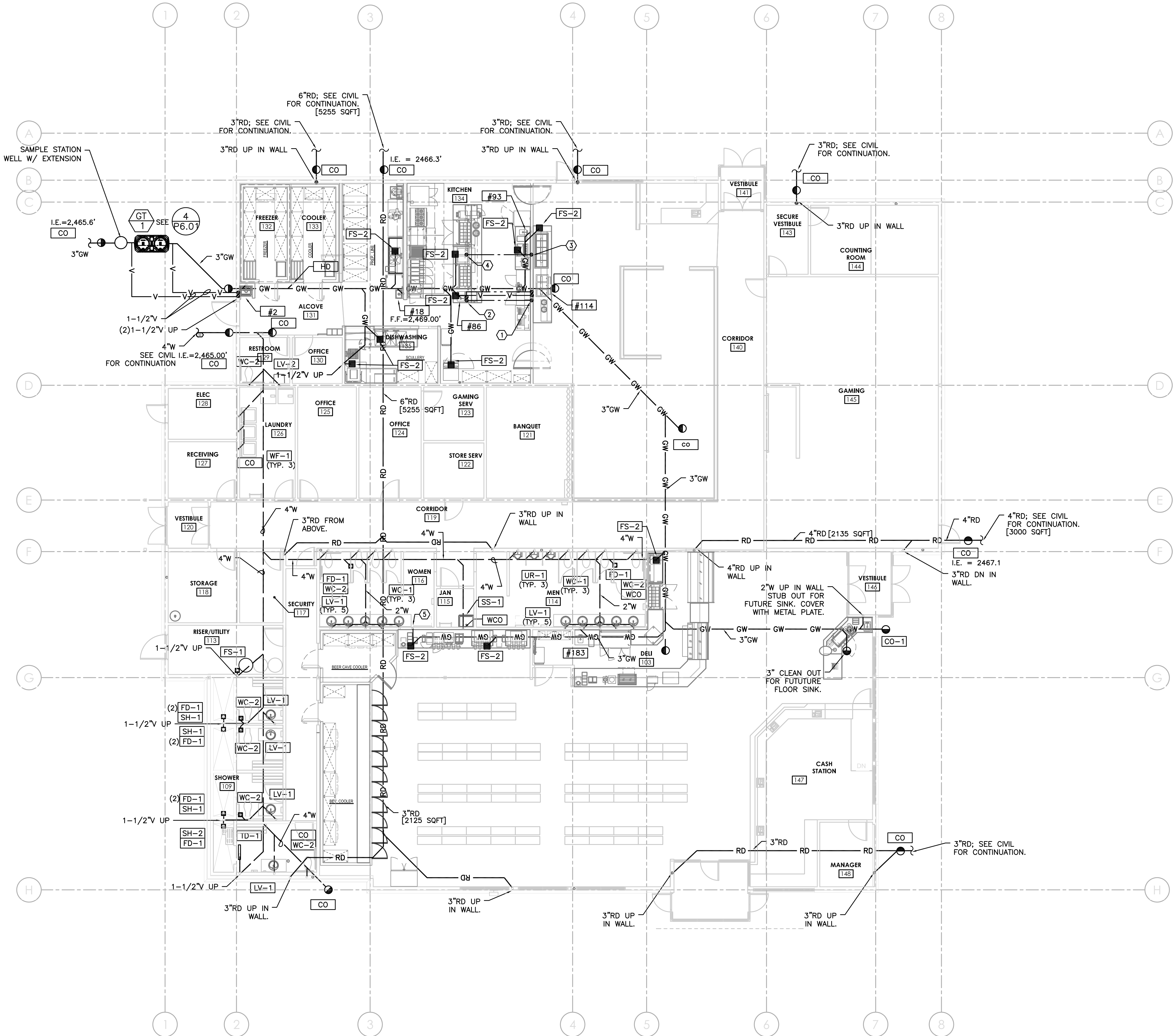
6/1/2016 7:55:28 AM ARCHITECTS

KEYED NOTES:

- ① - 1/2" CW/HW & 1-1/2" V UP THRU SLAB IN WALL TO CEILING SPACE.
② - 1/2" CW/HW UP THRU SLAB AND CONNECT TO SINK.
③ - 1/2" CW UP THRU SLAB IN WALL TO CEILING SPACE.
④ - 1/2" CW UP THRU SLAB TO FILL FAUCET.
⑤ - 1-1/2" V UP IN WALL.

GENERAL NOTES:

1. SEE P4.01 FOR CONDENSATE PIPING AND REFRIGERANT PIPING PLAN.
2. SEE 1/M6.03 FOR DUCT SUPPORT.
3. SEE 2/M6.03 FOR PIPE SUPPORT.
4. SEE 3/M6.03 FOR SEISMIC DUCT SUPPORT.
5. SEE 4/M6.03 FOR SEISMIC PIPE SUPPORT.



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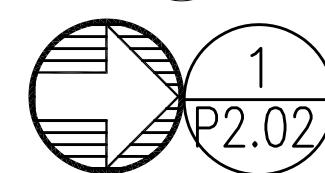
No.	Description	Date

Project Number	1519
Date	JAN. 12, 2016
Drawn By	TB
Checked By	JVB

UNDER SLAB
PLUMBING
PLAN

P2.01

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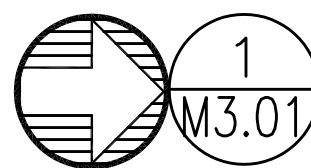
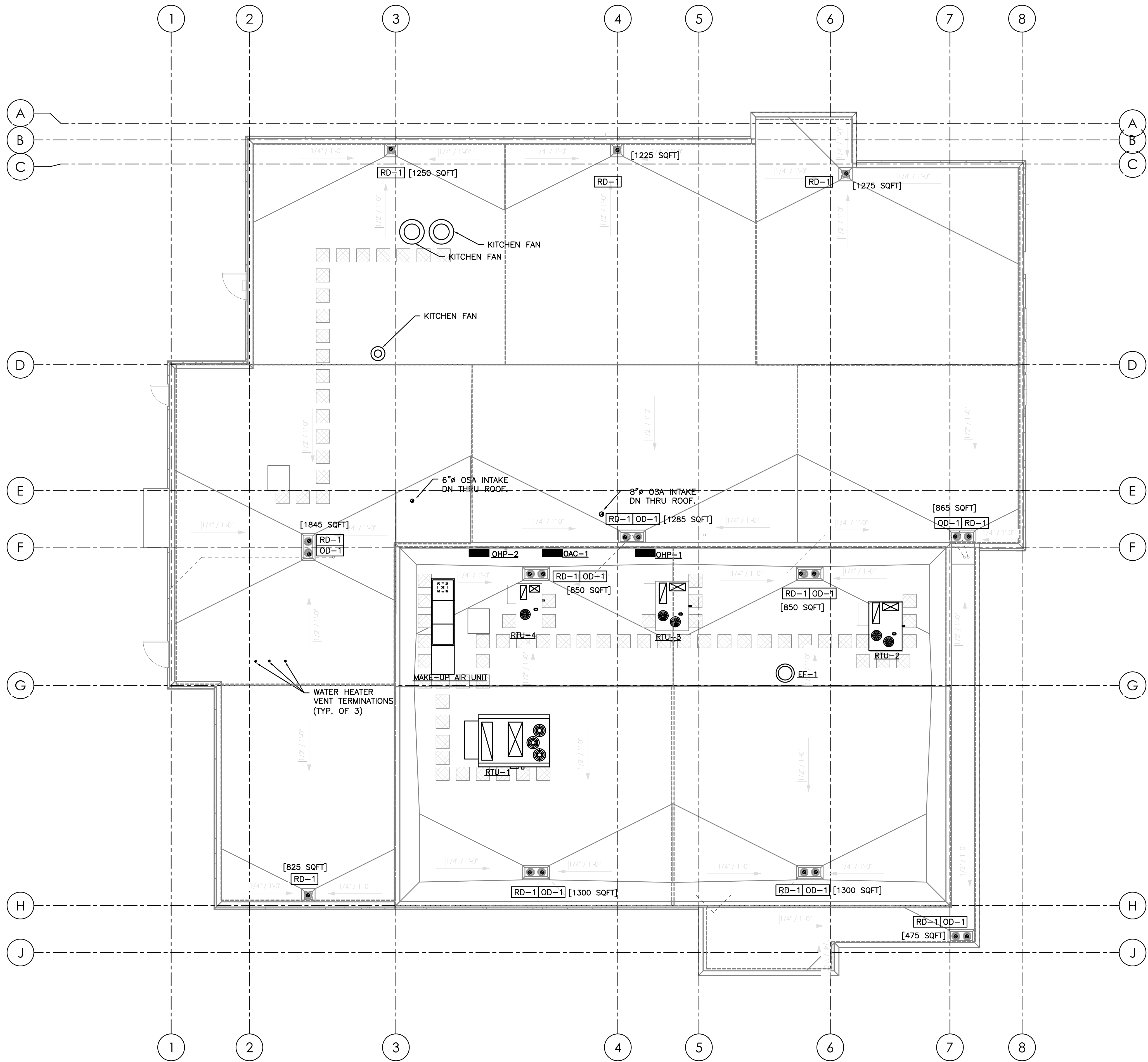
SCALE: 1/8" = 1'-0"

P2.02

PLUMBING FLOOR PLAN

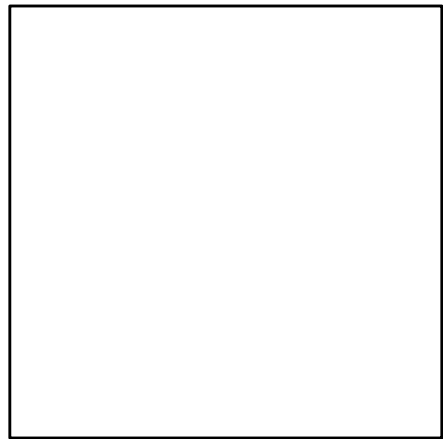
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1 HVAC ROOF PLAN

SCALE: 1/8" = 1'-0"



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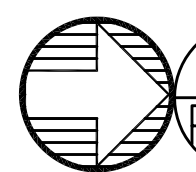
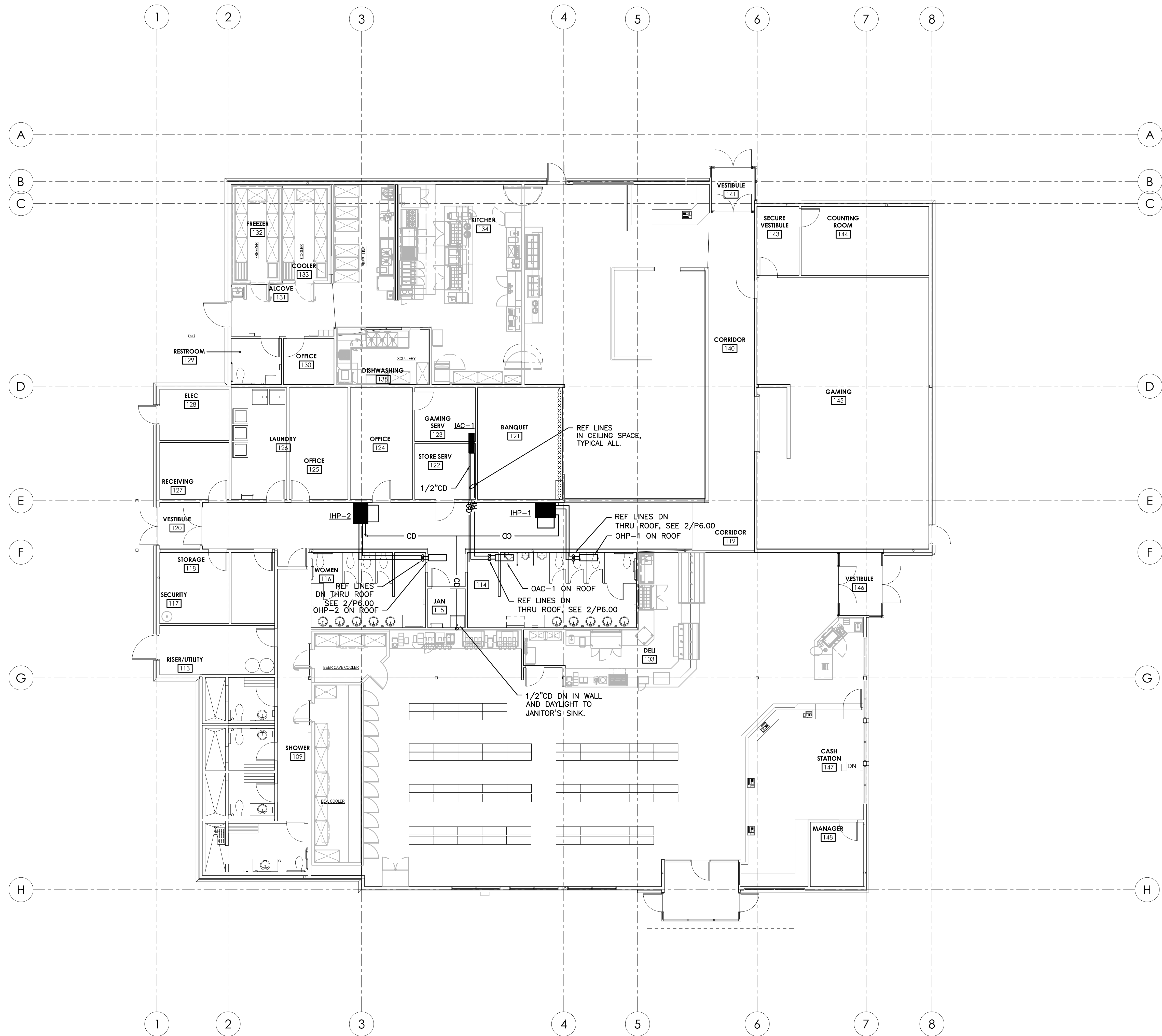
No.	Description	Date

Project Number	1519
Date	JAN. 12, 2016
Drawn By	TB
Checked By	TB

PLUMBING
ROOF PLAN

P3.01

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1
P4.01

CONDENSATE DRAIN AND REF PIPING PLAN
SCALE: 1/8" = 1'-0"

PRELIMINARY NOT FOR CONSTRUCTION

No.	Description	Date

Project Number	1519
Date	JAN. 12, 2016
Drawn By	TB
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CONDENSATE
DRAINS & REF
PIPING PLAN

P4.01

WARM SPRINGS TRAVEL CENTER

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[illegible]

FIXTURE TYPE	NUMBER OF FIXTURES	DRAINAGE FIXTURE UNITS	TOTAL DFU
HANDSINK	3	2	6
FLOOR SINKS (INDIRECT WASTE - <7.5 GPM)	8	2	16
FLOOR SINKS (INDIRECT WASTE) 15-30 GPM	1	6	6
FLOOR DRAINS	2	2	4
		TOTAL	32
HYDROMECHANICAL INTERCEPTOR (MIN. SIZE)		75	GPM

MARK	FIXTURE	W	V	CW	HW	REMARKS
WF-1	CLOTHES WASHER FITTING	2"	2"	3/4"	3/4"	Acorn 8185, Guy Gray WB 200/T 200 OR EQUAL
HB-1	HOSE BIB			3/4"		NON-FREEZE, SEE SPECS.
LV-1	LAVATORY	1-1/2"	1-1/2"	1/2"	1/2"	COUNTERMOUNT, BATTERY OPERATED
LV-2	LAVATORY	1-1/2"	1-1/2"	1/2"	1/2"	WALL MOUNT, ADA; BATTERY POWERED
SH-1	SHOWER	2"	1-1/2"	1/2"	1/2"	SEE SPECS.
SH-2	SHOWER	2"	1-1/2"	1/2"	1/2"	ADA, SEE SPECS.
SS-1	SERVICE SINK	3"	2"	1/2"	1/2"	24"X24" CORNER
WC-1	WATER CLOSET	3"	2"	1"		FLOOR MOUNT, FLUSH VALVE
WC-2	WATER CLOSET	3"	2"	1"		FLOOR MOUNT, FLUSH VALVE, ADA
UR-1	URINAL	2"	1-1/2"	3/4"		WALL MOUNT, BATTERY POWERED
FD-1	FLOOR DRAIN	3"	V.L.			J.R. SMITH 2005A (ROUND) OR EQUAL APPROVED.
FD-2	FLOOR DRAIN	3"	V.L.			J.R. SMITH 2120 (HEAVY DUTY) OR EQUAL
FS-1	FLOOR SINK	3"	V.L.			J.R. SMITH 3002 W/ 3/4 GRATE
TD-1	TRENCH DRAIN	3"	V.L.			3'-0", SEE SPECS.
OD-1	OVERFLOOR DRAIN	3"	V.L.			J.R. SMITH 1080
RD-1	ROOF DRAIN	3"				J.R. SMITH 1010
OF-1	OVERFLOOR FITTING	3"	V.L.			J.R. SMITH 1770

KITCHEN PLUMBING CONNECTION SCHEDULE*

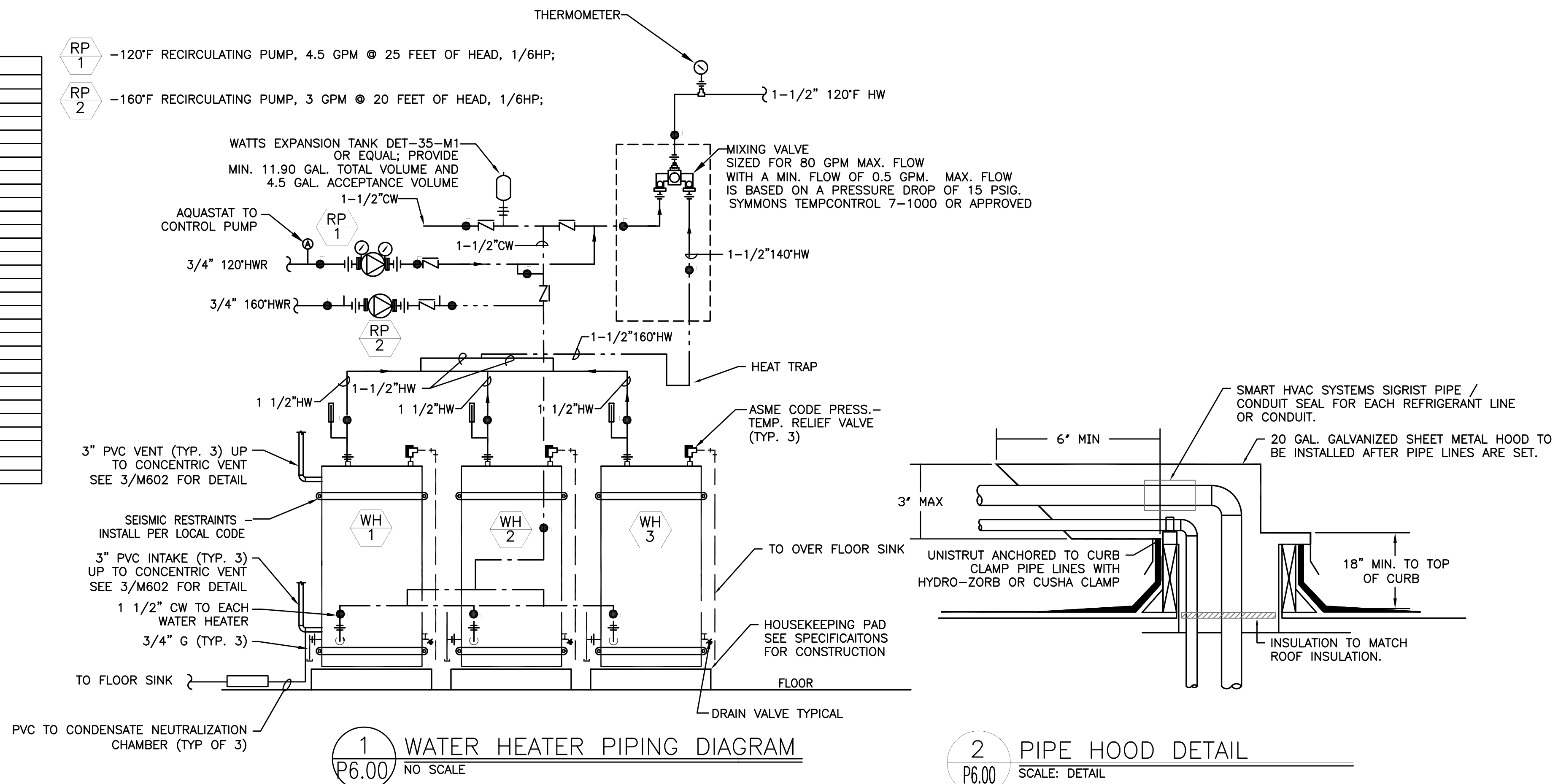
* PROVIDED BY FOOD SERVICE CONTRACTOR. SEE FOOD SERVICE PLANS FOR ROUGH-IN DIMENSIONS AND DETAILS.

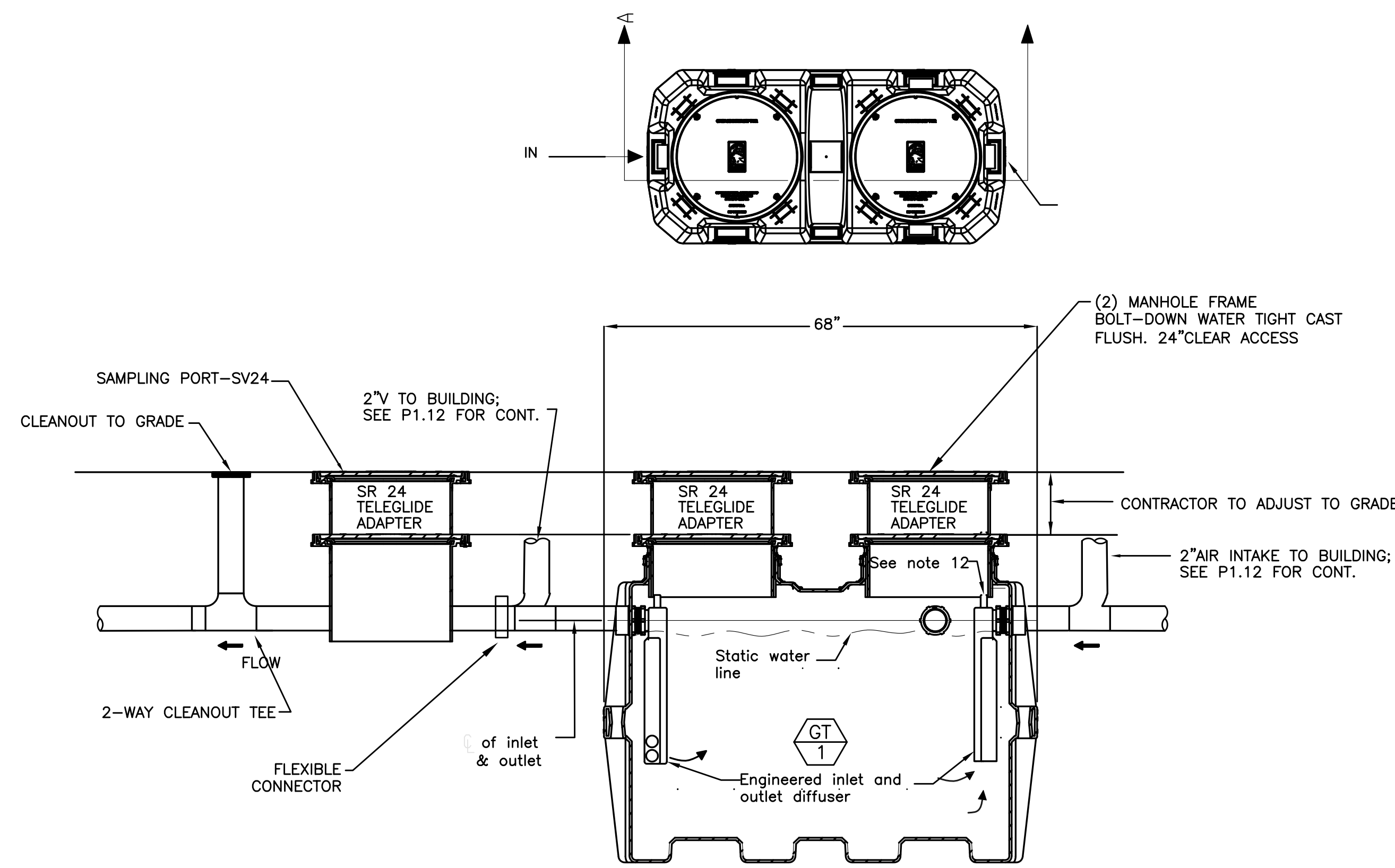
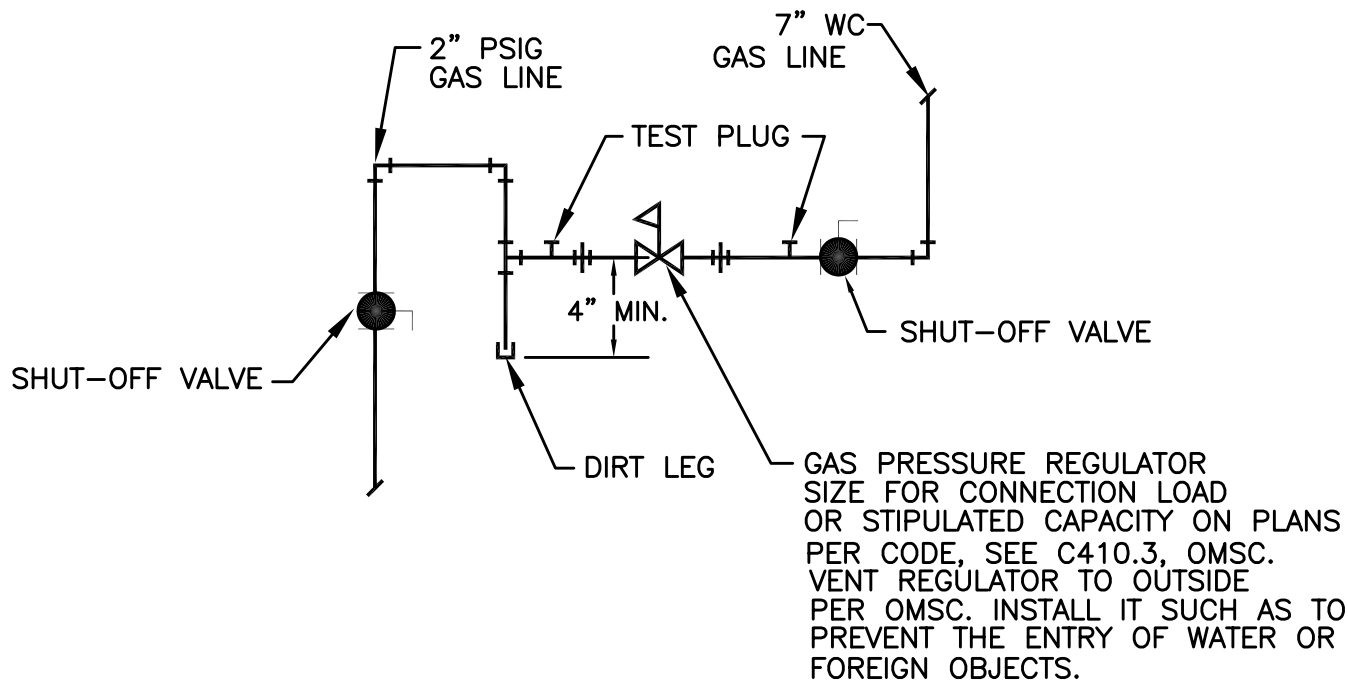
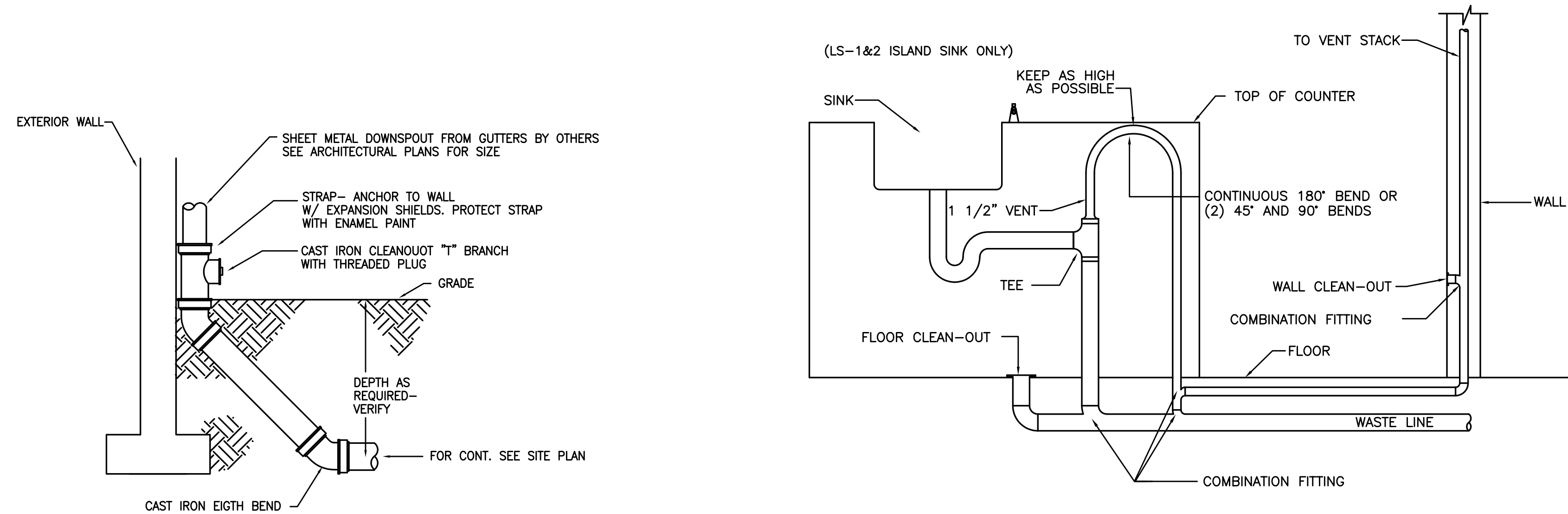
MARK NUMBER	WH 1	WH 2	WH 2
FUEL	NATURAL GAS		
CAPACITY (GAL)	100	100	100
INPUT RATE (MBH)	199	199	199
RECOVERY CAP. @ 100F TR (GPH)	239	239	239
EFFICIENCY (%)	94	94	94
GAS VENT/COMBUSTION AIR DIA.	3" PP	3" PP	3" PP
DESIGN WEIGHT (LBS)	1283	1283	1283
BASIS OF DESIGN: BRADFORD WHITE	ET-100T-199		

MARK NUMBER	NOTES 1, 2, 3
SERVICE	KITCHEN
CAPACITY (GPM)	100 GPM
GREASE (LB)	1,076 LBS
INLET/OUTLET PIPE SIZE	4"
DESIGN WEIGHT--WET (LBS)	2313 LBS
BASIS OF DESIGN	SCHIER GB-250
QTY	1

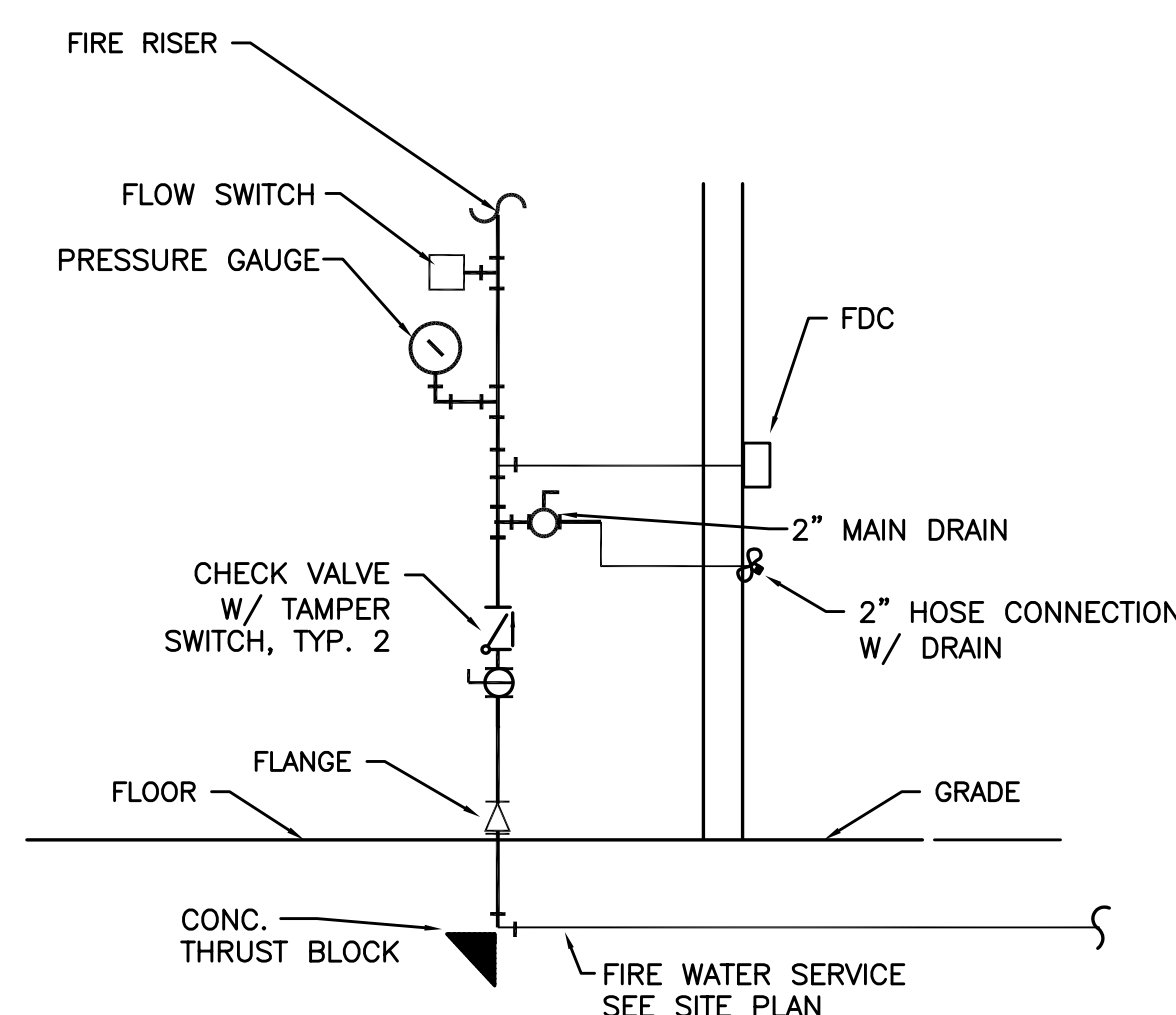
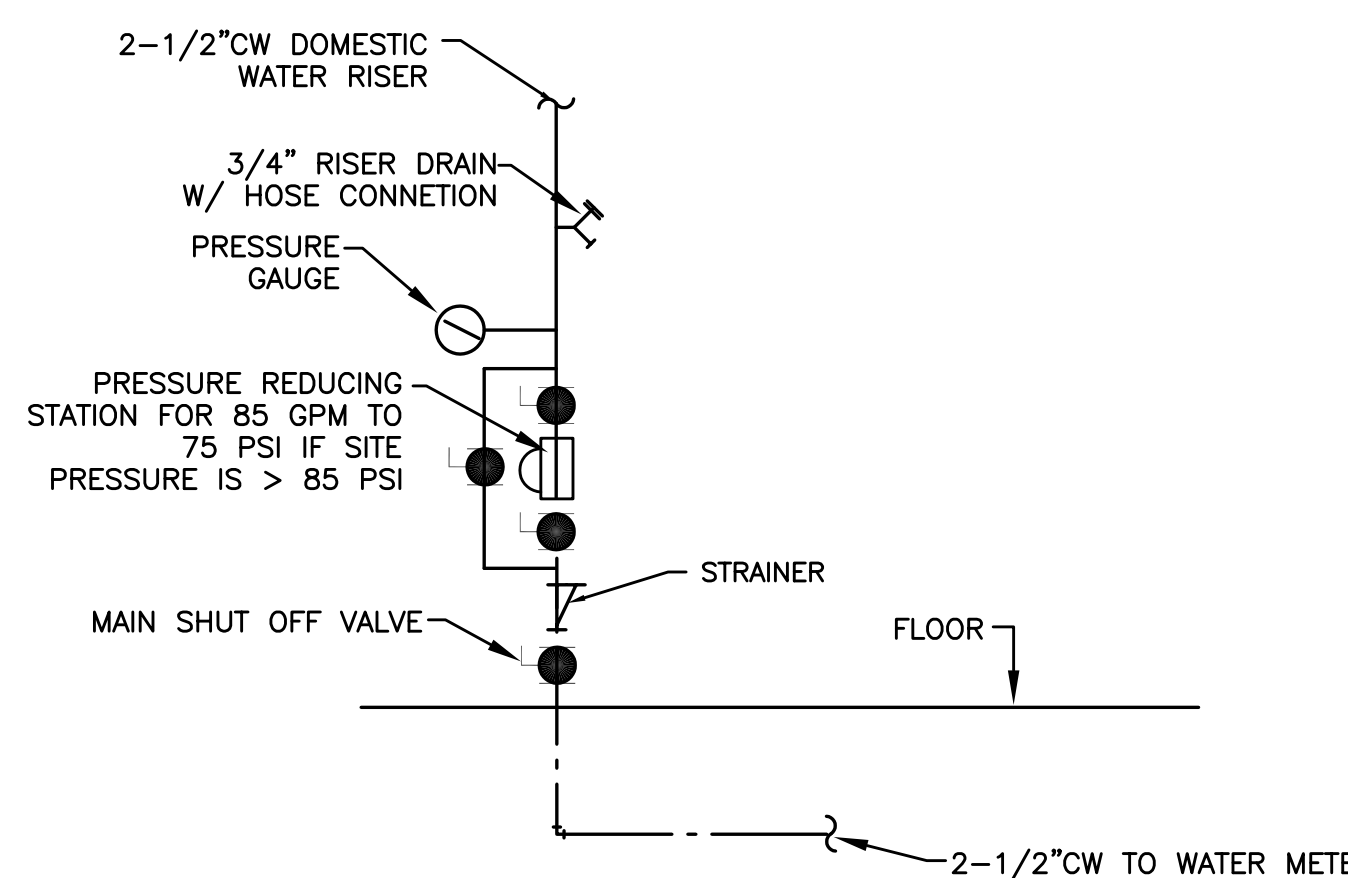
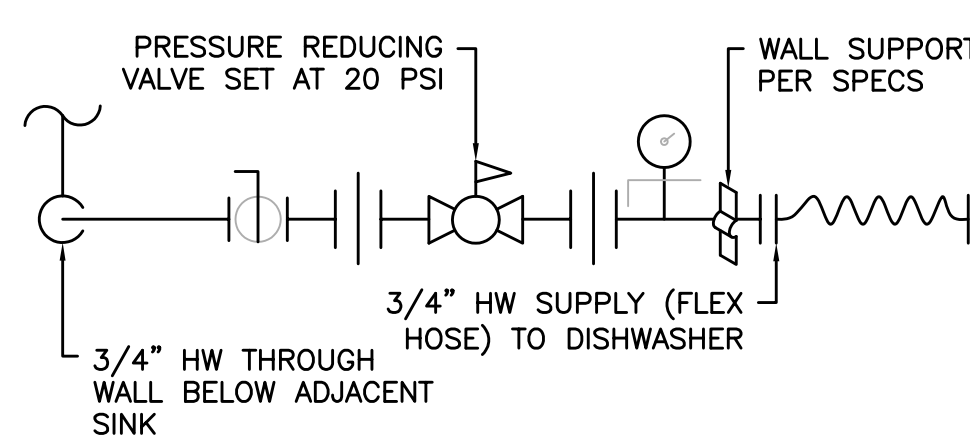
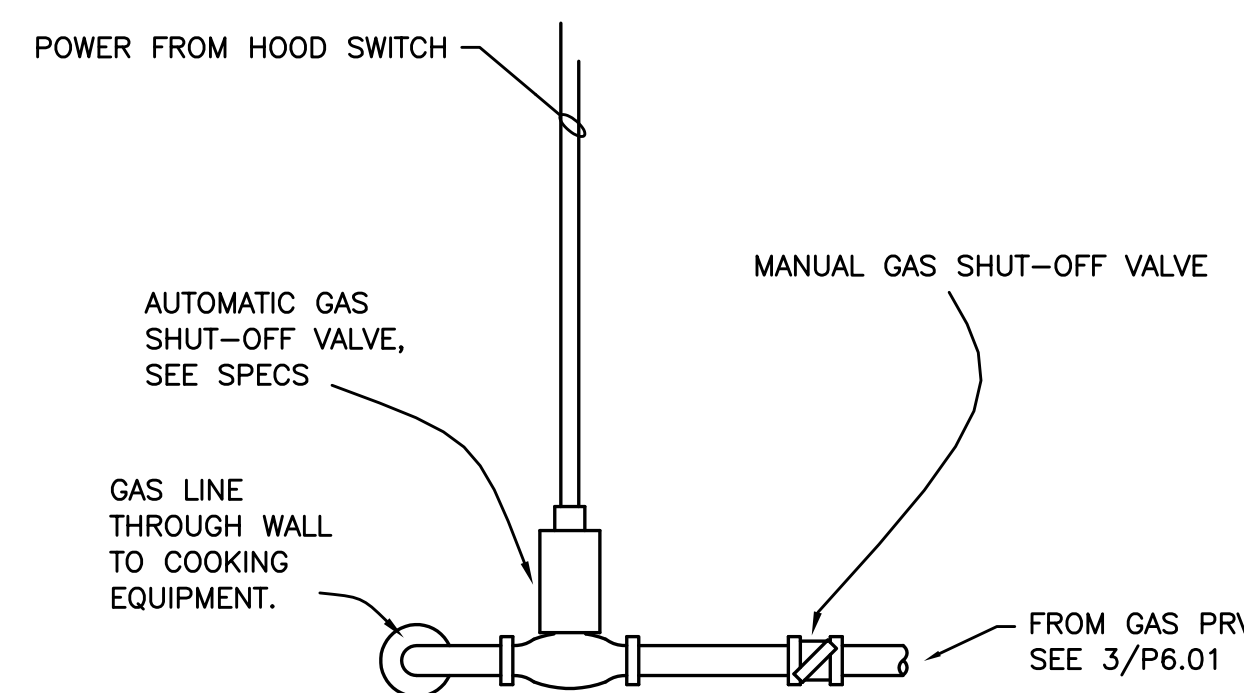
1. PROVIDE WITH SR24 TELEGLIDE RISER ADAPTER AND SV-24 SAMPLING PORT.
2. PROVIDE WITH HIGHWAY RATED COVER.(GT-1 & SAMPLING PORT)
3. PROVIDE WITH BUILT IN FLOW CONTROL & BUILT IN TEST CAP

OMSC 2014, TABLE C402.14(2)	
PRESSURE	2 PSI
TOTAL DEVELOPED PIPE LENGTH	250 FEET
MINIMUM MAIN PIPE SIZE	1-1/2"





- NOTES**
1. THE INTERCEPTOR SHALL BE CERTIFIED BY ASME #A112.14.3 AND LISTED BY IAPMO.
 2. THE INTERCEPTOR SHALL HAVE 3/8" THICK SEAMLESS HIGH DENSITY POLYETHYLENE WALLS.
 3. PROVIDE RISER EXTENSIONS FOR UNIT AND SAMPLING PORT TO ACCOMMODATE BURIAL DEPTH.
 4. PROVIDE COVER IN ACCESSIBLE AREA TO ALLOW FULL ACCESS TO TANK FOR PROPER MAINTENANCE.
 5. THE UNIT SHOULD INCORPORATE INTEGRAL AIR RELIEF/ANTI-SIPHON.
 6. COVER SHALL PROVIDE WATER/GAS-TIGHT SEAL AND HAVE MINIMUM 2,000 LBS LOAD CAPACITY.



BBT
ARCHITECTS

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WARM SPRINGS TRAVEL CENTER

Madras, OR

No.	Description	Date

Project Number	1519
Date	JUNE 21, 2016
Drawn By	TB
Checked By	JVB

**PLUMBING
LEGEND &
DETAILS**

PRELIMINARY NOT FOR CONSTRUCTION

6/1/2016 7:55:28 AM ARCHITECTS

