FAN SCHEDULE

CODE	MANUFACTURER/ MODEL NO.	SERVICE	LOCATION	WEIGHT LBS	ELECTRICAL DATA													MTG	CONTROL	REMARKS
					CFM	DRIVE	MOTOR TYPE	MOTOR RPM	ESP ("WC)	HP	BHP	VOLT	PH	HZ	FLA	DISC.	FUSE	FEEDER			
TX-2	GREENHECK / GB-071	TOILET EXHAUST	CORNER CLUB ROOF QUAD A	51	100	BELT	ODP	1725	0.5	1/6	0.05	115	1	60	4.4	THERMAL OVERLOAD		(2#12,#12G) 3/4"C	2	II	-
TX-3	GREENHECK / GB-071	TOILET EXHAUST	CORNER CLUB ROOF QUAD B	51	100	BELT	ODP	1725	0.5	1/6	0.05	115	1	60	4.4	THERMAL OVERLOAD		(2#12,#12G) 3/4"C	2	II	-
TX-4	GREENHECK / GB-071	TOILET EXHAUST	CORNER CLUB ROOF QUAD C	51	100	BELT	ODP	1725	0.5	1/6	0.05	115	1	60	4.4	THERMAL OVERLOAD		(2#12,#12G) 3/4"C	2	II	-
TX-5	GREENHECK / GB-071	TOILET EXHAUST	CORNER CLUB ROOF QUAD D	51	100	BELT	ODP	1725	0.5	1/6	0.05	115	1	60	4.4	THERMAL OVERLOAD		(2#12,#12G) 3/4"C	2	II	-
GX-1	GREENHECK / CSP-A110	GENERAL EXHAUST	ELEV EQUIP ROOM	16	100	DIRECT	ODP	950	0.25	0.03	0.03	115	1	60	0.62	THERMAL OVERLOAD		(2#12,#12G) 3/4"C	1	III	-
GX-2	GREENHECK / CSP-A110	GENERAL EXHAUST	ELEV REMOTE CONTROL QUAD D	16	100	DIRECT	ODP	950	0.25	0.03	0.03	115	1	60	0.62	THERMAL OVERLOAD		(2#12,#12G) 3/4"C	1	III	-
GX-3	GREENHECK / BSQ-080	GENERAL EXHAUST	TELE/DATA QUAD B	80	350	BELT	ODP	1140	0.25	1/4	0.09	115	1	60	5.8	THERMAL OVERLOAD		(2#12,#12G) 3/4"C	1	III	

GENERAL NOTES
1. DRIVE TYPE: D=DIRECT-PROVIDE RHEOSTAT SPEED CONTROLLER IN FAN HOUSING UNLESS OTHERWISE NOTED.
B=BELT-PROVIDE ADJUSTABLE SHEAVE UNLESS OTHERWISE NOTED.
VFD=VARIABLE FREQUENCY DRIVE.
2. ALL CURBS SHALL BE FACTORY MADE, 14 INCH HIGH INSULATED UNLESS OTHERWISE NOTED.
3. PROVIDE MAGNETIC STARTER WITH AUXILARY CONTACTS AND HOA SWITCH ON ALL THREE PHASE UNITS EXCEPT WHEN SERVED FROM MOTOR CONTROL CENTER.
4. PROVIDE PREMIUM EFFICIENCY MOTORS. PER NEMA STANDARD MG1-2003, TABLED 12-12, AND 12-13.
5. PROVIDE FLEXIBLE CONNECTIONS AT DUCT INLET AND OUTLET.
6. ALL EXTERIOR DISCONNECTS SWITCHES SHALL BE NEMA 4X TYPE.

MOUNTING (MTG)
1. INSTALL FAN WITH HANGING VIBRATION ISOLATORS.
2. PROVIDE WITH FACTORY MANUFACTURED ROOF CURB SUITABLE FOR ROOFING SYSTEM BEING USED. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

CONTROL (CTRL)
I. INTERLOCK WITH DISHWASHER OPERATION.
II. RUN CONTINUOUSLY, CONTROL VIA DDC SYSTEM.
III. CONTROL VIA WALL SENSOR - ENERGIZE AT 85F (ADJUSTABLE).

REMARK NOTES.
A. PROVIDE SPEED CONTROL SWITCH.
B. STAINLESS STEEL DUCTWORK.

GRILLE REGISTER DIFFUSER SCHEDULE

CODE	MANUFACTURER/ MODEL NO.	SERVICE	TYPE	ACCESSORIES	FACE SIZE	NECK SIZE	FINISH	REMARKS
A	TITUS / OMNI	SUPPLY AIR	PLAQUE	PROVIDE OPPOSED BLADE DAMPER WHERE NOTED	24x24	6" DIA UP TO 115 CFM 8" DIA UP TO 200 CFM 10" DIA UP TO 325 CFM 12" DIA UP TO 470 CFM 14" DIA UP TO 600 CFM	TBD BY ARCHITECT	-
B	TITUS / ML-39	SUPPLY AIR	LINEAR	PROVIDE OPPOSED BLADE DAMPER WHERE NOTED	SEE PLANS FOR NO. OF SLOTS AND TOTAL LENGTH	SEE DRAWING	SEE PLANS	A, B
C	TITUS / OMNI	SUPPLY AIR	PLAQUE	PROVIDE OPPOSED BLADE DAMPER WHERE NOTED	12x12	6" DIA UP TO 115 CFM 8" DIA UP TO 200 CFM 10" DIA UP TO 325 CFM 12" DIA UP TO 470 CFM 14" DIA UP TO 600 CFM	TBD BY ARCHITECT	-
D	TITUS / 350	RETURN/EXHAUST AIR	GRILLE	PROVIDE OPPOSED BLADE DAMPER WHERE NOTED	SEE PLANS	SEE DRAWING	SEE PLANS	-
E	TITUS / MLR-39	RETURN AIR	LINEAR	PROVIDE OPPOSED BLADE DAMPER WHERE NOTED	SEE PLANS FOR NO. OF SLOTS AND TOTAL LENGTH	SEE DRAWING	SEE PLANS	A, B

GENERAL NOTES
1. SEE PLANS FOR CFM AND NECK SIZES.
2. MAXIMUM NOISE CRITERIA (NC) SHALL BE 30 UNLESS OTHERWISE NOTED.
3. COLOR TO BE COORDINATED WITH ARCHITECT PRIOR TO ORDERING.
4. MATERIAL IS STEEL UNLESS OTHERWISE NOTED.
5. PROVIDE BALANCING DEVICE FOR ALL GRILLES, REGISTERS, AND DIFFUSERS UNLESS OTHERWISE NOTED. BALANCING DEVICES SHALL BE LOCATED AS FAR FROM THE GRILLES AS POSSIBLE.
6. CONTRACTOR TO CONFIRM GRILLES BORDER TYPE WITH ARCHITECTURAL REFLECTED CEILING PLANS PRIOR TO ORDERING.
7. CONTRACTOR SHALL PAINT THE INSIDE OF ALL DUCTWORK THAT IS VISIBLE THROUGH THE GRILL.

REMARKS
A. PROVIDE END CAPS, END BORDERS, OPEN BORDERS, AND ALIGNMENT CLIPS AS REQUIRED FOR CONTINUOUS DIFFUSER.
B. PROVIDE INSULATED PLENUMS BEHIND ALL DUCTED LINEAR DIFFUSERS AND RETURNS.

PUMP SCHEDULE

CODE	MANUFACTURER/ MODEL NO.	SERVICE	LOCATION	PUMP TYPE	GPM	DRIVE	RPM	HEAD (FT)	MIN. DESIGN PRESSURE	FLUID TEMP. RANGE (F)	NPSHR (FT)	IMPELLER SIZE (IN.)	HP	VOLT	PH	HZ	FLA	DISC	FUSE	COND	REMARKS
FFP-1	BELL & GOSSETT / e-90 STOCK-2AB	AHU-1	CLUB LEVEL MECH RM	IN-LINE	80	STARTER	1800	30	0	150-200	7.58	5.75	1.5	208	3	60	6.9	30A/3P	12A FRN-R	(3#12,#12G) 3/4"C	-

GENERAL NOTES
1. PROVIDE MAGNETIC STARTER WITH AUXILIARY CONTACTS AND HOA SWITCH ON ALL THREE PHASE MOTORS WHERE VARIABLE FREQUENCY DRIVES ARE NOT SPECIFIED.
2. PROVIDE PREMIUM EFFICIENCY MOTORS FOR MOTORS 1 HP AND OVER PER NEMA STANDARD MG1-2003, TABLES 12-12 AND 12-13.
3. FOR PARALLEL PUMP APPLICATIONS MANUFACTURER SHALL REVIEW SINGLE PUMP OPERATON SUCH THAT PUMP CAN OPERATE AND NOT EXCEED THE END OPERATION POINT ON THE PUMP CURVE AND MOTOR HP IS PROPERLY SELECTED TO PREVENT OVERLOADING.
4. NPSHR AT SCHEDULED OPERATING POINT SHALL NOT EXCEED 0.8*NPSHA.
5. REFER TO DRAWINGS TO DETERMINE REQUIRED PUMP ROTATION. COORDINATE WITH MECHANICAL CONTRACTOR PRIOR TO ORDERING.
6. PUMP HOUSING SHALL BE COMPLETELY INSULATED.

REMARK NOTES
A. -

CABINET HEATER SCHEDULE (ELECTRIC)

CODE (CUH)	MANUFACTURER/ MODEL NO.	SERVING	LOCATION	ORIENTATION	CAPACITY (kW)	EAT (°F)	LAT (°F)	CFM	WEIGHT (LBS.)	VOLT	HZ	PH	FLA	DISC	FUSE	FEEDER	REMARKS
CUH-A	TRANE / FFC-030	CORNER CLUB VESTIBULE	VARIOUS SEE PLANS	HORIZONTAL CONCEALED	4.5	50	97	300	74	208	60	3	12.6	30A/3P	20A FRN-R	(4#12,#12G) 3/4"C	A
CUH-B	TRANE / FFE-060	ELEVATOR LOBBY	VARIOUS SEE PLANS	HORIZONTAL RECESSED	10.5	50	97	700	74	480	60	3	12.7	30A/3P	20A FRS-R	(4#12,#12G) 3/4"C	A

GENERAL NOTES
1. PROVIDE WALL MOUNTED THERMOSTAT WITH SPEED CONTROL SWITCH.
2. PROVIDE 24 VDC CONTROL TRANSFORMER. COORDINATE WITH CONTROL CONTRACTOR.

REMARK NOTES
A. PROVIDE DDC CONTROLS.

SPLIT SYSTEM HEAT PUMP SCHEDULE

AIR HANDLING UNIT																						CONDENSING UNIT													
				FAN		COOLING CAPACITY				ELECTRICAL DATA														ELECTRICAL											
CODE (SSAC)	MANUFACTURER/ MODEL NO.	AREA SERVED	LOCATION	CFM	ESP ("W.C)	SENS MBH	TOTAL MBH	LINE SIZE (IN DIA.) LIQUID	LINE SIZE (IN DIA.) SUCTION	W	VOLT	PH	HZ	MCA	MAX FUSE	DISC	FEEDER SIZE	PANEL OCPD	WEIGHT LBS.	REMARKS	CODE (ACCU)	MANUFACTURER/ MODEL NO.	SEER	VOLT	PH	HZ	FAN FLA	MCA	MAX FUSE	DISC	FEEDER SIZE	PANEL OCPD	WEIGHT LBS.	REMARKS
SSAC-A	MITSUBISHI / PEAD-A18	SEE PLANS	SEE PLANS	635	0.2	14.4	18	1/4	1/2	96	208	1	60	2	15	30A/3P	FED FROM OUTDOOR UNIT		62		ACCU-A	MITSUBISHI/ PUZ-A18	14.3	208	1	60	0.35	13	15A	30A/3P	(3#12,#12G) 3/4"C	20	91	

GENERAL NOTES
1. EAT= 80/67 DB/WB.
2. PROVIDE PREMIUM EFFICIENCY MOTORS FOR MOTORS 1 HP AND OVER PER NEMA STANDARD MG1-2003, TABLES 12-12 AND 12-13.
3. CONTRACTOR TO MAINTAIN ALL MANUFACTURE SERVICE AND PERFORMANCE CLEARANCES. COORDINATE WITH ALL TRADES.
4. REFRIGERANT: R-410A
5. WARRANTY: TYPICALLY 2 YEAR PARTS, 5 YEAR COMPRESSOR
6. PROVIDE A REMOTE BMS CONNECTION. BMS SHALL MONITOR ALL POINTS.
7. CONTRACTOR IS RESPONSIBLE FOR ALL ADDITIONAL MECHANICAL, ELECTRICAL, RIGGING, OR PHYSICAL ALTERATION COST NECESSITATED BY THE PRODUCT, EVEN WITH ENGINEER APPROVAL. COST SAVINGS FOR THE SUBSITUTE PRODUCT SHALL BE PROVIDED TO THE ENGINEER.
8. CHECK, TEST AND STARTUP SUPERVISION WITH INSTALLING CONTRACTOR AND MANUFACTURE TECHNICIAN. SUBMIT STARTUP LOGS TO ENGINEER FOR RECORD.
9. PROVIDE ISOLATION VALVE AND FLEX CONNECTIONS ON EACH CONNECTION AT EACH EVAPORATOR & CONDENSER.
10. PROVIDE MINI CONDENSATE PUMP IN DRAIN PAN, SIMILAR TO LITTLE GIANT-VCC2D, 10' HEAD, 45 GPH, 115V, 1/30HP, WITH OVERFLOW SWITCH. POWER FROM NEAREST 120V RECEPTACLE CIRCUIT.
11. AIR HANDLING UNIT TO BE POWERED FROM CONDENSING UNIT. PROVIDE WIRING PER MANUFACTURER'S INSTRUCTIONS.

VAV BOX SCHEDULE (ELECTRIC HEAT)

CODE (VAV)	AREA SERVED	MANUFACTURER/ MODEL NO.	CONTROL	DESIGN (CFM)		ELECTRIC HEATING COIL										MAX. NC @ BOX MAX.	INLET SIZE	OUTLET SIZE	REMARKS
				MIN	MAX	kW	STAGES/SCR	VOLT	PH	HZ	FLA	MOCP	DISC	FUSE	FEEDER				
VAV-06-01	QUAD A CORNER CLUB UPPER CONCOURSE	TITUS DESV 14	DIGITAL	500	2000	36	2	480	3	60	43.3		60A/3P	60A FRS-R	(3#4,8G)1-1/4"C	25	14	20 x 17	C,E
VAV-06-02	QUAD B CORNER CLUB UPPER CONCOURSE	TITUS DESV 14	DIGITAL	500	2000	36	2	480	3	60	43.3		60A/3P	60A FRS-R	(3#4,8G)1-1/4"C	25	14	20 x 17	C,E
VAV-06-03	QUAD C CORNER CLUB UPPER CONCOURSE	TITUS DESV 14	DIGITAL	500	2000	36	2	480	3	60	43.3		60A/3P	60A FRS-R	(3#4,8G)1-1/4"C	25	14	20 x 17	C,E
VAV-05-04	QUAD D CORNER CLUB UPPER SUITE	TITUS DESV 14	DIGITAL	500	2000	36	2	480	3	60	43.3		60A/3P	60A FRS-R	(3#4,8G)1-1/4"C	25	14	20 x 17	C,E
VAV-06-04	QUAD D CORNER CLUB UPPER CONCOURSE	TITUS DESV 14	DIGITAL	500	2000	36	2	480	3	60	43.3		60A/3P	60A FRS-R	(3#4,8G)1-1/4"C	25	14	20 x 17	C,E

GENERAL NOTES
1. CONTROLS SHALL BE BY MANUFACTURER OR BY CONTROL MANUFACTURER AND INSTALLED AT THE FACTORY (SEE SPECIFICATIONS).
2. MOUNT WITH 5 STRAIGHT DUCT DIAMETERS UPSTREAM OF THE BOX.
3. MAXIMUM NC LEVELS ARE RADIATED SOUND DATA AND BASED ON AN INLET VELOCITY OF 2000 FPM AND AT A PRESSURE DROP ACROSS THE BOX OF 1.5".
4. PROVIDE FACTORY MOUNTED 120V FUSED DISCONNECT SWITCH, CONTROL, TRANSFORMER AND AIR FLOW SWITCH.
5. UPON POWER FAILURE, ACTUATOR SHALL MODULATE TO LAST USED POSITION
6. PROVIDE CONTROL TRANSFORMER FOR EACH VAV BOX. SUITABLE FOR 120V POWER SUPPLY.
7. HEATING SHALL BE DISABLED UNLESS VAV IS AT MINIMUM AIRFLOW.

SOUND ATTENUATOR SCHEDULE

CODE (SA)	MANUFACTURER / MODEL NO.	SYSTEM	CFM	FACE VELOCITY (FPM)	OCTAVE BAND Hz DYNAMIC INSERTION LOSS, dB SELF-NOISE POWER LEVELS, dB 63	125	250	500	1K	2K	4K	8K	SIZE WIDTH (IN)	HEIGHT (IN)	LENG. (IN)	MAX. PRESS. DROP (IN WC)	REMARKS
SA-06-01	PRICE / ERM48/WF	RTU-4 RETURN	2,000	541	8	14	16	26	27	19	17	18	38	14	48	0.13	A,B
SA-06-02	PRICE / ERM48/WF	RTU-4 RETURN	2,000	541	8	14	16	26	27	19	17	18	38	14	48	0.13	A,B
SA-06-03	PRICE / ERM48/WF	RTU-4 RETURN	2,000	541	8	14	16	26	27	19	17	18	38	14	48	0.13	A,B
SA-06-04	PRICE / ERM48/WF	RTU-4 RETURN	2,000	541	8	14	16	26	27	19	17	18	38	14	48	0.13	A,B

GENERAL NOTES
1. PROVIDE TWO STRAIGHT DUCT LENGTH UPSTREAM AND DOWNSTREAM OF SILENCER.
2. SILENCERS ARE SCHEDULED BASED ON SCHEDULED EQUIPMENT. CONTRACTOR SHALL PROVIDE NOISE INFORMATION FOR EACH ITEM REQUIRING AN ATTENUATOR AND SHALL BE RESPONSIBLE FOR MAKING REVISIONS TO SILENCERS IF ALTERNATE EQUIPMENT IS INSTALLED.
3. IF REQUIRED, PROVIDE MULTIPLE MODULES SO TOTAL SIZE MATCHES THE LISTED DIMENSIONS.

REMARK NOTES
A. ABSORPTIVE ELBOW ATTENUATOR.
B. ATTENUATOR SHALL HAVE MINIMUM 18 GA CASING.

UNIT HEATER SCHEDULE (ELECTRIC)

CODE (EUH)	MANUFACTURER/ MODEL NO.	SERVING	LOCATION	DISCHARGE DIRECTION	CAPACITY (kW)	EAT (°F)	LAT (°F)	CFM	WEIGHT (LBS)	ELECTRICAL kW	VOLT	PH	HZ	FLA	MOCP	DISC	FUSE	FEEDER	REMARKS
EUH-A	TRANE / UHEC-03	ELEV CONTROL RM	VARIOUS, SEE PLANS	HORIZONTAL	3.3	65	91	400	45	3.3	208	3	60	9.2	20A	30A/3P	20A FRN-R	(4#12,#12G) 3/4"C	

GENERAL NOTES
1. PROVIDE WALL MOUNTED THERMOSTAT.
2. PROVIDE 24V DC CONTROL TRANSFORMER. COORDINATE WITH CONTROL CONTRACTOR.

REMARK NOTES

POPULOUS®

Populous
Architecture, Planning, Interiors & Programming
4800 Main St., Suite 300
Kansas City, Missouri 64112 (816) 221-1500

Thornton Tomasetti
Structural Consultant
2323 Grand Boulevard, Suite 900
Kansas City, MO 64108 (816) 221-7771

ME Engineers
MEP / FA / FP Engineers
14143 Denver West Pkwy, Suite 300
Golden, CO 80401 (303) 421-6655

WJHW
Audio Visual Consultant
3404 Midcount Road, Suite 124
Carrollton, TX 75006 (972) 934-3700

Howe Engineers
Code Consultant
101 Longwater Cir, Suite #203
Norwell, MA 02061 (781) 878-3500

RK&K
Civil Engineering
3501 Concord Rd, Suite #100
York, PA 17402 (717) 600-2220

S2O Consultants, Inc.
Food Service Consultant
13 Winding Branch Rd
Hawthorn Woods, IL 60047 (224) 717-1555

Lorax Partnerships, LLC
LEED Consultant
1200 Light Street,
Baltimore, MD 21230 (443) 449-6319

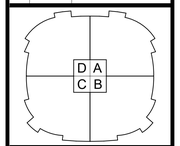
Larch Bates
Vertical Transportation Consultant
9780 S. Meridian Blvd #450
Englewood, CO 80112 (303) 723-7978

M&T BANK STADIUMEMENT IMPROVEMENTS
PHASE - 2
1101 RUSSEL ST,
BALTIMORE, MD 21230

ASI 002
01.18.2018

REVISIONS

NO.	DATE	DESCRIPTION
1	11/16/2017	PHASE-2 ASI 001
2	01/18/218	PHASE-2 ASI 002



PROJECT NO.
15.4130.50

ISSUED BY
POPULOUS

ISSUED DATE
07.27.2017

SHEET TITLE
MECHANICAL SCHEDULES

DISCIPLINE - CATEGORY - SUB CATEGORY - SHEET
2M0-03

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SPLIT SYSTEM SCHEDULE

CODE (PSC)	MANUFACTURER/ MODEL NO.	AREA SERVED	LOCATION	AIR HANDLING UNIT: FAN CFM	FAN ESP ("W.C)	COOLING CAPACITY SENS MBH	COOLING CAPACITY TOTAL MBH	LINE SIZE (IN DIA.) LIQUID	LINE SIZE (IN DIA.) SUCTION	ELECTRICAL DATA KW	VOLT	PH	HZ	MCA	MAX FUSE	DISC	FEEDER SIZE	WEIGHT LBS.	REMARKS	CODE (ACCU)	CONDENSING UNIT: MANUFACTURER/ MODEL NO.	SEER	ELECTRICAL VOLT	PH	HZ	FAN FLA	MCA	MAX FUSE	DISC	FEEDER SIZE	PANEL OCPD	WEIGHT LBS.	REMARKS
AC-55IN	MITSUBISHI / PEFY-P72	PANTRY 5.04.09	PANTRY 5.04.09	2,154	0.2	57.6	72	1/4	1/2	1.6	208	1	60	7.7	15	30A/2P	(2#12,#12G) 3/4"C	214		AC-55OT	MITSUBISHI/ PUMY-P60	17	208	1	60	0.35	36	40	60A/2P	(2#8,#10G) 1"C	40	306	
AC-56AIN	MITSUBISHI / PLFY-36	PANTRY 5.29.09	PANTRY 5.29.10	1,060	0.2	28.8	36	3/8	5/8	0.63	208	1	60	1.13	15	30A/2P	(2#12,#12G) 3/4"C	62		AC-56OT	MITSUBISHI/ PUMY-P60	17	208	1	60	0.35	36	40	60A/2P	(2#8,#10G) 1"C	40	306	
AC-56BIN	MITSUBISHI / PLFY-36	PANTRY 5.29.09	PANTRY 5.29.09	1,060	0.2	28.8	36	3/8	5/8	0.63	208	1	60	1.13	15	30A/2P	(2#12,#12G) 3/4"C	62															
AC-57AIN	MITSUBISHI / PLFY-36	PANTRY 6.04.09	PANTRY 6.04.09	1,060	0.2	28.8	36	3/8	5/8	0.63	208	1	60	1.13	15	30A/2P	(2#12,#12G) 3/4"C	62		AC-57OT	MITSUBISHI/ PUMY-P60	17	208	1	60	0.35	36	40	60A/2P	(2#8,#10G) 1"C	40	306	
AC-57BIN	MITSUBISHI / PLFY-36	PANTRY 6.04.09	PANTRY 6.04.09	1,060	0.2	28.8	36	3/8	5/8	0.63	208	1	60	1.13	15	30A/2P	(2#12,#12G) 3/4"C	62															
AC-58AIN	MITSUBISHI / PLFY-36	PANTRY 6.25.09	PANTRY 6.25.09	1,060	0.2	28.8	36	3/8	5/8	0.63	208	1	60	1.13	15	30A/2P	(2#12,#12G) 3/4"C	62		AC-58OT	MITSUBISHI/ PUMY-P60	17	208	1	60	0.35	36	40	60A/2P	(2#8,#10G) 1"C	40	306	
AC-58BIN	MITSUBISHI / PLFY-36	PANTRY 6.25.09	PANTRY 6.25.09	1,060	0.2	28.8	36	3/8	5/8	0.63	208	1	60	1.13	15	30A/2P	(2#12,#12G) 3/4"C	62															
AC-54IN	MITSUBISHI / PEFY-P72	PANTRY 4.25.05	PANTRY 4.25.05	2,154	0.2	57.6	72	1/4	1/2	1.6	208	1	60	7.7	15	30A/2P	(2#12,#12G) 3/4"C	214		AC-54OT	MITSUBISHI/ PUMY-P60	17	208	1	60	0.35	36	40	60A/2P	(2#8,#10G) 1"C	40	306	
AC-53IN	MITSUBISHI / PEFY-P72	PANTRY 4.29.06	PANTRY 4.25.05	2,154	0.2	57.6	72	1/4	1/2	1.6	208	1	60	7.7	15	30A/2P	(2#12,#12G) 3/4"C	214		AC-53OT	MITSUBISHI/ PUMY-P60	17	208	1	60	0.35	36	40	60A/2P	(2#8,#10G) 1"C	40	306	

GENERAL NOTES
1. EAT= 80/67 DB/WB.
2. PROVIDE PREMIUM EFFICIENCY MOTORS FOR MOTORS 1 HP AND OVER PER NEMA STANDARD MG1-2003, TABLES 12-12 AND 12-13.
3. CONTRACTOR TO MAINTAIN ALL MANUFACTURE SERVICE AND PERFORMANCE CLEARANCES. COORDINATE WITH ALL TRADES.
4. REFRIGERANT: R-410A
5. WARRANTY: 2 YEAR PARTS, 5 YEAR COMPRESSOR
6. PROVIDE A REMOTE BMS CONNECTION. BMS SHALL MONITOR ALL POINTS.
7. CONTRACTOR IS RESPONSIBLE FOR ALL ADDITIONAL MECHANICAL, ELECTRICAL, RIGGING, OR PHYSICAL ALTERATION COST NECESSITATED BY THE PRODUCT, EVEN WITH ENGINEER APPROVAL. COST SAVINGS FOR THE SUBSITUTE PRODUCT SHALL BE PROVIDED TO THE ENGINEER.
8. CHECK, TEST AND STARTUP SUPERVISION WITH INSTALLING CONTRACTOR AND MANUFACTURE TECHNICIAN. SUBMIT STARTUP LOGS TO ENGINEER FOR RECORD.
9. PROVIDE ISOLATION VALVE AND FLEX CONNECTIONS ON EACH CONNECTION AT EACH EVAPORATOR & CONDENSER.
10. PIPE CONDENSATE TO NEAREST FLOOR SINK IN PANTRY. IF DRAINAGE PITCH IS NOT ACHIEVEABLE PROVIDE MANUFACTURER DRAIN PUMP OPTION.
11. PROVIDE MANUFACTURER'S MOUNTING KIT FOR CONDENSING UNITS.

GRILLE REGISTER DIFFUSER SCHEDULE

CODE	MANUFACTURER/ MODEL NO.	SERVICE	TYPE	ACCESSORIES	FACE SIZE	NECK SIZE	FINISH	REMARKS
A	TITUS / TMS	SUPPLY AIR	SQUARE CEILING	PROVIDE OPPOSED BLADE DAMPER WHERE NOTED	24"X24"	6" DIA UP TO 115 CFM 8" DIA UP TO 200 CFM 10" DIA UP TO 325 CFM 12" DIA UP TO 470 CFM 14" DIA UP TO 600 CFM	MATCH EXISTING FINISH	
B	TITUS / 300RS	SUPPLY AIR	GRILLE	PROVIDE OPPOSED BLADE DAMPER WHERE NOTED	24"x24"	22"x22"	MATCH EXISTING FINISH	E
C	TITUS / OMNI	SUPPLY AIR	PLAQUE	PROVIDE OPPOSED BLADE DAMPER WHERE NOTED	24"x24"	6" DIA UP TO 115 CFM 8" DIA UP TO 200 CFM 10" DIA UP TO 325 CFM 12" DIA UP TO 470 CFM 14" DIA UP TO 600 CFM	MATCH EXISTING FINISH	
D	TITUS / 350RS	EXHAUST/ RETURN AIR	GRILLE	PROVIDE OPPOSED BLADE DAMPER WHERE NOTED	SEE PLANS	SEE DRAWING	MATCH EXISTING FINISH	
E	TITUS / ML-39	SUPPLY AIR	LINEAR	PROVIDE OPPOSED BLADE DAMPER WHERE NOTED	SEE PLANS FOR NO. OF SLOTS AND TOTAL LENGTH	SEE DRAWING	MATCH EXISTING FINISH	C,D

GENERAL NOTES
1. SEE PLANS FOR CFM AND NECK SIZES.
2. MAXIMUM NOISE CRITERIA (NC) SHALL BE 30 UNLESS OTHERWISE NOTED.
3. COLOR TO MATCH EXISTING DIFFUSERS AND IS SUBJECT TO ARCHITECTS APPROVAL PRIOR TO ORDERING.
4. MATERIAL IS STEEL UNLESS OTHERWISE NOTED.
5. PROVIDE BALANCING DEVICE FOR ALL GRILLES, REGISTERS, AND DIFFUSERS UNLESS OTHERWISE NOTED.
BALANCING DEVICES SHALL BE LOCATED AS FAR FROM THE GRILLES AS POSSIBLE.
6. CONTRACTOR TO CONFIRM GRILLES BORDER TYPE WITH ARCHITECTURAL REFLECTED CEILING PLANS PRIOR TO ORDERING.
7. CONTRACTOR SHALL PAINT THE INSIDE OF ALL DUCTWORK THAT IS VISIBLE THROUGH THE GRILL MATTE BLACK.

REMARKS
A. ALUMINUM CONSTRUCTION.
B. PROVIDE CONTINUOUS DIFFUSER FACE ACROSS ACTIVE AND BLANK SECTIONS SHOWN ON PLANS. REFER TO ARCHITECTURAL DRAWING FOR TOTAL DIFFUSER LENGTH.
PROVIDE DIFFUSER PLENUMS AT ACTIVE SECTIONS PER PLANS.
C. PROVIDE END CAPS, END BORDERS, OPEN BORDERS, AND ALIGNMENT CLIPS AS REQUIRED FOR CONTINUOUS DIFFUSER.
D. PROVIDE INSULATED PLENUMS BEHIND ALL DUCTED LINEAR DIFFUSERS AND RETURNS.
E. PROVIDE ADJUSTABLE AIR SCOOP DAMPER FOR ALL SIDEWALL INSTALLATIONS.

FAN SCHEDULE

CODE	MANUFACTURER/ MODEL NO.	SERVICE	LOCATION	WEIGHT LBS	ELECTRICAL DATA: CFM	DRIVE	MOTOR TYPE	MOTOR RPM	ESP ("WC)	HP	BHP	VOLT	PH	HZ	FLA	DISC.	FUSE	FEEDER	MTG	CONTROL	REMARKS
KEF-13B	GREENHECK / SQ-100-A	DISHWASHER EXHAUST	LOWER SUITE KITCHEN	61	1,100	DIRECT	ODP	1725	0.8	1/3	0.25	115	1	60	7.2	THERMAL OVERLOAD	-	(2#12,#12G) 3/4"C	1	I	A, B, C
CLA - TF1	GREENHECK / SQ-140-VG	CLUB LEVEL AV ROOM - QUAD A	CLUB LEVEL AV ROOM QUAD A	104	1,500	DIRECT	ECM	1000	0.38	3/4	0.3	277	1	60	5.4	THERMAL OVERLOAD	-	(2#12,#12G) 3/4"C	1	II	
CLB - TF1	GREENHECK / SQ-140-VG	CLUB LEVEL AV ROOM - QUAD B	CLUB LEVEL AV ROOM QUAD B	104	1,500	DIRECT	ECM	1000	0.38	3/4	0.3	277	1	60	5.4	THERMAL OVERLOAD	-	(2#12,#12G) 3/4"C	1	II	
CLC - TF1	GREENHECK / SQ-140-VG	CLUB LEVEL AV ROOM - QUAD C	CLUB LEVEL AV ROOM QUAD C	104	1,500	DIRECT	ECM	1000	0.38	3/4	0.3	277	1	60	5.4	THERMAL OVERLOAD	-	(2#12,#12G) 3/4"C	1	II	
CLD - TF1	GREENHECK / SQ-140-VG	CLUB LEVEL AV ROOM - QUAD D	CLUB LEVEL AV ROOM QUAD D	104	1,500	DIRECT	ECM	1000	0.38	3/4	0.3	277	1	60	5.4	THERMAL OVERLOAD	-	(2#12,#12G) 3/4"C	1	II	

GENERAL NOTES
1. DRIVE TYPE: D=DIRECT-PROVIDE RHEOSTAT SPEED CONTROLLER IN FAN HOUSING UNLESS OTHERWISE NOTED.
B=BELT-PROVIDE ADJUSTABLE SHEAVE UNLESS OTHERWISE NOTED.
VFD=VARIABLE FREQUENCY DRIVE.
2. ALL CURBS SHALL BE FACTORY MADE, 14 INCH HIGH INSULATED UNLESS OTHERWISE NOTED.
3. PROVIDE MAGNETIC STARTER WITH AUXILARY CONTACTS AND HOA SWITCH ON ALL THREE PHASE UNITS EXCEPT WHEN SERVED FROM MOTOR CONTROL CENTER.
4. PROVIDE PREMIUM EFFICIENCY MOTORS. PER NEMA STANDARD MG1-2003, TABLED 12-12, AND 12-13.
5. PROVIDE FLEXIBLE CONNECTIONS AT DUCT INLET AND OUTLET.
6. ALL EXTERIOR DISCONNECTS SWITCHES SHALL BE NEMA 4X TYPE.

MOUNTING (MTG)
1. INSTALL FAN WITH HANGING VIBRATION ISOLATORS.
2. PROVIDE WITH FACTORY MANUFACTURED ROOF CURB SUITABLE FOR ROOFING SYSTEM BEING USED. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

CONTROL (CTRL)
I. INTERLOCK WITH DISHWASHER OPERATION.
II. CONTROL VIA WALL SENSOR - ENERGIZE AT 76 DEG F (ADJUSTABLE). PROVIDE DDC SYSTEM MONITORING.

REMARK NOTES
A. PROVIDE SPEED CONTROL SWITCH.
B. STAINLESS STEEL DUCTWORK.
C. PROVIDE MOTORIZED BACKDRAFT DAMPER INTERLOCKED WITH FAN OPERATION.

FAN POWERED VAV BOX SCHEDULE (ELECTRIC)

CODE	AREA SERVED	MANUFACTURER/ MODEL NO.	INLET SIZE	PRIMARY AIR CFM	DESIGN AIR MIN. CFM	DESIGN AIR MAX. CFM	FAN SECTION CFM	FAN SECTION S.P. "W.C.	FAN SECTION HP	UNIT ELECTRICAL VOLT	PH	FLA	FEEDER	DISC	REMARKS
CLA-VB26	ELEC / 4.03.03	TRANE / VSCF-Q	8	740	105	900	900	.2	1/3	277	1	1.6	(2#12, 1#12G)3/4"C.	THERM OVLD SWITCH	
CLB-VB29	ELEC / 4.24.04	TRANE / VSCF-Q	8	550	105	900	710	.2	1/3	277	1	1.6	(2#12, 1#12G)3/4"C.	THERM OVLD SWITCH	
CLC-VB27	ELEC / 4.30.04	TRANE / VSCF-P	8	460	105	900	620	.2	1/3	277	1	1.6	(2#12, 1#12G)3/4"C.	THERM OVLD SWITCH	
CLD-VB24	ELEC / 4.51.04	TRANE / VSCF-P	8	460	105	900	620	.2	1/3	277	1	1.6	(2#12, 1#12G)3/4"C.	THERM OVLD SWITCH	

GENERAL NOTES:
1. PROVIDE 1" TA FILTERS ON FAN INLET.
2. FAN PERFORMANCE BASED ON MEDIUM SPEED UNLESS OTHERWISE NOTED.
3. PRIMARY AIR S.P. IS DOWNSTREAM BASED ON DESIGN AIR. VERIFY UNIT SELECTION BASED ON MAXIMUM ALLOWABLE S.P.
4. CONTROLS (DDC) SHALL BE BY MANUFACTURER OR BY TEMPERATURE CONTROL CONTRACTOR AND MOUNTED AT THE FACTORY. SEE SPECIFICATIONS.
5. PROVIDE FLEXIBLE CONNECTION ON INLET AND DISCHARGE.
6. PROVIDE SOLID STATE SPEED CONTROLLER, UNIT MOUNTED, FOR BALANCING.
7. SINGLE POINT ELECTRICAL CONNECTION.

REMARK NOTES:
A. SERIES CONFIGURATION.

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Populous
Architecture, Planning, Interiors & Programming
4800 Main St., Suite 300
Kansas City, Missouri 64112 (816) 221-1500

Thornton Tomasetti
Structural Consultant
2323 Grand Boulevard, Suite 900
Kansas City, MO 64108 (816) 221-7771

ME Engineers
MEP / FA / FP Engineers
14143 Denver West Pkwy, Suite 300
Golden, CO 80401 (303) 421-6655

WJHW
Audio Visual Consultant
3424 Midcourt Road, Suite 124
Carrollton, TX 75006 (972) 934-3700

Howe Engineers
Code Consultant
101 Longwater Cir, Suite #203
Norwell, MA 02061 (781) 878-3500

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Food Service Consultant
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Hawthorn Woods, IL 60047 (224) 717-1555

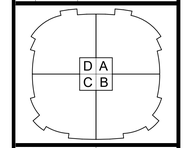
Lorax Partnerships, LLC
LEED Consultant
1200 Light Street
Baltimore, MD 21230 (443) 449-6319

M&T BANK STADIUM IMPROVEMENTS
PHASE - 3
1101 RUSSEL ST,
BALTIMORE, MD 21230

CONSTRUCTION DOCUMENTS

REVISIONS

NO.	DATE	DESCRIPTION
1	09/21/2018	PHASE-3 ADDENDUM #1
2	11/01/2018	PHASE-3 ADDENDUM #2
3	04/10/2019	PHASE-3 ASI 003



PROJECT NO. 15.4130.50
ISSUED BY: POPULOUS
ISSUED DATE: 05/24/2018
SHEET TITLE: MECHANICAL SCHEDULES
DISCIPLINE - CATEGORY - SUB CATEGORY - SHEET: 3M0-02

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MECHANICAL LEGEND

SYMBOL	ABBREV	DESCRIPTION
	RX	REMOVE EXISTING (SHOWN HEAVY AND DASHED ON DEMO.)
— CD —	CD	CONDENSATE DRAIN
— V —	V	VENT
— RV —	RV	RELIEF VENT
— D —	D	DRAIN WATER, MISCELLANEOUS DRAINAGE
— CHS —	CHS	CHILLED WATER SUPPLY
— CHR —	CHR	CHILLED WATER RETURN
— HS —	HS	HEATING WATER SUPPLY
— HR —	HR	HEATING WATER RETURN
— PHS —	PHS	PRIMARY HEATING WATER SUPPLY
— PHR —	PHR	PRIMARY HEATING WATER RETURN
— PCHS —	PCHS	PRIMARY CHILLED WATER SUPPLY
— PCHR —	PCHR	PRIMARY CHILLED WATER RETURN
H		HUMIDISTAT
T		THERMOSTAT
		PIPE CAP
		BRANCH TAKE OFF
		PIPE DROP TEE
		PIPE RISE TEE
	ACV	AUTOMATIC CONTROL VALVE
		SHUT–OFF VALVE
		BALL VALVE
		BALL VALVE
		UNION
		STRAINER W/BLOWDOWN VALVE
		PIPE GUIDE
		PIPE ANCHORS
		SOLENOID VALVE
	PRV	PRESSURE REDUCING VALVE
		ECCENTRIC REDUCER
		CONCENTRIC REDUCER
		PRESSURE RELIEF VALVE
		BALANCING VALVE (W/MEMORY STOP)
		CHECK VALVE
		BUTTERFLY VALVE
	HED	HOSE END DRAIN VALVE
UC	UC	UNDERCUT DOOR
		AIR FLOW
DL	DL	DOOR LOUVER
	AAV	AUTOMATIC AIR VENT
	MAV	MANUAL AIR VENT
		PRESSURE GAUGE w/GAUGE COCK
		THERMOMETER
S		SMOKE DETECTOR
SD		SMOKE DETECTOR
	AMD	AIR MONITORING DEVICE
		SUPPLY AIR DIFFUSER
		RETURN AIR REGISTER
		EXHAUST AIR GRILLE
F	FD	FIRE DAMPER
	VD	VOLUME DAMPER
		SQUARE TO ROUND DUCT TRANSITION
	FC	FLEXIBLE CONNECTION
	SL	DUCTWORK SOUND LINING, 1"THICK
	AD	ACCESS DOOR
	MOD	MOTOR OPERATED DAMPER
		ELBOW w/ DOUBLE THICKNESS TURNING VANES
		RECTANGULAR BRANCH TAKE–OFF
		BELL MOUTH BRANCH TAKE–OFF
		ROUND BRANCH TAKE–OFF
		DUCT TRANSITION
		CIRCULAR AIR DIFFUSER
		DUCT DROP OFF BOTTOM
		SQUARE TO ROUND TRANSITION
		SUPPLY/OUTSIDE AIR DUCT RISER
		RETURN AIR DUCT RISER
		EXHAUST/RELIEF AIR DUCT RISER
		ALL WELDED VEHICLE EXHAUST DUCT CONNECTION

SYMBOL	ABBREV	DESCRIPTION
		ROUND DUCT RISER
	DIA.	DIAMETER
		ARCHITECTURAL WALL LOUVER
X CFM		
XX	VAV	VARIABLE AIR VOLUME BOX
XX	FPTRU	FAN POWERED TERMINAL REHEAT UNIT
P–	P	PLUMBING FIXTURE DESIGNATION
AC–	AC	AIR COMPRESSOR DESIGNATION
WM–	WM	WATER METER DESIGNATION
AS–	AS	AIR SEPARATOR DESIGNATION
V–	V	VALVE DESIGNATION
CC–	CC	COOLING COIL DESIGNATION
PHC–	PHC	PRIMARY HEATING COIL
DWH–	DWH	DOMESTIC WATER HEATER DESIGNATION
AMD–	AMD	DUCT AIR MONITOR DEVICE DESIGNATION
SPSS–	SPSS	STATIC PRESSURE SENSOR DESIGNATION
UH–	UH	UNIT HEATER DESIGNATION
CUH–	CUH	CABINET UNIT HEATER DESIGNATION
F–	F	FILTER DESIGNATION
SF–	SF	SUPPLY FAN DESIGNATION
RF–	RF	RETURN FAN DESIGNATION
FCU–	FCU	FAN COIL UNIT DESIGINATION
HVU–	HVU	HEATING AND VENTILATING UNIT
AHU–	AHU	AIR HANDLING UNIT
HP–	HP	HEAT PUMP
KEF–	KEF	KITCHEN EXHAUST FAN
TEF–	TEF	TOILET EXHAUST FAN
GEF–	GEF	GENERAL EXHAUST FAN
SEF–	SEF	SMOKE EXHAUST FAN
VF–	VF	VENTILATION FAN
MAU	MAU	MAKEUP AIR UNIT
RAD–	RAD	RADIATION HEATING

X / XXX — AIR DEVICE:
— CFM

A / MX–X — SECTION REFERENCE:
(SEE DATA BELOW FOR DETAILS)

3 / MX–X2 —
— PARTIAL FLOOR PLANS = LETTER OF PARTIAL SECTION = LETTER OR NUMBER DETAIL = NUMBER
— SHEET NUMBER WHERE PLAN, PARTIAL SECTION, ELEVATION OR DETAIL IS LOCATED

ABBREVIATIONS

ABV	ABOVE
AD	ACCESS DOOR
A	COMPRESSED AIR
AHU	AIR HANDLING UNIT
APPROX	APPROXIMATELY
A DR	AREA DRAIN
@	AT
ATTEN	ATTENUATOR
AAV	AUTOMATIC AIR VENT
ACV	AUTOMATIC CONTROL VALVE
ATC	AUTOMATIC TEMPERATURE CONTROL
AMD	AIR MONITORING DEVICE
BFP	BACKFLOW PREVENTOR
BWV	BACKWATER VALVE
BLW	BELOW
BHP	BRAKE HORSEPOWER
BTU/HR	BRITISH THERMAL UNITS PER HOUR
CHR	CHILLED WATER RETURN
CHS	CHILLED WATER SUPPLY
CO	CLEANOUT
CW	COLD WATER
C	COMMON
CONC	CONCRETE
COND	CONDENSATE
CD	CONDENSATE DRAIN
CRU	CONDENSATE RETURN UNIT
CX	CONNECT TO EXISTING
CC	COOLING COIL
CFM	CUBIC FEET PER MINUTE
CCP	COOLING COIL PUMP
DPR	DAMPER
DB	DECIBEL
D	DEEP, DEPTH
DESIGN	DESIGNATION
DIA, ø	DIAMETER
DIFF	DIFFERENTIAL
DN	DOWN
DR	DRAIN WATER, MISCELLANEOUS DRAINAGE
DB	DRY BULB
DAM	DUCT AIR MONITOR
EFFIC	EFFICIENCY
EAT	ENTERING AIR TEMPERATURE
EWT	ENTERING WATER TEMPERATURE
EDR	EQUIVALENT DIRECT RADIATION
EXH	EXHAUST
EA	EXHAUST AIR
EF	EXHAUST FAN
EX	EXISTING
ESP	EXTERNAL STATIC PRESSURE
°F	DEGREES FAHRENHEIT
FPM	FEET PER MINUTE
FD	FIRE DAMPER
FDV	FIRE DEPARTMENT VALVE
F	FIRE LINE
FSP	FIRE STANDPIPE
FT	FLASH TANK
FC	FLEXIBLE CONNECTION
FD	FLOOR DRAIN
FT, '	FOOT, FEET
FD	FOUNDATION DRAIN
GAL	GALLON, GALLONS
GPM	GALLONS PER MINUTE
G	NATURAL GAS
GEN	GENERATOR
GS	GLYCOL SUPPLY
GR	GLYCOL RETURN
H_2O	WATER
HP	HORSEPOWER
HB	HOSE BIBB
HED	HOSE END DRAIN VALVE
HR	HEATING WATER RETURN
HS	HEATING WATER SUPPLY
HZ	HERTZ
H	HIGH, HEIGHT
HPR	HIGH PRESSURE CONDENSATE RETURN
HPS	HIGH PRESSURE STEAM
HW	HOT WATER
HCP	HEATING COIL PUMP
HWR	HOT WATER RECIRCULATION

IL	PIPE MOUNTED INLINE PUMP
IN, "	INCH, INCHES
ISOL	ISOLATION
KW	KILOWATTS
LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
L	LONG, LENGTH
LPR	LOW PRESSURE CONDENSATE RETURN
LPS	LOW PRESSURE STEAM
MAV	MANUAL AIR VENT
MAX	MAXIMUM
MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR
MPR	MEDIUM PRESSURE CONDENSATE RETURN
MPS	MEDIUM PRESSURE STEAM
MIN	MINIMUM
MOD	MOTOR OPERATED DAMPER
NC	NOISE CRITERIA, NORMALLY CLOSED
NOM	NOMINAL
NO	NORMALLY OPEN
No	NUMBER
OS&Y	OUTSIDE STEM & YOKE VALVE
OA	OUTDOOR AIR
%	PERCENT
PH	PHASE
POD	POINT OF DISCONNECTION
LBS	POUNDS
LBS/HR	POUNDS PER HOUR
PSI	POUNDS PER SQUARE INCH
PRESS	PRESSURE
PD	PRESSURE DROP, PUMP DISCHARGE
PRV	PRESSURE REDUCING VALVE
PHC	PRE–HEAT COIL
PCHS	PRIMARY CHILLED WATER SUPPLY
PCHR	PRIMARY CHILLED WATER RETURN
PHS	PRIMARY HEATING WATER SUPPLY
PHR	PRIMARY HEATING WATER RETURN
RH	RELATIVE HUMIDITY
RV	RELIEF VENT
RX	REMOVE EXISTING
RA	RETURN AIR, RELIEF AIR
RF	RETURN FAN
RPM	REVOLUTIONS PER MINUTE
RD	ROOF DRAIN
RM	ROOM
SAN	SANITARY, SOIL, WASTE
SAT	SATURATED
SENS	SENSIBLE
SEP	SEPARATOR
SD	SMOKE DETECTOR
SA	SOUND ATTENUATOR
SL	SOUND LINING
SPEC	SPECIFICATION
SPR	SPRINKLER LINE
SQ	SQUARE
SQ FT	SQUARE FOOT
SP	STATIC PRESSURE
SPSS	STATIC PRESSURE SENSING STATION
ST	STEAM TRAP
SW	STORM WATER
SF	SUPPLY FAN
TS	TAMPER SWITCH
TEMP	TEMPERATURE
△T	TEMPERATURE DROP
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UC	UNDERCUT DOOR
UH	UNIT HEATER
V	VACUUM
VEL	VELOCITY
V	VENT
VTR	VENT THROUGH ROOF
VENT	VENTILATION
VIB ISOL	VIBRATION ISOLATION
V	VOLTS
VD	VOLUME DAMPER
VFD	VARIABLE FREQUENCY DRIVE
VF	VENTILATION FAN
WB	WET BULB
W/	WITH

HELLMUTH OBATA & KASSABAUM, INC.
Architecture, Engineering, Planning, Interiors, Facility Programming
323 West 8th Street, Suite700
Kansas City, Missouri 64105

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PACKAGE
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DRAWING PACKAGE
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REVISIONS

NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44

KEYPLAN

PROJECT NO. 95-675-00	ISSUED BY:
DRAWN BY: JTP	REVIEWED BY:
ISSUED: 2-28-97	

SHEET TITLE
HVAC LEGEND AND ABBREVIATIONS

CATEGORY – SUB-CATEGORY – SHEET
M.0-01

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AIR HANDLING UNIT SCHEDULE

DESIG	DUTY	CFM	FAN SECTION: MIN. OA CFM	TSP INCH H_2O	MOTOR: BHP	MOTOR: HP	RPM	WHEEL DIA INCH	COOLING SECTION: EAT °F DB	EAT °F WB	LAT °F DB	LAT °F WB	TOTAL MBH	SENS MBH	GPM @ 36°F EWT 54°F LWT	MAX H_2O PD FT H_2O	MIN TOTAL FACE AREA	MAXIMUM FACE VEL FPM	No OF COILS	MAX FIN SPACING FIN/IN	MAXIMUM AIR PD IN H_2O	MIN ROWS	HEATING SECTION: EAT °F	LAT °F	MBH @200°F EWT	GPM @30°F ΔT	MAXIMUM H_2O PD FT H_2O	MAXIMUM AIR PD IN H_2O	MIN TOTAL FACE AREA	MAXIMUM FACE VEL FPM	No OF COILS	MAX FIN SPACING FIN/IN	MIN ROWS	ELECTRICAL	REMARKS
AHU-1	CLUB/SUITES - A	18200	11650	6.39	24.3	30	1471	AF30	87.6	71.8	42.5	42.5	1565	898	197	40	40.0	455	2	14	1.80	12	33.8	53.8	393	28.0	27	0.09	40.0	495	2	8	1	480V/3Ø/60HZ	LOW TEMP/FP VAV
AHU-2	CLUB/SUITES - A	18200	11650	6.39	24.3	30	1471	AF30	87.6	71.8	42.5	42.5	1565	898	197	40	40.0	455	2	14	1.80	12	33.8	53.8	393	28.0	27	0.09	40.0	495	2	8	1	480V/3Ø/60HZ	LOW TEMP/FP VAV
AHU-3	CLUB/SUITES - B	27500	15400	7.0	37.6	50	1451	AF33	86.1	70.5	42.5	42.5	2222	1311	280	40	58.8	468	2	14	1.87	12	39.0	59.0	594	42.4	22	0.09	58.8	468	2	8	1	480V/3Ø/60HZ	LOW TEMP/FP VAV
AHU-4	CLUB/SUITES - B	27500	15400	7.0	37.6	50	1451	AF33	86.1	70.5	42.5	42.5	2222	1311	280	40	58.8	468	2	14	1.87	12	39.0	59.0	594	42.4	22	0.09	58.8	468	2	8	1	480V/3Ø/60HZ	LOW TEMP/FP VAV
AHU-5	CLUB/SUITES - C	27500	17050	7.0	37.6	50	1451	AF33	87.2	71.6	42.6	42.6	2336	1341	295	40	58.8	468	2	14	1.87	12	35.1	55.1	594	42.4	22	0.09	58.8	468	2	8	1	480V/3Ø/60HZ	LOW TEMP/FP VAV
AHU-6	CLUB/SUITES - C	27500	17050	7.0	37.6	50	1451	AF33	87.2	71.6	42.6	42.6	2336	1341	295	40	58.8	468	2	14	1.87	12	35.1	55.1	594	42.4	22	0.09	58.8	468	2	8	1	480V/3Ø/60HZ	LOW TEMP/FP VAV
AHU-7	CLUB/SUITES - D	18200	12010	6.30	24.3	30	1471	AF30	87.9	72.2	42.6	42.6	1590	902	201	39	40.0	455	2	14	1.80	12	32.4	52.4	393	28.0	26	0.09	40.0	455	2	8	1	480V/3Ø/60HZ	LOW TEMP/FP VAV
AHU-8	CLUB/SUITES - D	18200	12010	6.30	24.3	30	1471	AF30	87.9	72.2	42.6	42.6	1590	902	201	39	40.0	455	2	14	1.80	12	32.4	52.4	393	28.0	26	0.09	40.0	455	2	8	1	480V/3Ø/60HZ	LOW TEMP/FP VAV
AHU-9	PRESS LEVEL	13300	3720	5.91	16.6	20	1775	AF24	81.0	64.9	42.5	42.5	806	560	102	29	30.2	441	1	14	1.68	12	57.5	77.5	287	20.5	22	0.08	30.2	441	2	8	1	480V/3Ø/60HZ	LOW TEMP/FP VAV
AHU-10	GAME DAY SERVICES - A	1800	1800	2.5	1.5	2	1625	FC10X7	94.0	78.0	52.3	52.1	162	82.1	20.7	28	5.5	327	1	10	0.45	6	10	85	146	10.7	21	0.05	5.5	325	1	8	2	480V/3Ø/60HZ	CV/SZ
AHU-11	STADIUM OPERATIONS - B	2900	1420	2.5	2.2	3	1562	FC10X10	84.8	69.0	52.1	51.7	155	104	18.9	24	7.6	383	1	14	0.57	5	44	85	128	9.4	13	0.07	7.6	383	1	8	1	480V/3Ø/60HZ	CV/SZ
AHU-12	BROADCAST MEDIA - B	3000	1350	2.0	2.0	3	1493	FC10X10	84.1	68.2	52.7	51.9	150	103	18.5	27	7.6	396	1	8	0.52	6	46	85	126	9.3	12	0.07	7.6	396	1	8	1	480V/3Ø/60HZ	CV/SZ
AHU-13	SECURITY - B	1600	320	2.25	1.6	2	1939	FC9X4	79.6	65.4	53.2	52.3	62.2	46.1	7.9	36	3.4	471	1	10	0.63	5	63	85	38.0	2.8	5	0.10	3.4	471	1	8	1	480V/3Ø/60HZ	CV/SZ
AHU-14	OFFICIALS - B	2500	2500	2.5	2.7	5	1817	FC10X7	94.0	78.0	51.9	51.8	226	115	27.9	25	5.5	455	1	10	0.98	8	10	85	203	14.9	25	0.08	5.5	451	1	10	2	480V/3Ø/60HZ	CV/SZ
AHU-15	VISITING LOCKER NO.1 - B	9300	9300	3.5	8.9	15	2014	AF20	94.0	78.0	51.8	51.7	843	429	104	19	21.3	437	1	10	0.92	8	10	85	753	55.2	21	0.09	20.4	457	1	8	2	480V/3Ø/60HZ	CV/RH
AHU-16	VISITING LOCKER NO.2 - B	8100	8100	3.0	6.5	10	1807	AF20	94.0	78.0	51.8	51.6	736	374	90.5	21	21.3	380	1	8	0.66	8	10	85	656	48.1	21	0.07	20.4	398	1	8	2	480V/3Ø/60HZ	CV/RH
AHU-17	HOME TEAM AREA - B	12900	12900	3.5	10.1	15	1494	AF24	94.0	78.0	51.6	51.5	1177	598	144	19	30.2	427	1	10	0.89	8	10	85	1045	76.6	22	0.08	29.7	434	1	8	2	480V/3Ø/60HZ	CV/RH
AHU-18	HOME TEAM STORAGE - B	2600	260	2.5	1.8	2	1531	FC10X10	77.8	64.4	52.9	52.0	94.2	70.8	11.7	34	5.5	473	1	10	0.64	5	69	89	56.2	4.0	14	0.10	5.5	473	1	8	1	480V/3Ø/60HZ	CV/SZ
AHU-19	MEDIA LOUNGE - A	640	640	0.40	-	380W	1100	3Ø6.3	94.0	78.0	52.7	52.3	56.0	27.5	7.3	9	3.2	200	1	16	-	4	10	85	51.8	3.8	13	-	3.2	200	1	16	4	120V/1Ø/60HZ	CV/SZ-FCU
AHU-20	ELEVATOR CORE - A	9700	970	3.75	10.0	15	2090	AF20	77.8	64.4	52.4	51.8	358	270	44.0	22.0	21.3	460	1	12	0.70	5	69	89	210	15.0	20	0.10	21.3	460	1	8	1	480V/3Ø/60HZ	BYPASS VAV
AHU-21	ELEVATOR CORE - B	11300	1130	3.75	10.4	15	1820	AF22	77.8	64.4	52.5	51.8	416	313	51.0	22.0	21.3	460	1	12	0.70	5	69	89	244	17.5	30	0.10	21.3	460	1	8	1	480V/3Ø/60HZ	BYPASS VAV
AHU-22	ELEVATOR CORE - C	11300	1130	3.75	10.4	15	1820	AF22	77.8	64.4	52.5	51.8	416	313	51.0	22.0	21.3	460	1	12	0.70	5	69	89	244	17.5	30	0.10	21.3	460	1	8	1	480V/3Ø/60HZ	BYPASS VAV
AHU-23	ELEVATOR CORE - D	9,700	970	3.75	10.0	15	2090	AF20	77.8	64.4	52.4	51.8	358	270	44.0	22.0	21.3	460	1	12	0.70	5	69	89	210	15.0	20	0.10	21.3	460	1	8	1	480V/3Ø/60HZ	BYPASS VAV
AHU-24	TICKET OFFICE - C	1260	130	2.0	0.95	1.5	1680	FC9x4	77.8	64.4	54.0	52.5	44.8	32.4	5.0	22.0	3.4	400	1	8	0.31	4	69	118.5	72.4	4.5	13	0.10	3.2	400	1	8	2	480V/3Ø/60HZ	CV/SZ
AHU-25	TICKET OFFICE - D	1200	120	2.0	0.95	1.5	1680	FC9x4	77.8	64.4	54.0	52.5	42.7	30.9	5.0	22.0	3.4	380	1	8	0.31	4	69	121.0	72.4	4.5	13	0.10	3.2	380	1	8	2	480V/3Ø/60HZ	CV/SZ
AHU-26	TICKET OFFICE - B	1200	120	2.0	0.95	1.5	1680	FC9x4	77.8	64.4	54.0	52.5	42.7	30.9	5.0	22.0	3.4	380	1	8	0.31	4	69	121.0	72.4	4.5	13	0.10	3.2	380	1	8	2	480V/3Ø/60HZ	CV/SZ

NOTE: CHILLED AND HEATED WATER ARE 40% ETHYLENE GLYCOL SOLUTION

HEATING AND VENTILATING UNIT SCHEDULE

DESIG	DUTY	CFM	FAN SECTION: MIN. OA CFM	TSP INCH H_2O	MOTOR: BHP	MOTOR: HP	RPM	WHEEL DIA INCH	HEATING SECTION: EAT °F	LAT °F	MBH @200°F EWT	GPM @30°F ΔT	MAXIMUM H_2O PD FT H_2O	MAXIMUM AIR PD IN H_2O	MIN TOTAL FACE AREA	MAXIMUM FACE VEL FPM	No OF COILS	MAX FIN SPACING FIN/IN	MIN ROWS	ELECTRICAL	REMARKS
HVU-1	CONCESSION STO/COMMISSARY	30,000	3000	2.0	16.0	20	947	AF36	50.5	85.0	1118	59.8	24	0.09	66.1	454	1	8	1	480V/3Ø/60HZ	
HVU-2	CONC. LOCKERS	13000	3900	2.0	6.8	10	1327	AF24	32.5	85.0	737	39.4	27	0.09	30.2	431	1	12	1	480V/3Ø/60HZ	
HVU-3	GAME DAY LOCKERS	6,000	3000	2.0	4.6	7.5	2703	AF15	32.5	85.0	340	18.2	19	0.14	12.0	500	1	14	1	480V/3Ø/60HZ	
HVU-4	RECYCLE	2000	2000	1.75	0.9	1.5	1289	FC10X10	10.0	85.0	162	8.7	15	0.08	5.5	364	1	14	1	480V/3Ø/60HZ	
HVU-5	FIELD MAINTENANCE	6600	1320	2.0	4.2	7.5	1047	FC15X15	47.4	85.0	268	14.3	22	0.09	14.7	448	1	8	1	480V/3Ø/60HZ	
HVU-6	SHOP-EAST	2300	1150	2.0	1.3	2	1393	FC10X10	32.5	85.0	130	7.0	39	0.10	5.5	419	1	12	1	480V/3Ø/60HZ	
HVU-7	SHOP-WEST	5700	2850	2.0	4.1	7.5	2613	AF15	32.5	85.0	323	17.3	13	0.12	12.0	476	1	12	1	480V/3Ø/60HZ	
HVU-8	FREIGHT ELEVATOR LOBBY	2700	2700	2.0	1.7	2	1440	FC10X10	10	85.0	219	11.7	28	0.19	5.5	491	1	8	2	480V/3Ø/60HZ	
HVU-9	SERVICE TUNNEL	3200	3200	2.0	2.3	3	1534	FC10X10	10	85.0	259	13.9	46	0.15	7.6	422	1	8	2	480V/3Ø/60HZ	
HVU-10	SERVICE TUNNEL	8800	8800	2.0	5.6	7.5	1749	AF20	10	85.0	713	38.1	20	0.14	21.3	413	1	8	2	480V/3Ø/60HZ	
HVU-11	SERVICE TUNNEL	5800	5800	2.0	4.3	7.5	2643	AF15	10	85.0	470	25.1	28	0.19	12.0	484	1	8	2	480V/3Ø/60HZ	
HVU-12	SERVICE TUNNEL	5800	5800	2.0	4.3	7.5	2643	AF15	10	85.0	470	25.1	28	0.19	12.0	484	1	8	2	480V/3Ø/60HZ	
HVU-13	FREIGHT ELEVATOR LOBBY	5800	2700	2.0	1.7	2	1440	FC10X10	10	85.0	219	11.7	28	0.19	5.5	491	1	8	2	480V/3Ø/60HZ	

NOTE: 40% ETHYLENE GLYCOL HEATING WATER SOLUTION

AIR SEPARATOR DUTY

DESIGNATION :	AS-1
PIPE SIZE :	10"Ø
WATER FLOW :	3,000 GPM
STRAINER FREE AREA :	409 SQ. INCHES
PRESSURE DROP :	10.0 FT H_2O
CV FACTOR W/STRAINER :	
APPROX SHIPPING WEIGHT :	1,000 LBS
SIZE :	30"Ø x 60"H
REMARKS :	AMTROL 10-AS

FOUR-PIPE FAN COIL UNIT SCHEDULE

DESIG	SUPPLY FAN SECTION: MAX CFM	RPM	ESP INCH H_2O	MOTOR SIZE HP	WHEEL DIA INCH	COOLING SECTION: EAT °(F) DB	EAT °(F) WB	SENS LOAD MBH	TOTAL LOAD MBH	MIN ROWS	GPM @18°F ΔT	MAXIMUM H_2O PD FT H_2O	HEATING SECTION: EAT °F	MBH @ 200°F EWT	GPM @30°F ΔT	MAXIMUM H_2O PD FT H_2O	MIN ROWS	APPROXIMATE OPERATING WEIGHT (LBS)	ELECTRICAL (V/PH/HZ)	REMARKS
FC-1	900	1080	0.35	1/3	9"	76	62.5	16.0	24.0	3	3.5	1.0	65	32	2.5	2.0	2	130	120/1/60	HORIZONTAL CONCEALED - CEILING
FC-2	1200	1000	0.35	(2)1/4	(2)9"	76	62.5	22.0	32.0	3	4.0	1.0	65	37	3.0	2.0	2	180	120/1/60	HORIZONTAL CONCEALED - CEILING
FC-3	1500	1100	0.35	(2)1/3	(2)9"	76	62.5	28.0	40.0	3	5.0	1.0	65	41	3.8	2.0	2	200	120/1/60	HORIZONTAL CONCEALED - CEILING
FC-4	1300	1000	.25	(2)1/3	(2)9"	95	75.0	36.3	36.3	4	5.5	12	55	13.9	1.0	2.0	1	200	120/1/60	VERTICAL CABINET - WALL

EXPANSION TANK SCHEDULE

DESIG	DUTY	TANK VOLUME	TYPE	DIMENSIONS: DIA	DIMENSIONS: HEIGHT	DRY WEIGHT	REMARKS
ET-1	HEATING WATER	528	DIAPHRAGM	48"	85"	1810 LBS	AMTROL 2000-L
ET-2	HEATING WATER	528	DIAPHRAGM	48"	85"	1810 LBS	AMTROL 2000-L
ET-3	HEATING WATER	528	DIAPHRAGM	48"	85"	1810 LBS	AMTROL 2000-L
ET-4	DOMESTIC HOT WATER	422	DIAPHRAGM	48"	71"	1580 LBS	AMTROL 1600-L

NOTES:
1. UNITS SHALL BE PROVIDED WITH 2-WAY MODULATING VALVE, PIPING PACKAGE, REMOTE THERMOSTATS, REAR RETURN AND UNIT MOUNTED DISCONNECT SWITCH.
2. CHILLED AND HEATED WATER ARE 40% ETYHLENE GLYCOL SOLUTION.

RETURN FAN SCHEDULE

DESIG	SERVICE	TYPE	CFM	SP INCH H_2O	APPROX RPM	BHP	HP (MOTOR SIZE)	WHEEL DIA. (IN)	DRIVE	AMCA CONSTRUCTION CLASS	ELECTRICAL (V/PH/HZ)	APPROX WEIGHT (LBS)	REMARKS
RF-1	AHU-1,2-CLUB/SUITE LEVEL-QUAD A	B	20,600	2.25	1170	11.0	15.0	42	BELT	I	480/3/60	1,240	INLINE-VANEAXIAL
RF-3	AHU-3,4-CLUB/SUITE LEVEL-QUAD B	B	44,000	2.25	1170	25.0	30.0	54	BELT	I	480/3/60	1,340	INLINE-VANEAXIAL
RF-5	AHU-5,6-CLUB/SUITE LEVEL-QUAD C	B	44,000	2.25	1170	25.0	30.0	54	BELT	I	480/3/60	1,340	INLINE-VANEAXIAL
RF-7	AHU-7,8-CLUB/SUITE LEVEL-QUAD D	B	27,400	2.25	1170	15.0	20.0	42	BELT	I	480/3/60	1,240	INLINE-VANEAXIAL
RF-9	AHU-9-PRESS LEVEL	C	11,200	1.5	950	4.2	5.0	30	BELT	I	480/3/60	490	INLINE-CENTRIFUGAL
RF-20	AHU-20-ELEVATOR LOBBIES-QUAD A	C	8,700	1.5	850	3.2	5.0	30	BELT	I	480/3/60	490	INLINE-CENTRIFUGAL
RF-21	AHU-21-ELEVATOR LOBBIES-QUAD B	C	10,200	1.5	950	4.2	5.0	30	BELT	I	480/3/60	490	INLINE-CENTRIFUGAL
RF-22	AHU-22-ELEVATOR LOBBIES-QUAD C	C	10,200	1.5	950	4.2	5.0	30	BELT	I	480/3/60	490	INLINE-CENTRIFUGAL
RF-23	AHU-23-ELEVATOR LOBBIES-QUAD D	C	8,700	1.5	850	3.2	5.0	30	BELT	I	480/3/60	490	INLINE-CENTRIFUGAL

VENTILATION FAN SCHEDULE

DESIG	SERVICE	LEVEL	TYPE	CFM	SP INCH H_2O	APPROX RPM	BHP	HP (MOTOR SIZE)	WHEEL DIA	DRIVE	AMCA CONSTRUCTION CLASS	ELECTRICAL (V/PH/HZ)	APPROX WEIGHT (LBS)	REMARKS
VF-1	HVU-1	SERVICE - A	C	26,000	1.0	600	11.0	15.0	45	BELT	I	480/3/60	720	INLINE-CENTRIFUGAL
VF-2	HVU-2	SERVICE - A	C	11,000/5500	1.0	900	4.8	5.0	33	BELT	I	480/3/60	480	INLINE-CENT-2 SPEED
VF-3	HVU-3	SERVICE - A	C	2800	1.0	1100	1.13	2.0	18	BELT	I	480/3/60	120	INLINE-CENTRIFUGAL
VF-4	HVU-4	SERVICE - A	C	2,000	1.0	1600	1.3	2.0	15	BELT	I	480/3/60	100	INLINE-CENTRIFUGAL
VF-5	HVU-5	SERVICE - A	C	6,300	1.0	1100	2.3	3.0	24	BELT	I	480/3/60	240	INLINE-CENTRIFUGAL
VF-6	HVU-6	SERVICE - B	C	2200/1100	1.0	1600	1.3	2.0	15	BELT	I	480/3/60	100	INLINE-CENT-2 SPEED
VF-7	HVU-7	SERVICE - B	C	5500	1.0	1100	2.3	3.0	24	BELT	I	480/3/60	240	INLINE-CENTRIFUGAL
VF-8	NORTH MECH RM A	SERVICE - A	C	10,000	1.25	800	3.9	5.0	33	BELT	I	480/3/60	480	INLINE-CENTRIFUGAL
VF-9	NORTH MECH RM A	SERVICE - A	C	30,000	1.25	600	12.0	15.0	40	BELT	I	480/3/60	600	INLINE-CENTRIFUGAL
VF-10	SOUTH MECH RM B	SERVICE - B	F	12,000	0.50	915	2.0	2.0	36	BELT	I	480/3/60	260	INLINE-CENTRIFUGAL
VF-11	SOUTH MECH RM B	SERVICE - B	C	24,000	1.25	800	11.0	15.0	40	BELT	I	480/3/60	600	INLINE-CENTRIFUGAL
VF-12	SOUTH ELEC RM B	SERVICE - B	C	25,000	1.25	800	11.0	15.0	40	BELT	I	480/3/60	600	INLINE-CENTRIFUGAL
VF-13	SOUTH ELEC RM B	SERVICE - B	C	25,000	1.25	800	11.0	15.0	40	BELT	I	480/3/60	600	INLINE-CENTRIFUGAL
VF-14	LOADING DOCK	SERVICE - A	C	4,300	1.0	1100	1.9	3.0	20	BELT	I	480/3/60	120	INLINE-CENTRIFUGAL
VF-15	LOADING DOCK	SERVICE - A	C	5,300	1.0	1300	2.4	3.0	20	BELT	I	480/3/60	120	INLINE-CENTRIFUGAL
VF-16	LOADING DOCK	SERVICE - A	C	5,300	1.0	1300	2.4	3.0	20	BELT	I	480/3/60	120	INLINE-CENTRIFUGAL
VF-17	LOADING DOCK	SERVICE - A	C	5,300	1.0	1300	2.4	3.0	20	BELT	I	480/3/60	120	INLINE-CENTRIFUGAL
VF-18	LOADING DOCK	SERVICE - A	C	5,300	1.0	1300	2.4	3.0	20	BELT	I	480/3/60	120	INLINE-CENTRIFUGAL
VF-19	LOADING DOCK	SERVICE - A	C	5,300	1.0	1300	2.4	3.0	20	BELT	I	480/3/60	120	INLINE-CENTRIFUGAL
VF-20	LOADING DOCK	SERVICE - A	C	5,300	1.0	1300	2.4	3.0	20	BELT	I	480/3/60	120	INLINE-CENTRIFUGAL
VF-21	LOADING DOCK	SERVICE - B	C	5,300	1.0	1300	2.4	3.0	20	BELT	I	480/3/60	120	INLINE-CENTRIFUGAL
VF-22	LOADING DOCK	SERVICE - B	C	5,300	1.0	1300	2.4	3.0	20	BELT	I	480/3/60	120	INLINE-CENTRIFUGAL
VF-23	LOADING DOCK	SERVICE - B	C	4,300	1.0	1100	1.9	3.0	20	BELT	I	480/3/60	120	INLINE-CENTRIFUGAL
VF-24	FIRE PUMP ROOM	SERVICE - B	F	4,500	0.25	1200	-	3/4	20	BELT	I	480/3/60	65	PROPELLER
VF-25	AHU-1 THRU 8 MECH RMS	PRESS LEVEL	F	3,600	0.25	1200	-	1/2	20	BELT	I	480/3/60	65	PROPELLER
VF-26	ELECTRIC ROOM	PRESS - A	H	32,000	0.75	640	12.0	15.0	44.5	BELT	I	480/3/60	840	PLENUM FAN
VF-27	ELECTRIC ROOM	PRESS - B	H	32,000	0.75	640	12.0	15.0	44.5	BELT	I	480/3/60	840	PLENUM FAN
VF-28	ELECTRIC ROOM	PRESS - C	H	32,000	0.75	640	12.0	15.0	44.5	BELT	I	480/3/60	840	PLENUM FAN
VF-29	ELECTRIC ROOM	PRESS - D	H	32,000	0.75	640	12.0	15.0	44.5	BELT	I	480/3/60	840	PLENUM FAN
VF-30	ELEV MACH ROOMS- A,B,C,D	LEVEL 8	D	3,700	0.25	1000	0.58	3/4	-	BELT	I	480/3/60	130	ROOF CENTRIFUGAL
VF-31	SERVICE ELEV MACH RM-A,B	LEVEL 7,8	D	1,200	0.25	1135	0.13	1/4	-	BELT	I	120/1/60	100	ROOF CENTRIFUGAL

HELLMUTH OBATA & KASSABAUM, INC.
Architecture, Engineering, Planning, Interiors, Facility Programming
325 West 8th Street, Suite700
Kansas City, Missouri 64105

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REVISIONS

NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44

KEYPLAN

PROJECT NO. 95-675-00 | ISSUED BY: ---
DRAWN BY: --- | REVIEWED BY: PMP
ISSUED: 2-28-97

SHEET TITLE
MECHANICAL SCHEDULES

CATEGORY - SUB-CATEGORY - SHEET
M.0-02

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GENERAL FAN SCHEDULE

DESIG	SERVICE	LEVEL	TYPE	CFM	SP INCH H_2O	APPROX RPM	BHP	HP (MOTOR SIZE)	WHEEL DIA	DRIVE	AMCA CONSTRUCTION CLASS	ELECTRICAL	APPROX WEIGHT (LBS)	REMARKS
GEF-A1	ELEVATOR LOBBY	UPPER CONC	D	1650	0.50	1075	0.26	1/3	–	DIRECT	I	115V/1Ø/60HZ	90	
GEF-A2	TRASH ROOM	MAIN CONC	J	970	0.50	1140	0.248	1/4	18 1/4"	DIRECT	I	115V/1Ø/60HZ	100	
GEF-A3	ELECTRIC ROOM	MAIN CONC	E 2	1420	0.375	1075	0.50	1/2	–	DIRECT	I	115V/1Ø/60HZ	130	
GEF-A4	SUMP PIT	SERVICE	A	900	3.0	2600	0.70	1.0	10 1/2"	DIRECT	I	480V/3Ø/60HZ	150	
GEF-A5	ELECTRICAL ROOM	UPPER SUITE	E	480	0.375	1725	0.149	1/6	12 15/16"	DIRECT	I	115V/1Ø/60HZ	70	
GEF-A6	ELECTRICAL ROOM	UPPER CONC	D	480	0.375	1550	–	1/8	–	DIRECT	I	115V/1Ø/60HZ	30	
GEF-A7	ELECTRICAL ROOM	SERVICE LEVEL	E	240	0.375	1725	0.149	1/6	12 15/16"	DIRECT	I	115V/1Ø/60HZ	30	
GEF-B1	ELEVATOR LOBBY	UPPER CONC	D	4620	0.50	1370	1.33	1 1/2	–	BELT	I	480V/1Ø/60HZ	130	
GEF-B2	TRASH ROOM	MAIN CONC	J	970	0.50	1140	0.248	1/4	18 1/4"	DIRECT	I	115V/1Ø/60HZ	100	
GEF-B3	ELECTRIC ROOM	MAIN CONC	E 2	1420	0.375	1075	0.50	1/2	–	DIRECT	I	115V/1Ø/60HZ	130	
GEF-B4	SUMP PIT	SERVICE	A	900	3.0	2600	0.70	1.0	10 1/2"	DIRECT	I	480V/3Ø/60HZ	150	
GEF-B5	VENDING	MAIN CONC	J	940	0.375	1140	0.248	1/4	18 1/4"	DIRECT	I	115V/1Ø/60HZ	100	
GEF-B6	ELECTRICAL ROOM	UPPER CONC	D	480	0.375	1550	–	1/8	–	DIRECT	I	115V/1Ø/60HZ	30	
GEF-B7	MECHANICAL ROOM	PRESS LEVEL	E	710	0.375	1075	–	1/3	–	DIRECT	I	115V/1Ø/60HZ	70	
GEF-B8	ELEV. LOBBY	UPPER CONC	D	1660	0.50	1075	0.26	1/3	–	DIRECT	I	115V/1Ø/60HZ	90	
GEF-C1	TRASH ROOM	MAIN CONC	J	880	0.50	1140	0.248	1/4	18 1/4"	DIRECT	I	115V/1Ø/60HZ	100	
GEF-C2	ELECTRIC ROOM	MAIN CONC	E	1420	0.375	1075	0.50	1/2	–	DIRECT	I	115V/1Ø/60HZ	130	
GEF-C3	ELECTRIC ROOM	UPPER CONC	D 2	480	0.375	1550	–	1/8	–	DIRECT	I	115V/1Ø/60HZ	30	
GEF-C4	ELECTRIC ROOM	UPPER SUITE	E	480	0.375	1725	0.149	1/6	12 15/16"	DIRECT	I	115V/1Ø/60HZ	70	
GEF-D1	TRASH ROOM	MAIN CONC	J	970	0.50	1140	0.248	1/4	18 1/4"	DIRECT	I	115V/1Ø/60HZ	100	
GEF-D2	ELECTRIC ROOM	MAIN CONC	E	1420	0.375	1075	0.50	1/2	–	DIRECT	I	115V/1Ø/60HZ	130	
GEF-D3	ELECTRIC ROOM	UPPER CONC	D	480	0.375	1550	–	1/8	–	DIRECT	I	115V/1Ø/60HZ	30	

SMOKE EXHAUST FAN SCHEDULE

DESIG	SERVICE	TYPE	CFM	SP INCH H_2O	APPROX RPM	BHP	HP (MOTOR SIZE)	WHEEL DIA	DRIVE	AMCA CONSTRUCTION CLASS	ELECTRICAL	APPROX WEIGHT (LBS)	REMARKS
SEF-1	SERVICE LEVEL-QUAD A	C	12,500	1.5	800	5.2	7.5	33	BELT	I	480/3/60	480	INLINE-CENTRIFUGAL
SEF-2	SERVICE LEVEL-QUAD A	C	12,500	1.5	800	5.2	7.5	33	BELT	I	480/3/60	480	INLINE-CENTRIFUGAL
SEF-3	SERVICE LEVEL-QUAD B	C	12,500	1.5	800	5.2	7.5	33	BELT	I	480/3/60	480	INLINE-CENTRIFUGAL
SEF-4	SERVICE LEVEL-QUAD B	C	12,500	1.5	800	5.2	7.5	33	BELT	I	480/3/60	480	INLINE-CENTRIFUGAL
SEF-5	ATRIUM-QUAD A	B	26,000	1.5	1170	13.5	15.0	40	DIRECT	I	480/3/60	930	INLINE-VANEAXIAL
SEF-6	ATRIUM-QUAD A	A	24,000	1.5	800	12.5	15.0	40	BELT	I	480/3/60	1,230	VENT SET
SEF-7a	ATRIUM-QUAD B	B	32,000	1.5	1170	15.0	20.0	48	DIRECT	I	480/3/60	1,490	INLINE-VANEAXIAL
SEF-7b	ATRIUM-QUAD B	B	32,000	1.5	1170	15.0	20.0	48	DIRECT	I	480/3/60	1,490	INLINE-VANEAXIAL
SEF-8	ATRIUM-QUAD B	A	12,000	1.5	800	5.3	7.5	33	BELT	I	480/3/60	930	VENT SET
SEF-9	ATRIUM-QUAD B	A	24,000	1.5	800	12.5	15.0	40	BELT	I	480/3/60	1,230	VENT SET
SEF-10a	CLUB LEVEL-QUAD C	B	37,500	2.0	1170	17.0	20.0	48	DIRECT	I	480/3/60	1,490	INLINE-VANEAXIAL
SEF-10b	CLUB LEVEL-QUAD C	B	37,500	2.0	1170	17.0	20.0	48	DIRECT	I	480/3/60	1,490	INLINE-VANEAXIAL
SEF-11	ATRIUM-QUAD D	B	26,000	1.5	1170	13.5	15.0	40	DIRECT	I	480/3/60	930	INLINE-VANEAXIAL
SEF-12	ATRIUM-QUAD D	A	24,000	1.5	800	12.5	15.0	40	BELT	I	480/3/60	1,230	VENT SET

HEAT EXCHANGER SCHEDULE

DESIG	TUBE SIDE								SHELL SIDE					APPROX SIZE	CAPACITY
	GPM	EWT °F	LWT °F	TUBE VELOCITY	MAXIMUM PRESS DROP	No PASS	HEATING SURFACE	FOULING FACTOR	GPM	EWT °F	LWT °F	SHELL VELOCITY	MAXIMUM PRESS DROP		
HX-1	200	40	130	1.6 FPS	1.1 FT	4	761 SQ FT	0.001	300	200	140	2.1 FPS	4.8 FT	24"ø x 96"L	9000 MBH

STEAM / HEATING WATER CONVERTOR SCHEDULE

DESIG	HEATING WATER SIDE								STEAM SIDE			APPROX SIZE	CAPACITY
	GPM	EWT °F	LWT °F	TUBE VELOCITY	MAXIMUM PRESS DROP	No PASS	HEATING SURFACE	FOULING FACTOR	STEAM PRESSURE	SAT STEAM TEMP	COND LOAD		
C-1	1500	176	200	7.3 FPS	5.8 FT	2	337 SQ FT	0.001	60 PSIG	307 °F	49,200 MBH	22"ø x 60"L	16,400 MBH
C-2	1500	176	200	7.3 FPS	5.8 FT	2	337 SQ FT	0.001	60 PSIG	307 °F	49,200 MBH	22"ø x 60"L	16,400 MBH
C-3	1500	176	200	7.3 FPS	5.8 FT	2	337 SQ FT	0.001	60 PSIG	307 °F	49,200 MBH	22"ø x 60"L	16,400 MBH

DUPLEX CONDENSATE RETURN UNIT SCHEDULE

DESIG	LOCATION	CAPACITY SQ FT EDR	GPM	DISCHARGE HEAD PSIG	RECEIVER SIZE	PUMP DISCHARGE SIZE	MOTOR HP	RPM	ELECTRICAL V/PH/HZ	REMARKS
CRU-1	MECH 1.26.03	100,000	150	20	120 GAL	2"	2.0	1750	480/3/60	
CRU-2	MECH 1.26.03	100,000	150	20	120 GAL	2"	2.0	1750	480/3/60	

TOILET EXHAUST FAN SCHEDULE

DESIG	SERVICE	LEVEL	TYPE	CFM	SP INCH H_2O	APPROX RPM	BHP	HP (MOTOR SIZE)	WHEEL DIA	DRIVE	AMCA CONSTRUCTION CLASS	ELECTRICAL	APPROX WEIGHT (LBS)	REMARKS
TEF-A1	TOILET/LOCKER	SERVICE	J	2400	0.50	1775	0.859	1	18 1/4"	DIRECT	I	480V/3Ø/60HZ	100	
TEF-A2	TOILET/LOCKER	SERVICE 2	J	1500	0.50	1140	0.498	1/2	20 15/16"	DIRECT	I	115V/1Ø/60HZ	120	
TEF-A3	TOILET/LOCKER	SERVICE	J	3720	0.50	1725	1.729	2	20 15/16"	DIRECT	I	480V/3Ø/60HZ	120	
TEF-A4	TOILET	MAIN CONC	J	1460	0.50	1140	0.498	1/2	20 15/16"	DIRECT	I	115V/1Ø/60HZ	120	
TEF-A5	TOILET	MAIN CONC	J	1900	0.50	1140	0.498	1/2	20 15/16"	DIRECT	I	115V/1Ø/60HZ	120	
TEF-A6	TOILET	MAIN CONC	J	2480	0.75	1725	1.729	2	20 15/16"	DIRECT	I	480V/3Ø/60HZ	120	
TEF-A7	TOILET	MAIN CONC	E	200	0.375	1550	–	155 WATTS	–	DIRECT	I	115V/1Ø/60HZ	40	
TEF-A8	NOT USED													
TEF-A9	TOILET	MAIN CONC	J 2	1460	0.50	1140	0.498	1/2	20 15/16"	DIRECT	I	115V/1Ø/60HZ	120	
TEF-A10	TOILET	UPPER CONC	D	1740	0.50	1075	0.26	1/3	–	DIRECT	I	115V/1Ø/60HZ	90	
TEF-A11	TOILET	UPPER CONC	D	1740	0.50	1075	0.26	1/3	–	DIRECT	I	115V/1Ø/60HZ	90	
TEF-A12	TOILET	UPPER CONC	D	1800	0.50	1075	0.42	1/3	–	DIRECT	I	115V/1Ø/60HZ	90	
TEF-A13	NOT USED													
TEF-A14	TOILET	UPPER CONC	D	960	0.50	1075	0.16	1/6"	–	DIRECT	I	115V/1Ø/60HZ	80	
TEF-A15	TOILET	UPPER CONC	D	1740	0.50	1075	0.26	1/3	–	DIRECT	I	115V/1Ø/60HZ	90	
TEF-A16	TOILET	UPPER CONC	D 2	3760	0.75	1020	0.90	1	–	BELT	I	480V/3Ø/60HZ	140	
TEF-A17	TOILET	UPPER SUITE	J	800	0.50	1140	0.248	1/4	18 1/4"	DIRECT	I	115V/1Ø/60HZ	100	
TEF-A18	TOILET	UPPER SUITE	J	1040	0.50	1725	0.357	1/8	15 9/16"	DIRECT	I	115V/1Ø/60HZ	90	
TEF-A19	TOILET	UPPER SUITE	J	450	0.375	1725	0.149	1/6	12 15/16"	DIRECT	I	115V/1Ø/60HZ	70	
TEF-A20	TOILET	UPPER CONC	D	1360	0.50	1725	0.34	1/3	–	DIRECT	I	115V/1Ø/60HZ	70	
TEF-A21	TOILET	UPPER CONC	D	1100	0.50	1725	0.34	1/3	–	DIRECT	I	115V/1Ø/60HZ	70	
TEF-A22	TOILET	UPPER CONC	D	1180	0.50	1725	0.34	1/3	–	DIRECT	I	115V/1Ø/60HZ	70	
TEF-A23	TOILET/TRASH	CLUB 2	J	1410	0.50	1140	0.498	1/2	20 15/16"	DIRECT	I	115V/1Ø/60HZ	120	
TEF-B1	TOILET/LOCKER	SERVICE	J	810	0.50	1140	0.248	1/4	18 1/4"	DIRECT	I	115V/1Ø/60HZ	100	
TEF-B2	TOILET	SERVICE	J	1395	0.50	1140	0.498	1/2	20 15/16"	DIRECT	I	115V/1Ø/60HZ	120	
TEF-B3	TOILET	SERVICE	J	1980	0.75	1725	0.859	1	18 1/4"	DIRECT	I	480V/3Ø/60HZ	100	
TEF-B4	TOILET/LOCKER	SERVICE	J	225	0.375	1140	0.101	1/8	15 9/16"	DIRECT	I	115V/1Ø/60HZ	90	
TEF-B5	TOILET	SERVICE	J	2675	0.50	1725	0.859	1	18 1/4"	DIRECT	I	480V/3Ø/60HZ	100	
TEF-B6	TOILET/LOCKER	SERVICE	J	13270	0.75	780	4.91	7 1/2	42 3/16"	BELT	I	480V/3Ø/60HZ	500	
TEF-B7	TOILET/LOCKER	SERVICE	J	7920	0.50	1075	3.02	5	31 9/16"	BELT	I	480V/3Ø/60HZ	280	
TEF-B8	TOILET/LOCKER	SERVICE	J	8770	0.75	1190	4.17	5	31 9/16"	BELT	I	480V/3Ø/60HZ	280	
TEF-B9	TOILET	MAIN CONC	J	1460	0.50	1140	0.498	1/2	20 15/16"	DIRECT	I	115V/1Ø/60HZ	120	
TEF-B10	TOILET	MAIN CONC	J	2060	0.50	1140	0.498	1/2	20 15/16"	DIRECT	I	115V/1Ø/60HZ	120	
TEF-B11	TOILET	UPPER SUITE	J	300	0.375	1140	0.101	1/8	15 9/16"	DIRECT	I	115V/1Ø/60HZ	90	
TEF-B12	TOILET	MAIN CONC	J	2140	0.50	1140	0.498	1/2	20 15/16"	DIRECT	I	115V/1Ø/60HZ	120	
TEF-B13	TOILET	MAIN CONC	J	1700	0.50	1140	0.498	1/2	20 15/16"	DIRECT	I	115V/1Ø/60HZ	120	
TEF-B14	TOILET	UPPER CONC	D	3580	0.75	1020	0.90	1	–	BELT	I	480V/3Ø/60HZ	140	
TEF-B15	TOILET	UPPER CONC	D	1740	0.50	1075	0.26	1/3	–	DIRECT	I	115V/1Ø/60HZ	90	
TEF-B16	TOILET	CLUB/SUITE	D	1740	0.50	1075	0.26	1/3	–	DIRECT	I	115V/1Ø/60HZ	90	
TEF-B17	TOILET	UPPER CONC	D	2620	0.50	1140	0.82	3/4	–	DIRECT	I	480V/3Ø/60HZ	110	
TEF-B18	TOILET	UPPER CONC	D 2	960	0.50	1075	0.16	1/6	–	DIRECT	I	115V/1Ø/60HZ	80	
TEF-B19	TOILET	UPPER CONC	D 2	960	0.50	1075	0.16	1/6	–	DIRECT	I	115V/1Ø/60HZ	80	
TEF-B20	TOILET	UPPER SUITE	J	940	0.50	1140	0.248	1/4	18 1/4"	DIRECT	I	115V/1Ø/60HZ	100	
TEF-B21	TOILET	UPPER SUITE	J	880	0.50	1140	0.248	1/4	18 1/4"	DIRECT	I	115V/1Ø/60HZ	100	
TEF-B22	TOILET	UPPER CONC	D	1540	0.50	1725	0.34	1/3	–	DIRECT	I	115V/1Ø/60HZ	70	
TEF-B23	TOILET	UPPER CONC	D	1180	0.50	1725	0.34	1/3	–	DIRECT	I	115V/1Ø/60HZ	70	
TEF-B24	TOILET	UPPER CONC	D	1180	0.50	1725	0.34	1/3	–	DIRECT	I	115V/1Ø/60HZ	70	
TEF-B25	TOILET/TRASH	CLUB	J	570	0.375	1140	0.101	1/8	–	DIRECT	I	115V/1Ø/60HZ	90	
TEF-B26	TOILET	UPPER SUITE	E	100	0.375	1170	–	115 WATTS	–	DIRECT	I	115V/1Ø/60HZ	20	
TEF-B27	TOILET	MAIN CONC	J	750	0.375	1140	0.248	1/4	18 1/4"	DIRECT	I	115V/1Ø/60HZ	100	
TEF-C1	TOILET	MAIN CONC	J	1460	0.50	1140	0.498	1/2	20 15/16"	DIRECT	I	115V/1Ø/60HZ	120	
TEF-C2	TOILET	MAIN CONC 2	J	2220	0.50	1140	0.498	1/2	20 15/16"	DIRECT	I	115V/1Ø/60HZ	120	
TEF-C3	TOILET	MAIN CONC	J	3240	0.75	1140	0.923	1	23 9/16"	DIRECT	I	480V/3Ø/60HZ	170	
TEF-C4	TOILET	MAIN CONC	E	200	0.375	1550	–	155 WATTS	–	DIRECT	I	115V/1Ø/60HZ	40	
TEF-C5	TOILET	PRESS	J	940	0.50	1140	0.248	1/4	18 1/4"	DIRECT	I	115V/1Ø/60HZ	100	
TEF-C6	TOILET	UPPER CONC	D	2620	0.50	1140	0.82	3/4	–	DIRECT	I	480V/3Ø/60HZ	110	
TEF-C7	TOILET	UPPER CONC	D	1740	0.50	1075	0.26	1/3	–	DIRECT	I	115V/1Ø/60HZ	90	
TEF-C8	TOILET	UPPER CONC	D	1740	0.50	1075	0.26	1/3	–	DIRECT	I	115V/1Ø/60HZ	90	
TEF-C9	TOILET	UPPER CONC	D	5060	0.50	1010	1.17	1 1/2	–	BELT	I	480V/3Ø/60HZ	260	
TEF-C10	TOILET	UPPER CONC	D	1360	0.50	1725	0.34	1/3	–	DIRECT	I	115V/1Ø/60HZ	70	
TEF-C11	TOILET	UPPER CONC	D 2	960	0.50	1075	0.16	1/6	–	DIRECT	I	115V/1Ø/60HZ	80	
TEF-C12	TOILET	UPPER SUITE	J	800	0.50	1140	0.248	1/4	18 1/4"	DIRECT	I	115V/1Ø/60HZ	100	
TEF-C13	TOILET	UPPER SUITE	J	1020	0.50	1725	0.357	1/3	15 9/16"	DIRECT	I	115V/1Ø/60HZ	90	
TEF-C14	TOILET/TRASH	CLUB	J	1230	0.50	1725	0.357	1/3	15 9/16"	DIRECT	I	115V/1Ø/60HZ	90	
TEF-C15	TOILET	MAIN CONC	E	200	0.375	1550	–	155 WATTS	–	DIRECT	I	115V/1Ø/60HZ	40	
TEF-C16	TOILET	UPPER CONC	D	1200	0.50	1725	0.34	1/3	–	DIRECT	I	115V/1Ø/60HZ	70	
TEF-C17	TOILET	UPPER CONC	D	1180	0.50	1725	0.34	1/3	–	DIRECT	I	115V/1Ø/60HZ	70	
TEF-C18	TOILET	UPPER CONC	D	1540	0.50	1725	0.34	1/3	–	DIRECT	I	115V/1Ø/60HZ	70	
TEF-C19	(NOT USED) 2	–	–	–	–	–	–	–	–	–	–	–	–	
TEF-C20	TOILET	UPPER SUITE	J	400	0.375	1140	0.101	1/8	15 9/16"	DIRECT	I	115V/1Ø/60HZ	90	
TEF-C21	TOILET	UPPER CONC	D	480	0.50	1550	–	1/8	–	DIRECT	I	115V/1Ø/60HZ	30	
TEF-D1	TOILET	MAIN CONC	J	3440	0.75	1140	0.923	1	23 9/16"	DIRECT	I	480V/3Ø/60HZ	170	
TEF-D2	TOILET	UPPER CONC	D 2	1180	0.50	1725	0.34	1/3	–	DIRECT	I	115V/1Ø/60HZ	70	
TEF-D3	TOILET	UPPER CONC	D	1540	0.50	1725	0.34	1/3	–	DIRECT	I	115V/1Ø/60HZ	70	
TEF-D4	TOILET	MAIN CONC	J	2140	0.50	1140	0.498	1/2	20 15/16"	DIRECT	I	115V/1Ø/60HZ	120	
TEF-D5	TOILET	MAIN CONC	J	1700	0.50	1140	0.498	1/2	20 15/16"	DIRECT	I	115V/1Ø/60HZ	120	
TEF-D6	TOILET	UPPER CONC	D	3720	0.75	870	0.81	3/4	–	BELT	I	480V/3Ø/60HZ	240	
TEF-D7	TOILET	UPPER CONC	D	1900	0.50	1075	0.42	1/3	–	DIRECT	I	115V/1Ø/60HZ	90	
TEF-D8	TOILET	UPPER CONC	D	1740	0.50	1075	0.26	1/3	–	DIRECT	I	115V/1Ø/60HZ	90	
TEF-D9	TOILET	UPPER CONC	D	1740	0.50	1075	0.26	1/3	–	DIRECT	I	115V/1Ø/60HZ	90	
TEF-D10	TOILET	UPPER CONC	D	960	0.50	1075	0.16	1/6	–	DIRECT	I	115V/1Ø/60HZ	80	
TEF-D11	TOILET	UPPER CONC	D	1740	0.50	1075	0.26	1/3	–	DIRECT	I	115V/1Ø/60HZ	90	
TEF-D12	TOILET	UPPER SUITE	J	450	0.375	1140	0.101	1/8	–	DIRECT	I	115V/1Ø/60HZ	90	
TEF-D13	TOILET	UPPER SUITE	J	940	0.50	1140	0.248	1/4	18 1/4"	DIRECT	I	115V/1Ø/60HZ	100	
TEF-D14	TOILET	UPPER SUITE	J 2	800	0.50	1140	0.248	1/4	18 1/4"	DIRECT	I	115V/1Ø/60HZ	100	
TEF-D15	TOILET/TRASH	CLUB	J	1440	0.50	1140	0.498	1/2	20 15/16"	DIRECT	I	115V/1Ø/60HZ	120	
TEF-D16	TOILET	UPPER CONC	D	1560	0.50	1725	0.34	1/3	–	DIRECT	I	115V/1Ø/60HZ	70	
TEF-D17	TOILET	UPPER SUITE	E	100	0.375	1170	–	115 WATTS	–	DIRECT	I	115V/1Ø/60HZ	20	

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REVISIONS

NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44

KEYPLAN

PROJECT NO. 95-675-00 | ISSUED BY: ---
DRAWN BY: | REVIEWED BY: PMP
ISSUED: 2-28-97

SHEET TITLE
MECHANICAL SCHEDULE

CATEGORY - SUB-CATEGORY - SHEET
M.0-03

3.97-11:27-5110M03 - RMF #95110

KITCHEN FAN SCHEDULE

DESIG	SERVICE ROOM No	LEVEL	TYPE	CFM	SP INCH H_2O	APPROX RPM	BHP	HP (MOTOR SIZE)	WHEEL DIA	DRIVE	ELECTRICAL	REMARKS
KEF-1A	6.13.01	UPPER SUITE	G	2,500	1.75	2,830	1.60	2.0	12	BELT	480V/3ø/60HZ	NOTE (1)
KEF-2A	7.02.01	UPPER CONCOURSE	G	5,000	1.75	2,150	3.33	5.0	16	BELT	480V/3ø/60HZ	NOTE (1)
KEF-3A	1.08.01 & 4.08.05	CLUB LEVEL	G	2,875	2.25	2,510	2.05	3.0	13	BELT	480V/3ø/60HZ	NOTE (1)
KEF-4A	4.08.01 & 4.08.05	CLUB LEVEL	G	5,400	3.00	1,960	4.40	5.0	18	BELT	480V/3ø/60HZ	NOTE (1)
KEF-5A	4.08.01 & 4.08.06	CLUB LEVEL	G	3,600	2.75	2,350	2.92	5.0	15	BELT	480V/3ø/60HZ	NOTE (1)
KEF-6A	4.08.01 & 4.08.07	CLUB LEVEL	G	1,600	2.75	2,780	1.25	2.0	10	BELT	480V/3ø/60HZ	NOTE (1)
KEF-1B	2.19.01	MAIN CONCOURSE	G	7,500	3.5	1,665	6.36	7.5	22	BELT	480V/3ø/60HZ	NOTE (1)
KEF-3B	6.15.01	UPPER SUITE	G	5,000	1.75	2,150	3.33	5.0	16	BELT	480V/3ø/60HZ	NOTE (1)
KEF-4B	7.23.01	UPPER CONCOURSE	G	5,000	1.75	2,150	3.33	5.0	16	BELT	480V/3ø/60HZ	NOTE (1)
KEF-2B	4.19.01	CLUB LEVEL	G	2,875	2.25	2,510	2.05	3.0	13	BELT	480V/3ø/60HZ	NOTE (1)
KEF-2C	6.40.01	UPPER SUITE	G	2,500	1.75	2,830	1.60	2.0	12	BELT	480V/3ø/60HZ	NOTE (1)
KEF-3C	7.32.01	UPPER CONCOURSE	G	2,500	1.75	2,830	1.60	2.0	12	BELT	480V/3ø/60HZ	NOTE (1)
KEF-1D	2.46.01	MAIN CONCOURSE	G	2,500	1.75	2,830	1.82	3.0	16	BELT	480V/3ø/60HZ	NOTE (1)
KEF-2D	6.42.01	UPPER SUITE	G	5,000	1.75	2,150	3.33	5.0	16	BELT	480V/3ø/60HZ	NOTE (1)
KEF-3D	7.52.01	UPPER CONCOURSE	G	2,500	1.75	2,830	1.60	2.0	12	BELT	480V/3ø/60HZ	NOTE (1)
KEF-8A	COMMISSARY	SERVICE LEVEL	C	1,400	2.75	2,780	1.25	2.0	10	BELT	480V/3ø/60HZ	
KEF-9A	2.01.02	MAIN CONCOURSE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-10A	2.04.01	MAIN CONCOURSE	A	1,480	2.50	2,340	1.00	1.5	12 1/4	BELT	480V/3ø/60HZ	
KEF-11A	2.10.02	MAIN CONCOURSE	G	5,000	3.50	1,490	4.29	5.0	22	BELT	480V/3ø/60HZ	NOTE (1)
KEF-12A	2.12.01	MAIN CONCOURSE	G	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	NOTE (1)
KEF-13A	6.08.01	UPPER SUITE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-14A	6.09.01	UPPER SUITE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-15A	6.10.01	UPPER SUITE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-16A	7.05.01	UPPER CONCOURSE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-17A	7.05.02	UPPER CONCOURSE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-18A	7.06.02	UPPER CONCOURSE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-5B	2.16.01	MAIN CONCOURSE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-6B	2.24.01	MAIN CONCOURSE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-7B	2.25.01	MAIN CONCOURSE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-8B	6.18.01	UPPER SUITE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-9B	6.19.01	UPPER SUITE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-10B	7.21.01	UPPER CONCOURSE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-11B	7.22.01	UPPER CONCOURSE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-12B	7.25.02	UPPER CONCOURSE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-4C	2.30.01	MAIN CONCOURSE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-5C	2.31.01	MAIN CONCOURSE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-6C	2.34.01	MAIN CONCOURSE	G	10,000	3.50	1,280	7.50	10	27	BELT	480V/3ø/60HZ	NOTE (1)
KEF-7C	2.38.01	MAIN CONCOURSE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-8C	4.35.05	CLUB LEVEL PANTRY	G	2,875	3.50	2,250	2.40	3	15	BELT	480V/3ø/60HZ	NOTE (1)
KEF-9C	6.35.01	UPPER SUITE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-10C	6.36.01	UPPER SUITE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-11C	6.37.01	UPPER SUITE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-12C	7.28.01	UPPER CONCOURSE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-13C	7.32.01	UPPER CONCOURSE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-14C	7.33.02	UPPER CONCOURSE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-4D	2.43.01	MAIN CONCOURSE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-5D	2.50.01	MAIN CONCOURSE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-6D	2.53.01	MAIN CONCOURSE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-7D	4.46.03	CLUB LEVEL PANTRY	G	2,875	3.50	2,250	2.40	3	15	BELT	480V/3ø/60HZ	NOTE (1)
KEF-8D	6.45.01	UPPER SUITE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-9D	6.46.01	UPPER SUITE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-10D	7.48.01	UPPER CONCOURSE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-11D	7.48.04	UPPER CONCOURSE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	120V/1ø/60HZ	
KEF-12D	7.49.01	UPPER CONCOURSE	A	650	1.25	1,470	0.23	1/3	9 3/16	BELT	480V/3ø/60HZ	
KEF-13D	2.46.01	MAIN CONCOURSE	G	5,000	3.50	1,685	4.29	5	20	BELT	480V/3ø/60HZ	NOTE (1)

NOTE:
(1) FAN SHALL BE UL 762 APPROVED FOR MAXIMUM 375 DEGREES FARENHEIT, EQUIPPED WITH HINGED ACCESS DOOR AND DRAIN CONNECTION.

FILTER SCHEDULE

DESIG	SERVES	TYPE	NOM CFM	APPROX BANK DIMENSION LxHxD	No CARTRIDGES	CARTRIDGE SIZE LxHxD	FACE VEL FPM	MEDIA AREA PER CARTRIDGE	MAXIMUM INITIAL PD IN WG	EFFICIENCY	REMARKS
F-1-1	AHU-1	B	18200	100"x60"x12"	15	20"x20"x12"	436	39.0 SQ FT	0.29	60%	
F-1-1A	AHU-1	A	18200	100"x60"x2"	15	20"x20"x2"	436	4.6 SQ FT	0.28	30%	
F-2-1	AHU-2	B	18200	100"x60"x12"	15	20"x20"x12"	436	39.0 SQ FT	0.29	60%	
F-2-1A	AHU-2	A	18200	100"x60"x2"	15	20"x20"x2"	436	4.6 SQ FT	0.28	30%	
F-3-1	AHU-3	B	27500	100"x80"x12"	20	20"x20"x12"	494	39.0 SQ FT	0.29	60%	
F-3-1A	AHU-3	A	27500	100"x80"x2"	20	20"x20"x2"	494	4.6 SQ FT	0.28	30%	
F-4-1	AHU-4	B	27500	100"x80"x12"	20	20"x20"x12"	494	39.0 SQ FT	0.29	60%	
F-4-1A	AHU-4	A	27500	100"x80"x2"	20	20"x20"x2"	494	4.6 SQ FT	0.28	30%	
F-5-1	AHU-5	B	27500	100"x80"x12"	20	20"x20"x12"	494	39.0 SQ FT	0.29	60%	
F-5-1A	AHU-5	A	27500	100"x80"x2"	20	20"x20"x2"	494	4.6 SQ FT	0.28	30%	
F-6-1	AHU-6	B	27500	100"x80"x12"	20	20"x20"x12"	494	39.0 SQ FT	0.29	60%	
F-6-1A	AHU-6	A	27500	100"x80"x2"	20	20"x20"x2"	494	4.6 SQ FT	0.28	30%	
F-7-1	AHU-7	B	18200	100"x60"x12"	15	20"x20"x12"	436	39.0 SQ FT	0.29	60%	
F-7-1A	AHU-7	A	18200	100"x60"x2"	15	20"x20"x2"	436	4.6 SQ FT	0.28	30%	
F-8-1	AHU-8	B	18200	100"x60"x12"	15	20"x20"x12"	436	39.0 SQ FT	0.29	60%	
F-8-1A	AHU-8	A	18200	100"x60"x2"	15	20"x20"x2"	436	4.6 SQ FT	0.28	30%	
F-9-1	AHU-9	B	13300	96"x48"x12"	8	24"x24"x12"	416	39.0 SQ FT	0.30	60%	NOTE 1
F-9-1A	AHU-9	A	13300	96"x48"x2"	8	24"x24"x2"	416	4.6 SQ FT	0.20	30%	NOTE 1
F-10-1	AHU-10	A	1800	32"x40"x2"	4	20"x16"x2"	202	4.6 SQ FT	0.20	30%	NOTE 1,2
F-11-1	AHU-11	A	2900	40"x40"x2	4	20"x20"x2"	261	4.6 SQ FT	0.20	30%	NOTE 1,2
F-12-1	AHU-12	A	3000	40"x40"x2"	4	20"x20"x2"	270	4.6 SQ FT	0.20	30%	NOTE 1,2
F-13-1	AHU-13	A	1600	20"x32"x2"	2	20"x16"X2"	364	4.6 SQ FT	0.20	30%	NOTE 1,2
F-14-1	AHU-14	A	2500	32"x40"x2"	4	20"x16"x2"	280	4.6 SQ FT	0.20	30%	NOTE 1,2
F-15-1	AHU-15	B	9300	80"x40"x12"	8	20"x20"x12"	419	39.0 SQ FT	0.30	60%	NOTE 1
F-15-1A	AHU-15	A	9300	80"x40"x2"	8	20"x20"x2"	419	4.6 SQ FT	0.20	30%	NOTE 1
F-16-1	AHU-16	B	8100	80"x40"x12"	8	20"x20"x12"	365	39.0 SQ FT	0.30	60%	NOTE 1
F-16-1A	AHU-16	A	8100	80"x40"x2"	8	20"x20"x2"	365	4.6 SQ FT	0.20	30%	NOTE 1
F-17-1	AHU-17	B	12900	96"x48"x12"	8	20"x20"x12"	403	39.0 SQ FT	0.30	60%	NOTE 1
F-17-1A	AHU-17	A	12900	96"x48"x2"	8	20"x20"x2"	403	4.6 SQ FT	0.20	30%	NOTE 1,2
F-18-1	AHU-18	A	2600	32"x40"x2"	4	20"x16"x2"	292	4.6 SQ FT	0.20	30%	NOTE 1,2
F-20-1	AHU-20	A	9700	80"x40"x2"	8	20"x20"x2"	437	4.6 SQ FT	0.20	30%	NOTE 1,2
F-21-1	AHU-21	A	11300	72"x48"x2"	6	24"x24"x2"	471	4.6 SQ FT	0.20	30%	NOTE 1,2
F-22-1	AHU-22	A	11300	72"x48"x2"	6	24"x24"x2"	471	4.6 SQ FT	0.20	30%	NOTE 1,2
F-23-1	AHU-23	A	9700	80"x40"x2"	8	20"x20"x2"	437	4.6 SQ FT	0.20	30%	NOTE 1,2
F-V-1	HVU-1	A	16300	96"x60"x2"	12	24"x20"x2"	408	4.6 SQ FT	0.20	30%	NOTE 1,2
F-V-2	HVU-2	A △1	13000	95"x64"x2"	12 4	16"x25"x2" 16"x20"x2"	308	4.6 SQ FT	0.20	30%	NOTE 1,2
F-V-3	HVU-3	A	6000	60"x40"x2"	6	20"x20"x2"	360	4.6 SQ FT	0.20	30%	NOTE 1,2
F-V-4	HVU-4	A	2000	32"x40"x2"	4	16"x20"x2"	225	4.6 SQ FT	0.20	30%	NOTE 1,2
F-V-5	AHU-23	A	6600	76"x40"x2"	6 2	20"x20"x2" 16"x20"x2"	313	4.6 SQ FT	0.20	30%	NOTE 1,2
F-V-6	HVU-6	A	3300	32"x40"x2"	4	16"x20"x2"	259	4.6 SQ FT	0.20	30%	NOTE 1,2
F-V-7	HVU-7	A	5700	60"x40"x2"	6	20"x20"x2"	342	4.6 SQ FT	0.20	30%	NOTE 1,2
F-V-8	HVU-8	A	2700	32"x40"x2"	4	16"x20"x2"	304	4.6 SQ FT	0.20	30%	NOTE 1,2
F-V-9	HVU-9	A	3200	40"x40"x2	4	20"x20"x2"	288	4.6 SQ FT	0.20	30%	NOTE 1,2
F-V-10	HVU-10	A	8800	84"x50"x2"	8 2	16"x25"x2" 20"x25"x2"	302	4.6 SQ FT	0.20	30%	NOTE 1,2
F-V-11	HVU-11	A	5800	60"x40"x2"	6	20"x20"x2"	348	4.6 SQ FT	0.20	30%	NOTE 1,2
F-V-12	HVU-12	A	5800	60"x40"x2"	6	20"x20"x2"	348	4.6 SQ FT	0.20	30%	NOTE 1,2
F-V-13	HVU-13	A	2700	32"x40"x2"	4	16"x20"x2"	520	4.6 SQ FT	0.20	30%	NOTE 1,2
F-A-1	ELEC RM	A	32,000	72"x144"x2"	18	24"x24"x2"	444	4.6 SQ FT	0.20	30%	PRESS QUAD-A
F-B-1	ELEC RM	A	32,000	72"x144"x2"	18	24"x24"x2"	444	4.6 SQ FT	0.20	30%	PRESS QUAD-B
F-C-1	ELEC RM	A	32,000	72"x144"x2"	18	24"x24"x2"	444	4.6 SQ FT	0.20	30%	PRESS QUAD-C
F-D-1	ELEC RM	A	32,000	72"x144"x2"	18	24"x24"x2"	444	4.6 SQ FT	0.20	30%	PRESS QUAD-D
F-B-2	ELEC RM	A	50000	192"x72"x2"	24	24"x24"x2"	520	4.6 SQ FT	0.20	30%	MAIN CONCOURSE-B

NOTES:
(1) PROVIDED BY AHU MANUFACTURER.
(2) FILTER/MIXING BOX.

COIL PIPE SCHEDULE

DESIG	No COILS IN BANK	RUNOUT PIPE SIZE (A)	BANK HEADER PIPE SIZE (B)	MAIN PIPE SIZE (B)	REMARKS
CC-1	2	3	4	4	AHU-1
HC-1	2	1.5	2	2	AHU-1
CC-2	2	3	4	4	AHU-2
HC-2	2	1.5	2	2	AHU-2
CC-3	2	3	4	4	AHU-3
HC-3	2	1.5	2	2	AHU-3
CC-4	2	3	4	4	AHU-4
HC-4	2	1.5	2	2	AHU-4
CC-5	2	3	4	4	AHU-5
HC-5	2	1.5	2	2	AHU-5
CC-6	2	3	4	4	AHU-6
HC-6	2	1.5	2	2	AHU-6
CC-7	2	3	4	4	AHU-7
HC-7	2	1.5	2	2	AHU-7
CC-8	2	3	4	4	AHU-8
HC-6	2	1.5	2	2	AHU-8

DUCT HEATING COIL SCHEDULE

DESIG (No.)	CFM	APPROX SIZE LxH	MAX AIR PD (IN H_2O)	EAT °F	LAT °F	BTUH @200°F EWT	MAX H_2O PD (FT H_2O)	ROWS	GPM * @30°F ΔT	REMARKS
RH-1	670	18"x9"	.20	55	90	25300	1.0	1	1.9	
RH-2	800	34"x8"	.10	55	90	30200	1.0	1	2.2	
RH-3	1825	38"x12"	.20	55	90	69000	1.0	1	5.0	
RH-4	525	14"x9"	.20	55	90	19800	1.0	1	1.4	
RH-5	495	14"x9"	.20	55	90	18700	1.0	1	1.3	
RH-6	500	14"x9"	.20	55	90	18900	1.0	1	1.4	
RH-7	260	12"x6"	.20	55	90	9800	1.0	1	0.8	
RH-8	315	14"x6"	.20	55	90	11900	1.0	1	0.9	
RH-9	180	6"x10"	.20	55	90	6800	1.0	1	0.6	
RH-10	160	6"x10"	.10	55	90	6000	1.0	1	0.5	
RH-11	160	6"x10"	.10	55	90	6000	1.0	1	0.5	
RH-12	935	26"x12"	.10	55	90	35300	2.0	1	2.6	
RH-13	110	8"x6"	.10	55	90	4200	1.0	1	0.5	
RH-14	760	24"x9"	.20	55	90	28700	1.0	1	2.1	
RH-15	1120	30"x9"	.20	55	90	42300	2.0	1	3.1	
RH-16	970	20"x12"	.20	55	90	36700	2.0	1	2.6	
RH-17	545	16"x9"	.20	55	90	20600	1.0	1	1.5	
RH-18	85	6"x6"	.10	55	90	3200	1.0	1	0.5	
RH-19	1310	30"x12"	.20	55	90	49500	4.0	1	3.6	
RH-20	1310	30"x12"	.20	55	90	49500	4.0	1	3.6	
RH-21	370	16"x6"	.20	55	90	14000	1.0	1	1.0	
RH-22	1000	28"x9"	.20	55	90	37800	2.0	1	2.7	
RH-23	560	24"x6"	.20	55	90	21200	1.0	1	1.5	
RH-24	1120	24"x12"	.20	55	90	42300	2.0	1	3.1	
RH-25	680	20"x9"	.20	55	90	25700	1.0	1	1.9	
RH-26	765	22"x9"	.20	55	90	28900	1.0	1	2.1	
RH-27	880	20"x12"	.20	55	90	33300	1.0	1	2.5	
RH-28	720	18"x12"	.20	55	90	27300	1.0	1	2.0	

△1
* 40% EG SOLUTION

HELLMUTH OBATA & KASSABAUM, INC.
Architecture, Engineering, Planning, Interiors, Facility Programming
323 West 8th Street, Suite700
Kansas City, Missouri 64105

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REVISIONS

NO.	DATE	DESCRIPTION
1	6-4-97	BULLETIN #43
2	6-28-97	BULLETIN #44
3	7-9-97	BULLETIN #58
4	7-25-97	BULLETIN #71

KEYPLAN

PROJECT NO. 95-675-00
ISSUED BY: ---
DRAWN BY:
REVIEWED BY: PMP
ISSUED: 2-28-97

SHEET TITLE
MECHANICAL SCHEDULE

CATEGORY - SUB-CATEGORY - SHEET
M.0-04

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29.07.97-10:27 - 5110M04 -29MAY97@8:21p - 5110M04 - RMF #95110

UNIT HEATER SCHEDULE (ELECTRIC)

DESIG	NOMINAL CFM	REQUIRED MBH	KW	TEMP RISE °F	MOTOR HP	RPM	ELECTRICAL	REMARKS
UH-1	715	34.1	10.0	44	1/15	1550	480V/3ø/60HZ	
UH-2	540	25.6	7.5	44	1/25	1550	480V/3ø/60HZ	
UH-3	1250	51.3	15.0	38	1/4	1550	480V/3ø/60HZ	
UH-4	315	17.1	5.0	50	1/50	1550	480V/3ø/60HZ	

CONVECTOR SCHEDULE

DESIG	REQUIRED MBH	KW	ELECTRICAL	REMARKS
1	6.8	2	277V/1ø/60HZ	
2	10.2	3	277V/1ø/60HZ	
3	13.7	4	277V/1ø/60HZ	
4	3.4	1	277V/1ø/60HZ	

HEAT PUMP UNIT SCHEDULE

DESIG	DUTY	FAN SECTION CFM	MIN. OA CFM	TSP INCH H_2O	MOTOR HP	RPM	WHEEL DIA INCH	COOLING SECTION EAT °F DB	EAT °F WB	LAT °F DB	LAT °F WB	TOTAL MBH	SENS MBH	MAXIMUM AIR PD IN H_2O	HEATING SECTION HEAT PUMP MBH Δ T 17°F	RESISTANCE HEAT MBH	RESISTANCE HEAT KW	RESISTANCE HEAT EAT °F DB	RESISTANCE HEAT LAT °F DB	CONDENSER SECTION No OF COMP	COND FAN HP	TOTAL UNIT AMP	ELECTRICAL	REMARKS
HPU-1	TICKETS C – MAIN CONC.	4030	400	2.20	5	980	15x15	77.8	52.2	54.0	52.2	143.3	103.6	–	–	184.3	54	69.0	111.3	2	1	65	480V/3ø/60HZ	
HPU-2	FIRST AID A – MAIN CONC.	920	90	1.50	1/3	960	10x8	77.8	52.2	54.0	53.0	26.9	21.9	0.4	18.0	52.5	15	70.0	121.5	1	1	62.4	480V/3ø/60HZ	
HPU-3	FIRST AID C – MAIN CONC.	920	90	1.50	1/3	960	10x8	77.8	52.2	54.0	53.0	26.9	21.9	0.4	18.0	52.5	15	70.0	121.5	1	1	62.4	480V/3ø/60HZ	
HPU-4	NOVELTY B – MAIN CONC.	1140	110	1.50	1/3	960	10x8	77.8	52.2	54.0	52.2	36.4	27.1	–	18.0	52.5	15	70.0	111.6	1	1	–	480V/3ø/60HZ	
HPU-5	NOVELTY B – MAIN CONC.	1140	110	1.50	1/3	960	10x8	77.8	52.2	54.0	53.0	36.4	27.1	–	18.0	52.5	15	70.0	111.6	1	1	–	480V/3ø/60HZ	
HPU-6	NOVELTY D – MAIN CONC.	1140	110	1.50	1/3	960	10x8	77.8	52.2	54.0	53.0	36.4	27.1	–	18.0	52.5	15	70.0	111.6	1	1	–	480V/3ø/60HZ	
HPU-7	NOVELTY D – MAIN CONC.	1140	110	1.50	1/3	960	10x8	77.8	52.2	54.0	53.0	36.4	27.1	–	18.0	52.5	15	70.0	111.6	1	1	–	480V/3ø/60HZ	
HPU-8	TV/AV-A	1070	0	1.00	1/2	980	9X4	76.0	53.0	54.0	53.0	31.8	25.4	–	22.6	–	–	74.0	93.6	REFER TO ACCU-8 SCH.			115V/1ø/60HZ	SPLIT SYSTEM
HPU-9	TV/AV-B	1070	0	1.00	1/2	980	9X4	76.0	53.0	54.0	52.2	31.8	25.4	–	22.6	–	–	74.0	93.6	REFER TO ACCU-9 SCH.			115V/1ø/60HZ	SPLIT SYSTEM
HPU-10	TV/AV-C	1070	0	1.00	1/2	960	9X4	76.0	53.0	54.0	53.0	31.8	25.4	–	22.6	–	–	74.0	93.6	REFER TO ACCU-10 SCH.			115V/1ø/60HZ	SPLIT SYSTEM
HPU-11	TV/AV-D	1070	0	1.00	1/2	960	9X4	76.0	53.0	54.0	53.0	31.8	25.4	–	22.6	–	–	74.0	93.6	REFER TO ACCU-11 SCH.			115V/1ø/60HZ	SPLIT SYSTEM
HPU-12	FIRST AID B	430	0	–	0.5 AMP	–	–	76.0	53.0	–	–	14.3	–	–	8.7	5.1	1.5	74.0	103.7	REFER TO ACCU-12 SCH.			115V/1ø/60HZ	SPLIT SYSTEM
HPU-13	FIRST AID D	430	0	–	0.5 AMP	–	–	76.0	53.0	–	–	14.3	–	–	8.7	5.1	1.5	74.0	103.7	REFER TO ACCU-13 SCH.			115V/1ø/60HZ	SPLIT SYSTEM
HPU-14	SCORE BOARD CONTROL A	7300	750	2.25	7.5	1000	15X15	77.8	52.2	54.0	53.0	249.7	187.6	–	–	126.2	38.0	69.0	85.0	REFER TO ACCU-14 SCH.			115V/1ø/60HZ	SPLIT SYSTEM

PUMP SCHEDULE

DESIG	DUTY	TYPE	GPM	HEAD FEET H_2O	SUCTION X DISCHARGE	MOTOR BHP	MOTOR HP	RPM	% EFFICIENCY	ELECTRICAL	REMARKS
P-1	SECONDARY CHW	B	1650	160	8"x8"	81	100	1780	81%	460V/3ø/60HZ	VSD
P-2	SECONDARY CHW	B	1650	160	8"x8"	81	100	1780	81%	460V/3ø/60HZ	VSD
P-3	SECONDARY CHW	B	1650	160	8"x8"	81	100	1780	81%	460V/3ø/60HZ	VSD
P-4	PRIMARY HTG WATER	B	1500	50	10"x8"	22.7	25	1175	83%	460V/3ø/60HZ	VSD
P-5	PRIMARY HTG WATER	B	1500	50	10"x8"	22.7	25	1175	83%	460V/3ø/60HZ	VSD
P-6	PRIMARY HTG WATER	B	1500	50	10"x8"	22.7	25	1175	83%	460V/3ø/60HZ	VSD
P-7	SECONDARY HTG WATER	B	1300	130	8"x6"	53.3	75	1780	79%	460V/3ø/60HZ	VSD
P-8	SECONDARY HTG WATER	B	1300	130	8"x6"	53.3	75	1780	79%	460V/3ø/60HZ	VSD
UDP-1	PRIMARY CHW	–	3300	–	–	–	–	–	–	–	BY OTHERS
UDP-2	PRIMARY CHW	–	3300	–	–	–	–	–	–	–	BY OTHERS

AIR COOLED HEAT PUMP CONDENSING UNIT SCHEDULE

DESIG.	OUTDOOR FAN CFM	No MOTOR	MOTOR SIZE	RPM	FLA EACH	LRA EACH	ELECTRIC	COMPRESSOR No	RLA	LRA	OUTDOOR COIL OUTDOOR TEMP °F DB	TOTAL FACE AREA	No ROWS	FINS/ INCH	REMARKS
ACCU-8	2700	1	1/4	850	1.6	3.5	480V/3ø/60HZ	1	20.5	107.0	95	14.6	2	13	
ACCU-9	2700	1	1/4	850	1.6	3.5	480V/3ø/60HZ	1	20.5	107.0	95	14.6	2	13	
ACCU-10	2700	1	1/4	850	1.6	3.5	480V/3ø/60HZ	1	20.5	107.0	95	14.6	2	13	
ACCU-11	2700	1	1/4	850	1.6	3.5	480V/3ø/60HZ	1	20.5	107.0	95	14.6	2	13	
ACCU-12	–	1	–	–	0.5	–	115V/1ø/60HZ	1	10.0	35.0	95	–	–	–	
ACCU-13	–	1	–	–	0.5	–	115V/1ø/60HZ	1	10.0	35.0	95	–	–	–	
ACCU-14	17100	3	3/4	1075	3.5	–	480V/3ø/60HZ	1	10.0	214.0	95	38.8	3	12	

KITCHEN EXHAUST UNIT SCHEDULE

DESIG	SERVICE ROOM No	LEVEL	TYPE	CFM	SP INCH H_2O	APPROX RPM	BHP	HP MOTOR SIZE	DRIVE	ELECTRICAL V/PH/HZ	APPROX WEIGHT	REMARKS
KEU-1A	2.10.02	MAIN CONCOURSE	A	5000	2	1840	5.20	7.5	BELT	480V/3ø/60HZ	3360	
KEU-1B	2.19.01	MAIN CONCOURSE	A	5000	2	1840	5.20	7.5	BELT	480V/3ø/60HZ	3360	
KEU-1C	2.34.01	MAIN CONCOURSE	A	5000	2	1840	5.20	7.5	BELT	480V/3ø/60HZ	3360	
KEU-2C	22.34.01	MAIN CONCOURSE	A	5000	2	1840	5.20	7.5	BELT	480V/3ø/60HZ	3360	
KEU-3C	4.35.03	CLUB	A	2875	2	2960	3.10	5.0	BELT	480V/3ø/60HZ	2700	
KEU-1D	2.46.01	MAIN CONCOURSE	A	5000	2	1840	5.20	7.5	BELT	480V/3ø/60HZ	3360	
KEU-2D	4.46.03	CLUB	A	2875	2	2960	3.10	5.0	BELT	480V/3ø/60HZ	2700	

SOUND ATTENUATOR SCHEDULE

DESIG	DUTY	No ATTEN	SIZE LxWxH IN. (EACH)	CAPACITY CFM TOTAL	MAXIMUM PD INCH H_2O	FACE VELOCITY FPM	MINIMUM DB REDUCTION BY OCTAVE BAND 2	3	4	5	6	7	8	REMARKS
SA-1-1	AHU-1 SUPPLY	1	36"x36"x36"	18200	0.20	2022	5	9	14	23	24	14	10	IAC 3L
SA-2-1	AHU-2 SUPPLY	1	36"x36"x36"	18200	0.20	2022	5	9	14	23	24	14	10	IAC 3L
SA-3-1	AHU-3.4 SUPPLY	4	36"x24"x36"	55000	0.30	2290	7	12	15	15	10	9	8	IAC 3LFL
SA-5-1	AHU-5.6 SUPPLY	4	36"x24"x36"	55000	0.30	2290	7	12	15	15	10	9	8	IAC 3LFL
SA-7-1	AHU-7.8 SUPPLY	3	36"x24"x30"	36400	0.30	2000	7	12	15	15	10	9	8	IAC 3LFL
SA-1-2	RF-1 DUCT	2	36"x24"X30"	20600	0.20	1650	7	13	17	16	11	11	10	IAC 3LFL
		1	36"x12"x30"											
SA-3-2	RF-3 DUCT	3	36"x24"x42"	44000	0.30	2095	7	13	17	16	11	11	10	IAC 3LFL
SA-5-2	RF-5 DUCT	3	36"x24"x42"	44000	0.30	2095	7	13	17	16	11	11	10	IAC 3LFL
SA-7-2	RF-7 DUCT	3	36"x24"x30"	27400	0.20	1570	7	13	17	16	11	11	10	IAC 3LFL
		1	36"x12"x30"											
SA-1-3	RF-1 DISCHARGE	1	32"x48"x48"	20600	–	–	9	16	18	19	14	10	10	IAC D-DUCT
SA-3-3	RF-3 DISCHARGE	1	48"x72"x72"	44000	–	–	9	17	19	17	12	12	10	IAC D-DUCT
SA-5-3	RF-5 DISCHARGE	1	48"x72"x72"	44000	–	–	9	17	19	17	12	12	10	IAC D-DUCT
SA-7-3	RF-7 DISCHARGE	1	38"x58"x58"	27400	–	–	10	16	20	17	14	12	10	IAC D-DUCT

COIL PUMP SCHEDULE

DESIG	DUTY	TYPE	GPM	HEAD FEET H_2O	SUCTION X DISCHARGE	MOTOR BHP	MOTOR HP	RPM	% EFFICIENCY	ELECTRICAL	REMARKS
CCP-1	AHU-1 COOLING OIL	C	197	51	2.5"x2.5"	4.2	5.0	1760	60%	460V/3ø/HZ	
CCP-2	AHU-2 COOLING COIL	C	197	51	2.5"x2.5"	4.2	5.0	1760	60%	460V/3ø/HZ	
CCP-3	AHU-3 COOLING COIL	C	280	51	3"x3"	5.0	7.5	1760	73%	460V/3ø/HZ	
CCP-4	AHU-4 COOLING COIL	C	280	51	3"x3"	5.0	7.5	1760	73%	460V/3ø/HZ	
CCP-5	AHU-5 COOLING COIL	C	295	51	3"x3"	5.3	7.5	1760	72%	460V/3ø/HZ	
CCP-6	AHU-6 COOLING COIL	C	295	51	3"x3"	5.3	7.5	1760	72%	460V/3ø/HZ	
CCP-7	AHU-7 COOLING COIL	C	201	50	2.5"x2.5	4.3	5.0	1760	60%	460V/3ø/HZ	
CCP-8	AHU-8 COOLING COIL	C	201	50	2.5"x2.5"	4.3	5.0	1760	60%	460V/3ø/HZ	
CCP-9	AHU-9 COOLING COIL	C	102	40	2"x2"	1.6	3.0	1750	63%	460V/3ø/HZ	
CCP-10	AHU-10 COOLING COIL	C	21	38	1.5"x1.5"	0.5	1.0	1750	43%	460V/3ø/HZ	
CCP-11	AHU-11 COOLING COIL	C	19	34	1.5"x1.5"	0.4	1.0	1760	41%	460V/3ø/HZ	
CCP-12	AHU-12 COOLING COIL	C	19	37	1.5"x2.5"	0.4	1.0	1760	40%	460V/3ø/HZ	
CCP-13	AHU-13 COOLING COIL	C	8	46	1.5"x1.5"	0.7	1.5	1760	17%	460V/3ø/HZ	
CCP-14	AHU-14 COOLING COIL	C	28	35	1.5"x1.5"	0.5	1.0	1760	49%	460V/3ø/HZ	
CCP-15	AHU-15 COOLING COIL	C	104	30	2"x2"	1.3	2.0	1750	62%	460V/3ø/HZ	
CCP-16	AHU-16 COOLING COIL	C	91	31	2"x2"	1.0	1.5	1750	71%	460V/3ø/HZ	
CCP-17	AHU-17 COOLING COIL	C	144	30	2"x2"	1.7	3.0	1750	63%	460V/3ø/HZ	
CCP-18	AHU-18 COOLING COIL	C	12	44	1.5"x1.5"	0.7	1.5	1760	20%	460V/3ø/HZ	
CCP-19	AHU-19 COOLING COIL	C	8	40	1.5"x1.5"	0.4	1.5	1750	25%	460V/3ø/HZ	
CCP-20	AHU-20 COOLING COIL	C	44	31	1.5"x1.5"	0.6	1.5	1750	55%	460V/3ø/HZ	
CCP-21	AHU-21 COOLING COIL	C	51	31	2"x2"	0.7	1.5	1750	59%	460V/3ø/HZ	
CCP-22	AHU-22 COOLING COIL	C	51	31	2"x2"	0.7	1.5	1750	59%	460V/3ø/HZ	
CCP-23	AHU-23 COOLING COIL	C	44	31	1.5"x1.5"	0.6	1.5	1750	55%	460V/3ø/HZ	
CCP-24	AHU-24 COOLING COIL	C	7	32	2"x2"	0.4	1.0	1160	16%	460V/3ø/HZ	
CCP-25	AHU-25 COOLING COIL	C	7	32	2"x2"	0.4	1.0	1160	16%	460V/3ø/HZ	
CCP-26	AHU-26 COOLING COIL	C	7	32	2"x2"	0.4	1.0	1160	16%	460V/3ø/HZ	

UNIT HEATER SCHEDULE (HYDRONIC)

DESIG	NOMINAL CFM	CAP BTUH @ 200°F EWT	CAP BTUH @ 30°F Δ T H_2O	MAXIMUM H_2O PD FT H_2O	MOTOR HP	RPM	ELECTRICAL	REMARKS
UH-10	2220	83.2	5.5	2.0	1/6	1070	120V/1ø/60HZ	DOWN-BLAST DISCHARGE
UH-11	1540	50.0	3.5	1.0	1/8	1550	120V/1ø/60HZ	HORIZONTAL DISCHARGE
UH-12	1100	31.7	2.5	1.0	1/8	1550	120V/1ø/60HZ	HORIZONTAL DISCHARGE

CABINET HEATER SCHEDULE

DESIG	NOMINAL CFM	REQUIRED MBH	KW	TEMP RISE °F	MOTOR HP	RPM	ELECTRICAL	REMARKS
CUH-1	1000	81.9	24.0	75.8	1/20	1550	480V/3ø/60HZ	WALL MOUNTED – SURFACE
CUH-2	1000	95.6	28.0	88.5	1/20	1550	480V/3ø/60HZ	WALL MOUNTED – SURFACE
CUH-3	1000	68.3	20.0	63.2	1/20	1550	480V/3ø/60HZ	WALL MOUNTED – SURFACE
CUH-4	1000	54.6	16.0	50.6	1/20	1550	480V/3ø/60HZ	WALL MOUNTED – SURFACE
CUH-5	1000	109.2	32.0	101.1	1/20	1550	480V/3ø/60HZ	WALL MOUNTED – SURFACE
CUH-6	750	40.9	12.0	50.5	1/20	1550	480V/3ø/60HZ	WALL MOUNTED – SURFACE
CUH-7	320	17.1	5.0	50.0	1/50	1550	480V/3ø/60HZ	WALL MOUNTED – SURFACE
CUH-8	400	20.5	6.0	47.4	1/20	1550	480V/3ø/60HZ	WALL MOUNTED – SURFACE
CUH-9	600	27.3	8.0	42.1	1/20	1550	480V/3ø/60HZ	WALL MOUNTED – SURFACE
CUH-10	310	10.2	3.0	31.1	1/20	1550	480V/3ø/60HZ	WALL MOUNTED – SURFACE
CUH-11	750	34.1	10.0	42.1	1/20	1550	480V/3ø/60HZ	CEILING MOUNTED – RECESSED
CUH-12	600	27.3	8.0	42.1	1/20	1550	480V/3ø/60HZ	CEILING MOUNTED – RECESSED
CUH-13	1000	54.6	16.0	50.6	1/20	1550	480V/3ø/60HZ	CEILING MOUNTED – RECESSED
CUH-14	320	17.1	5.0	50.0	1/50	1550	480V/3ø/60HZ	CEILING MOUNTED – RECESSED

HELLMUTH OBATA & KASSABAUM, INC.
Architecture, Engineering, Planning, Interiors, Facility Programming
323 West 8th Street, Suite700
Kansas City, Missouri 64105

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NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44

KEYPLAN

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SHEET TITLE
MECHANICAL SCHEDULE

CATEGORY - SUB-CATEGORY - SHEET
M.0-05

04.23.97-10:42 - 5110M05 - RMF #95110
A/S

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MAKE UP AIR UNIT SCHEDULE

DESIG	SERVICE ROOM No	LEVEL	TYPE (SEE SPEC)	FAN SECTION							HEATING SECTION			ELECTRICAL V/PH/HZ	REMARKS
				CFM	SP INCH H_2O	APPROX RPM	BHP	HP MOTOR SIZE	WHEEL DIA	DRIVE	EAT °F	LAT °F	OUTPUT MBH		
MAU-1A	2.10.02	MAIN CONCOURSE	A	5500	1.25	895	3.06	5.0	15	BELT	0	100	594.0	480V/3ø/60HZ	CEILING MOUNTED UNIT
MAU-2A	4.08.01	CLUB LEVEL	A	8600	1.25	950	4.08	5.0	15	BELT	0	60	557.0	480V/3ø/60HZ	CEILING MOUNTED UNIT
MAU-3A	6.13.01	UPPER SUITE	B	2750	1.25	1205	1.45	2.0	10	BELT	0	100	297.0	480V/3ø/60HZ	ROOF MOUNTED UNIT
MAU-4A	7.02.01	UPPER CONCOURSE	B	5500	1.25	780	2.46	3.0	15	BELT	0	100	594.0	480V/3ø/60HZ	ROOF MOUNTED UNIT
MAU-1B	2.19.01	MAIN CONCOURSE	A	8250	1.25	785	4.21	5.0	18	BELT	0	100	891.0	480V/3ø/60HZ	CEILING MOUNTED UNIT
MAU-2B	4.19.03	CLUB LEVEL	C	2575	1.25	1180	1.25	2.0	10	BELT	0	60	167.0	480V/3ø/60HZ	CEILING MOUNTED UNIT
MAU-3B	6.15.01	UPPER SUITE	B	5500	1.25	780	2.46	3.0	15	BELT	0	100	594.0	480V/3ø/60HZ	ROOF MOUNTED UNIT
MAU-4B	7.23.01	UPPER CONCOURSE	B	5500	1.25	780	2.46	3.0	15	BELT	0	100	594.0	480V/3ø/60HZ	ROOF MOUNTED UNIT
MAU-1C	2.34.01	MAIN CONCOURSE	A	11000	1.25	700	5.80	7.5	20	BELT	0	100	1,188.0	480V/3ø/60HZ	CEILING MOUNTED UNIT
MAU-2C	4.35.05	CLUB LEVEL	C	2575	1.25	1180	1.25	2.0	10	BELT	0	60	167.0	480V/3ø/60HZ	CEILING MOUNTED UNIT
MAU-3C	6.40.01	UPPER SUITE	B	2750	1.25	1205	1.45	2.0	10	BELT	0	100	297.0	480V/3ø/60HZ	ROOF MOUNTED UNIT
MAU-4C	7.32.01	UPPER CONCOURSE	B	2750	1.25	1205	1.45	2.0	10	BELT	0	100	297.0	480V/3ø/60HZ	ROOF MOUNTED UNIT
MAU-1D	2.46.01	MAIN CONCOURSE	A	8250	1.25	785	4.21	5.0	18	BELT	0	100	891.0	480V/3ø/60HZ	CEILING MOUNTED UNIT
MAU-2D	4.46.03	CLUB LEVEL	C	2575	1.25	1180	1.25	2.0	10	BELT	0	60	167.0	480V/3ø/60HZ	CEILING MOUNTED UNIT
MAU-3D	6.42.01	UPPER SUITE	B	5500	1.25	780	2.46	3.0	15	BELT	0	100	594.0	480V/3ø/60HZ	ROOF MOUNTED UNIT
MAU-4D	7.52.01	UPPER CONCOURSE	B	2750	1.25	1205	1.45	2.0	10	BELT	0	100	297.0	480V/3ø/60HZ	ROOF MOUNTED UNIT

NOTE: MAKE-UP AIR UNITS TYPE C REFER TO COOLING COIL SCHEDULE ON M.0-06

VARIABLE AIR VOLUME TERMINAL REHEAT UNIT SCHEDULE

No ⬡	CFM MAX	CFM MIN	INLET SIZE	OUTLET SIZE	STATIC PRESSURE DROP INCHES WG	MAX NC VALUE @1.0 INCH H_2O INLET SP	HEATING COIL PERFORMANCE EAT °F	LAT °F	MAX AIR P.D. IN. H_2O	MBH @190°F EWT	MAX H_2O PD FT H_2O	ROWS	GPM @30°F ΔT	REMARKS
1	2130	600	14"ø	20"x17"	0.49	–	55°	89	0.41	78.3	3.9	2	5.5	
2	300	0	5"ø	12"x8"	0.25	21	55°	97	0.13	13.5	0.3	2	1.0	
3	450	120	7"ø	12"x10"	0.29	20	55°	137	0.20	39.8	2.3	2	3.0	
4	1510	600	12"ø	16"x15"	0.56	–	55°	103	0.41	78.3	5.6	2	5.5	
5	480	0	7"ø	12"x10"	0.33	20	55°	81	0.20	13.5	2.3	2	1.0	
6	1290	600	10"ø	14"x12"	0.84	22	55°	111	0.45	78.3	4.5	2	5.5	
7	820	0	8"ø	12"x10"	0.69	25	55°	80	0.46	22.2	1.0	2	1.5	
8	1290	600	10"ø	14"x12"	0.84	22	55°	111	0.45	78.3	4.5	2	5.5	
9	820	0	8"ø	12"x10"	0.69	25	55°	80	0.46	22.2	1.0	2	1.5	
10	280	240	5"ø	12"x8"	0.25	21	55°	103	0.13	15.0	0.3	2	1.0	
11	2730	600	14"ø	20"x17"	0.84	–	55°	82	0.63	78.3	3.9	2	5.5	
12	300	0	5"ø	12"x8"	0.25	21	55°	97	0.13	13.5	0.3	2	1.0	
13	330	120	6"ø	12"x8"	0.32	20	55°	167	0.18	39.8	1.7	2	3.0	
14	1990	600	14"ø	20"x17"	0.49	–	55°	92	0.65	78.3	5.6	2	5.5	
15	480	0	7"ø	12"x10"	0.33	20	55°	81	0.20	13.5	2.3	2	1.0	
16	1550	600	12"ø	16"x15"	0.61	–	55°	102	0.41	78.3	5.7	2	5.5	
17	820	0	8"ø	12"x10"	0.69	25	55°	80	0.46	22.2	1.0	2	1.5	
18	1550	600	12"ø	16"x15"	0.61	–	55°	102	0.41	78.3	5.7	2	5.5	
19	820	0	8"ø	12"x10"	0.69	25	55°	80	0.46	22.2	1.0	2	1.5	
20	290	240	5"ø	12"x8"	0.25	21	55°	103	0.13	15.0	0.3	2	1.0	
21	2490	600	14"ø	20"x17"	0.74	–	55°	84	0.51	78.3	3.9	2	5.5	
22	300	0	5"ø	12"x8"	0.25	21	55°	97	0.13	13.5	0.3	2	1.0	
23	330	120	6"ø	12"x8"	0.32	20	55°	167	0.18	39.8	1.7	2	3.0	
24	2010	600	14"ø	20"x17"	0.49	–	55°	91	0.35	78.3	5.6	2	5.5	
25	480	0	7"ø	12"x10"	0.33	20	55°	81	0.20	13.5	2.3	2	1.0	
26	1550	600	12"ø	16"x15"	0.61	–	55°	102	0.41	78.3	5.7	2	5.5	
27	820	0	8"ø	12"x10"	0.69	25	55°	80	0.46	22.2	1.0	2	1.5	
28	1550	600	12"ø	16"x15"	0.61	–	55°	102	0.41	78.3	5.7	2	5.5	
29	820	0	8"ø	12"x10"	0.69	25	55°	80	0.46	22.2	1.0	2	1.5	
30	280	240	5"ø	12"x8"	0.25	21	55°	103	0.13	15.0	0.3	2	1.0	
31	2170	600	14"ø	20"x17"	0.49	–	55°	88	0.41	78.3	3.9	2	5.5	
32	300	0	5"ø	12"x8"	0.25	21	55°	97	0.13	13.5	0.3	2	1.0	
33	470	120	7"ø	12"x10"	0.33	20	55°	133	0.20	39.8	2.4	2	3.0	
34	1510	600	12"ø	16"x15"	0.56	–	55°	103	0.41	78.3	5.6	2	5.5	
35	480	0	7"ø	12"x10"	0.33	20	55°	81	0.20	13.5	2.3	2	1.0	
36	1290	600	10"ø	14"x12"	0.84	22	55°	111	0.45	78.3	4.5	2	5.5	
37	820	0	8"ø	12"x10"	0.69	25	55°	80	0.46	22.2	1.0	2	1.5	
38	1290	600	10"ø	14"x12"	0.84	22	55°	111	0.45	78.3	4.5	2	5.5	
39	820	0	8"ø	12"x10"	0.69	25	55°	80	0.46	22.2	1.0	2	1.5	
40	290	240	5"ø	12"x8"	0.25	21	55°	103	0.13	15.0	0.3	2	1.5	

AIR DEVICE SCHEDULE

TYPE	DUTY	CFM	SIZE	BLOW	PD IN H_2O	NC	REMARKS
A	CEILING SUPPLY	0–150	6"X6"	4–WAY	0.17	23	
A	CEILING SUPPLY	151–280	9"X9"	4–WAY	0.12	21	
A	CEILING SUPPLY	281–500	12"X12"	4–WAY	0.12	23	
A	CEILING SUPPLY	501–625	15"X15"	4–WAY	0.08	19	
A	CEILING SUPPLY	626–900	18"X18"	4–WAY	0.08	20	
A	CEILING SUPPLY	901–1225	21"X21"	4–WAY	0.08	21	
A	CEILING SUPPLY	1226–1600	24"X24"	4–WAY	0.08	22	
B	LINEAR BAR SUPPLY	100/FT	3 1/2"	0° DEFL	0.07	21	
B	LINEAR BAR SUPPLY	120/FT	4"	0° DEFL	0.07	22	
B	LINEAR BAR SUPPLY	160/FT	5"	0° DEFL	0.07	22	
B	LINEAR BAR SUPPLY	200/FT	6"	0° DEFL	0.07	24	
C	SUPPLY REGISTER	0–130	6"X6"	22.5° DEFL	0.10	20	
C	SUPPLY REGISTER	131–230	10"X6"	22.5° DEFL	0.10	23	
C	SUPPLY REGISTER	231–330	14"X6"	22.5° DEFL	0.10	24	
C	SUPPLY REGISTER	331–430	20"X6" *	22.5° DEFL	0.08	21	* OR EQUIVALENT
C	SUPPLY REGISTER	431–530	18"X8" *	22.5°DEFL	0.08	22	* OR EQUIVALENT
C	SUPPLY REGISTER	531–670	18"X10" *	22.5° DEFL	0.08	23	* OR EQUIVALENT
C	SUPPLY REGISTER	671–820	22"X10" *	22.5° DEFL	0.08	23	* OR EQUIVALENT
C	SUPPLY REGISTER	821–1000	24"X12" *	22.5° DEFL	0.08	21	* OR EQUIVALENT
C	SUPPLY REGISTER	1001–1200	30"X12" *	22.5° DEFL	0.06	22	* OR EQUIVALENT
D	LINEAR SLOT SUPPLY	70/FT	3@1" SLOT	1–WAY	0.05	22	
D	LINEAR SLOT SUPPLY	100/FT	4@1" SLOT	1–WAY	0.05	24	
D	LINEAR SLOT SUPPLY	110/FT	5@1" SLOT	1–WAY	0.05	23	
D	LINEAR SLOT SUPPLY	120/FT	6@1" SLOT	1–WAY	0.05	21	
E	RETURN REGISTER	0–170	6"X6"	0° DEFL	0.11	22	
E	RETURN REGISTER	171–230	8"X6"	0° DEFL	0.11	22	
E	RETURN REGISTER	231–310	10"X6"	0° DEFL	0.11	23	
E	RETURN REGISTER	311–370	12"X6"	0° DEFL	0.11	24	
E	RETURN REGISTER	371–460	12"X8" *	0° DEFL	0.11	22	* OR EQUIVALENT
E	RETURN REGISTER	461–580	12"X10" *	0° DEFL	0.11	23	* OR EQUIVALENT
E	RETURN REGISTER	581–700	24"X6" *	0° DEFL	0.11	24	* OR EQUIVALENT
E	RETURN REGISTER	701–800	18"X10" *	0° DEFL	0.11	21	* OR EQUIVALENT
E	RETURN REGISTER	801–950	18"X12" *	0° DEFL	0.11	22	* OR EQUIVALENT
E	RETURN REGISTER	951–1100	18"X14" *	0° DEFL	0.11	22	* OR EQUIVALENT
E	RETURN REGISTER	1101–1500	18"X18" *	0° DEFL	0.11	23	* OR EQUIVALENT
E	RETURN REGISTER	1501–1600	30"X12" *	0° DEFL	0.11	24	* OR EQUIVALENT
E	RETURN REGISTER	1601–2100	30"X18" *	0° DEFL	0.11	21	* OR EQUIVALENT
F	EXHAUST GRILLE	0–170	6"X6"	0° DEFL	0.11	22	
F	EXHAUST GRILLE	171–230	8"X6"	0° DEFL	0.11	22	
F	EXHAUST GRILLE	231–310	10"X6"	0° DEFL	0.11	23	
F	EXHAUST GRILLE	311–370	12"X6"	0° DEFL	0.11	24	
F	EXHAUST GRILLE	371–460	12"X8" *	0° DEFL	0.11	22	* OR EQUIVALENT
F	EXHAUST GRILLE	461–580	12"X10" *	0° DEFL	0.11	23	* OR EQUIVALENT
F	EXHAUST GRILLE	581–700	24"X6" *	0° DEFL	0.11	24	* OR EQUIVALENT
F	EXHAUST GRILLE	701–800	18"X10" *	0° DEFL	0.11	21	* OR EQUIVALENT
F	EXHAUST GRILLE	801–950	18"X12" *	0° DEFL	0.11	22	* OR EQUIVALENT
F	EXHAUST GRILLE	951–1100	18"X14" *	0° DEFL	0.11	22	* OR EQUIVALENT
F	EXHAUST GRILLE	1101–1500	18"X18" *	0° DEFL	0.11	23	* OR EQUIVALENT
F	EXHAUST GRILLE	1501–1600	30"X12" *	0° DEFL	0.11	24	* OR EQUIVALENT
F	EXHAUST GRILLE	1601–2100	30"X18" *	0° DEFL	0.11	21	* OR EQUIVALENT
G	TRANSFER GRILLE	0–170	6"X6"	0° DEFL	0.11	22	
G	TRANSFER GRILLE	171–230	8"X6"	0° DEFL	0.11	22	
G	TRANSFER GRILLE	231–310	10"X6"	0° DEFL	0.11	23	
G	TRANSFER GRILLE	311–370	12"X6"	0° DEFL	0.11	24	
G	TRANSFER GRILLE	371–460	12"X8" *	0° DEFL	0.11	22	* OR EQUIVALENT
G	TRANSFER GRILLE	461–580	12"X10" *	0° DEFL	0.11	23	* OR EQUIVALENT
G	TRANSFER GRILLE	581–700	24"X6" *	0° DEFL	0.11	24	* OR EQUIVALENT
G	TRANSFER GRILLE	701–800	18"X10" *	0° DEFL	0.11	21	* OR EQUIVALENT
G	TRANSFER GRILLE	801–950	18"X12" *	0° DEFL	0.11	22	* OR EQUIVALENT
G	TRANSFER GRILLE	951–110	18"X14" *	0° DEFL	0.11	22	* OR EQUIVALENT
G	TRANSFER GRILLE	1101–1500	18"X18" *	0° DEFL	0.11	23	* OR EQUIVALENT
G	TRANSFER GRILLE	1501–1600	30"X12" *	0° DEFL	0.11	24	* OR EQUIVALENT
G	TRANSFER GRILLE	1601–2100	30"X18" *	0° DEFL	0.11	21	* OR EQUIVALENT
J	SPOT DIFFUSER	320–500	12"ø	40° ROTATION	0.24	25	0° ROTATION @ SIDEWALL
J	SPOT DIFFUSER	501–950	16"ø	40° ROTATION	0.21	26	

COOLING COIL SCHEDULE

DESIG	DUTY	CFM	COOLING SECTION EAT °F DB	EAT °F WB	LAT °F DB	LAT °F WB	TOTAL MBH	SENS MBH	GPM @ 36°F EWT 54°F LWT	MAX H_2O PD FT H_2O	MIN TOTAL FACE AREA	MAXIMUM FACE VEL FPM	No OF COILS	MAX FIN SPACING FIN/IN	MAXIMUM AIR PD IN H_2O	MIN ROWS	REMARKS
CC-MAU-2B	RM 4.19.03	2575	94	78	58	57.8	187	100	23	20	5.2	500	1	11	0.39	4	40% GLYCOL
CC-MAU-2C	RM 4.35.05	2575	94	78	58	57.8	187	100	23	20	5.2	500	1	11	0.39	4	40% GLYCOL
CC-MAU-2D	RM 4.46.03	2575	94	78	58	57.8	187	100	23	20	5.2	500	1	11	0.39	4	40% GLYCOL

HELLMUTH OBATA & KASSABAUM, INC.
Architecture, Engineering, Planning, Interiors, Facility Programming
320 West 8th Street, Suite700
Kansas City, Missouri 64105

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PACKAGE
MEP PACKAGE
DRAWING PACKAGE 09B SUBMITTAL

REVISIONS

NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44
3	7-25-97	BULLETIN #71

KEYPLAN

PROJECT NO. 95-675-00 | ISSUED BY: ---
DRAWN BY: | REVIEWED BY: PMP
ISSUED: 2-28-97
SHEET TITLE

MECHANICAL SCHEDULE

CATEGORY - SUB-CATEGORY - SHEET
M.0-06

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31.07.97-09:37-5110M06 - RMF #95110

FAN POWERED TERMINAL REHEAT UNIT SCHEDULE

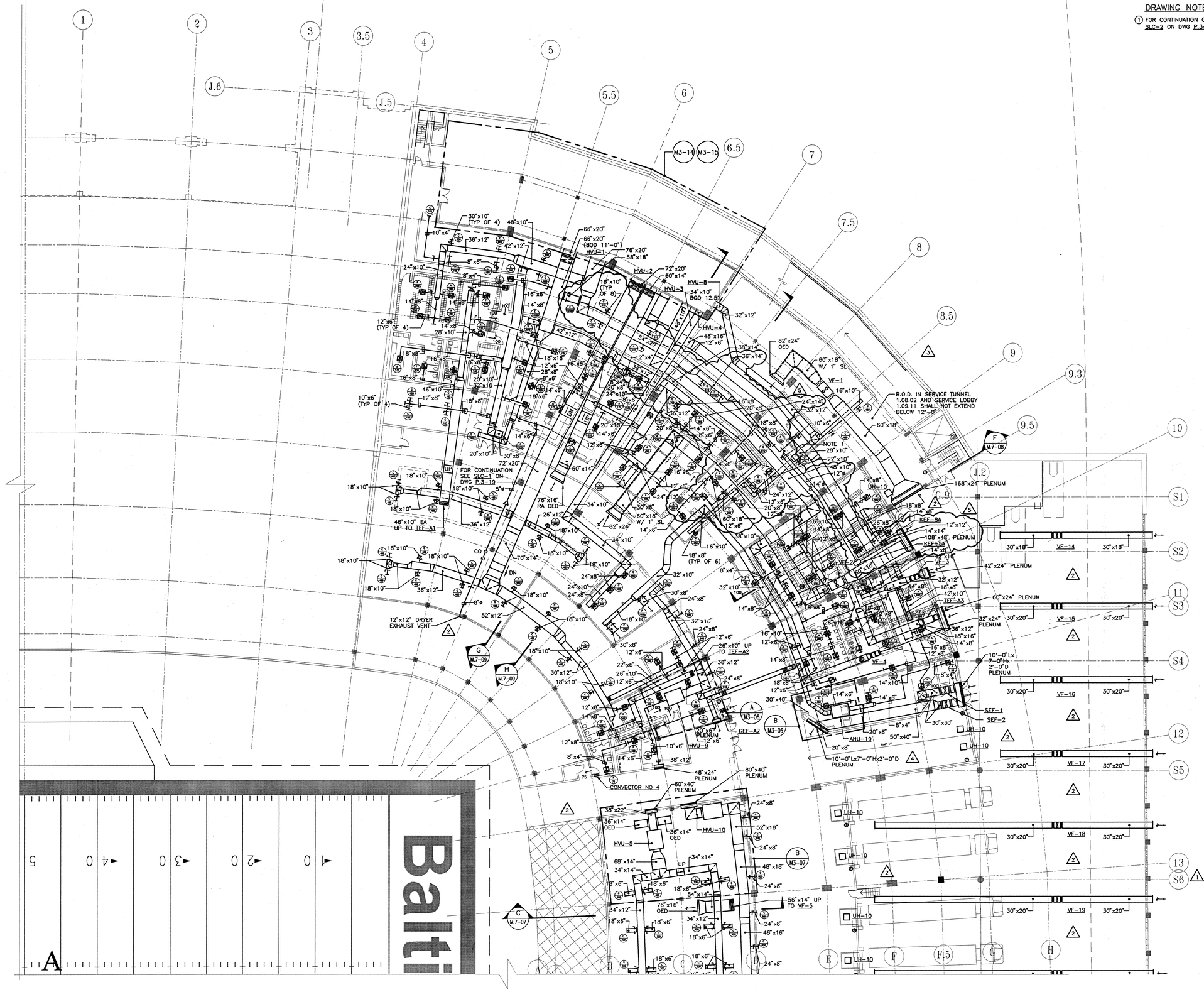
NO ☐	FAN CFM	PRIMARY AIR CFM MAX	PRIMARY AIR CFM MIN	INLET SIZE	OUTLET SIZE	PRIMARY AIR SP LOSS INCHES H_2O	FAN DATA HP	FLA	DISCH SP	ELECTRICAL	HEATING COIL PERFORMANCE EAT °F	LAT °F	BTUH @190°F EWT	MAX. H_2O PD FT H_2O	ROWS	GPM @30°F ΔT	FILTER SIZE	EFFICIENCY
1	160	110	80	6"ø	6 7/8x10 3/8	0.02	1/10	0.8	0.40	277V/1ø/60HZ	60	85	4320	1.0	1	0.5	16"x14"	20%
2	1670	1110	555	12"ø	13 1/4x11 1/2	0.18	1/2	4.6	0.40	277V/1ø/60HZ	65	93	50447	1.0	2	3.4	17"x17"	20%
3	2020	1350	675	12"ø	13 1/4x11 1/2	0.22	3/4	5.4	0.40	277V/1ø/60HZ	65	85	43686	1.0	1	2.9	22"x19"	20%
4	1670	1110	555	12"ø	13 1/4x11 1/2	0.18	1/2	4.6	0.40	277V/1ø/60HZ	65	93	50447	1.0	2	3.4	17"x17"	20%
5	1570	1050	525	12"ø	13 1/4x11 1/2	0.17	1/2	4.6	0.40	277V/1ø/60HZ	65	85	33966	1.0	1	2.3	17"x17"	20%
6	280	190	95	6"ø	6 7/8x10 3/8	0.05	1/10	0.8	0.40	277V/1ø/60HZ	65	85	6102	1.0	1	0.5	16"x14"	20%
7	1260	840	420	10"ø	10 1/2x10 3/8	0.19	1/3	3.1	0.40	277V/1ø/60HZ	65	85	27216	1.0	1	1.8	17"x17"	20%
8	1940	1290	645	12"ø	13 1/4x11 1/2	0.19	3/4	5.4	0.40	277V/1ø/60HZ	65	85	41850	1.0	1	2.8	22"x19"	20%
9	1930	1290	645	12"ø	13 1/4x11 1/2	0.19	3/4	5.4	0.40	277V/1ø/60HZ	65	85	41742	1.0	1	2.8	22"x19"	20%
1	1500	1000	500	12"ø	13 1/4x11 1/2	0.17	1/2	4.6	0.40	277V/1ø/60HZ	65	85	32400	1.0	1	2.2	17"x17"	20%
11	1110	740	370	10"ø	10 1/2x10 3/8	0.11	1/3	3.1	0.40	277V/1ø/60HZ	65	85	23976	1.0	1	1.6	17"x17"	20%
12	945	630	315	10"ø	10 1/2x10 3/8	0.06	1/3	3.1	0.40	277V/1ø/60HZ	65	85	20412	1.0	1	1.3	17"x17"	20%
13	1480	990	495	12"ø	13 1/4x11 1/2	0.15	1/2	4.6	0.40	277V/1ø/60HZ	65	85	32022	1.0	1	2.1	17"x17"	20%
14	740	490	245	8"ø	9 1/4x10 3/8	0.10	1/4	2.1	0.40	277V/1ø/60HZ	65	85	15930	1.0	1	1.1	16"x14"	20%
15	320	210	105	6"ø	6 7/8x10 3/8	0.07	1/10	0.8	0.40	277V/1ø/60HZ	65	85	6858	1.0	1	0.5	16"x14"	20%
16	1800	1200	600	12"ø	13 1/4x11 1/2	0.20	3/4	5.4	0.40	277V/1ø/60HZ	65	115	97200	1.0	2	6.5	22"x19"	20%
17	1785	1190	595	12"ø	13 1/4x11 1/2	0.19	3/4	5.4	0.40	277V/1ø/60HZ	65	115	96390	1.0	2	6.4	22"x19"	20%
18	2040	1360	680	12"ø	13 1/4x11 1/2	0.22	3/4	5.4	0.40	277V/1ø/60HZ	65	85	44064	1.0	1	2.9	22"x19"	20%
19	1000	670	335	10"ø	10 1/2x10 3/8	0.09	1/3	3.1	0.40	277V/1ø/60HZ	65	85	21654	1.0	1	1.4	17"x17"	20%
20	1780	1190	595	12"ø	13 1/4x11 1/2	0.19	3/4	5.4	0.40	277V/1ø/60HZ	65	115	96174	1.0	2	6.4	22"x19"	20%
21	2270	1510	755	14"ø	13 5/8x11 7/8	0.20	3/4	5.7	0.40	277V/1ø/60HZ	65	85	48978	1.0	1	3.3	24"x20"	20%
22	760	510	255	8"ø	9 1/4x10 3/8	0.11	1/4	2.1	0.40	277V/1ø/60HZ	65	85	16470	1.0	1	1.1	16"x14"	20%
23	1520	1010	505	12"ø	13 1/4x11 1/2	0.18	1/2	4.6	0.40	277V/1ø/60HZ	65	85	32778	1.0	1	2.2	17"x17"	20%
24	615	410	205	8"ø	9 1/4x10 3/8	0.06	1/4	2.1	0.40	277V/1ø/60HZ	65	85	13284	1.0	1	0.9	16"x14"	20%
25	1290	860	430	10"ø	10 1/2x10 3/8	0.15	1/3	3.1	0.40	277V/1ø/60HZ	65	85	27864	1.0	1	1.9	17"x17"	20%
26	1470	980	490	12"ø	13 1/4x11 1/2	0.15	1/2	4.6	0.40	277V/1ø/60HZ	65	85	31752	1.0	1	2.1	17"x17"	20%
27	1630	1090	545	12"ø	13 1/4x11 1/2	0.20	1/2	4.6	0.40	277V/1ø/60HZ	65	85	35262	1.0	1	2.4	17"x17"	20%
28	940	630	315	10"ø	10 1/2x10 3/8	0.06	1/3	3.1	0.40	277V/1ø/60HZ	65	85	20358	1.0	1	1.4	17"x17"	20%
29	1880	1250	625	12"ø	13 1/4x11 1/2	0.25	3/4	5.4	0.40	277V/1ø/60HZ	65	85	40554	1.0	1	2.7	22"x19"	20%
30	1705	1140	570	12"ø	13 1/4x11 1/2	0.20	3/4	5.4	0.40	277V/1ø/60HZ	65	85	36882	1.0	1	2.5	22"x19"	20%
31	1700	1130	565	12"ø	13 1/4x11 1/2	0.18	3/4	5.4	0.40	277V/1ø/60HZ	65	85	36666	1.0	1	2.4	22"x19"	20%
32	1550	1030	515	12"ø	13 1/4x11 1/2	0.17	1/2	4.6	0.40	277V/1ø/60HZ	65	85	33426	1.0	1	2.2	17"x17"	20%
33	1080	720	360	10"ø	10 1/2x10 3/8	0.10	1/3	3.1	0.40	277V/1ø/60HZ	65	100	40824	1.0	2	2.7	17"x17"	20%
34	1330	890	445	10"ø	10 1/2x10 3/8	0.18	1/3	3.1	0.40	277V/1ø/60HZ	65	85	28782	1.0	1	1.9	17"x17"	20%
35	1090	730	365	10"ø	10 1/2x10 3/8	0.10	1/3	3.1	0.40	277V/1ø/60HZ	65	100	41256	1.0	2	2.8	17"x17"	20%
36	1540	1030	515	12"ø	13 1/4x11 1/2	0.18	1/2	4.6	0.40	277V/1ø/60HZ	65	85	33318	1.0	1	2.2	17"x17"	20%
37	1710	1140	570	12"ø	13 1/4x11 1/2	0.20	3/4	5.4	0.40	277V/1ø/60HZ	65	85	36936	1.0	1	2.5	22"x19"	20%
38	1180	790	395	10"ø	10 1/2x10 3/8	0.12	1/3	3.1	0.40	277V/1ø/60HZ	65	85	25542	1.0	1	1.7	17"x17"	20%
39	2300	1530	765	14"ø	13 5/8x11 7/8	0.20	3/4	5.7	0.40	277V/1ø/60HZ	65	90	62046	1.0	2	4.1	24"x20"	20%
40	1090	730	365	10"ø	10 1/2x10 3/8	0.10	1/3	3.1	0.40	277V/1ø/60HZ	65	85	23598	1.0	1	1.6	17"x17"	20%
41	1600	1070	535	12"ø	13 1/4x11 1/2	0.20	1/2	4.6	0.40	277V/1ø/60HZ	65	85	34614	1.0	1	2.3	17"x17"	20%
42	2265	1510	755	14"ø	13 5/8x11 7/8	0.20	3/4	5.7	0.40	277V/1ø/60HZ	65	90	61155	1.0	2	4.1	24"x20"	20%
43	2240	1490	745	14"ø	13 1/4x11 1/2	0.20	3/4	5.7	0.40	277V/1ø/60HZ	65	100	84618	1.0	2	5.6	24"x20"	20%
44	1115	740	370	10"ø	10 1/2x10 3/8	0.12	1/3	3.1	0.40	277V/1ø/60HZ	65	100	42093	1.0	2	2.8	17"x17"	20%
45	780	520	260	8"ø	9 1/4x10 3/8	0.11	1/4	2.1	0.40	277V/1ø/60HZ	65	90	21060	1.0	1	1.4	16"x14"	20%
46	1120	750	375	10"ø	10 1/2x10 3/8	0.12	1/3	3.1	0.40	277V/1ø/60HZ	65	110	54486	1.0	2	3.6	17"x17"	20%
47	1030	690	345	10"ø	10 1/2x10 3/8	0.09	1/3	3.1	0.40	277V/1ø/60HZ	65	85	22302	1.0	1	1.5	17"x17"	20%
48	2075	1380	690	12"ø	13 1/4x11 1/2	0.25	3/4	5.4	0.40	277V/1ø/60HZ	65	85	44766	1.0	1	3.0	22"x19"	20%
49	780	520	260	8"ø	9 1/4x10 3/8	0.11	1/4	2.1	0.40	277V/1ø/60HZ	65	85	16848	1.0	1	1.1	16"x14"	20%
50	1040	690	345	10"ø	10 1/2x10 3/8	0.09	1/3	3.1	0.40	277V/1ø/60HZ	65	100	39258	1.0	2	2.6	17"x17"	20%
51	2080	1390	695	12"ø	13 1/4x11 1/2	0.22	3/4	5.4	0.40	277V/1ø/60HZ	65	100	78678	1.0	1	5.2	22"x19"	20%
52	1880	1250	625	12"ø	13 1/4x11 1/2	0.21	3/4	5.4	0.40	277V/1ø/60HZ	65	90	50706	1.0	2	3.4	22"x19"	20%
53	1700	1130	565	12"ø	13 1/4x11 1/2	0.20	3/4	5.4	0.40	277V/1ø/60HZ	65	85	36666	1.0	1	2.4	22"x19"	20%
54	1185	1260	630	12"ø	13 1/4x11 1/2	0.21	3/4	5.4	0.40	277V/1ø/60HZ	65	90	50949	1.0	1	3.4	22"x19"	20%
55	1890	1260	630	12"ø	13 1/4x11 1/2	0.21	3/4	5.4	0.40	277V/1ø/60HZ	65	90	51030	1.0	1	3.4	22"x19"	20%
56	1720	1150	575	12"ø	13 1/4x11 1/2	0.20	3/4	5.4	0.40	277V/1ø/60HZ	65	85	37206	1.0	1	2.5	22"x19"	20%
57	1490	990	495	12"ø	13 1/4x11 1/2	0.15	1/2	4.6	0.40	277V/1ø/60HZ	65	85	32130	1.0	1	2.1	17"x17"	20%
58	960	640	320	10"ø	10 1/2x10 3/8	0.06	1/3	3.1	0.40	277V/1ø/60HZ	65	90	25920	1.0	1	1.7	17"x17"	20%
59	1650	1100	550	12"ø	13 1/4x11 1/2	0.19	1/2	4.6	0.40	277V/1ø/60HZ	65	85	35640	1.0	1	2.4	17"x17"	20%
60	1870	1250	625	12"ø	13 1/4x11 1/2	0.21	3/4	5.4	0.40	277V/1ø/60HZ	65	90	50544	1.0	1	3.4	22"x19"	20%
61	~~1380~~	~~920~~	~~460~~	10"ø	10 1/2x10 3/8	0.18	1/3	3.1	0.40	277V/1ø/60HZ	65	85	29808	1.0	1	2.0	17"x17"	20%
62	1375	920	460	10"ø	10 1/2x10 3/8	0.18	1/3	3.1	0.40	277V/1ø/60HZ	65	85	29754	1.0	1	2.0	17"x17"	20%
63	1870	1250	625	12"ø	13 1/4x11 1/2	0.21	3/4	5.4	0.40	277V/1ø/60HZ	65	90	50544	1.0	1	3.4	22"x19"	20%
64	1640	1090	545	12"ø	13 1/4x11 1/2	0.20	1/2	4.6	0.40	277V/1ø/60HZ	65	85	35370	1.0	1	2.4	17"x17"	20%
65	1115	740	370	10"ø	10 1/2x10 3/8	0.12	1/3	3.1	0.40	277V/1ø/60HZ	65	85	24030	1.0	1	1.6	17"x17"	20%
66	1650	1100	550	12"ø	13 1/4x11 1/2	0.18	1/2	4.6	0.40	277V/1ø/60HZ	65	85	35640	1.0	1	2.4	17"x17"	20%
67	400	270	135	6"ø	6 7/8x10 3/8	0.14	1/10	0.8	0.40	277V/1ø/60HZ	65	85	8694	1.0	1	0.6	16"x14"	20%
68	1375	920	460	10"ø	10 1/2x10 3/8	0.18	1/3	3.1	0.40	277V/1ø/60HZ	65	85	29754	1.0	1	2.0	17"x17"	20%
69	1800	1200	600	12"ø	13 1/4x11 1/2	0.19	3/4	5.4	0.40	277V/1ø/60HZ	65	97	62208	1.0	2	4.1	22"x19"	20%
70	540	360	180	8"ø	9 1/4x10 3/8	0.04	1/4	2.1	0.40	277V/1ø/60HZ	65	97	18662	1.0	2	1.2	16"x14"	20%
71	1120	750	375	10"ø	10 1/2x10 3/8	0.12	1/3	3.1	0.40	277V/1ø/60HZ	65	97	38761	1.0	2	2.6	17"x17"	20%
72	960	640	320	10"ø	10 1/2x10 3/8	0.07	1/3	3.1	0.40	277V/1ø/60HZ	65	97	33178	1.0	2	2.2	17"x17"	20%
73	1570	1050	525	12"ø	13 1/4x11 1/2	0.18	1/2	4.6	0.40	277V/1ø/60HZ	65	108	72965	1.0	2	4.9	17"x17"	20%
74	1800	1200	600	12"ø	13 1/4x11 1/2	0.19	3/4	5.4	0.40	277V/1ø/60HZ	65	108	83592	1.0	2	5.6	22"x19"	20%
75	860	570	285	10"ø	10 1/2x10 3/8	0.05	1/3	3.1	0.40	277V/1ø/60HZ	65	108	39884	1.0	2	2.7	17"x17"	20%
76	1920	1280	640	12"ø	13 1/4x11 1/2	0.22	3/4	5.4	0.40	277V/1ø/60HZ	65	108	89165	1.0	2	5.9	22"x19"	20%
77	2200	1470	735	14"ø	13 5/8x11 7/8	0.15	3/4	5.7	0.40	277V/1ø/60HZ	65	85	47574	1.0	1	3.2	24"x20"	20%
78	860	570	285	10"ø	10 1/2x10 3/8	0.05	1/3	3.1	0.40	277V/1ø/60HZ	65	85	18522	1.0	1	1.2	17"x17"	20%
79	510	340	170	8"ø	9 1/4x10 3/8	0.04	1/4	2.1	0.40	277V/1ø/60HZ	65	85	11016	1.0	1	0.7	16"x14"	20%
80	840	560	280	10"ø	10 1/2x10 3/8	0.04	1/3	3.1	0.40	277V/1ø/60HZ	65	85	18144	1.0	1	1.2	17"x17"	20%
81	510	340	170	8"ø	9 1/4x10 3/8	0.04	1/4	2.1	0.40	277V/1ø/60HZ	65	85	11016	1.0	1	0.7	16"x14"	20%
82	1310	870	435	10"ø	10 1/2x10 3/8	0.17	1/3	3.1	0.40	277V/1ø/60HZ	65	85	28242	1.0	1	1.9	17"x17"	20%
83	2300	1530	765	14"ø	13 5/8x11 7/8	0.20	3/4	5.7	0.40	277V/1ø/60HZ	65	85	49626	1.0	1	3.3	24"x20"	20%
84	1500	1000	500	12"ø	13 1/4x11 1/2	0.18	1/2	4.6	0.40	277V/1ø/60HZ	65	90	40500	1.0	2	3.3	22"x19"	20%
85	1820	1210	605	12"ø	13 1/4x11 1/2	0.20	3/4	5.4	0.40	277V/1ø/60HZ	65	90	49140	1.0	2	2.7	17"x17"	20%
86	1585	1060	530	12"ø	13 1/4x11 1/2	0.18	1/2	4.6	0.40	277V/1ø/60HZ	65	108	73661	1.0	2	4.9	17"x17"	20%
87	590	390	195	8"ø	9 1/4x10 3/8	0.05	1/4	4.6	0.40	277V/1ø/60HZ	65	108	27346	1.0	2	1.8	16"x14"	20%
88	1120	750	375	10"ø	10 1/2x10 3/8	0.12	1/3	3.1	0.40	277V/1ø/60HZ	65	97	38761	1.0	2	2.6	17"x17"	20%
89	540	360	180	8"ø	9 1/4x10 3/8	0.04	1/4	2.1	0.40	277V/1ø/60HZ	65	97	18662	1.0	2	1.2	16"x14"	20%
90	1230	820	410	10"ø	10 1/2x10 3/8	0.12	1/3	3.1	0.40	277V/1ø/60HZ	65	97	42509	1.0	2	2.8	17"x17"	20%
91	1375	920	460	10"ø	10 1/2x10 3/8	0.14	1/3	3.1	0.40	277V/1ø/60HZ	65	97	47574	1.0	2	3.2	17"x17"	20%
92	400	270	135	6"ø	6 7/8x10 3/8	0.14	1/10	0.8	0.40	277V/1ø/60HZ	65	85	8694	1.0	1	0.6	16"x14"	20%
93	1650	1100	550	12"ø	13 1/4x11 1/2	0.18	1/2	4.6	0.40	277V/1ø/60HZ	65	85	35640	1.0	1	2.4	17"x17"	20%
94	1115	740	370	10"ø	10 1/2x10 3/8	0.12	1/3	3.1	0.40	277V/1ø/60HZ	65	85	24030	1.0	1	1.6	17"x17"	20%
95	1780	1190	595	12"ø	13 1/4x11 1/2	0.20	3/4	5.4	0.40	277V/1ø/60HZ	65	115	96174	1.0	2	6.4	22"x19"	20%
96	465	310	155	6"ø	6 7/8x10 3/8	0.18	1/10	0.8	0.40	277V/1ø/60HZ	65	99	17075	1.0	1	1.1	16"x14"	20%
97	930	620	310	10"ø	10 1/2x10 3/8	0.08	1/3	3.1	0.40	277V/1ø/60HZ	65	99	34150	1.0	2	2.3	17"x17"	20%
98	1800	1200	600	12"ø	13 1/4x11 1/2	0.19	3/4	5.4	0.40	277V/1ø/60HZ	65	115	97200	1.0	2	6.5	22"x19"	20%
99	390	260	130	6"ø	6 7/8x10 3/8	0.14	1/10	0.8	0.40	277V/1ø/60HZ	65	99	14321	1.0	1	1.0	16"x14"	20%
100	2080	1390	695	12"ø	13 1/4x11 1/2	0.19	3/4	5.4	0.40	277V/1ø/60HZ	65	90	56214	1.0	2	3.7	22"x19"	20%

FAN POWERED TERMINAL REHEAT UNIT SCHEDULE

NO ☐	FAN CFM	PRIMARY AIR CFM MAX	PRIMARY AIR CFM MIN	INLET SIZE	OUTLET SIZE	PRIMARY AIR SP LOSS INCHES H_2O	FAN DATA HP	FLA	DISCH SP	ELECTRICAL	HEATING COIL PERFORMANCE EAT °F	LAT °F	BTUH @190°F EWT	MAX. H_2O PD FT H_2O	ROWS	GPM @30°F ΔT	FILTER SIZE	EFFICIENCY
101	2070	1380	690	12"ø	13 1/4x11 1/2	0.19	3/4	5.4	0.40	277V/1ø/60HZ	65	90	55890	1.0	2	3.7	22"x19"	20%
102	690	460	230	8"ø	9 1/4x10 3/8	0.09	1/4	2.1	0.40	277V/1ø/60HZ	65	85	14904	1.0	1	1.0	16"x14"	20%
103	590	390	195	8"ø	9 1/4x10 3/8	0.06	1/4	2.1	0.40	277V/1ø/60HZ	65	85	12690	1.0	1	0.8	16"x14"	20%
104	1360	910	455	10"ø	10 1/2x10 3/8	0.19	1/3	3.1	0.40	277V/1ø/60HZ	65	85	29430	1.0	1	2.0	17"x17"	20%
105	1660	1110	555	12"ø	13 1/4x11 1/2	0.19	1/2	4.6	0.40	277V/1ø/60HZ	65	90	44874	1.0	2	3.0	17"x17"	20%
106	400	270	135	6"ø	6 7/8x10 3/8	0.14	1/10	0.8	0.40	277V/1ø/60HZ	65	85	8694	1.0	1	0.6	16"x14"	20%
107	1225	820	410	10"ø	10 1/2x10 3/8	0.15	1/3	3.1	0.40	277V/1ø/60HZ	65	85	26514	1.0	1	1.8	17"x17"	20%
108	1500	1000	500	12"ø	13 1/4x11 1/2	0.18	1/2	4.6	0.40	277V/1ø/60HZ	65	90	40500	1.0	2	2.7	17"x17"	20%
109	500	330	165	8"ø	9 1/4x 10 3/8	0.03	1/4	2.1	0.40	277V/1ø/60HZ	65	90	13500	1.0	1	0.9	16"x14"	20%
110	465	310	155	6"ø	6 7/8x10 3/8	0.18	1/10	0.8	0.40	277V/1ø/60HZ	65	99	17075	1.0	1	1.1	16"x14"	20%
111	410	270	135	6"ø	6 7/8x10 3/8	0.14	1/10	0.8	0.40	277V/1ø/60HZ	65	99	15001	1.0	1	1.0	16"x14"	20%
112	1800	1200	600	12"ø	13 1/4x11 1/2	0.19	3/4	5.4	0.40	277V/1ø/60HZ	65	115	97200	1.0	2	6.5	22"x19"	20%
113	930	620	310	10"ø	10 1/2x10 3/8	0.08	1/3	3.1	0.40	277V/1ø/60HZ	65	99	34150	1.0	2	2.3	17"x17"	20%
114	465	310	155	6"ø	6 7/8x10 3/8	0.18	1/10	0.8	0.40	277V/1ø/60HZ	65	99	17075	1.0	1	1.1	16"x14"	20%
115	1780	1190	595	12"ø	13 1/4x11 1/2	0.19	3/4	5.4	0.40	277V/1ø/60HZ	65	115	96174	1.0	2	6.4	22"x19"	20%
116	1565	1040	520	12"ø	13 1/4x11 1/2	0.18	1/2	4.6	0.40	277V/1ø/60HZ	65	96	52342	1.0	2	3.5	17"x17"	20%
117	1200	800	400	10"ø	10 1/2x10 3/8	0.15	1/3	3.1	0.40	277V/1ø/60HZ	65	96	40176	1.0	2	2.7	17"x17"	20%
118	610	410	205	8"ø	9 1/4x10 3/8	0.09	1/4	2.1	0.40	277V/1ø/60HZ	65	90	16524	1.0	1	1.1	16"x14"	20%
119	510	340	170	8"ø	9 1/4x10 3/8	0.06	1/4	2.1	0.40	277V/1ø/60HZ	65	85	11016	1.0	1	0.7	16"x14"	20%
120	360	240	120	6"ø	6 7/8x10 3/8	0.07	1/10	0.8	0.40	277V/1ø/60HZ	65	85	7776	1.0	1	0.5	16"x14"	20%
121	220	150	80	6"ø	6 7/8x10 3/8	0.03	1/10	0.8	0.40	277V/1ø/60HZ	65	85	4968	1.0	1	0.5	16"x14"	20%
122	430	290	145	8"ø	9 1/4x10 3/8	0.03	1/10	0.8	0.40	277V/1ø/60HZ	65	105	18630	1.0	2	1.2	16"x14"	20%
123	535	360	180	8"ø	9 1/4x10 3/8	0.04	1/4	2.1	0.40	277V/1ø/60HZ	65	105	23166	1.0	2	1.5	16"x14"	20%
124	390	260	130	6"ø	6 7/8x10 3/8	0.03	1/10	0.8	0.40	277V/1ø/60HZ	65	90	10530	1.0	1	0.7	16"x14"	20%
125	435	290	145	8"ø	9 1/4x10 3/8	0.03	1/10	0.8	0.40	277V/1ø/60HZ	65	105	18792	1.0	2	1.3	16"x14"	20%
126	1600	1070	535	12"ø	13 1/4x11 1/2	0.20	1/2	4.6	0.40	277V/1ø/60HZ	65	85	34614	1.0	1	2.3	17"x17"	20%
127	370	250	125	6"ø	6 7/8x10 3/8	0.08	1/10	0.8	0.40	277V/1ø/60HZ	65	105	16038	1.0	1	1.1	16"x14"	20%
128	530	350	175	8"ø	9 1/4x10 3/8	0.05	1/4	2.1	0.40	277V/1ø/60HZ	65	85	11394	1.0	1	0.8	16"x14"	20%
129	275	180	905	6"ø	6 7/8x10 3/8	0.06	1/10	0.8	0.40	277V/1ø/60HZ	65	105	11826	1.0	1	0.8	16"x14"	20%
130	1595	1060	530	12"ø	13 1/4x11 1/2	0.18	1/2	4.6	0.40	277V/1ø/60HZ	65	85	34398	1.0	1	2.3	17"x17"	20%
131	540	360	180	8"ø	9 1/4x 10 3/8	0.05	1/4	2.1	0.40	277V/1ø/60HZ	65	85	11664	1.0	1	0.8	16"x14"	20%
132	440	290	145	6"ø	6 7/8x10 3/8	0.14	1/10	0.8	0.40	277V/1ø/60HZ	65	97	15206	1.0	1	1.0	16"x14"	20%
133	1700	1130	565	12"ø	13 1/4x11 1/2	0.19	3/4	5.4	0.40	277V/1ø/60HZ	65	90

DRAWING NOTES

1. FOR CONTINUATION OF DUCTWORK SEE PART PLAN SLC-2 ON DWG P.3-20



PROJECT NORTH

0 4 8 16 32

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HELLMUTH OBATA & KASSABAUM, INC.
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REVISIONS

NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44
3	7-8-97	BULLETIN #56
4	9-10-97	SUPPLEMENTS NFL - 221
5	11-26-97	BULLETIN #94

KEYPLAN

PROJECT NO. 95-675-00
ISSUED BY:
DRAWN BY: ---
REVIEWED BY:
ISSUED: 2-28-97

SHEET TITLE
HVAC PLAN
SERVICE LEVEL
QUAD A

CATEGORY - SUB-CATEGORY - SHEET
M.2-01A

25-97-13.20-5110M21 - RMF #95110



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NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44

KEYPLAN

PROJECT NO. 95-675-00
ISSUED BY:
DRAWN BY: ---
REVIEWED BY:
ISSUED: 2-28-97

SHEET TITLE
HVAC PLAN
SERVICE LEVEL
QUAD B

CATEGORY - SUB-CATEGORY - SHEET
M.2-01B

04.27.97-15:48- 5110M21 - RMF #95110

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DRAWING NOTE

1. NOT USED
2. NOT USED
3. 24"x24" TRANSFER AIR GRILLE (EACH SIDE OF WALL) WITH MOD MOUNT 8" AFF.
4. CABINET UNIT HEATERS MOUNTED 10'-0" AFF.
5. 16"x8" GRILLE MOUNTED 8" AFF.
6. 16"x8" GRILLE MOUNTED 6'-8" AFF.

FOR DETAILED HVAC AND SMOKE EVACUATION DESIGN IN THIS AREA, REFER TO DWG M.3-19

12"x8" TRANSFER GRILLE EACH SIDE OF WALL (TYP TWO PLACES)

32"X12" TRANSFER AIR GRILLE (EACH SIDE OF WALL) MOUNT 8" AFF

24"x18" TRANSFER AIR GRILLE (EACH SIDE OF WALL) MOUNT 7'-6" AFF

24"x12" TRANSFER AIR GRILLE (EACH SIDE OF WALL) MOUNT 8" AFF

16"x12" WITH BIRDSCREEN AT INLET, UP TO GEF-A2 LOCATION IN MECH ROOM 3.09.01

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1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44

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PROJECT NO.	ISSUED BY:
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DRAWN BY:	REVIEWED BY:
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ISSUED: 2-28-97

SHEET TITLE

HVAC PLAN MAIN CONCOURSE QUAD A

CATEGORY - SUB-CATEGORY - SHEET

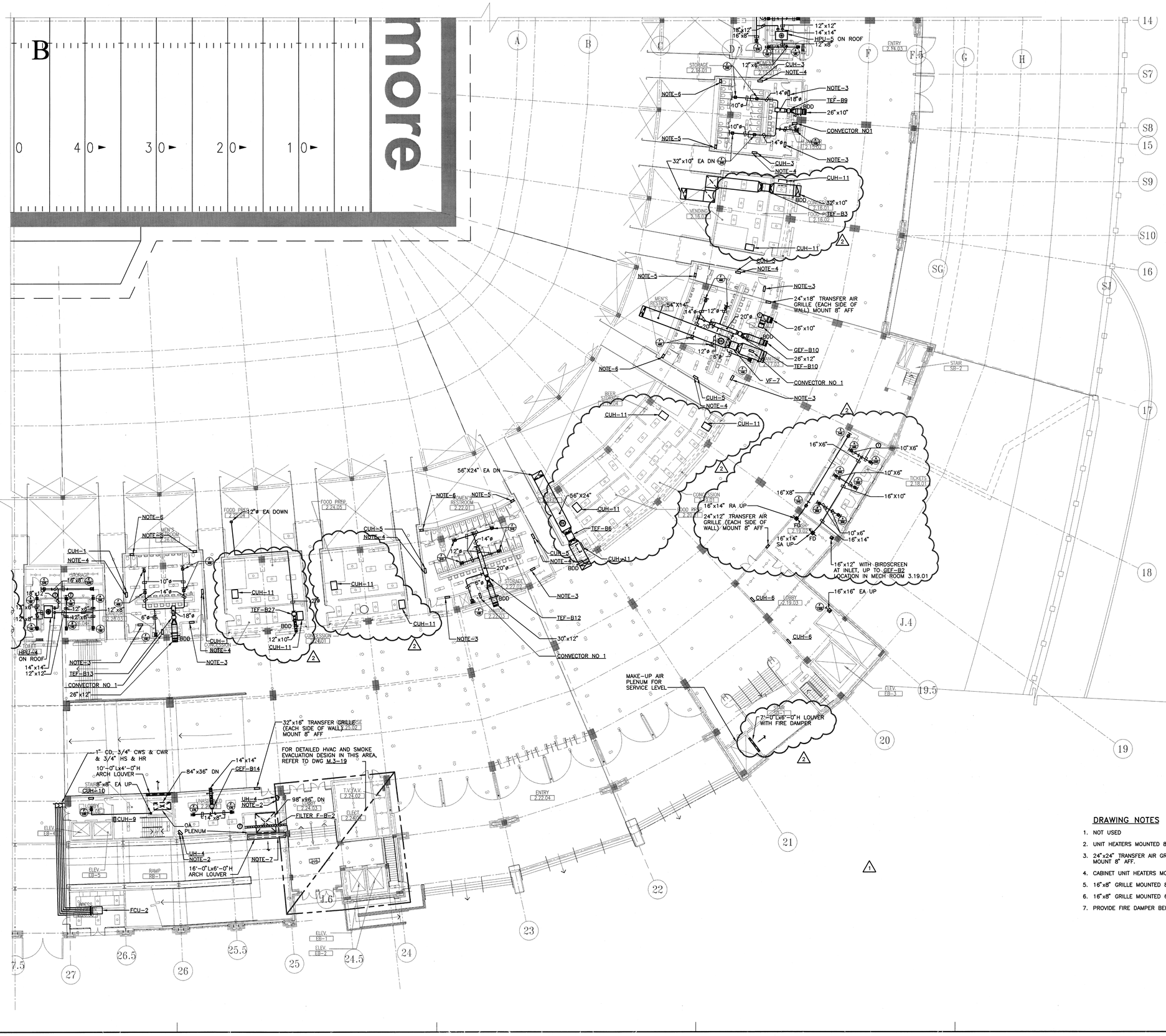
M.2-02A

PROJECT NORTH

0 4 8 16 32

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03.02.97-16:17-5110M22 - RMF #95110



DRAWING NOTES

1. NOT USED
2. UNIT HEATERS MOUNTED 8'-0" AFF.
3. 24"x24" TRANSFER AIR GRILLE (EACH SIDE OF WALL) WITH MOD MOUNT 8" AFF.
4. CABINET UNIT HEATERS MOUNTED 10'-0" AFF.
5. 16"x8" GRILLE MOUNTED 8" AFF.
6. 16"x8" GRILLE MOUNTED 6'-8" AFF.
7. PROVIDE FIRE DAMPER BEHIND LOUVER.

PROJECT NORTH

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NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44

KEYPLAN

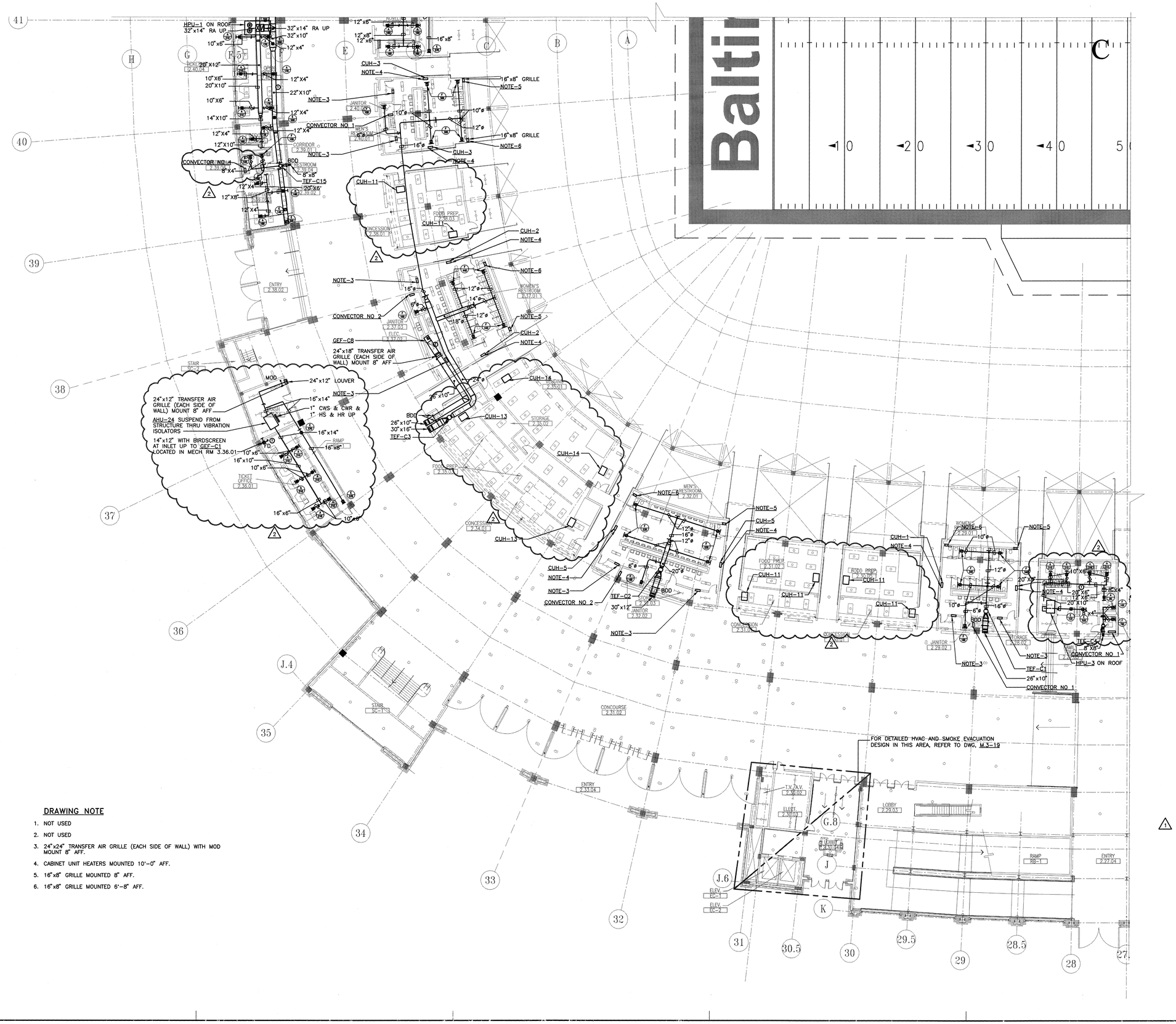
PROJECT NO. 95-675-00	ISSUED BY: ---
DRAWN BY: ---	REVIEWED BY: DSP
ISSUED: 2-28-97	

SHEET TITLE
HVAC PLAN
MAIN CONCOURSE
QUAD B

CATEGORY - SUB-CATEGORY - SHEET
M.2-02B

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DRAWING NOTE

1. NOT USED
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3. 24"x24" TRANSFER AIR GRILLE (EACH SIDE OF WALL) WITH MOD MOUNT 8" AFF.
4. CABINET UNIT HEATERS MOUNTED 10'-0" AFF.
5. 16"x8" GRILLE MOUNTED 8" AFF.
6. 16"x8" GRILLE MOUNTED 6'-8" AFF.

PROJECT NORTH

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NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44

KEYPLAN

PROJECT NO. 95-675-00	ISSUED BY: ---
DRAWN BY:	REVIEWED BY: DSP
ISSUED: 2-28-97	

SHEET TITLE
HVAC PLAN MAIN CONCOURSE QUAD C

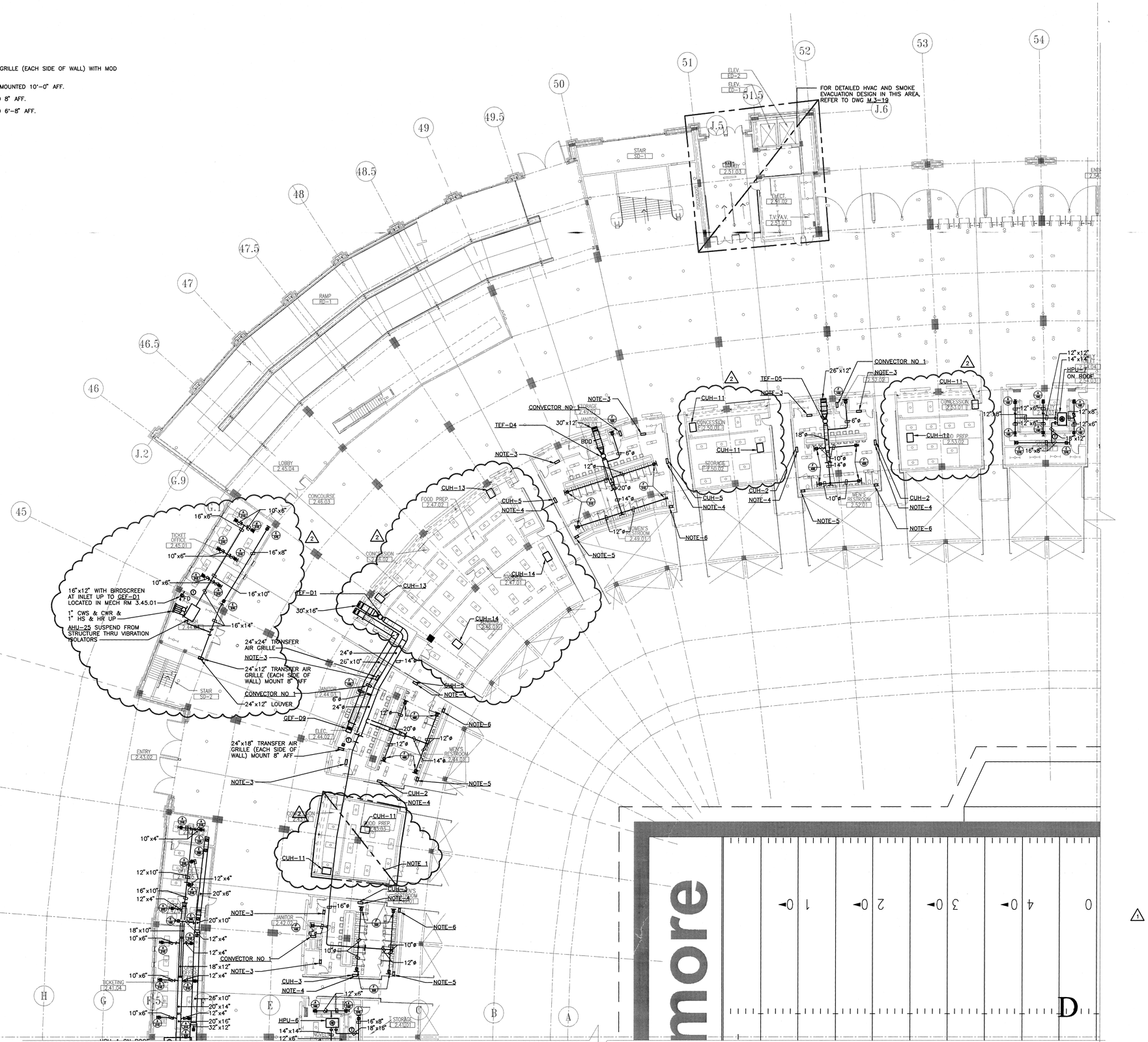
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M.2-02C

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DRAWING NOTE

1. NOT USED
2. NOT USED
3. 24"x24" TRANSFER AIR GRILLE (EACH SIDE OF WALL) WITH MOD MOUNT 8" AFF.
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5. 16"x8" GRILLE MOUNTED 8" AFF.
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NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44

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PROJECT NO. 95-675-00	ISSUED BY: ---
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ISSUED: 2-28-97	

SHEET TITLE

HVAC PLAN
MAIN CONCOURSE
QUAD D

CATEGORY - SUB-CATEGORY - SHEET

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2	4-28-97	BULLETIN #44

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PROJECT NO. 95-675-00
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ISSUED: 2-28-97
SHEET TITLE

ISSUED BY: ---
REVIEWED BY: USP

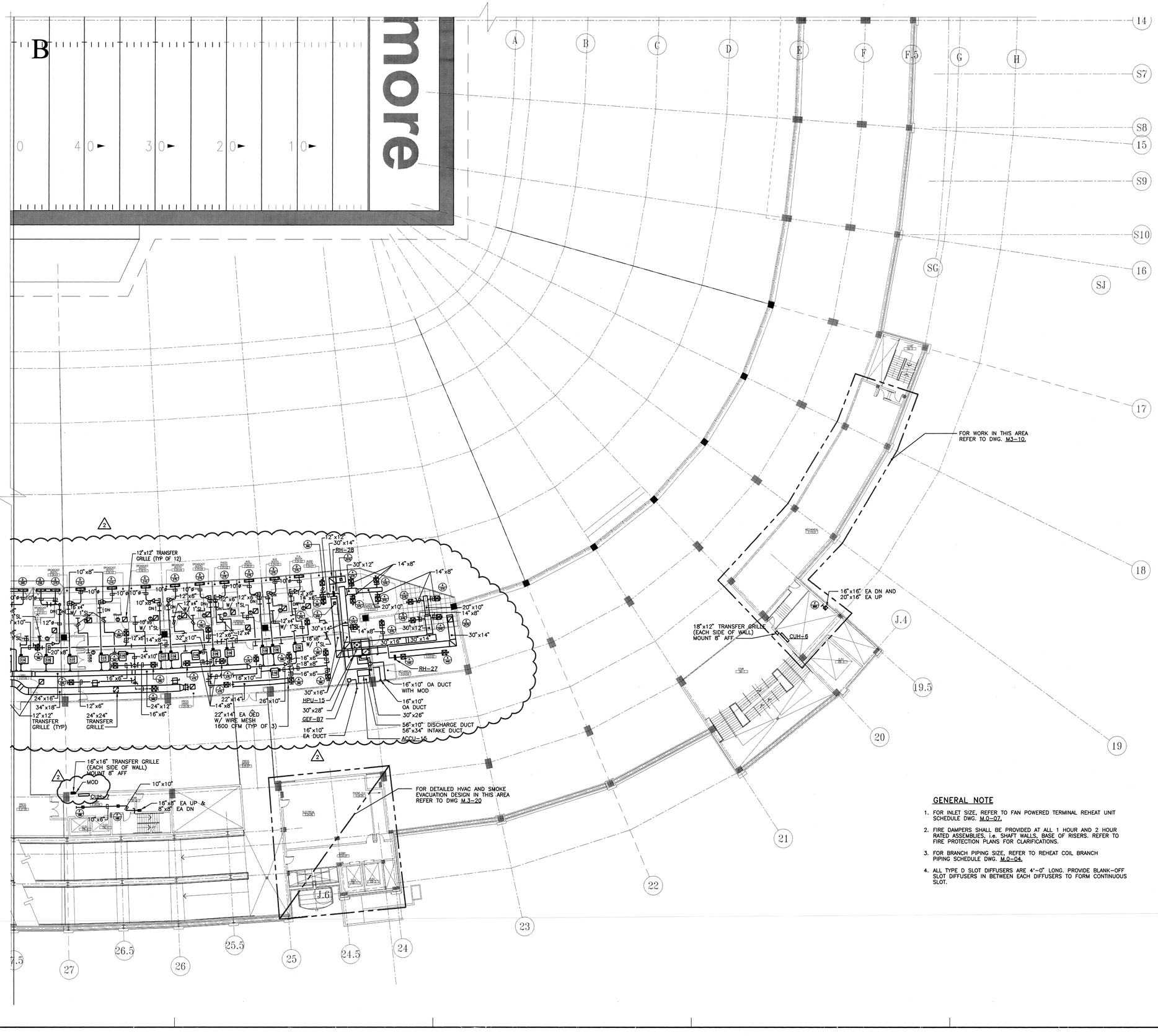
HVAC PLAN
PRESS LEVEL
QUAD A

CATEGORY - SUB-CATEGORY - SHEET
M.2-03A

PROJECT NORTH

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04.25.97-13:41 - 511DM23 - RNF #95110



GENERAL NOTE

1. FOR INLET SIZE, REFER TO FAN POWERED TERMINAL REHEAT UNIT SCHEDULE DWG. M.0-07.
2. FIRE DAMPERS SHALL BE PROVIDED AT ALL 1 HOUR AND 2 HOUR RATED ASSEMBLIES, i.e. SHAFT WALLS, BASE OF RISERS. REFER TO FIRE PROTECTION PLANS FOR CLARIFICATIONS.
3. FOR BRANCH PIPING SIZE, REFER TO REHEAT COIL BRANCH PIPING SCHEDULE DWG. M.0-04.
4. ALL TYPE D SLOT DIFFUSERS ARE 4'-0" LONG. PROVIDE BLANK-OFF SLOT DIFFUSERS IN BETWEEN EACH DIFFUSERS TO FORM CONTINUOUS SLOT.

PROJECT NORTH

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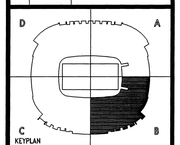
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REVISIONS

NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44

KEYPLAN



PROJECT NO.	ISSUED BY:
95-675-00	---
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ISSUED:
2-28-97

SHEET TITLE

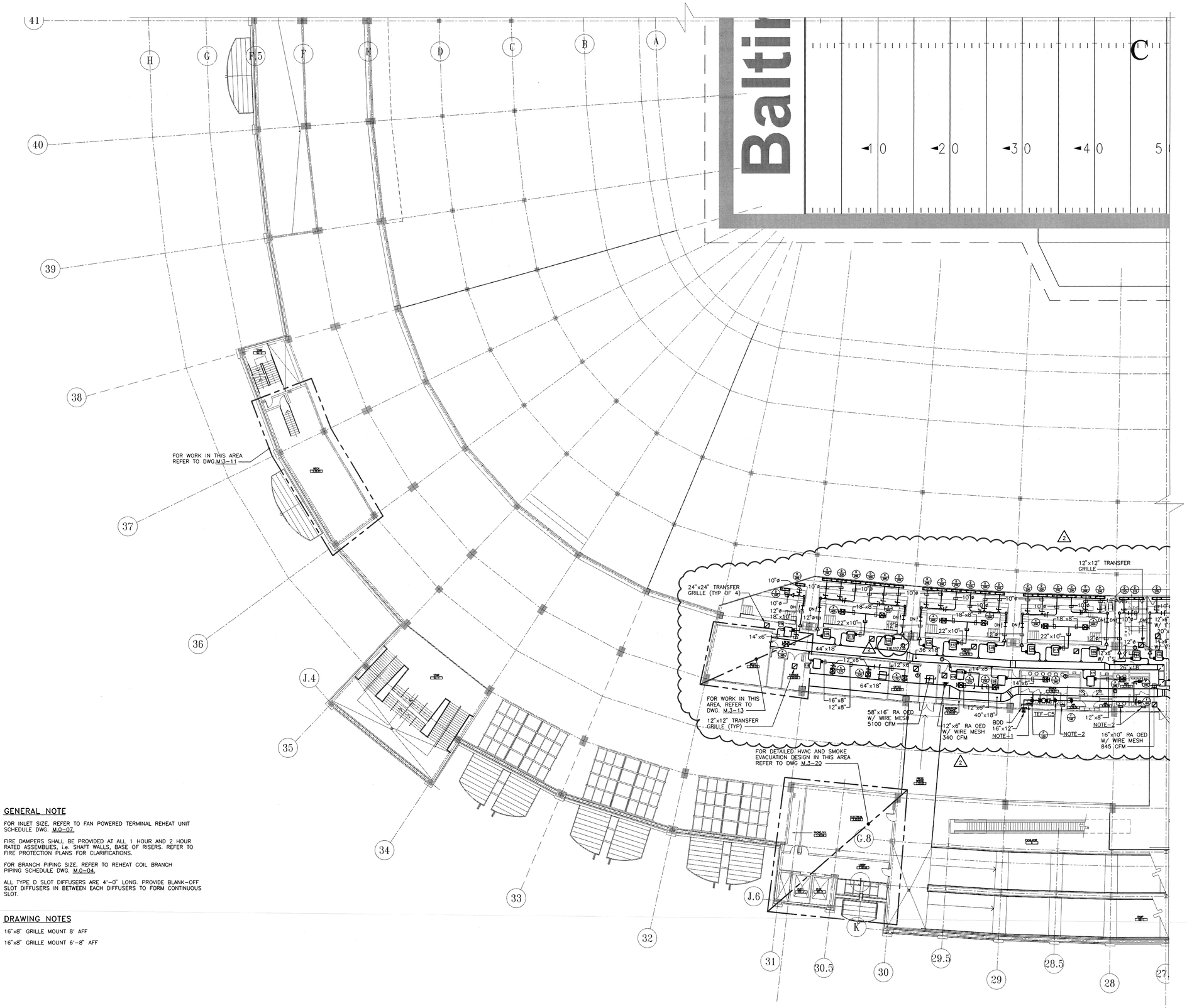
HVAC PLAN
PRESS LEVEL
QUAD B

CATEGORY - SUB-CATEGORY - SHEET

M.2-03B

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GENERAL NOTE

1. FOR INLET SIZE, REFER TO FAN POWERED TERMINAL REHEAT UNIT SCHEDULE DWG. M.0-07.
2. FIRE DAMPERS SHALL BE PROVIDED AT ALL 1 HOUR AND 2 HOUR RATED ASSEMBLIES, i.e. SHAFT WALLS, BASE OF RISERS. REFER TO FIRE PROTECTION PLANS FOR CLARIFICATIONS.
3. FOR BRANCH PIPING SIZE, REFER TO REHEAT COIL BRANCH PIPING SCHEDULE DWG. M.0-04.
4. ALL TYPE D SLOT DIFFUSERS ARE 4'-0" LONG. PROVIDE BLANK-OFF SLOT DIFFUSERS IN BETWEEN EACH DIFFUSERS TO FORM CONTINUOUS SLOT.

DRAWING NOTES

1. 16"x8" GRILLE MOUNT 8' AFF
2. 16"x8" GRILLE MOUNT 6'-8" AFF

PROJECT NORTH
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REVISIONS

NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44

KEYPLAN

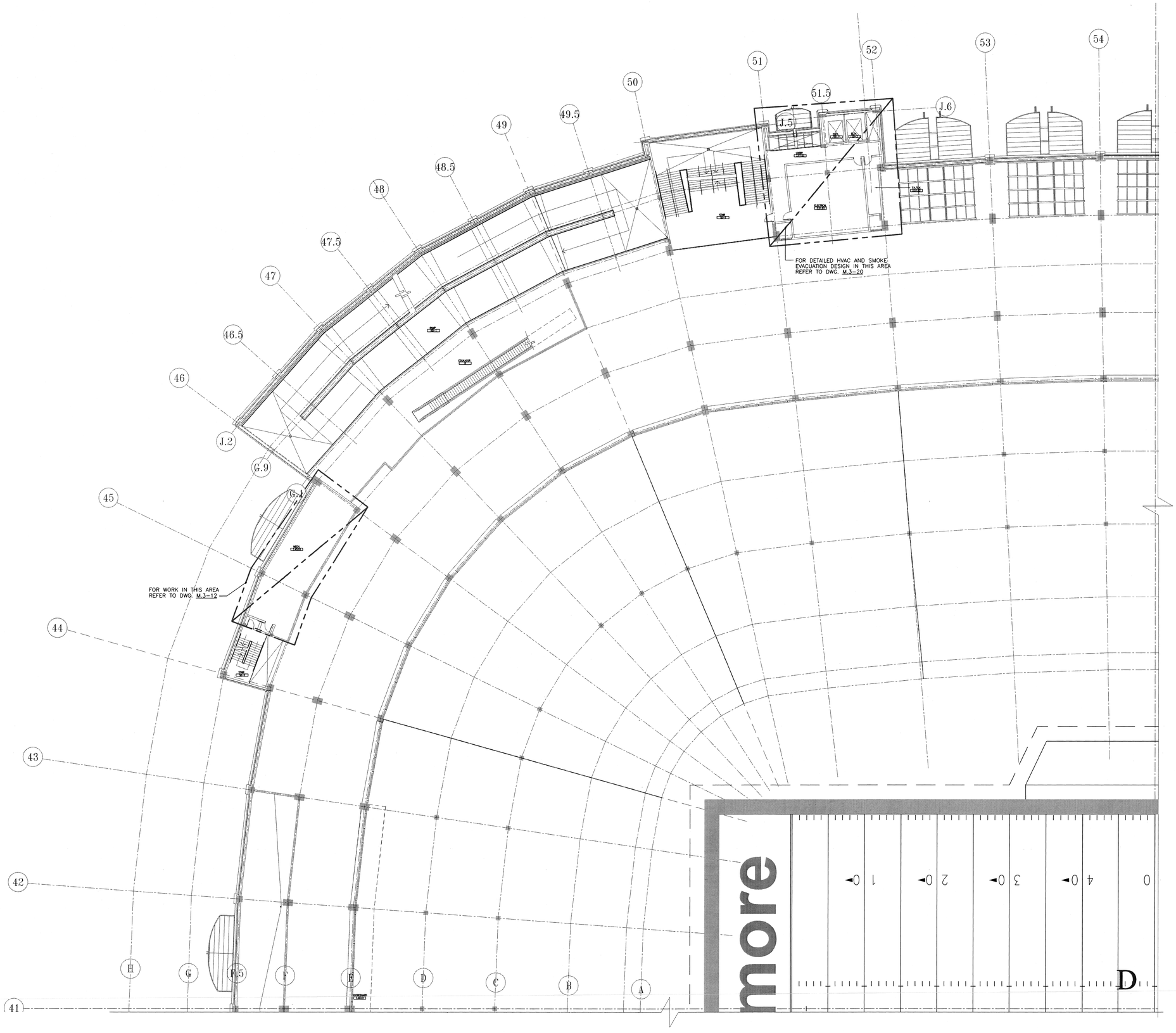
PROJECT NO. 95-675-00	ISSUED BY: ---
DRAWN BY: ---	REVIEWED BY: DSP
ISSUED: 2-28-97	

SHEET TITLE
HVAC PLAN
PRESS LEVEL
QUAD C

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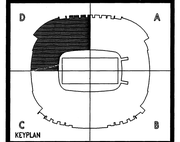
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KEYPLAN



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ISSUED: 2-28-97

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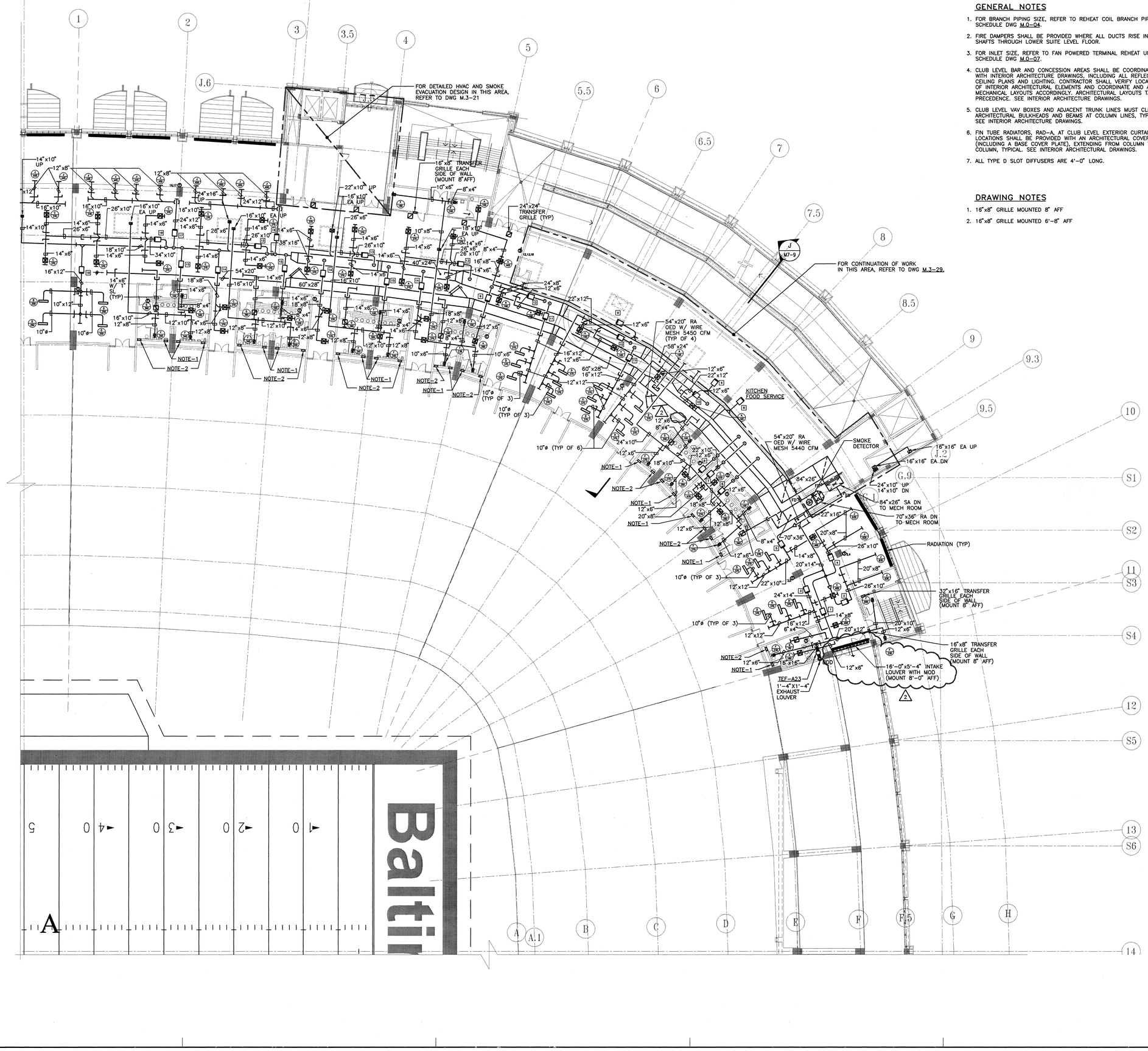
HVAC PLAN
PRESS LEVEL
QUAD D

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M.2-03D

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GENERAL NOTES

1. FOR BRANCH PIPING SIZE, REFER TO REHEAT COIL BRANCH PIPING SCHEDULE DWG M.0-04.
2. FIRE DAMPERS SHALL BE PROVIDED WHERE ALL DUCTS RISE INTO SHAFTS THROUGH LOWER SUITE LEVEL FLOOR.
3. FOR INLET SIZE, REFER TO FAN POWERED TERMINAL REHEAT UNIT SCHEDULE DWG M.0-07.
4. CLUB LEVEL BAR AND CONCESSION AREAS SHALL BE COORDINATED WITH INTERIOR ARCHITECTURE DRAWINGS, INCLUDING ALL REFLECTED CEILING PLANS AND LIGHTING. CONTRACTOR SHALL VERIFY LOCATIONS OF INTERIOR ARCHITECTURAL ELEMENTS AND COORDINATE AND ADJUST MECHANICAL LAYOUTS ACCORDINGLY. ARCHITECTURAL LAYOUTS TAKE PRECEDENCE. SEE INTERIOR ARCHITECTURE DRAWINGS.
5. CLUB LEVEL VAV BOXES AND ADJACENT TRUNK LINES MUST CLEAR ARCHITECTURAL BULKHEADS AND BEAMS AT COLUMN LINES, TYPICAL. SEE INTERIOR ARCHITECTURE DRAWINGS.
6. FIN TUBE RADIATORS, RAD-A, AT CLUB LEVEL EXTERIOR CURTAIN WALL LOCATIONS SHALL BE PROVIDED WITH AN ARCHITECTURAL COVER (INCLUDING A BASE COVER PLATE), EXTENDING FROM COLUMN TO COLUMN, TYPICAL. SEE INTERIOR ARCHITECTURAL DRAWINGS.
7. ALL TYPE D SLOT DIFFUSERS ARE 4'-0" LONG.

DRAWING NOTES

1. 16"x8" GRILLE MOUNTED 8" AFF
2. 16"x8" GRILLE MOUNTED 6'-8" AFF

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Architecture, Engineering, Planning, Interiors, Facility Programming
323 West 8th Street, Suite700
Kansas City, Missouri 64105

STRUCTURAL ENGINEER
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REVISIONS

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2	4-28-97	BULLETIN #44

KEYPLAN

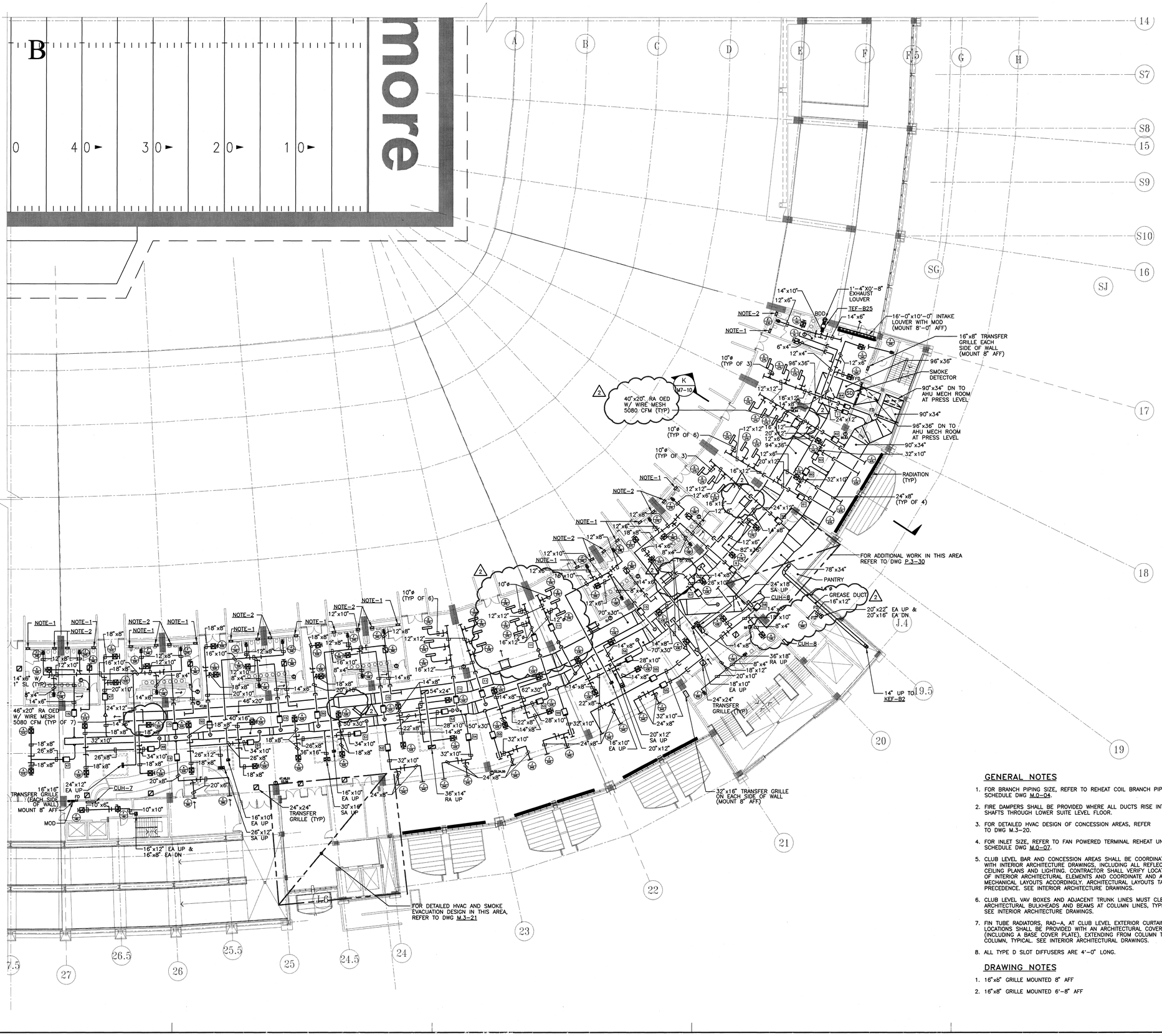
PROJECT NO. 95-675-00
ISSUED BY: ---
DRAWN BY: ---
REVIEWED BY: DSP
ISSUED: 2-28-97

SHEET TITLE
HVAC PLAN
CLUB LEVEL
QUAD A

CATEGORY - SUB-CATEGORY - SHEET
M.2-04A

04.14.97-14:48-5110M24 - RMF #95110

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GENERAL NOTES

1. FOR BRANCH PIPING SIZE, REFER TO REHEAT COIL BRANCH PIPING SCHEDULE DWG M.0-04.
2. FIRE DAMPERS SHALL BE PROVIDED WHERE ALL DUCTS RISE INTO SHAFTS THROUGH LOWER SUITE LEVEL FLOOR.
3. FOR DETAILED HVAC DESIGN OF CONCESSION AREAS, REFER TO DWG M.3-20.
4. FOR INLET SIZE, REFER TO FAN POWERED TERMINAL REHEAT UNIT SCHEDULE DWG M.0-07.
5. CLUB LEVEL BAR AND CONCESSION AREAS SHALL BE COORDINATED WITH INTERIOR ARCHITECTURE DRAWINGS, INCLUDING ALL REFLECTED CEILING PLANS AND LIGHTING. CONTRACTOR SHALL VERIFY LOCATIONS OF INTERIOR ARCHITECTURAL ELEMENTS AND COORDINATE AND ADJUST MECHANICAL LAYOUTS ACCORDINGLY. ARCHITECTURAL LAYOUTS TAKE PRECEDENCE. SEE INTERIOR ARCHITECTURE DRAWINGS.
6. CLUB LEVEL VAV BOXES AND ADJACENT TRUNK LINES MUST CLEAR ARCHITECTURAL BULKHEADS AND BEAMS AT COLUMN LINES, TYPICAL. SEE INTERIOR ARCHITECTURE DRAWINGS.
7. FIN TUBE RADIATORS, RAD-A, AT CLUB LEVEL EXTERIOR CURTAIN WALL LOCATIONS SHALL BE PROVIDED WITH AN ARCHITECTURAL COVER (INCLUDING A BASE COVER PLATE), EXTENDING FROM COLUMN TO COLUMN, TYPICAL. SEE INTERIOR ARCHITECTURAL DRAWINGS.
8. ALL TYPE D SLOT DIFFUSERS ARE 4'-0" LONG.

DRAWING NOTES

1. 16"x6" GRILLE MOUNTED 8" AFF
2. 16"x8" GRILLE MOUNTED 6'-8" AFF

PROJECT NORTH

0 4 8 16 32

HELLMUTH OBATA & KASSABAUM, INC.
Architecture, Engineering, Planning, Interiors, Facility Programming
323 West 8th Street, Suite700
Kansas City, Missouri 64105

STRUCTURAL ENGINEER
BLISS & NITRAY, INC.
MIAMI, FLORIDA

MECHANICAL/ELECTRICAL/PLUMBING
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BALTIMORE, MARYLAND

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WALLACE ROBERT & TODD
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RUMMEL, KLEPPER & KAHL
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DRAWING PACKAGE
09B SUBMITTAL

REVISIONS

NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44

KEYPLAN

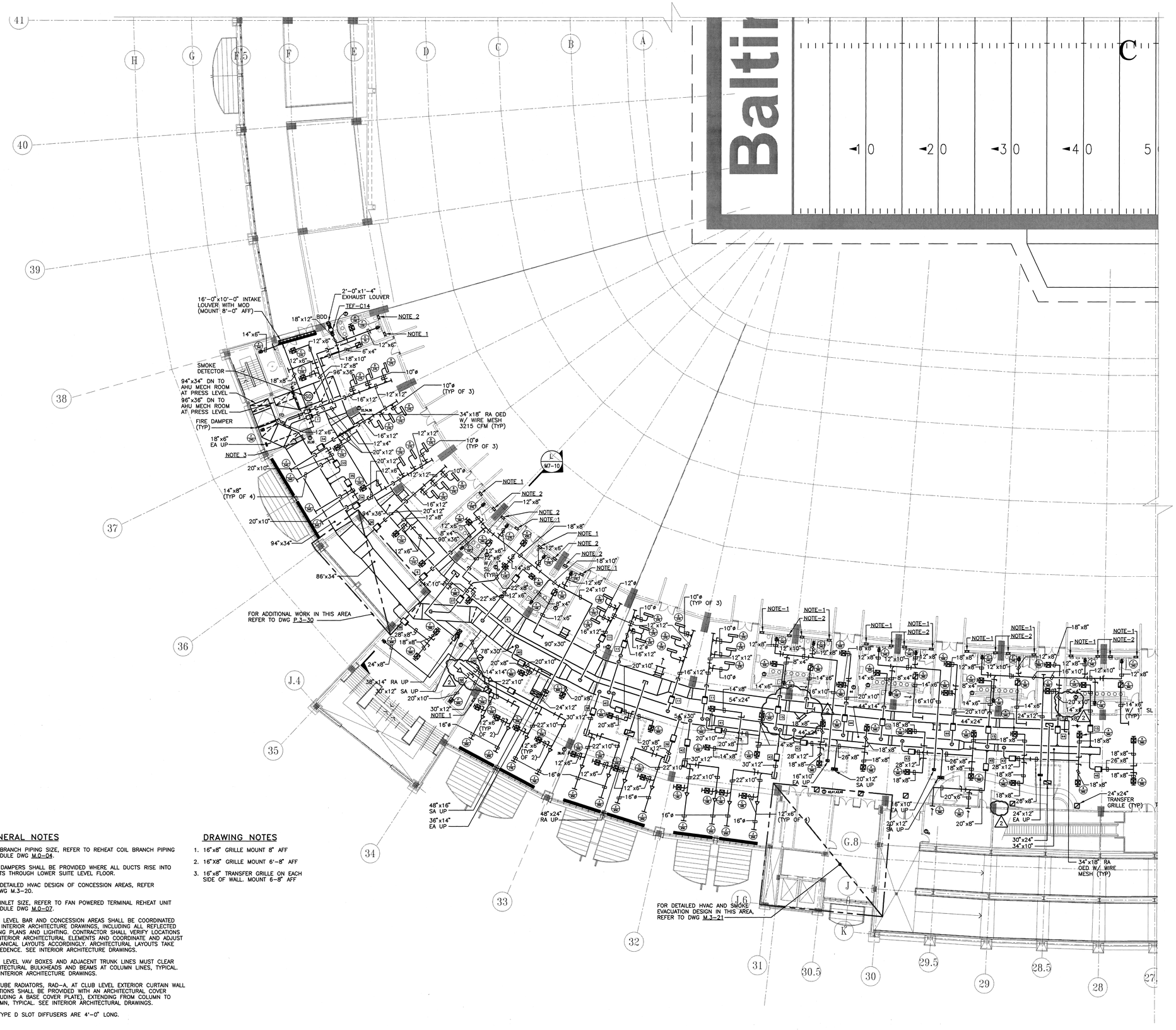
PROJECT NO. 95-675-00	ISSUED BY: ---
DRAWN BY: JFL	REVIEWED BY: DSP
ISSUED: 2-28-97	

SHEET TITLE
HVAC PLAN
CLUB LEVEL
QUAD B

CATEGORY - SUB-CATEGORY - SHEET
M.2-04B

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GENERAL NOTES

1. FOR BRANCH PIPING SIZE, REFER TO REHEAT COIL BRANCH PIPING SCHEDULE DWG M.0-04.
2. FIRE DAMPERS SHALL BE PROVIDED WHERE ALL DUCTS RISE INTO SHAFTS THROUGH LOWER SUITE LEVEL FLOOR.
3. FOR DETAILED HVAC DESIGN OF CONCESSION AREAS, REFER TO DWG M.3-20.
4. FOR INLET SIZE, REFER TO FAN POWERED TERMINAL REHEAT UNIT SCHEDULE DWG M.0-07.
5. CLUB LEVEL BAR AND CONCESSION AREAS SHALL BE COORDINATED WITH INTERIOR ARCHITECTURE DRAWINGS, INCLUDING ALL REFLECTED CEILING PLANS AND LIGHTING. CONTRACTOR SHALL VERIFY LOCATIONS OF INTERIOR ARCHITECTURAL ELEMENTS AND COORDINATE AND ADJUST MECHANICAL LAYOUTS ACCORDINGLY. ARCHITECTURAL LAYOUTS TAKE PRECEDENCE. SEE INTERIOR ARCHITECTURE DRAWINGS.
6. CLUB LEVEL VAV BOXES AND ADJACENT TRUNK LINES MUST CLEAR ARCHITECTURAL BULKHEADS AND BEAMS AT COLUMN LINES, TYPICAL. SEE INTERIOR ARCHITECTURE DRAWINGS.
7. FIN TUBE RADIATORS, RAD-A, AT CLUB LEVEL EXTERIOR CURTAIN WALL LOCATIONS SHALL BE PROVIDED WITH AN ARCHITECTURAL COVER (INCLUDING A BASE COVER PLATE), EXTENDING FROM COLUMN TO COLUMN, TYPICAL. SEE INTERIOR ARCHITECTURAL DRAWINGS.
8. ALL TYPE D SLOT DIFFUSERS ARE 4'-0" LONG.

DRAWING NOTES

1. 16"x8" GRILLE MOUNT 8" AFF
2. 16"X8" GRILLE MOUNT 6'-8" AFF
3. 16"x8" TRANSFER GRILLE ON EACH SIDE OF WALL. MOUNT 6-8" AFF

PROJECT NORTH
0 4 8 16 32

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Kansas City, Missouri 64105

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BLISS & NITRAY, INC.
MIAMI, FLORIDA

MECHANICAL/ELECTRICAL/PLUMBING
ROSS MURPHY FINKELSTIEN, INC.
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WALLACE ROBERT & TODD
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DALLAS, TEXAS

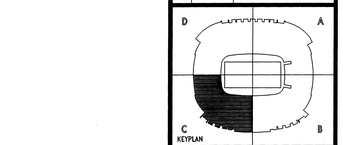
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REVISIONS

NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44



KEYPLAN

PROJECT NO.	ISSUED BY:
95-675-00	---
DRAWN BY:	REVIEWED BY:
---	DSP

ISSUED:
2-28-97

SHEET TITLE

HVAC PLAN CLUB LEVEL QUAD C

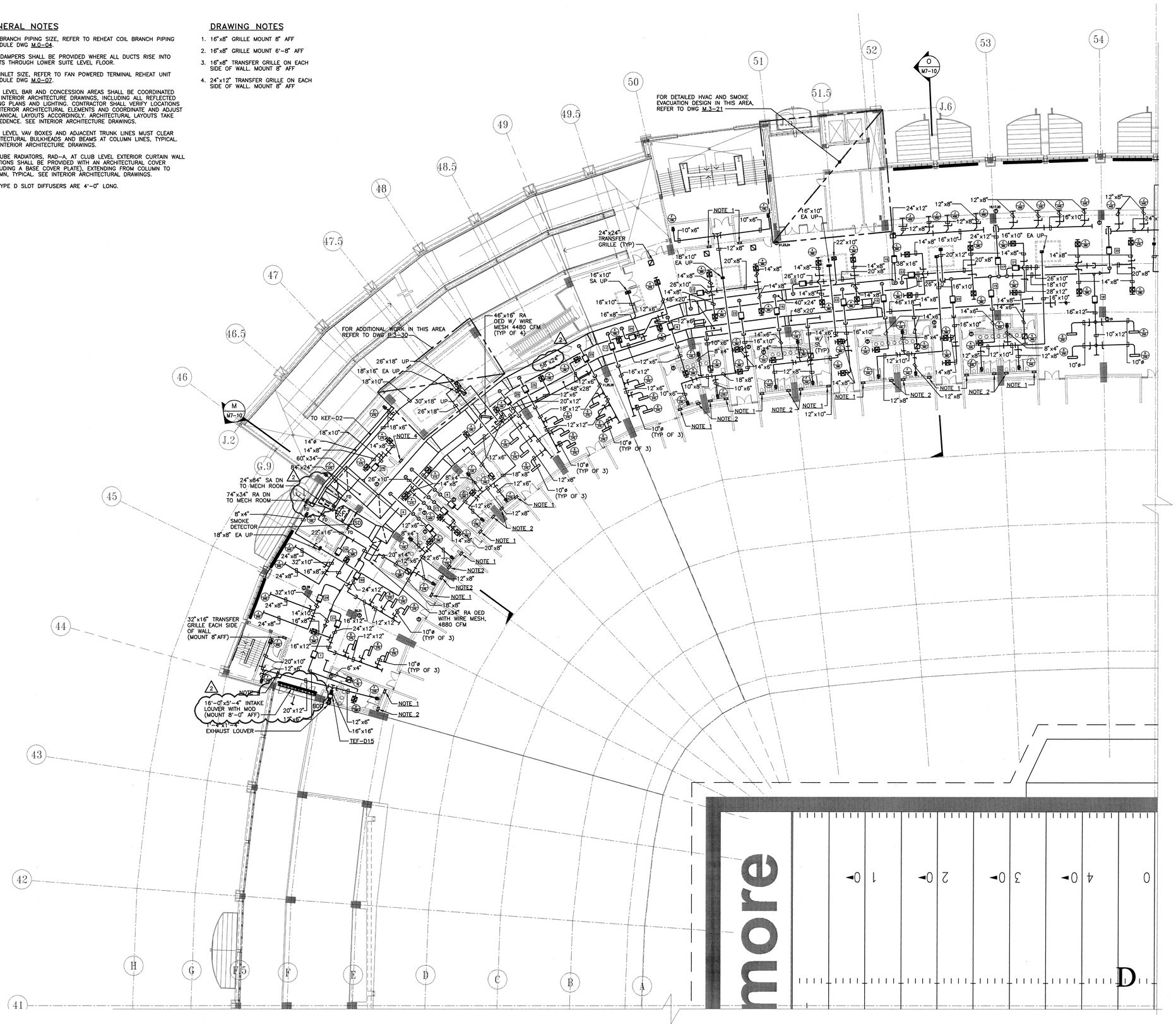
CATEGORY - SUB-CATEGORY - SHEET
M.2-04C

GENERAL NOTES

1. FOR BRANCH PIPING SIZE, REFER TO REHEAT COIL BRANCH PIPING SCHEDULE DWG M.0-04.
2. FIRE DAMPERS SHALL BE PROVIDED WHERE ALL DUCTS RISE INTO SHAFTS THROUGH LOWER SUITE LEVEL FLOOR.
3. FOR INLET SIZE, REFER TO FAN POWERED TERMINAL REHEAT UNIT SCHEDULE DWG M.0-07.
4. CLUB LEVEL BAR AND CONCESSION AREAS SHALL BE COORDINATED WITH INTERIOR ARCHITECTURE DRAWINGS, INCLUDING ALL REFLECTED CEILING PLANS AND LIGHTING. CONTRACTOR SHALL VERIFY LOCATIONS OF INTERIOR ARCHITECTURAL ELEMENTS AND COORDINATE AND ADJUST MECHANICAL LAYOUTS ACCORDINGLY. ARCHITECTURAL LAYOUTS TAKE PRECEDENCE. SEE INTERIOR ARCHITECTURE DRAWINGS.
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7. ALL TYPE D SLOT DIFFUSERS ARE 4'-0" LONG.

DRAWING NOTES

1. 16"x8" GRILLE MOUNT 8" AFF
2. 16"x8" GRILLE MOUNT 6'-8" AFF
3. 16"x8" TRANSFER GRILLE ON EACH SIDE OF WALL, MOUNT 8" AFF
4. 24"x12" TRANSFER GRILLE ON EACH SIDE OF WALL, MOUNT 8" AFF



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Architecture, Engineering, Planning, Interiors, Facility Programming
323 West 8th Street, Suite700
Kansas City, Missouri 64105

STRUCTURAL ENGINEER
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NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44

KEYPLAN

PROJECT NO. 95-675-00	ISSUED BY: ---
DRAWN BY: ---	REVIEWED BY: DSP
ISSUED: 2-28-97	

SHEET TITLE
HVAC PLAN
CLUB LEVEL
QUAD D

CATEGORY - SUB-CATEGORY - SHEET
M.2-04D

04.14.97-14:48-5110M24 - RMF #95110

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GENERAL NOTES

1. FOR BRANCH PIPING SIZE, REFER TO REHEAT COIL BRANCH PIPING SCHEDULE DWG. M.0-04.
2. FIRE DAMPERS SHALL BE PROVIDED AT ALL DUCTS PENETRATING FLOORS WITHIN SHAFTS BETWEEN SUITES. SHAFT WALLS ARE NOT RATED.
3. FOR DETAILED HVAC DESIGN OF TYPICAL SUITES REFER TO DWG. M.3-01.
4. FOR INLET SIZE, REFER TO FAN POWERED TERMINAL REHEAT UNIT SCHEDULE DWG. M.0-07.
5. ALL TYPE D SLOT DIFFUSERS ARE 4'-0" LONG.

FOR DETAILED HVAC CND SMOKE EVACUCTION DESIGN IN THIS AREA, REFER TO DWG M.3-22

38"x18" RA/OED W/ WIRE MESH, 3680 CFM

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REVISIONS

NO.	DATE	DESCRIPTION

KEYPLAN

PROJECT NO.	ISSUED BY:
95-675-00	---
DRAWN BY:	REVIEWED BY:
---	DSP

ISSUED: 2-28-97

SHEET TITLE

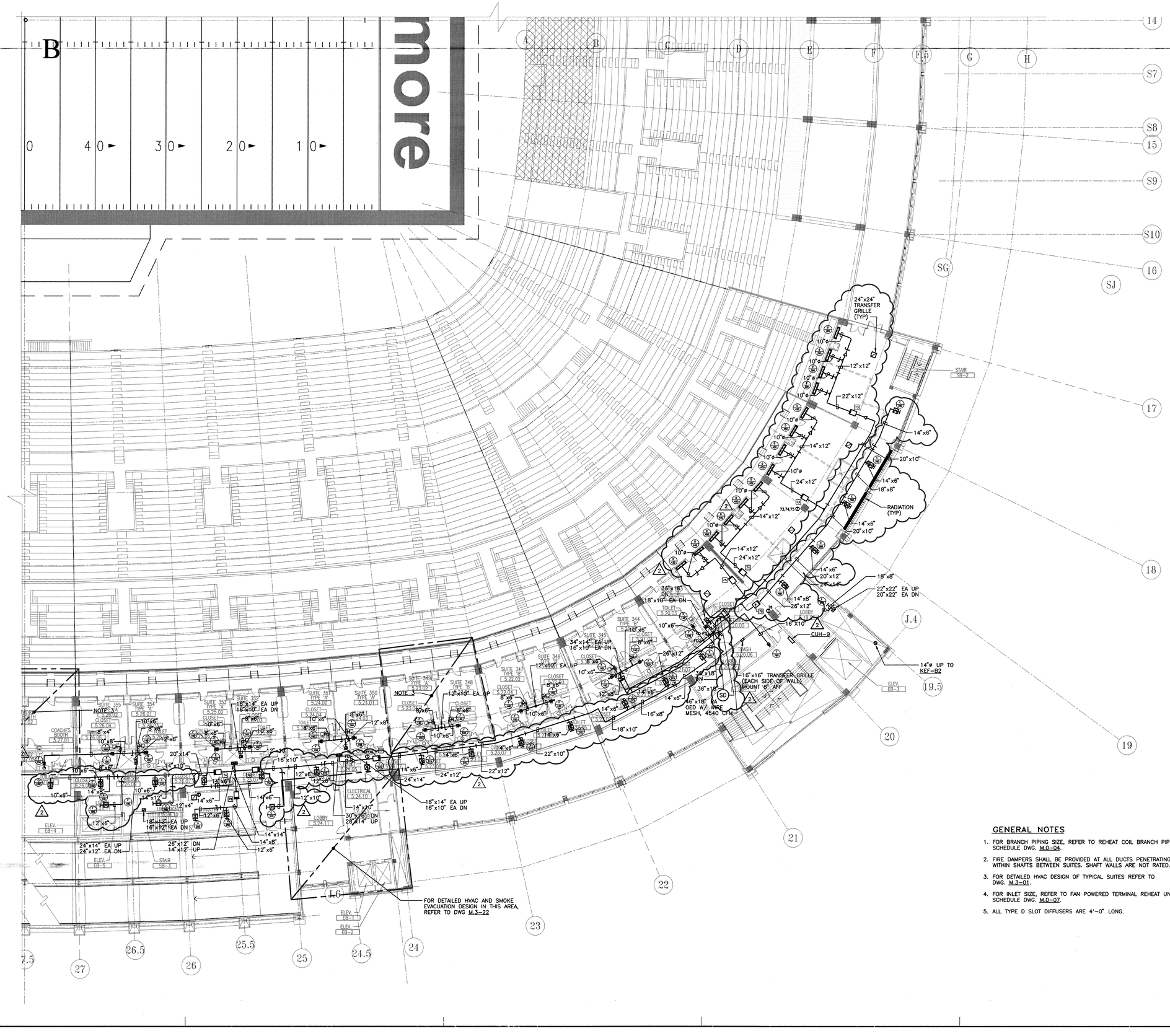
HVAC PLAN
LOWER SUITE LEVEL
QUAD A

CATEGORY - SUB-CATEGORY - SHEET

M.2-05A

04.15.97-07:50- 5110M25 - RMF #95110

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GENERAL NOTES

1. FOR BRANCH PIPING SIZE, REFER TO REHEAT COIL BRANCH PIPING SCHEDULE DWG. M.0-04.
2. FIRE DAMPERS SHALL BE PROVIDED AT ALL DUCTS PENETRATING FLOORS WITHIN SHAFTS BETWEEN SUITES. SHAFT WALLS ARE NOT RATED.
3. FOR DETAILED HVAC DESIGN OF TYPICAL SUITES REFER TO DWG. M.3-01.
4. FOR INLET SIZE, REFER TO FAN POWERED TERMINAL REHEAT UNIT SCHEDULE DWG. M.0-02.
5. ALL TYPE D SLOT DIFFUSERS ARE 4'-0" LONG.

PROJECT NORTH

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REVISIONS

NO.	DATE	DESCRIPTION

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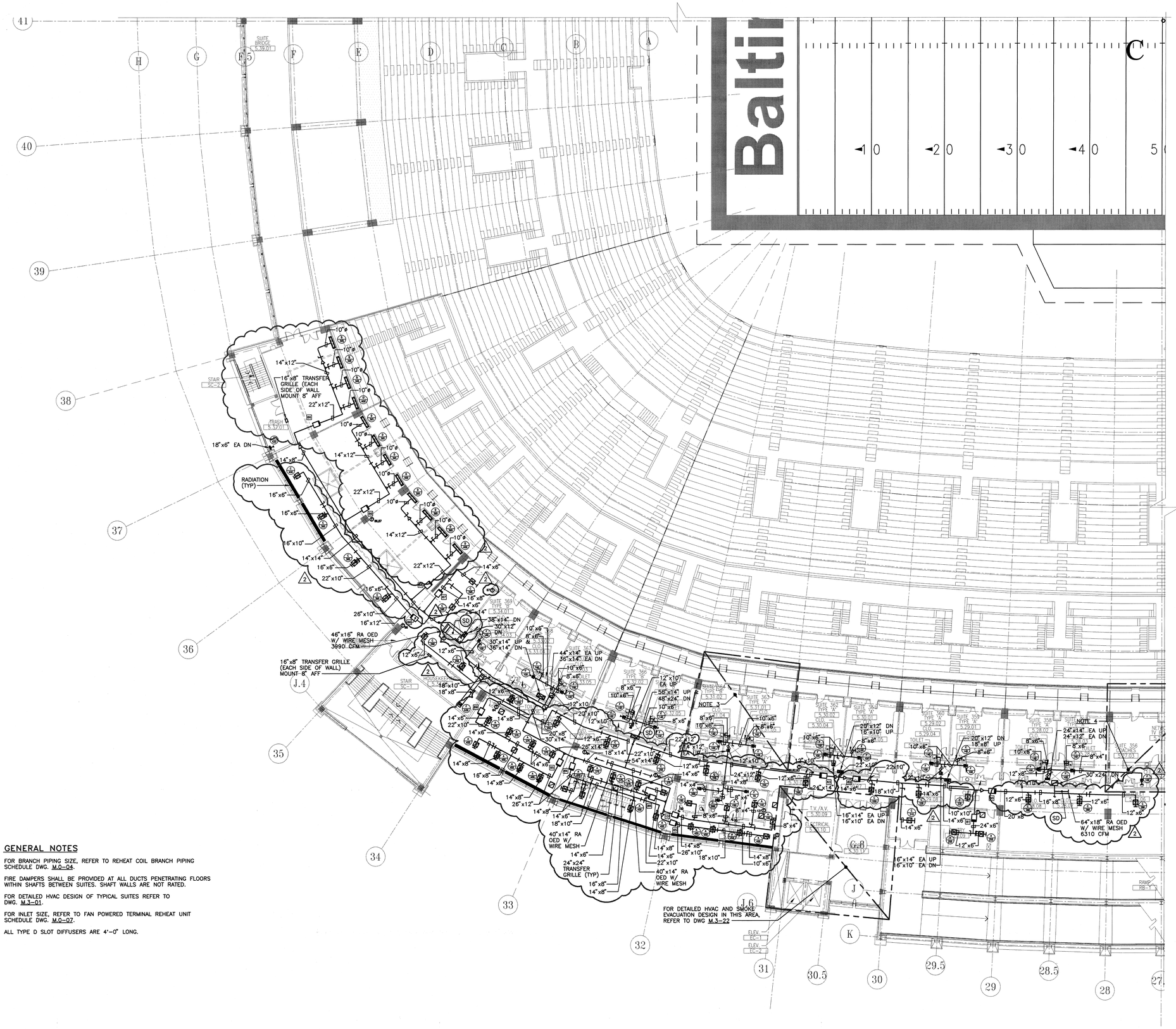
PROJECT NO. 95-675-00	ISSUED BY:
DRAWN BY: JFL	REVIEWED BY: DSP
ISSUED: 2-28-97	

SHEET TITLE
HVAC PLAN
LOWER SUITE LEVEL
QUAD B

CATEGORY - SUB-CATEGORY - SHEET
M.2-05B

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GENERAL NOTES

1. FOR BRANCH PIPING SIZE, REFER TO REHEAT COIL BRANCH PIPING SCHEDULE DWG. M.0-04.
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3. FOR DETAILED HVAC DESIGN OF TYPICAL SUITES REFER TO DWG. M.3-01.
4. FOR INLET SIZE, REFER TO FAN POWERED TERMINAL REHEAT UNIT SCHEDULE DWG. M.0-07.
5. ALL TYPE D SLOT DIFFUSERS ARE 4'-0" LONG.

PROJECT NORTH

0 4 8 16 32

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Architecture, Engineering, Planning,
Interiors, Facility Programming
323 West 8th Street, Suite200
Kansas City, Missouri 64105

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BLISS & NITRAY, INC.
MIAMI, FLORIDA

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ROSS MURPHY FINKELSTIEN, INC.
BALTIMORE, MARYLAND

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09B SUBMITTAL

REVISIONS

NO.	DATE	DESCRIPTION

KEYPLAN

PROJECT NO. 95-675-00	ISSUED BY: ---
DRAWN BY: JFL	REVIEWED BY: DSP
ISSUED: 2-28-97	

SHEET TITLE
HVAC PLAN
LOWER SUITE LEVEL
QUAD C

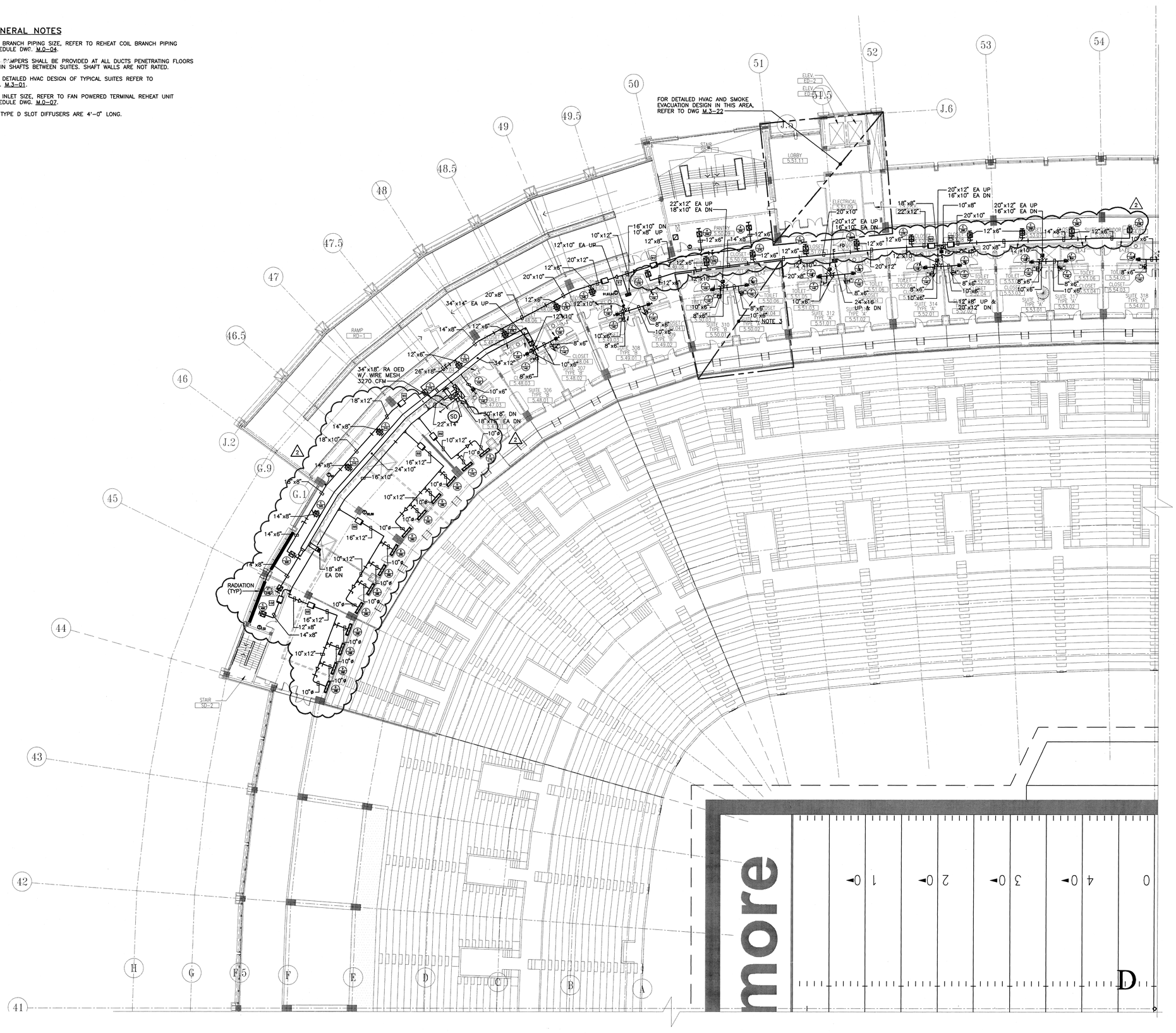
CATEGORY - SUB-CATEGORY - SHEET
M.2-05C

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GENERAL NOTES

1. FOR BRANCH PIPING SIZE, REFER TO REHEAT COIL BRANCH PIPING SCHEDULE DWG. M.0-04.
2. FIRE DAMPERS SHALL BE PROVIDED AT ALL DUCTS PENETRATING FLOORS WITHIN SHAFTS BETWEEN SUITES. SHAFT WALLS ARE NOT RATED.
3. FOR DETAILED HVAC DESIGN OF TYPICAL SUITES REFER TO DWG. M.3-01.
4. FOR INLET SIZE, REFER TO FAN POWERED TERMINAL REHEAT UNIT SCHEDULE DWG. M.0-07.
5. ALL TYPE D SLOT DIFFUSERS ARE 4'-0" LONG.



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325 West 8th Street, Suite700
Kansas City, Missouri 64105

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MIAMI, FLORIDA

MECHANICAL/ELECTRICAL/PLUMBING
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WALLACE ROBERT & TODD
PHILADELPHIA, PENNSYLVANIA

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NO.	DATE	DESCRIPTION

KEYPLAN

PROJECT NO. 95-675-00
ISSUED BY: ---
DRAWN BY: ---
REVIEWED BY: DSP
ISSUED: 2-28-97

SHEET TITLE
HVAC PLAN
LOWER SUITE LEVEL
QUAD D

CATEGORY - SUB-CATEGORY - SHEET
M.2-05D

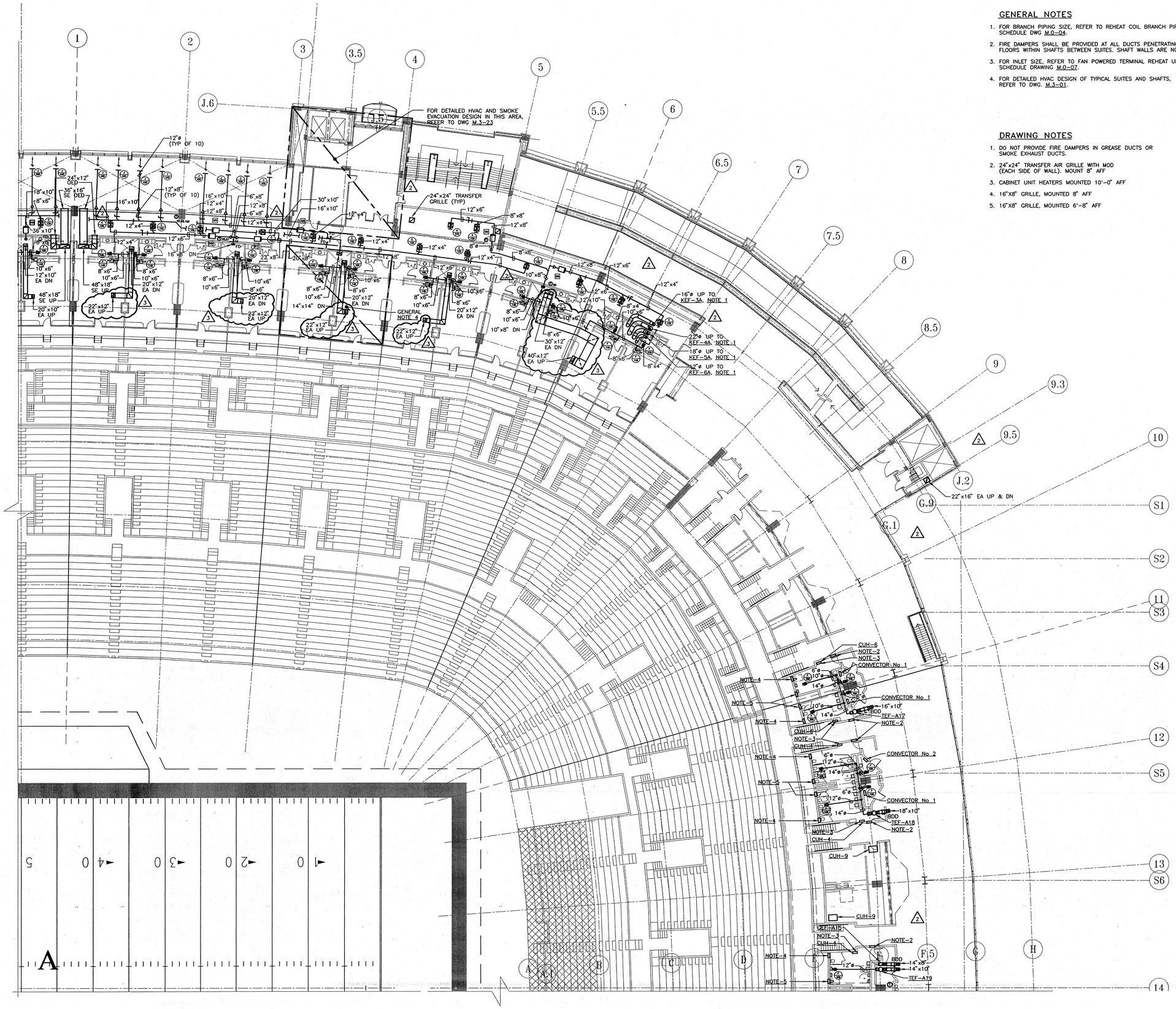
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GENERAL NOTES

1. FOR BRANCH PIPING SIZE, REFER TO REHEAT COIL BRANCH PIPING SCHEDULE DWG M.0-04.
2. FIRE DAMPERS SHALL BE PROVIDED AT ALL DUCTS PENETRATING FLOORS WITHIN SHAFTS BETWEEN SUITES. SHAFT WALLS ARE NOT RATED.
3. FOR INLET SIZE, REFER TO FAN POWERED TERMINAL REHEAT UNIT SCHEDULE DRAWING M.0-07.
4. FOR DETAILED HVAC DESIGN OF TYPICAL SUITES AND SHAFTS, REFER TO DWG. M.3-01.

DRAWING NOTES

1. DO NOT PROVIDE FIRE DAMPERS IN GREASE DUCTS OR SMOKE EXHAUST DUCTS.
2. 24"x24" TRANSFER AIR GRILLE WITH MOD (EACH SIDE OF WALL). MOUNT 8" AFF
3. CABINET UNIT HEATERS MOUNTED 10'-0" AFF
4. 16"X8" GRILLE, MOUNTED 8" AFF
5. 16"X8" GRILLE, MOUNTED 6'-8" AFF



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Architecture, Engineering, Planning, Interiors, Facility Programming
323 West 8th Street, Suite700
Kansas City, Missouri 64105

STRUCTURAL ENGINEER
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MIAMI, FLORIDA

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ROSS MURPHY FINKELSTEIN, INC.
BALTIMORE, MARYLAND

LANDSCAPE ARCHITECT/PLANNING
WALLACE ROBERT & TODD,
PHILADELPHIA, PENNSYLVANIA

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DALLAS, TEXAS

INTERIOR ARCHITECTURE CONSULTANT
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BALTIMORE, MARYLAND

BALTIMORE NFL STADIUM

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MEP PACKAGE
DRAWING PACKAGE
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REVISIONS NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44
3	5-12-97	BULLETIN #76

KEYPLAN

PROJECT NO.	ISSUED BY:
95-675-00	---
DRAWN BY: ---	REVIEWED BY: DSP

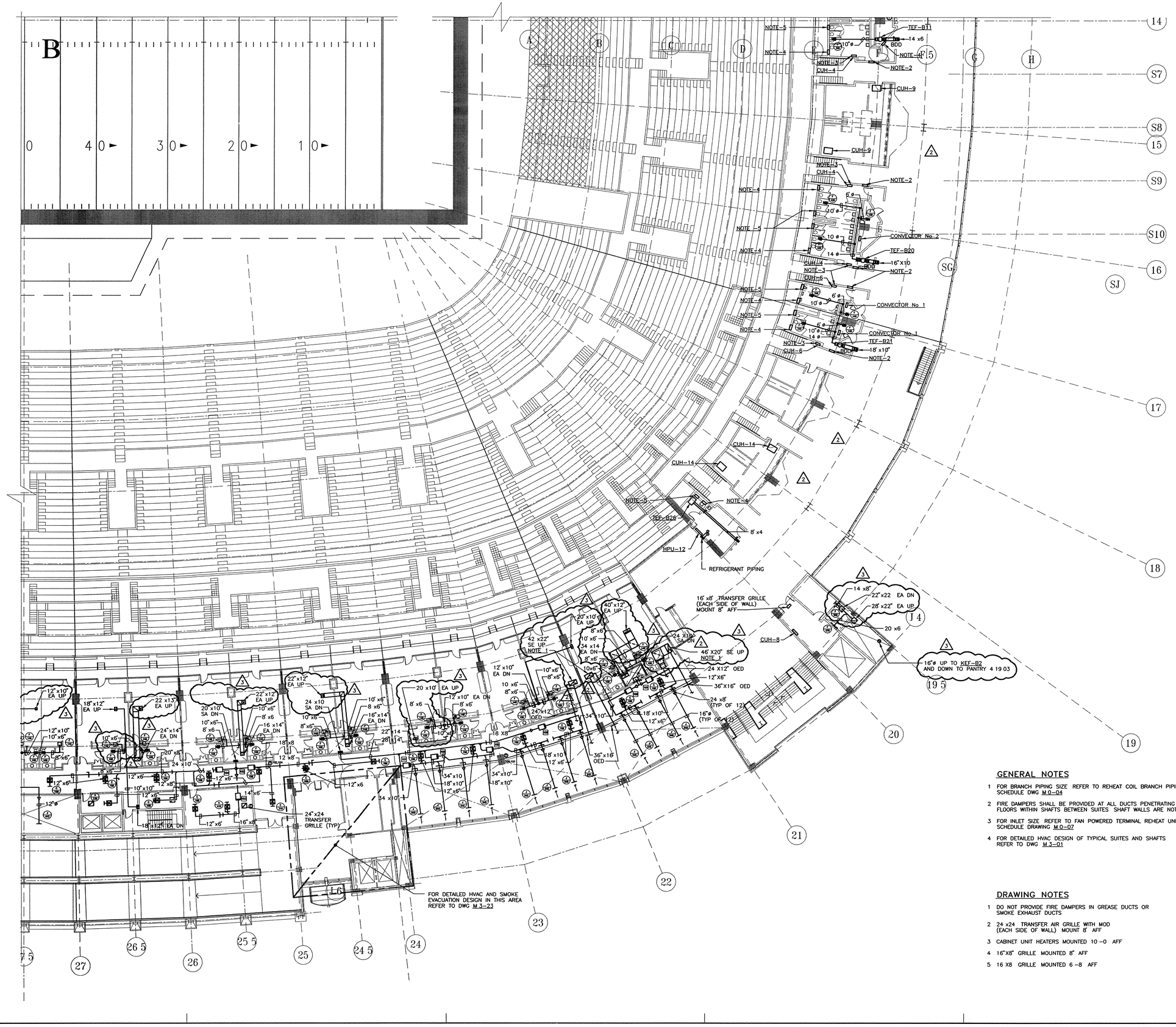
ISSUED: 2-28-97

SHEET TITLE
HVAC PLAN
UPPER SUITE LEVEL
QUAD A

CATEGORY - SUB-CATEGORY - SHEET
M.2-06A

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08.15.97-07:48 - 5110M26 - RMF #95110



GENERAL NOTES

1 FOR BRANCH PIPING SIZE REFER TO REHEAT COIL BRANCH PIPING SCHEDULE DWG M.0-04

2 FIRE DAMPERS SHALL BE PROVIDED AT ALL DUCTS PENETRATING FLOORS WITHIN SHAFTS BETWEEN SUITES' SHAFT WALLS ARE NOT RATED

3 FOR INLET SIZE REFER TO FAN POWERED TERMINAL REHEAT UNIT SCHEDULE DRAWING M.0-07

4 FOR DETAILED HVAC DESIGN OF TYPICAL SUITES AND SHAFTS REFER TO DWG M.3-01

DRAWING NOTES

1 DO NOT PROVIDE FIRE DAMPERS IN GREASE DUCTS OR SMOKE EXHAUST DUCTS

2 24 x24 TRANSFER AIR GRILLE WITH MOD (EACH SIDE OF WALL) MOUNT 8' AFF

3 CABINET UNIT HEATERS MOUNTED 10 -0 AFF

4 16"X8" GRILLE MOUNTED 8" AFF

5 16 X8 GRILLE MOUNTED 6 -8 AFF

PROJECT NORTH

0 4 8 16 32

HELLMUTH OBATA & KASSABAUM INC
Architecture Engineering Planning
Interiors Facility Programming
323 West 8th Street, Suite700
Kansas City Missouri 64105

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REVISIONS

NO	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44
3	8-12-97	BULLETIN #76

KEYPLAN

PROJECT NO 95-675-00	ISSUED BY
DRAWN BY JFL	REVIEWED BY DSP
ISSUED 2-28-97	

SHEET TITLE

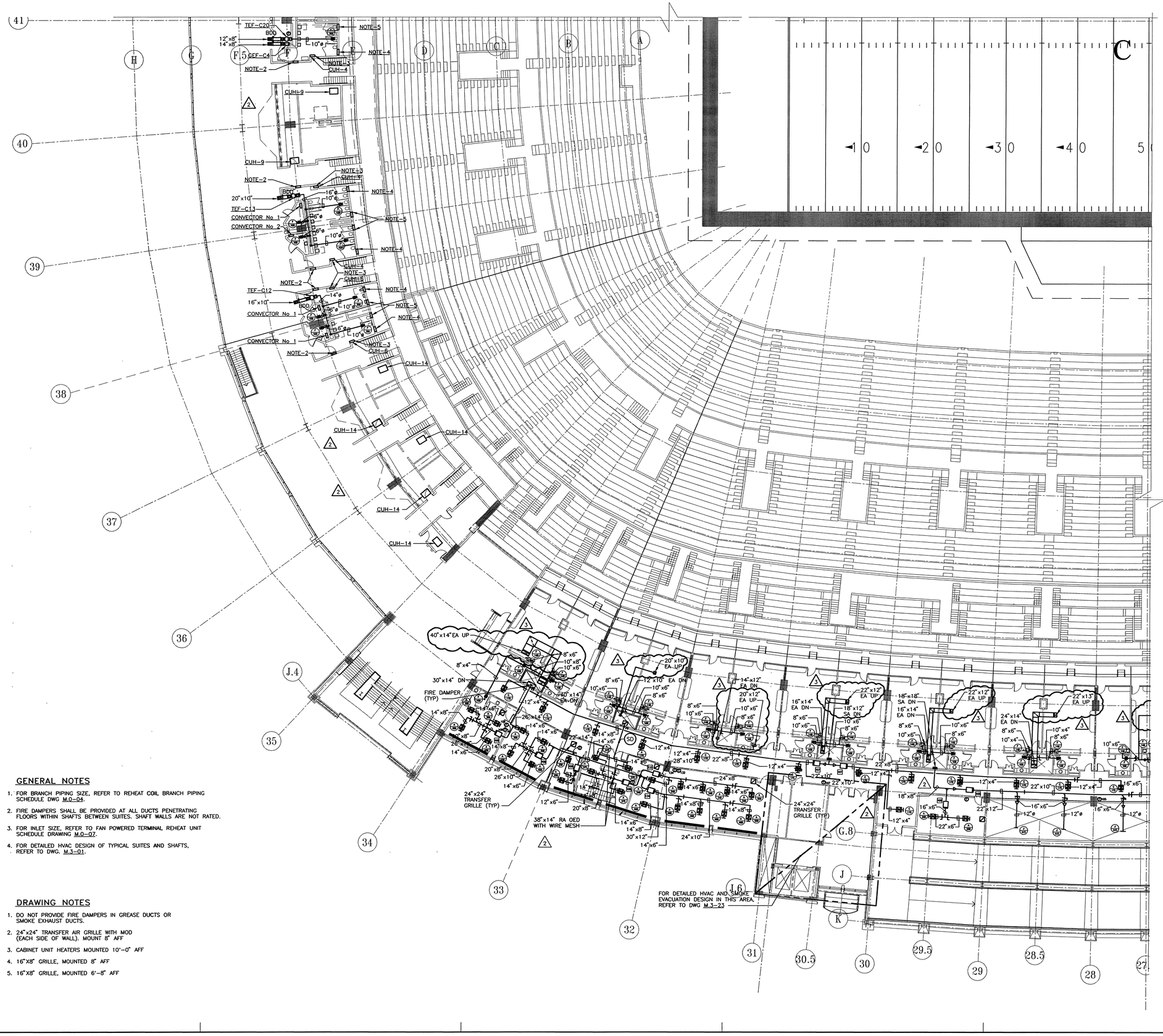
HVAC PLAN
UPPER SUITE LEVEL
QUAD B

CATEGORY - SUB-CATEGORY - SHEET

M.2-06B

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08 15 97-07 48- 5110W26 - RMF #95110



GENERAL NOTES

1. FOR BRANCH PIPING SIZE, REFER TO REHEAT COIL BRANCH PIPING SCHEDULE DWG M.0-04.
2. FIRE DAMPERS SHALL BE PROVIDED AT ALL DUCTS PENETRATING FLOORS WITHIN SHAFTS BETWEEN SUITES. SHAFT WALLS ARE NOT RATED.
3. FOR INLET SIZE, REFER TO FAN POWERED TERMINAL REHEAT UNIT SCHEDULE DRAWING M.0-07.
4. FOR DETAILED HVAC DESIGN OF TYPICAL SUITES AND SHAFTS, REFER TO DWG. M.3-01.

DRAWING NOTES

1. DO NOT PROVIDE FIRE DAMPERS IN GREASE DUCTS OR SMOKE EXHAUST DUCTS.
2. 24"x24" TRANSFER AIR GRILLE WITH MOD (EACH SIDE OF WALL). MOUNT 8" AFF
3. CABINET UNIT HEATERS MOUNTED 10'-0" AFF
4. 16"X8" GRILLE, MOUNTED 8" AFF
5. 16"X8" GRILLE, MOUNTED 6'-8" AFF

PROJECT NORTH
0 4 8 16 32

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REVISIONS

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1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44
3	8-12-97	BULLETIN #76

KEYPLAN

PROJECT NO. 95-675-00	ISSUED BY: ---
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SHEET TITLE
HVAC PLAN
UPPER SUITE
QUAD C

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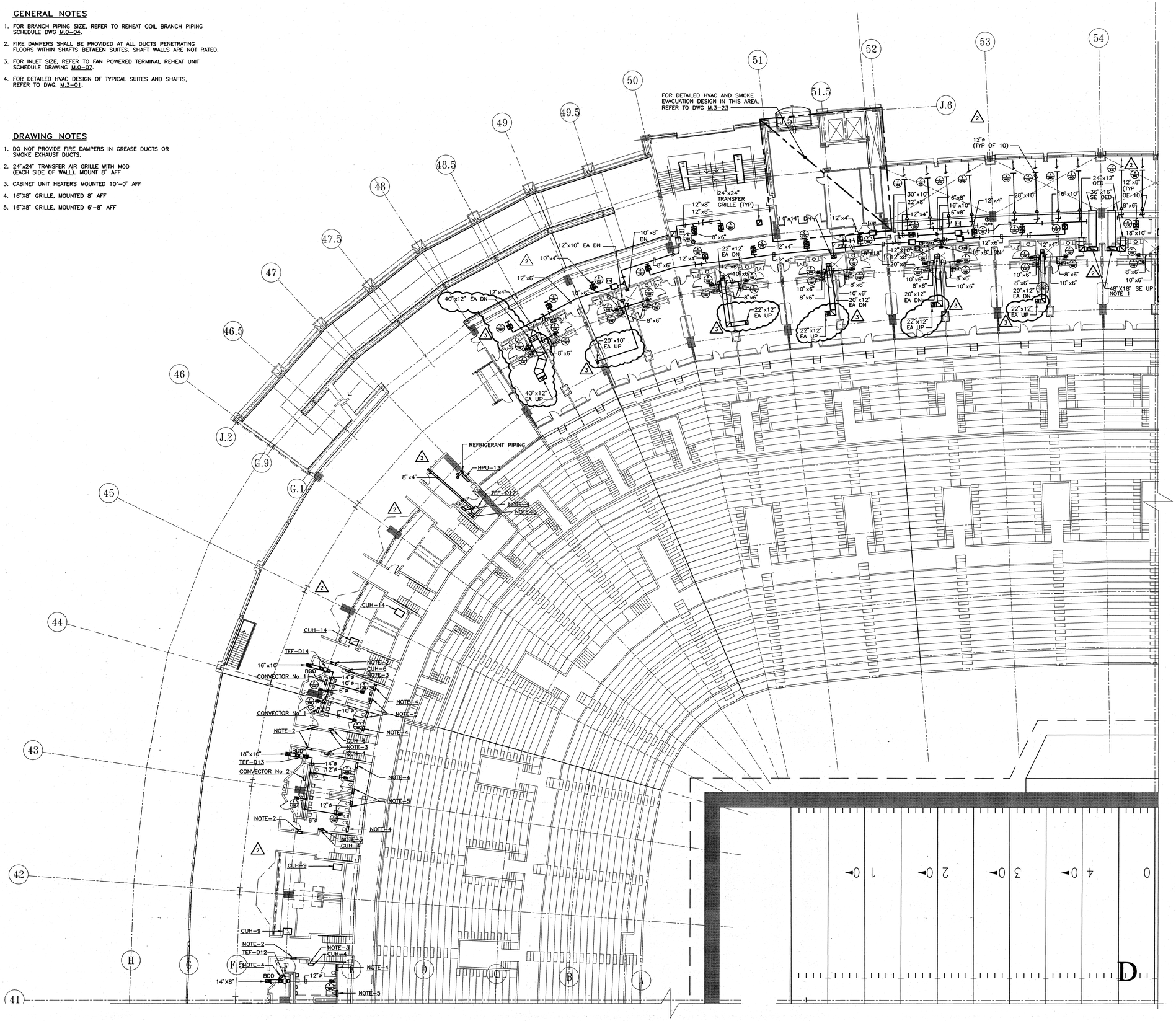
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1. FOR BRANCH PIPING SIZE, REFER TO REHEAT COIL BRANCH PIPING SCHEDULE DWG M.0-04.
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4. FOR DETAILED HVAC DESIGN OF TYPICAL SUITES AND SHAFTS, REFER TO DWG. M.3-01.

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4. 16"X8" GRILLE, MOUNTED 8" AFF
5. 16"X8" GRILLE, MOUNTED 6'-8" AFF



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1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44
3	5-12-97	BULLETIN #76

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PROJECT NO. 95-675-00 | ISSUED BY: ---
DRAWN BY: --- | REVIEWED BY: DSP
ISSUED: 2-28-97

SHEET TITLE
HVAC PLAN
UPPER SUITE LEVEL
QUAD D

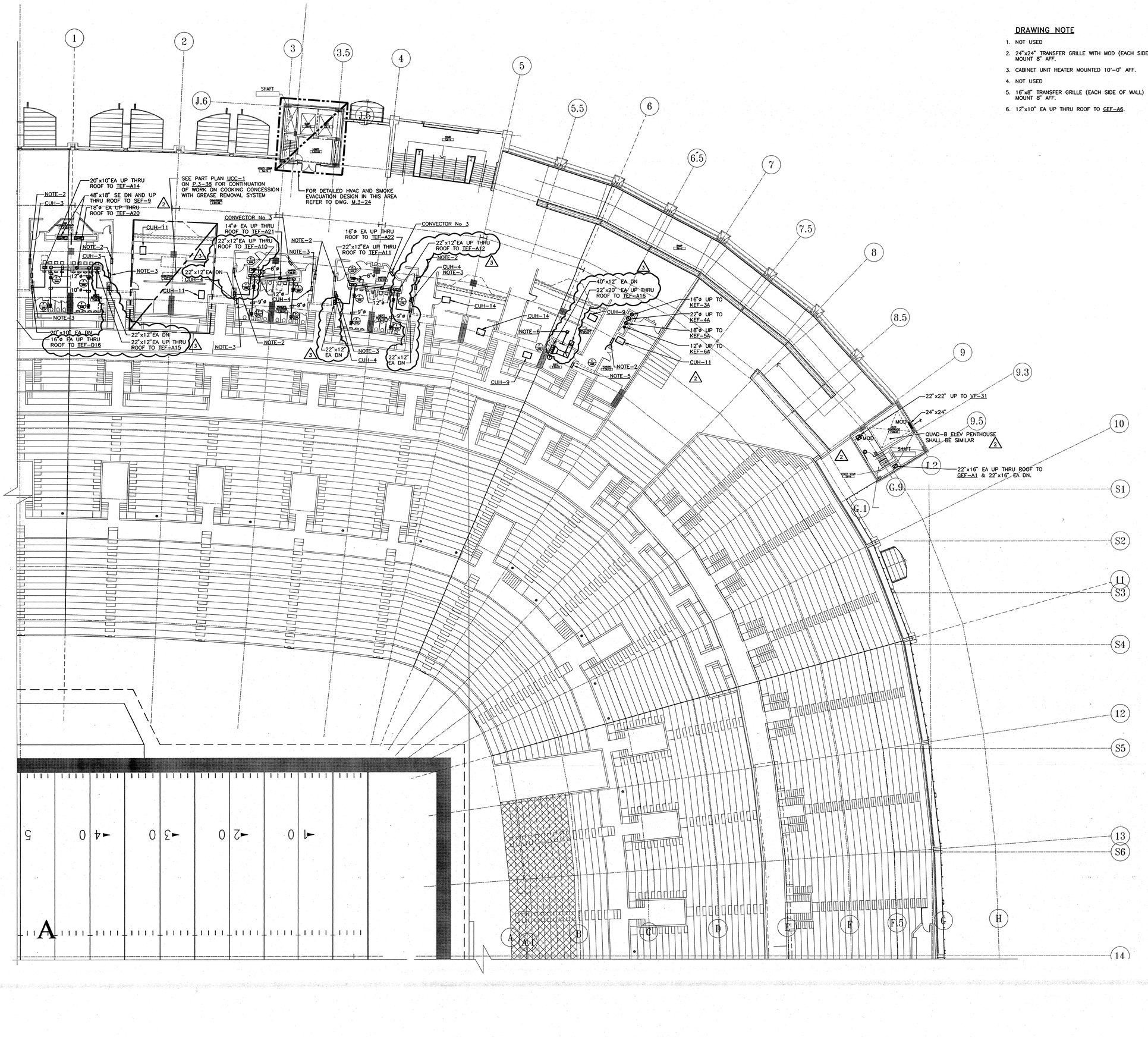
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08.15.97-07:48 - 5110W26 - RMF #95110

DRAWING NOTE

1. NOT USED
2. 24"x24" TRANSFER GRILLE WITH MOD (EACH SIDE OF WALL). MOUNT 8" AFF.
3. CABINET UNIT HEATER MOUNTED 10'-0" AFF.
4. NOT USED
5. 16"x8" TRANSFER GRILLE (EACH SIDE OF WALL) MOUNT 8" AFF.
6. 12"x10" EA UP THRU ROOF TO GEF-A6.



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REVISIONS

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2	4-28-97	BULLETIN #44
3	8-12-97	BULLETIN #76

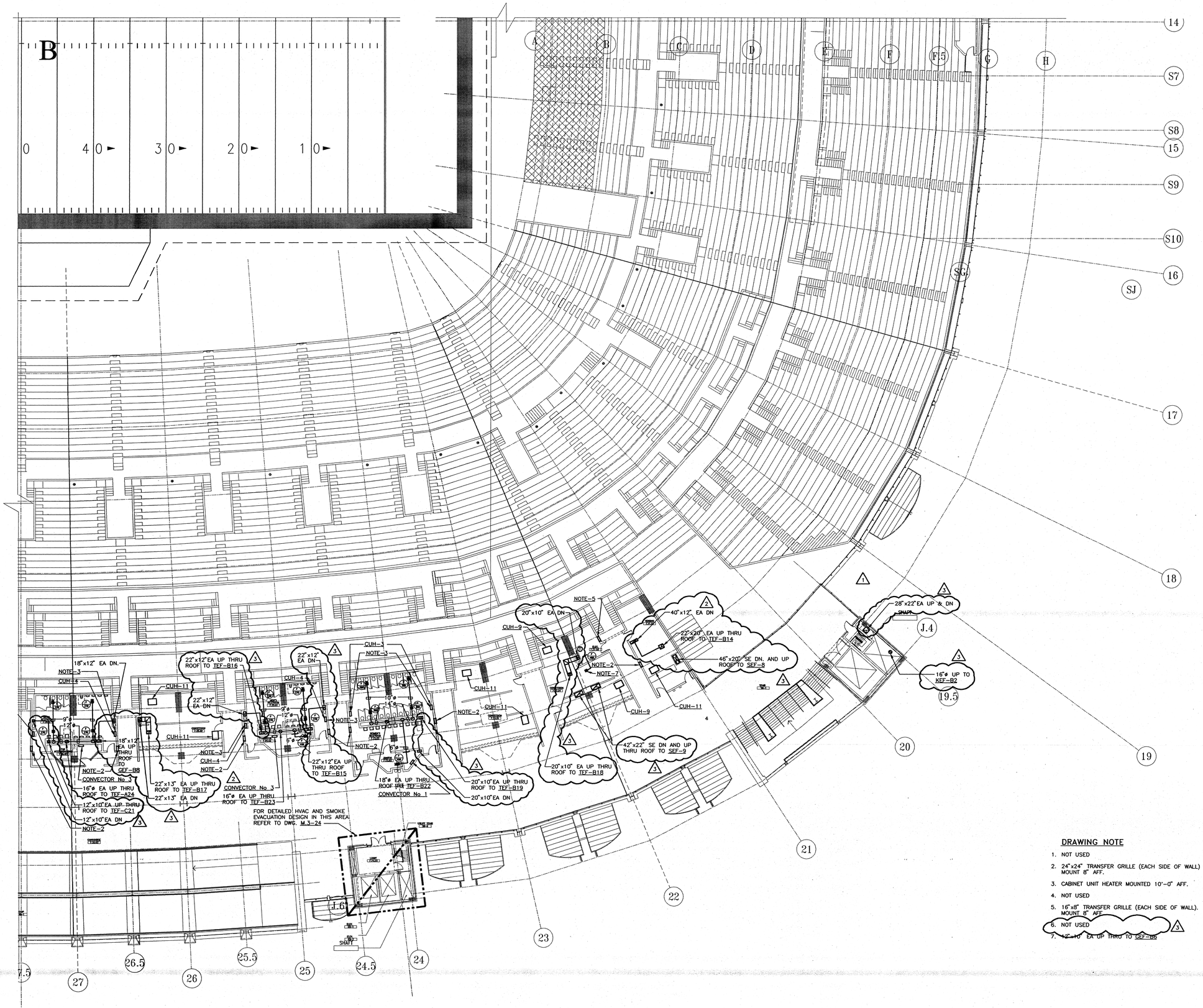
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PROJECT NO. 95-675-00	ISSUED BY: ---
DRAWN BY: ---	REVIEWED BY: DSP
ISSUED: 2-28-97	

SHEET TITLE
HVAC PLAN
UPPER CONCOURSE
QUAD A

CATEGORY - SUB-CATEGORY - SHEET
M.2-07A

8.15.97-07:39 - 5110M27 - RMF #95110



DRAWING NOTE

1. NOT USED
2. 24"x24" TRANSFER GRILLE (EACH SIDE OF WALL) WITH MOD. MOUNT 8" AFF.
3. CABINET UNIT HEATER MOUNTED 10'-0" AFF.
4. NOT USED
5. 16"x8" TRANSFER GRILLE (EACH SIDE OF WALL). MOUNT 8" AFF.
6. NOT USED
7. 12"x10" EA UP THRU TO GEF-B8

PROJECT NORTH

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NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44
3	8-12-97	BULLETIN #76

KEYPLAN

PROJECT NO. 95-675-00	ISSUED BY: ---
DRAWN BY: ---	REVIEWED BY: DSP
ISSUED: 2-28-97	

SHEET TITLE

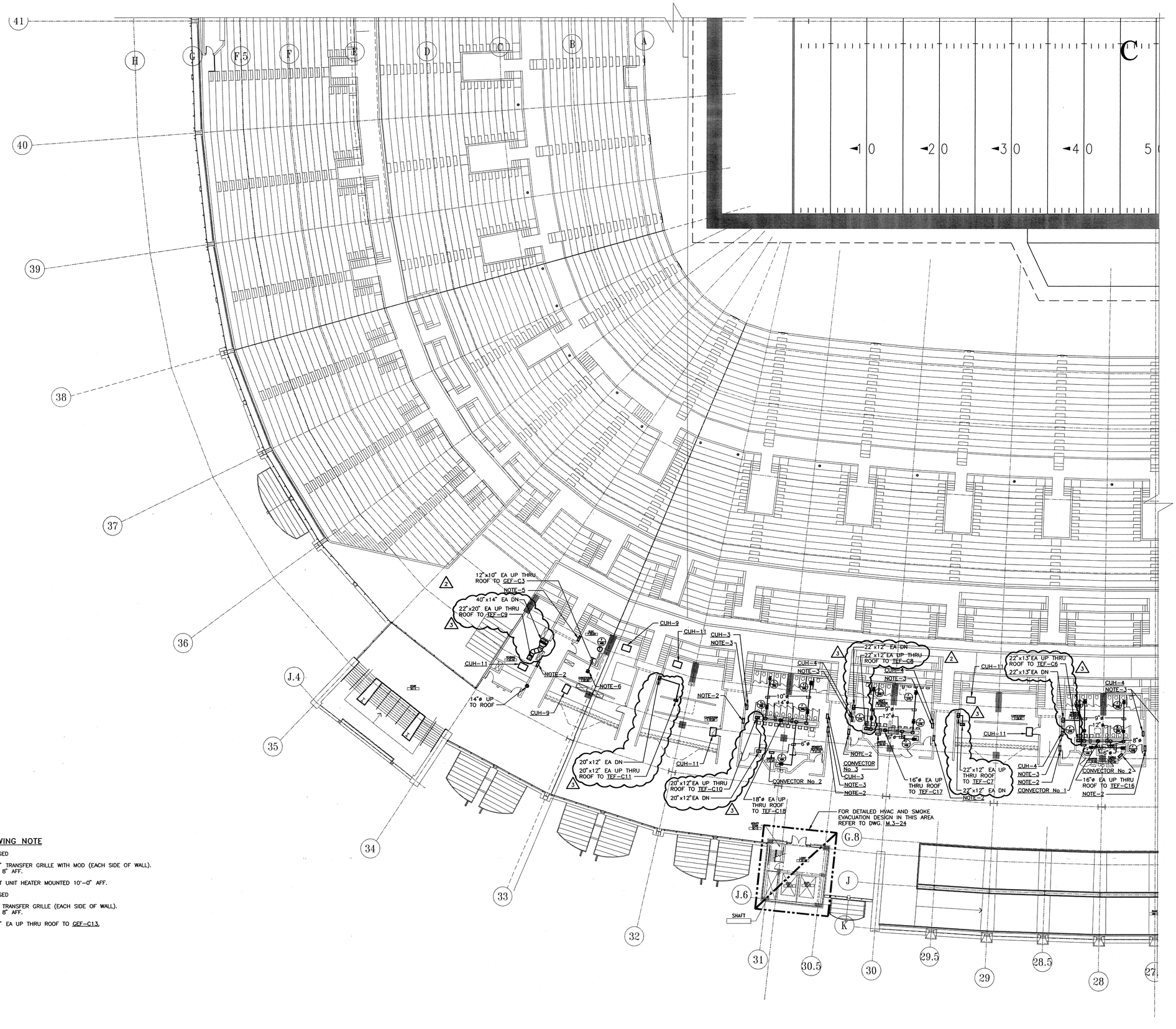
HVAC PLAN
UPPER CONCOURSE
QUAD B

CATEGORY - SUB-CATEGORY - SHEET

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DRAWING NOTE

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2. 24"x24" TRANSFER GRILLE WITH MOD (EACH SIDE OF WALL). MOUNT 8" AFF.
3. CABINET UNIT HEATER MOUNTED 10'-0" AFF.
4. NOT USED
5. 16"x8" TRANSFER GRILLE (EACH SIDE OF WALL). MOUNT 8" AFF.
6. 12"x10" EA UP THRU ROOF TO GEF-C13.

PROJECT NORTH

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REVISIONS

NO.	DATE	DESCRIPTION
1	6-6-97	BULLETIN #45
2	6-26-97	BULLETIN #64
3	8-12-97	BULLETIN #76

KEYPLAN

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ISSUED: 2-28-97	

SHEET TITLE

HVAC PLAN
UPPER CONCOURSE
QUAD C

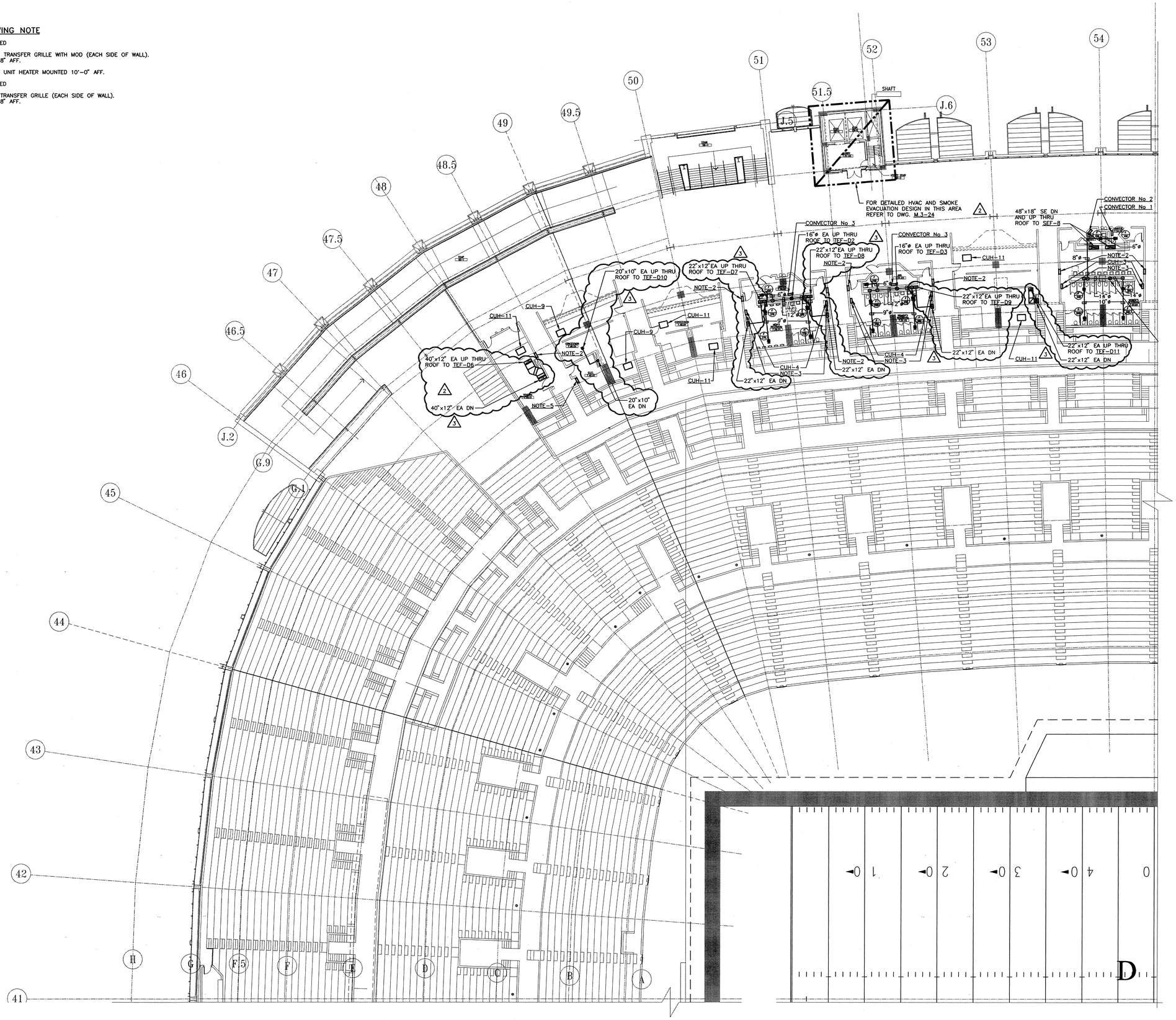
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DRAWING NOTE

1. NOT USED
2. 24"x24" TRANSFER GRILLE WITH MOD (EACH SIDE OF WALL). MOUNT 8" AFF.
3. CABINET UNIT HEATER MOUNTED 10'-0" AFF.
4. NOT USED
5. 16"x8" TRANSFER GRILLE (EACH SIDE OF WALL). MOUNT 8" AFF.



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REVISIONS

NO.	DATE	DESCRIPTION
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2	4-28-97	BULLETIN #44
3	8-12-97	BULLETIN #76

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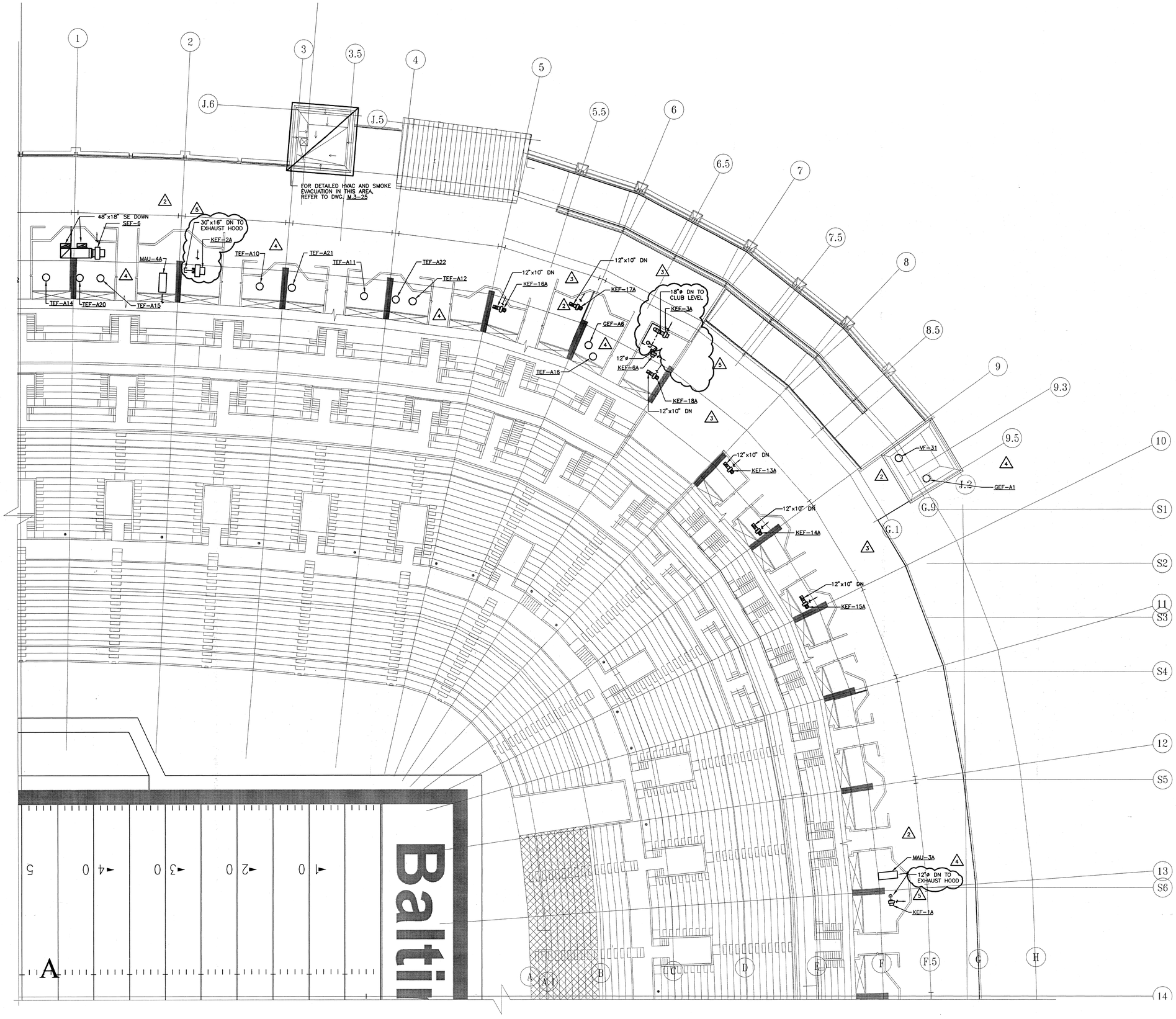
PROJECT NO. 95-675-00	ISSUED BY: ---
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SHEET TITLE

HVAC PLAN
UPPER CONCOURSE
QUAD D

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REVISIONS

NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44
3	7-25-97	BULLETIN #71
4	8-12-97	BULLETIN #76
5	11-26-97	BULLETIN #94

KEYPLAN

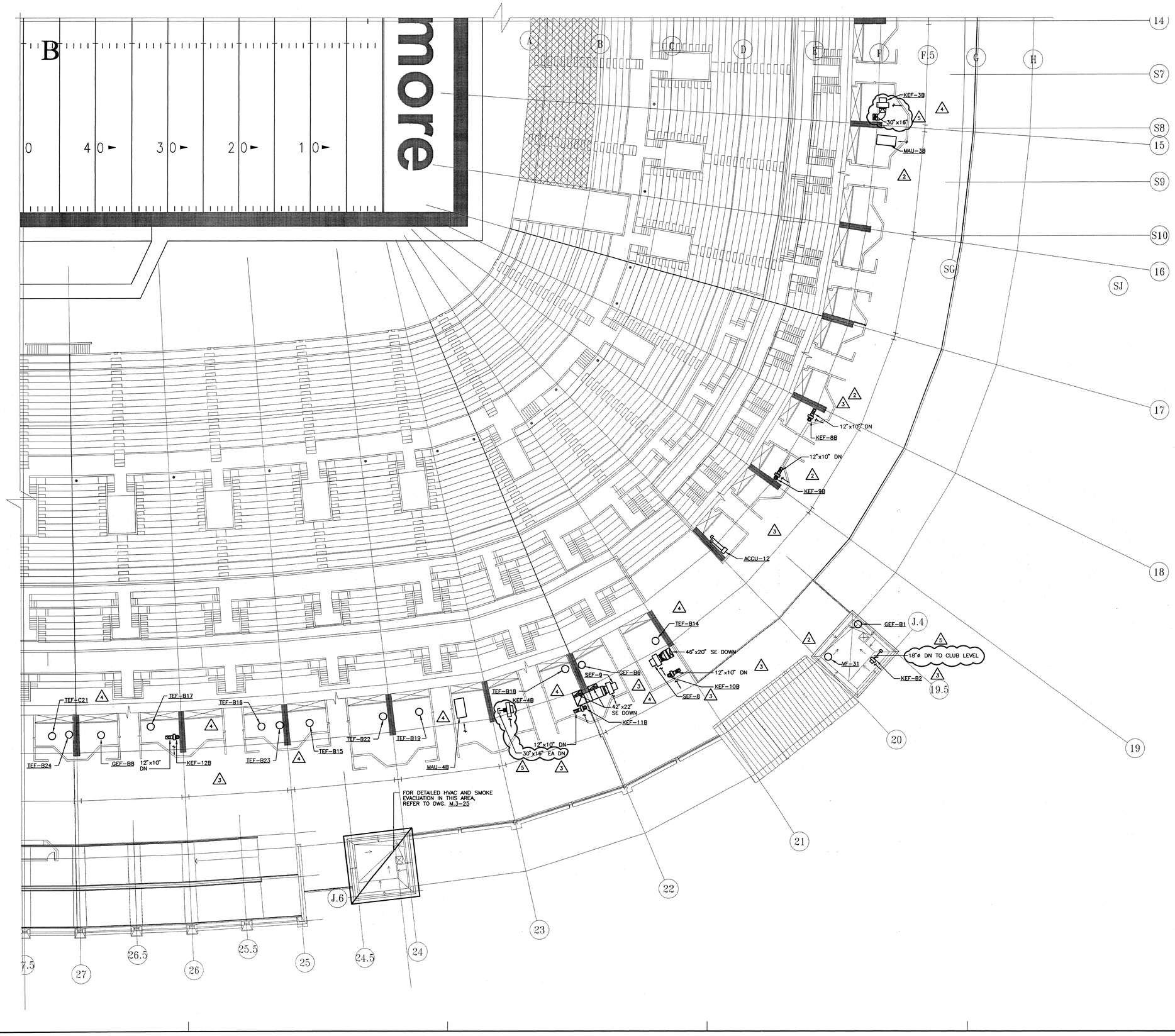
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ISSUED: 2-28-97	

SHEET TITLE
HVAC PLAN
UPPER CONCOURSE
ROOF QUAD A

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REVISIONS

NO.	DATE	DESCRIPTION
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2	4-28-97	BULLETIN #44
3	7-25-97	BULLETIN #71
4	8-12-97	BULLETIN #78
5	11-26-97	BULLETIN #84

KEYPLAN

PROJECT NO.	ISSUED BY:
95-675-00	---
DRAWN BY: ---	REVIEWED BY: DSP

ISSUED: 2-28-97

SHEET TITLE

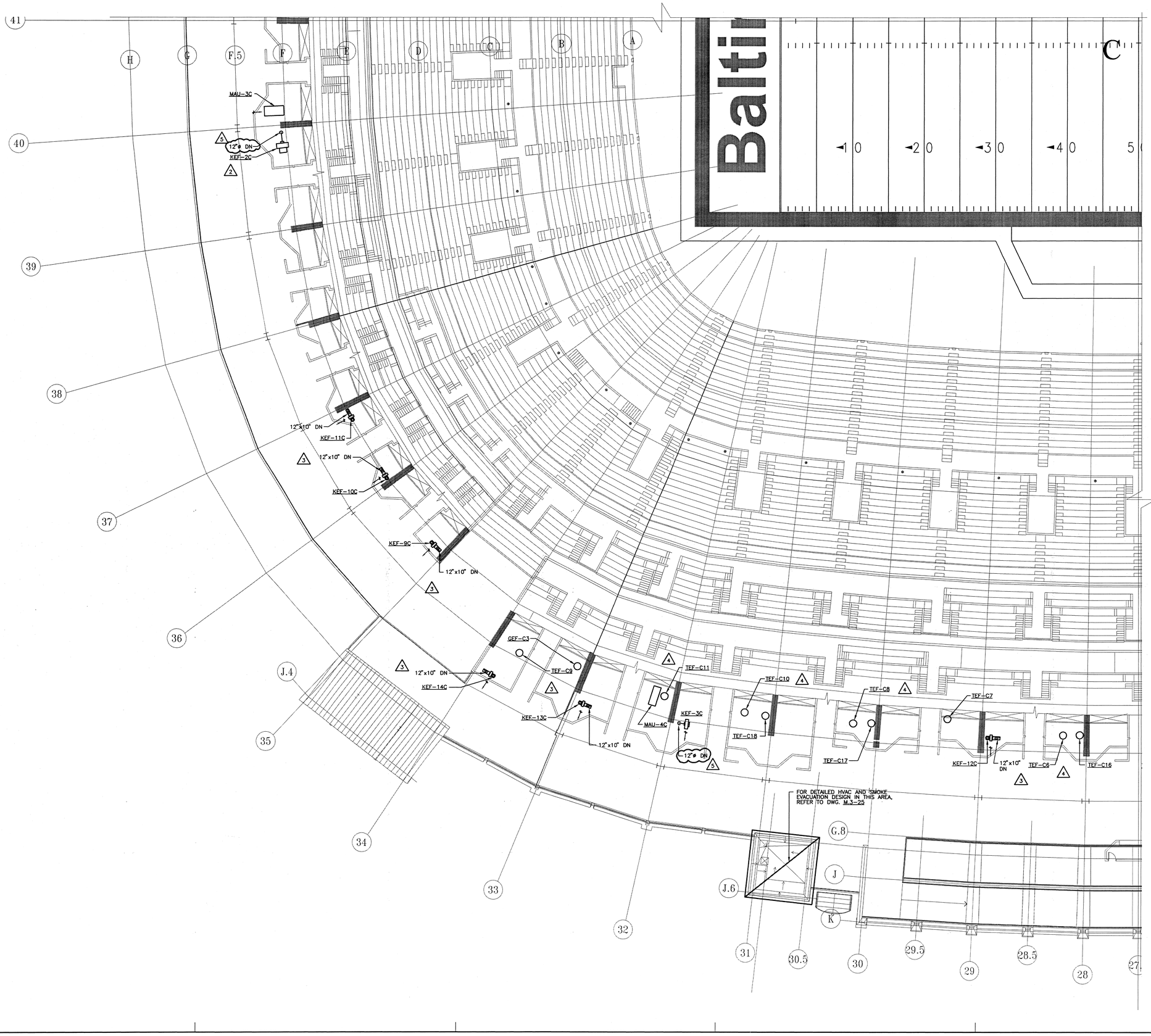
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UPPER CONCOURSE
ROOF QUAD B

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4	8-12-97	BULLETIN #76
5	11-26-97	BULLETIN #94

KEYPLAN

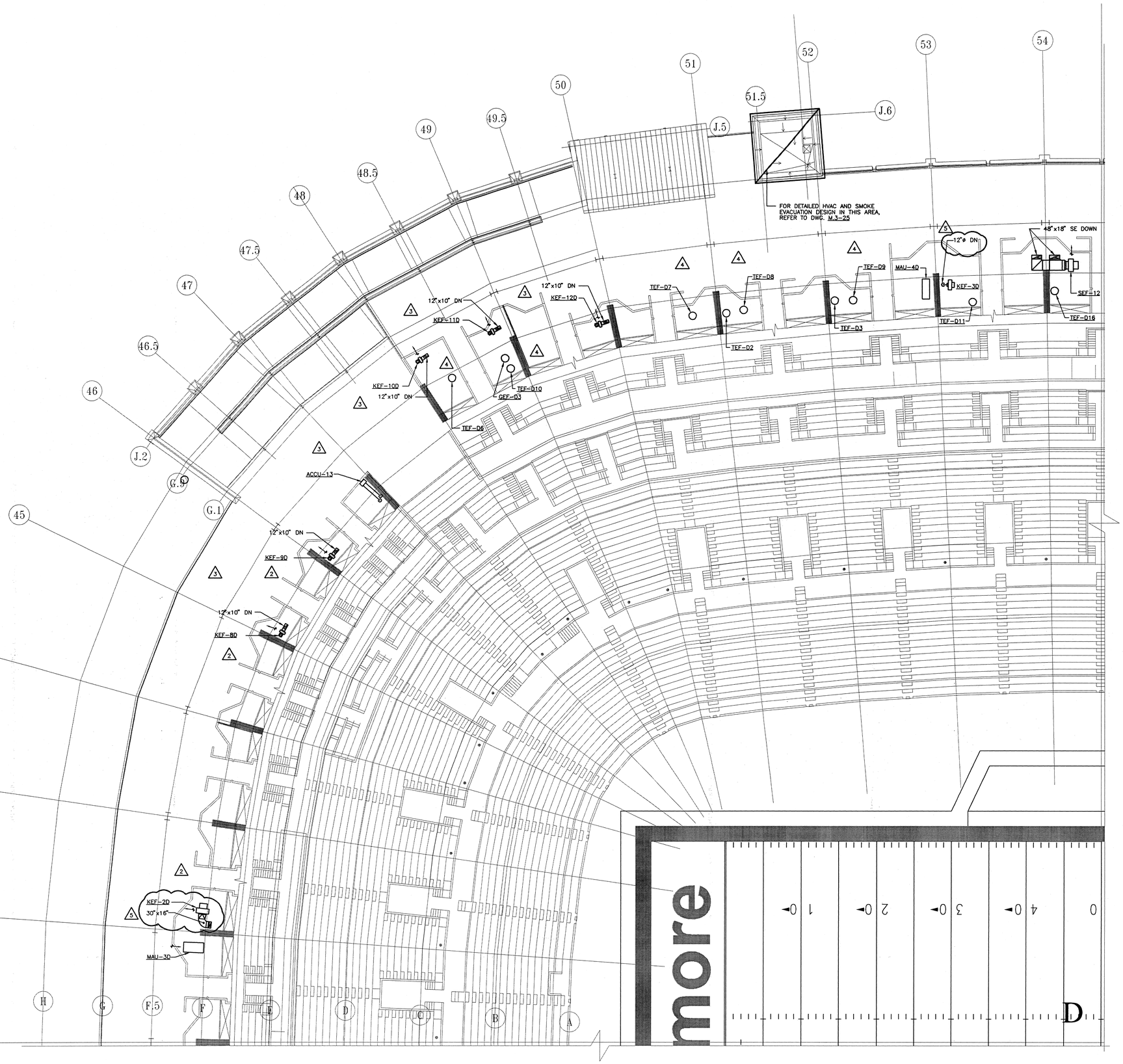
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ISSUED BY: ---
DRAWN BY: ---
REVIEWED BY: DSP
ISSUED: 2-28-97

SHEET TITLE
HVAC PLAN
UPPER CONCOURSE
ROOF QUAD C

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KEYPLAN

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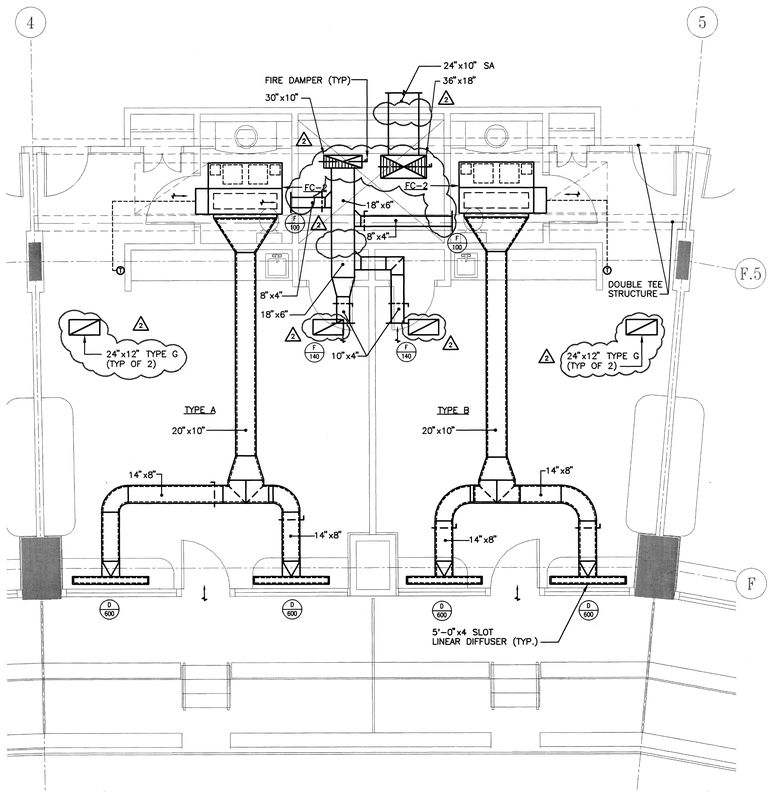
SHEET TITLE
HVAC PLAN
UPPER CONCOURSE
ROOF QUAD D

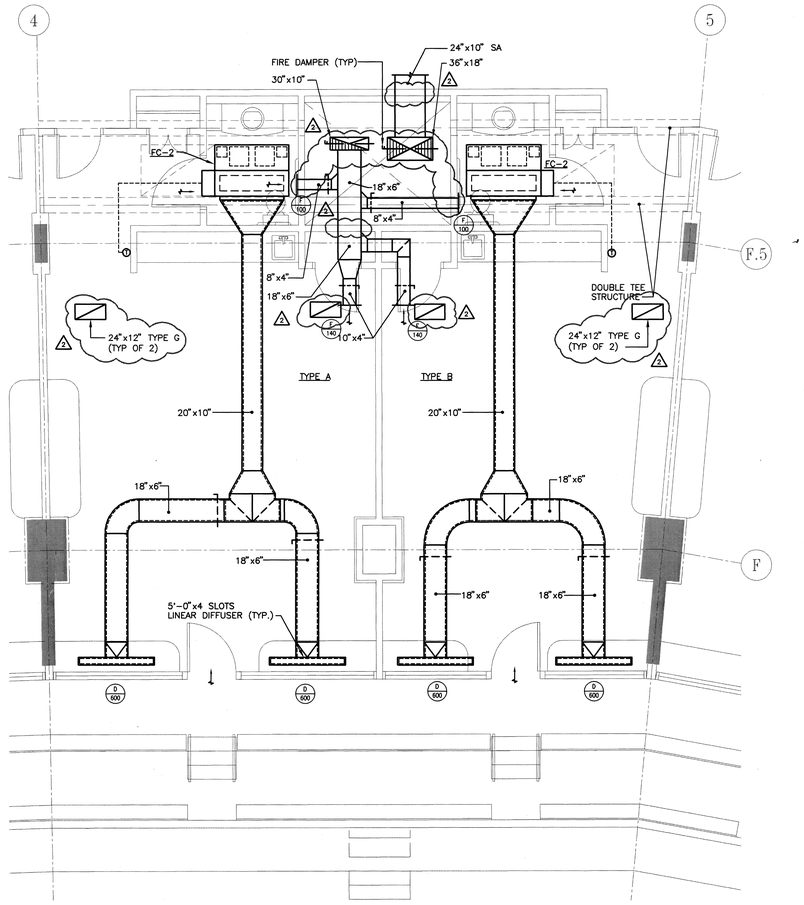
CATEGORY - SUB-CATEGORY - SHEET
M.2-08D

PROJECT NORTH
0 4 8 16 32

11.25.97-13:22 - 5110M28 - RMF #95110

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DRAWING NOTES:

1. FOR ACTUAL DUCT RISER SIZES LOCATED WITHIN SHAFTS REFER TO DRAWINGS M.2-04g – d, M.2-05g – d, AND M.2-06g – d.
2. DUCT RISER SIZES ON PLANS ARE SHOWN FOR CLARIFICATION PURPOSES ONLY.
3. FOR SHAFT COORDINATION AND DETAILED PIPING OF TYPICAL SUITES SEE PART PLAN 5 ON DWG M.3-03.
4. DIFFUSERS SHALL BE CENTERED ABOVE GLASS AREA.
5. PROVIDE 1" SOUND LINING ON ALL SUPPLY DUCTWORK.
6. HORIZONTAL DUCTWORK RUNS WITHIN SHAFTS SHALL BE RUN BELOW DOUBLE TEE STRUCTURE AND PIPING.

PART PLAN – LOWER SUITE LEVEL QUAD A & D

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

DRAWING NOTES:

1. FOR ACTUAL DUCT RISER SIZES LOCATED WITHIN SHAFTS REFER TO DRAWINGS M.2-04g – d, M.2-05g – d, AND M.2-06g – d.
2. DUCT RISER SIZES ON PLANS ARE SHOWN FOR CLARIFICATION PURPOSES ONLY.
3. FOR SHAFT COORDINATION AND DETAILED PIPING OF TYPICAL SUITES SEE PART PLAN 5 ON DWG M.3-03.
4. DIFFUSERS SHALL BE CENTERED ABOVE GLASS AREA.
5. PROVIDE 1" SOUND LINING ON ALL SUPPLY DUCTWORK.
6. HORIZONTAL DUCTWORK RUNS WITHIN SHAFTS SHALL BE RUN BELOW DOUBLE TEE STRUCTURE AND PIPING.

PART PLAN – UPPER SUITE LEVEL QUAD A & D

SCALE: 1/4"=1'-0" (2)

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REVISIONS

NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44

KEYPLAN

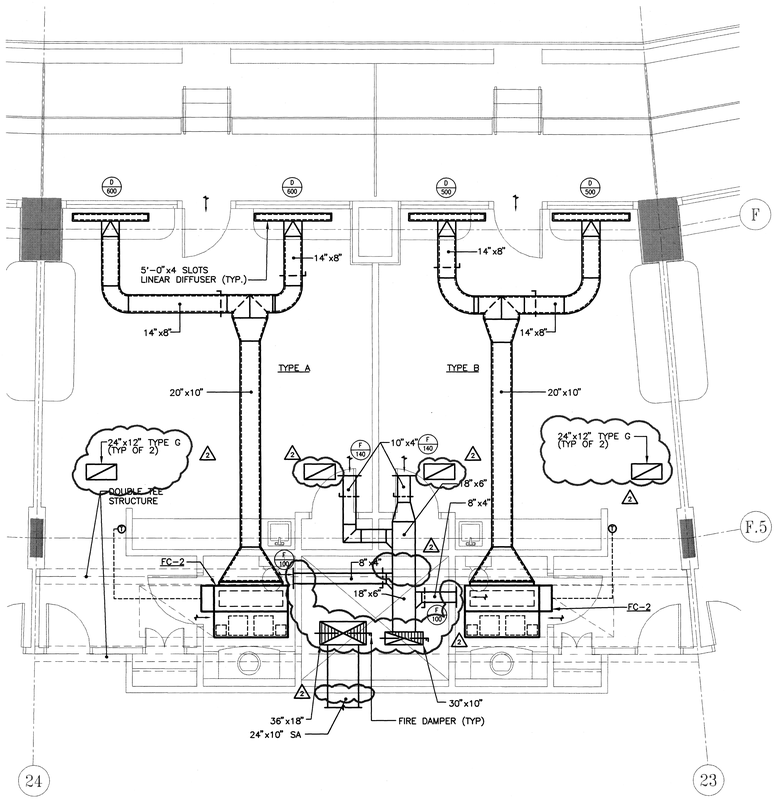
PROJECT NO. 95-675-00
ISSUED BY:
DRAWN BY:
REVIEWED BY:
ISSUED: 2-28-97

SHEET TITLE
PART PLANS - TYPICAL SUITES HVAC

CATEGORY - SUB-CATEGORY - SHEET
M.3-01

04.24.97-18:25- 5110M31 - RMF #95110

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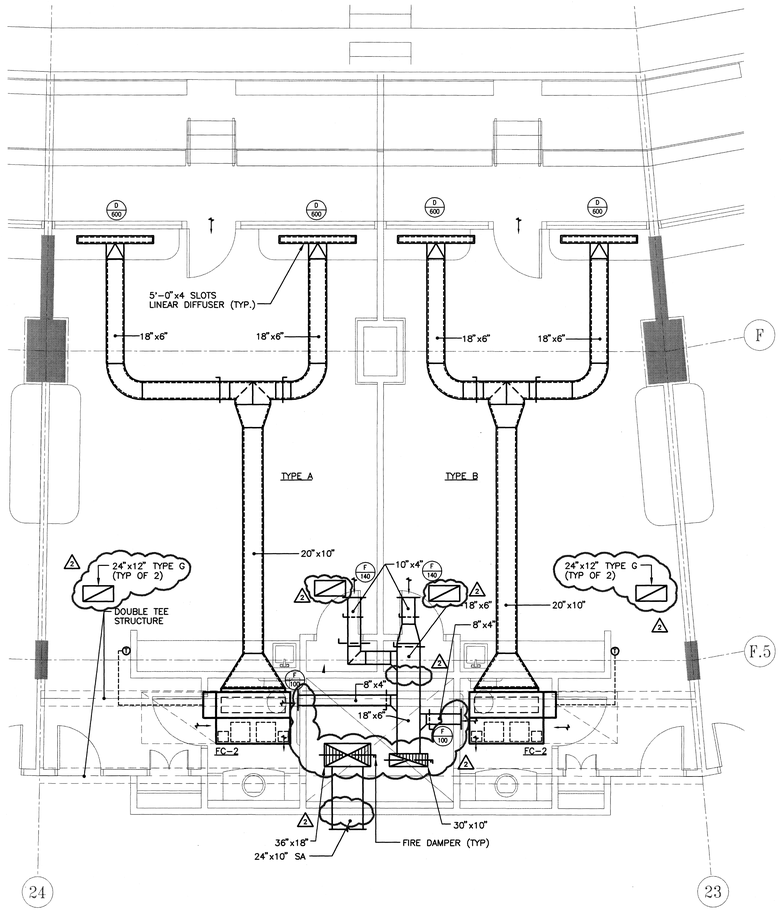


DRAWING NOTES:

1. FOR ACTUAL DUCT RISER SIZES LOCATED WITHIN SHAFTS REFER TO DRAWINGS M.2-04a - d, M.2-05a - d, AND M.2-06a - d.
2. DUCT RISER SIZES ON PLANS ARE SHOWN FOR CLARIFICATION PURPOSES ONLY.
3. FOR SHAFT COORDINATION AND DETAILED PIPING OF TYPICAL SUITES SEE PART PLAN 5 ON DWG M.3-03.
4. DIFFUSERS SHALL BE CENTERED ABOVE GLASS AREA.
5. PROVIDE 1" SOUND LINING ON ALL SUPPLY DUCTWORK.
6. HORIZONTAL DUCTWORK RUNS WITHIN SHAFTS SHALL BE RUN BELOW DOUBLE TEE STRUCTURE AND PIPING.

PART PLAN - LOWER SUITE LEVEL QUAD B & C

SCALE: 1/4"=1'-0" (3)



DRAWING NOTES:

1. FOR ACTUAL DUCT RISER SIZES LOCATED WITHIN SHAFTS REFER TO DRAWINGS M.2-04a - d, M.2-05a - d, AND M.2-06a - d.
2. DUCT RISER SIZES ON PLANS ARE SHOWN FOR CLARIFICATION PURPOSES ONLY.
3. FOR SHAFT COORDINATION AND DETAILED PIPING OF TYPICAL SUITES SEE PART PLAN ON DWG M.3-03.
4. DIFFUSERS SHALL BE CENTERED ABOVE GLASS AREA.
5. PROVIDE 1" SOUND LINING ON ALL SUPPLY DUCTWORK.
6. HORIZONTAL DUCTWORK RUNS WITHIN SHAFTS SHALL BE RUN BELOW DOUBLE TEE STRUCTURE AND PIPING.

PART PLAN - UPPER SUITE LEVEL QUAD B & C

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

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NO.	DATE	DESCRIPTION
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2	4-28-97	BULLETIN #44

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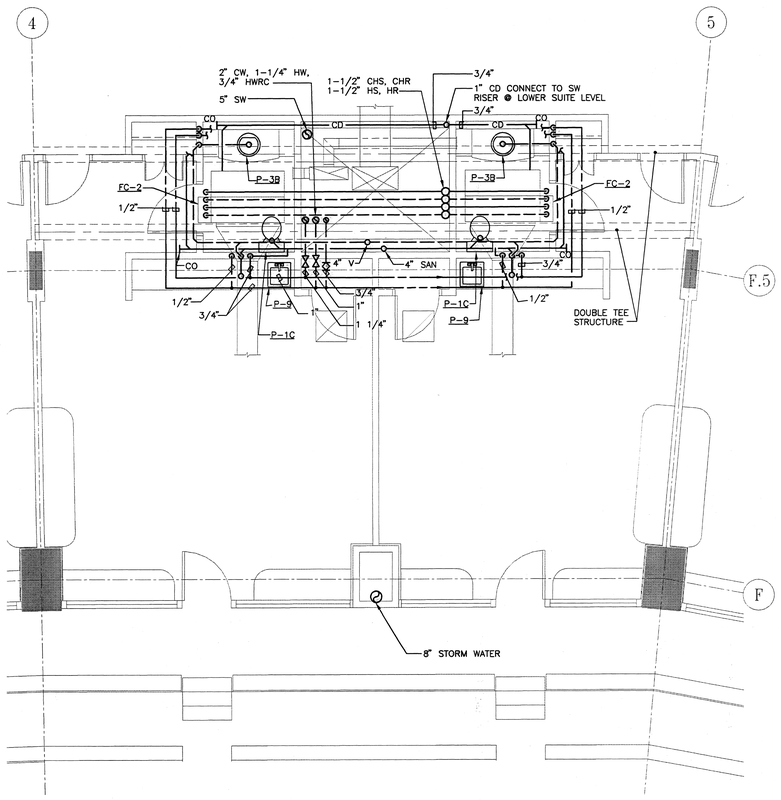
PROJECT NO. 95-675-00	ISSUED BY: RMF
DRAWN BY: JRJ	REVIEWED BY: DSP
ISSUED: 2-28-97	

SHEET TITLE
PART PLANS - TYPICAL SUITES HVAC

CATEGORY - SUB-CATEGORY - SHEET
M.3-02

04.25.97-1632-5110432 - RMF #95110

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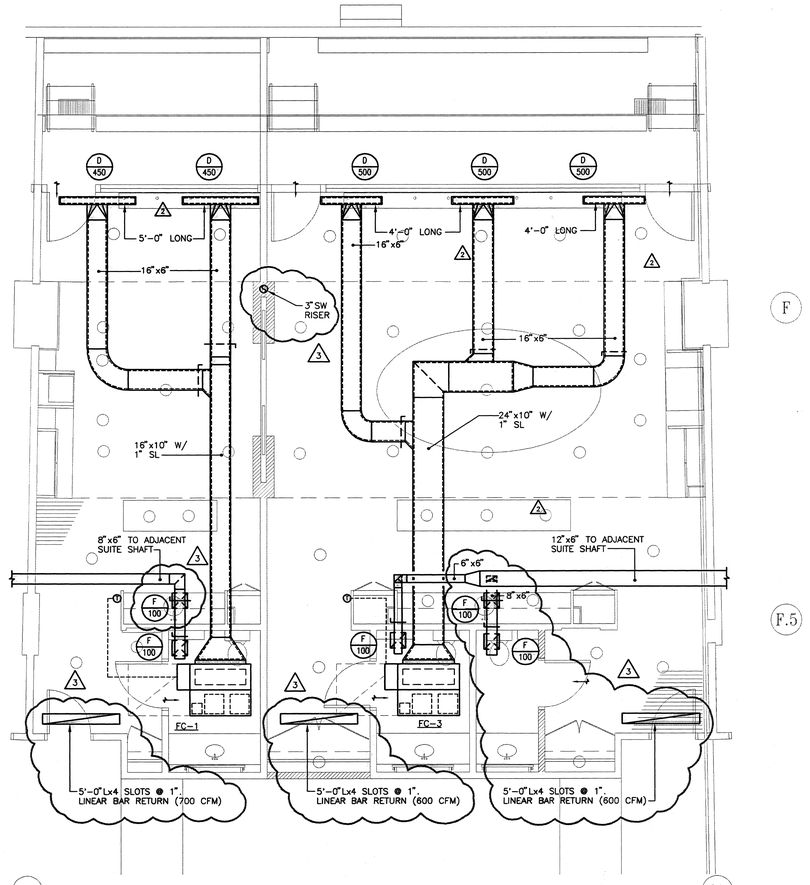


DRAWING NOTES:

1. FOR CLARIFICATION OF PIPE ROUTING AND SIZES REFER TO DRAWINGS P.2-04a-d, P.2-05a-d, P.2-06a-d.
2. BRANCH PIPING TO FAN COIL UNITS FROM SHAFT MAINS SHALL BE RUN ABOVE FAN COIL UNIT.
3. PROVIDE ACCESS PANELS FOR SHUT-OFF VALVES.

PART PLAN - TYPICAL SUITE - PIPING

SCALE: 1/4"=1'-0" (5)



DRAWING NOTES:

1. COORDINATION AND DETAILED PIPING OF TYPICAL SUITES SEE PART PLAN ON DWG M.3-03.
2. DIFFUSERS SHALL BE CENTERED ABOVE GLASS AREA.
3. PROVIDE 1" SOUND LINING ON ALL SUPPLY DUCTWORK.

PART PLAN - OWNERS SUITE

SCALE: 1/4"=1'-0" (6)

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323 West 8th Street, Suite700
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2	4-28-97	BULLETIN #44
3	1-16-98	BULLETIN #104

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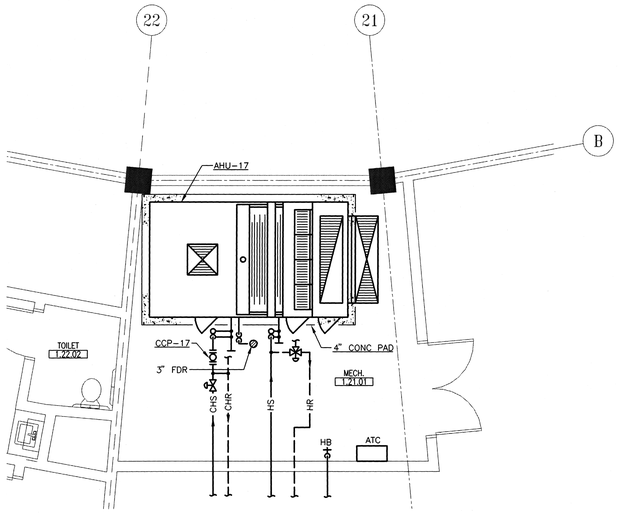
PROJECT NO. 95-675-00 | ISSUED BY:
DRAWN BY: JRJ | REVIEWED BY:
ISSUED: 2-28-97

SHEET TITLE
PART PLANS - TYPICAL SUITE PIPING AND OWNER'S SUITE

CATEGORY - SUB-CATEGORY - SHEET
M.3-03

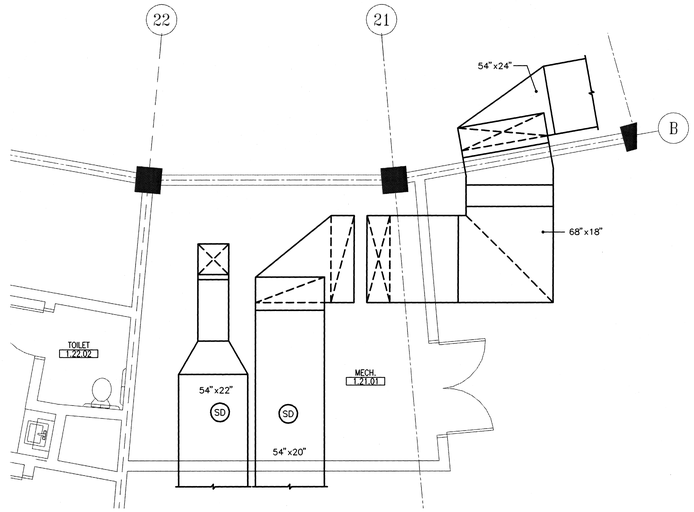
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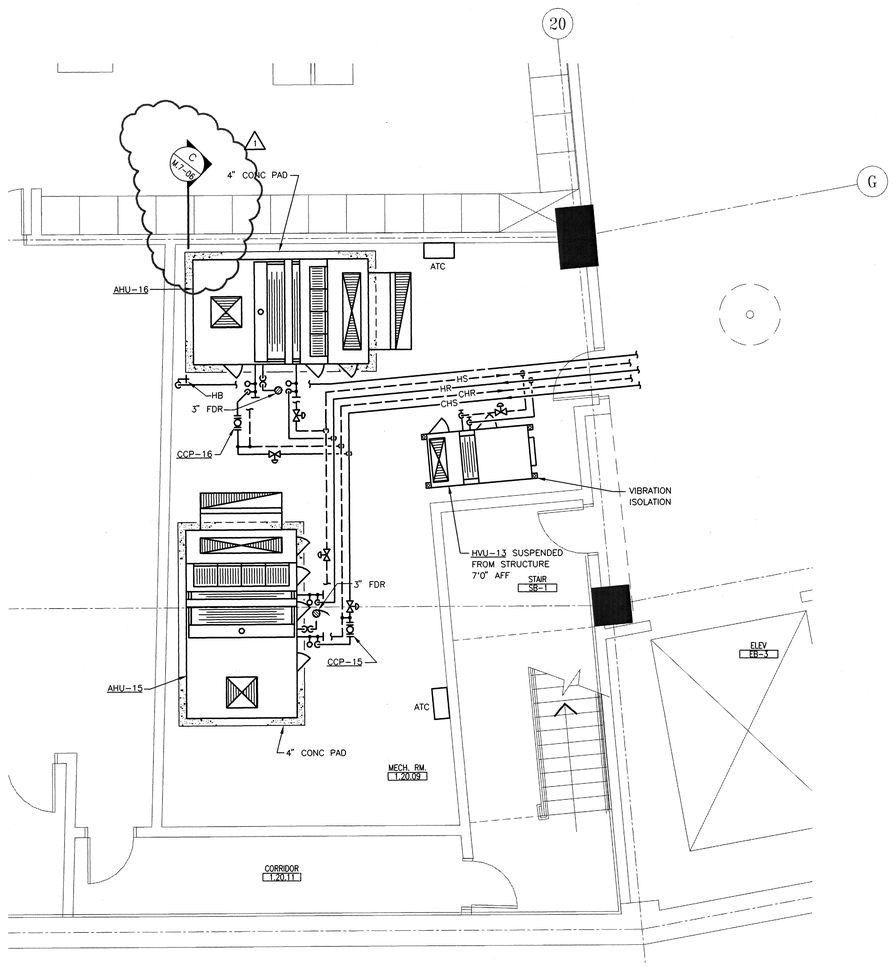
A / M.3-05 MECHANICAL ROOM #1.21.01 – PIPING

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



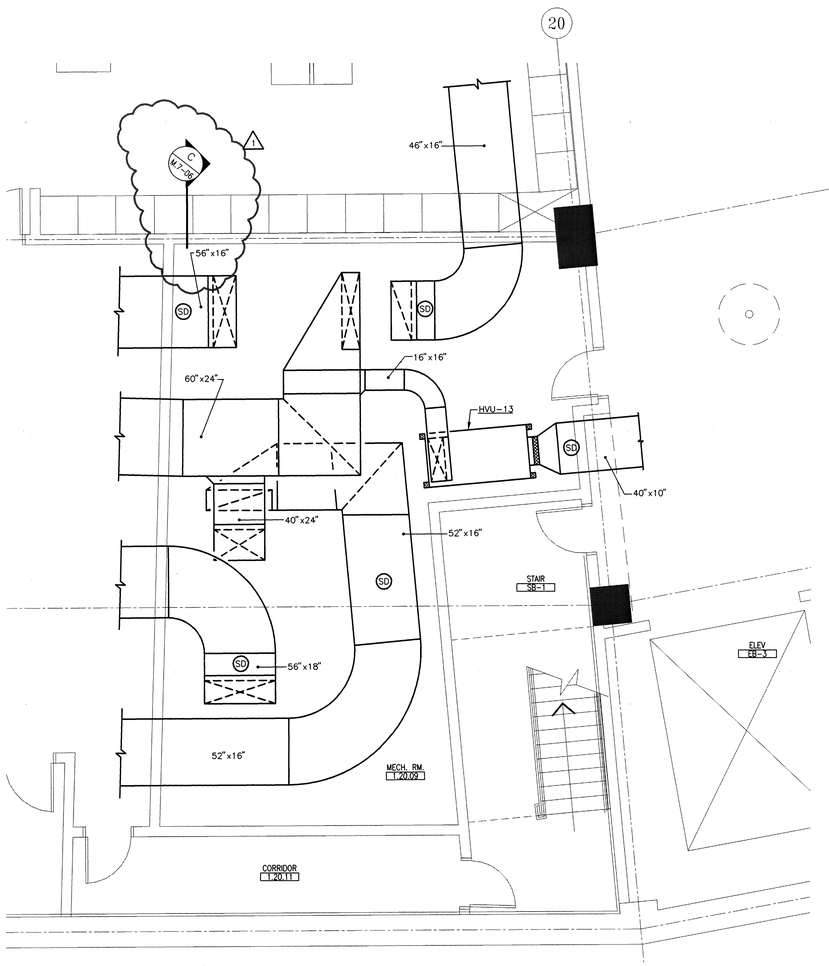
A / M.3-05 MECHANICAL ROOM #1.21.01 – DUCTWORK

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



B / M.3-05 MECHANICAL ROOM #1.20.09 – PIPING

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



B / M.3-05 MECHANICAL ROOM #1.20.09 – DUCTWORK

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

GENERAL NOTES:

1. FLOOR DRAINS SHALL HAVE DEEP SEAL TRAPS.

PROJECT NORTH

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REVIEWED BY:
ISSUED: 2-28-97

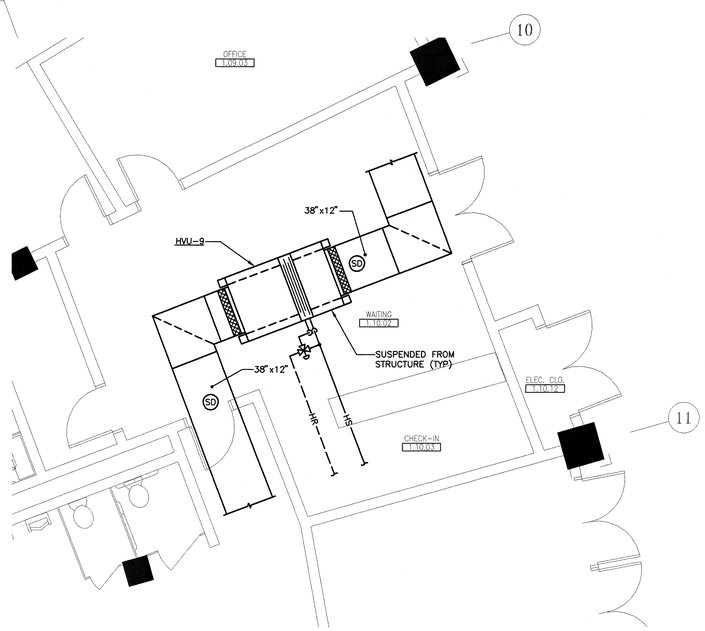
SHEET TITLE

MECHANICAL ROOMS AIR SYSTEMS SERVICE LEVEL - B

CATEGORY - SUB-CATEGORY - SHEET

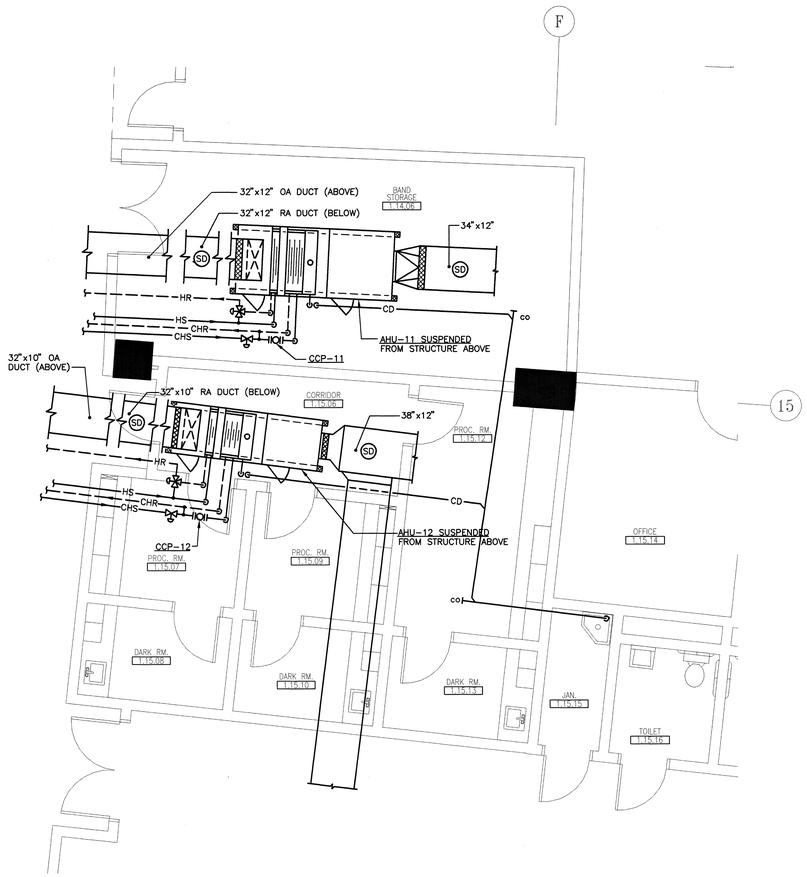
M.3-05

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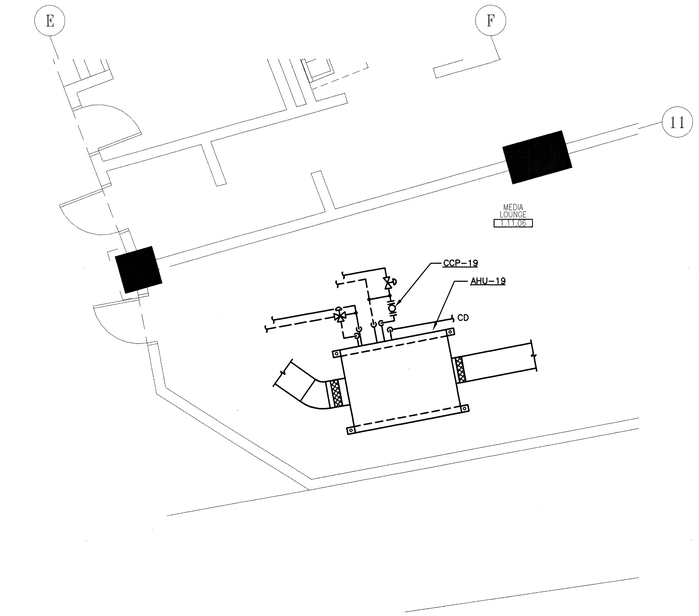
A M.3-06 PART PLAN – HVU-9

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



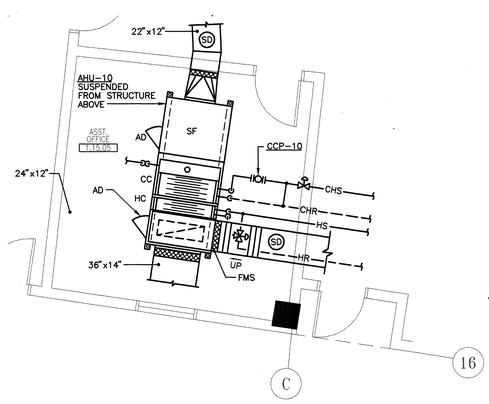
C M.3-06 PART PLAN – AHU-11 & 12

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



B M.3-06 PART PLAN – AHU-19

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



D M.3-06 PART PLAN – AHU-10

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

1 SHOW FLEX CONNECTIONS AND SUPPORT HANGERS/RAILS

PROJECT NORTH

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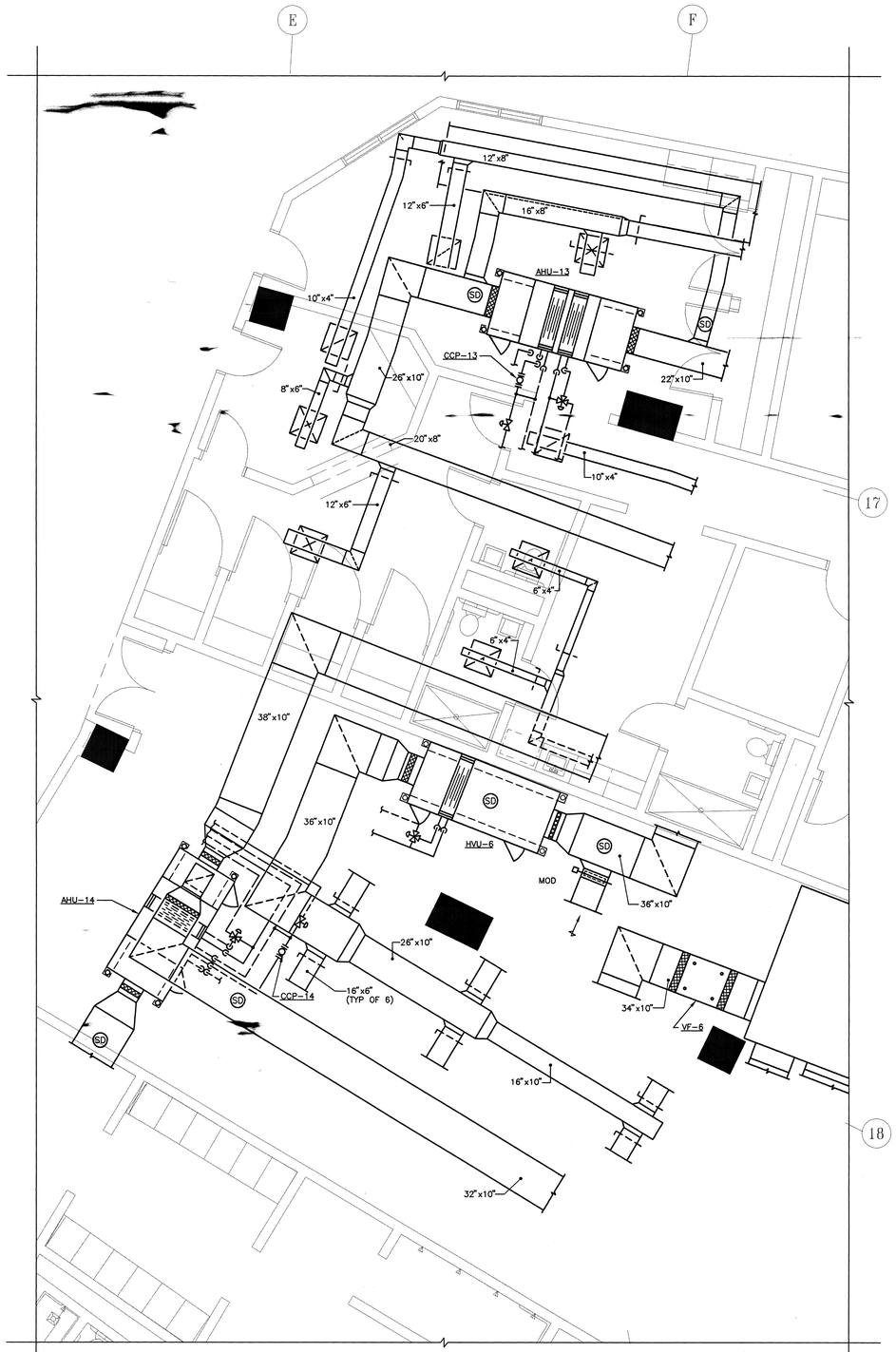
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KEYPLAN

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ISSUED: 2-28-97	

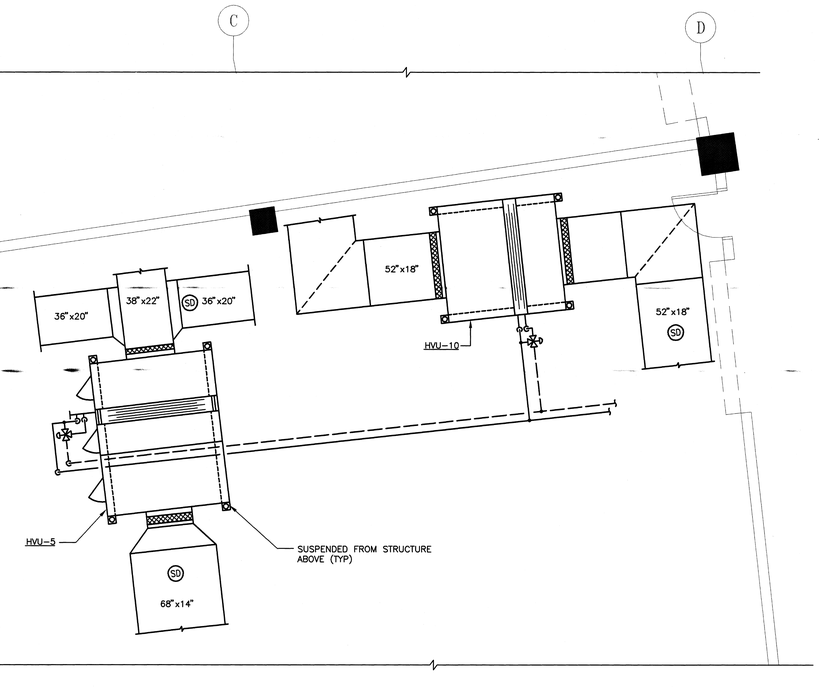
SHEET TITLE
MECHANICAL PART PLANS - AIR SYSTEMS SERVICE LEVEL

CATEGORY - SUB-CATEGORY - SHEET
M.3-06



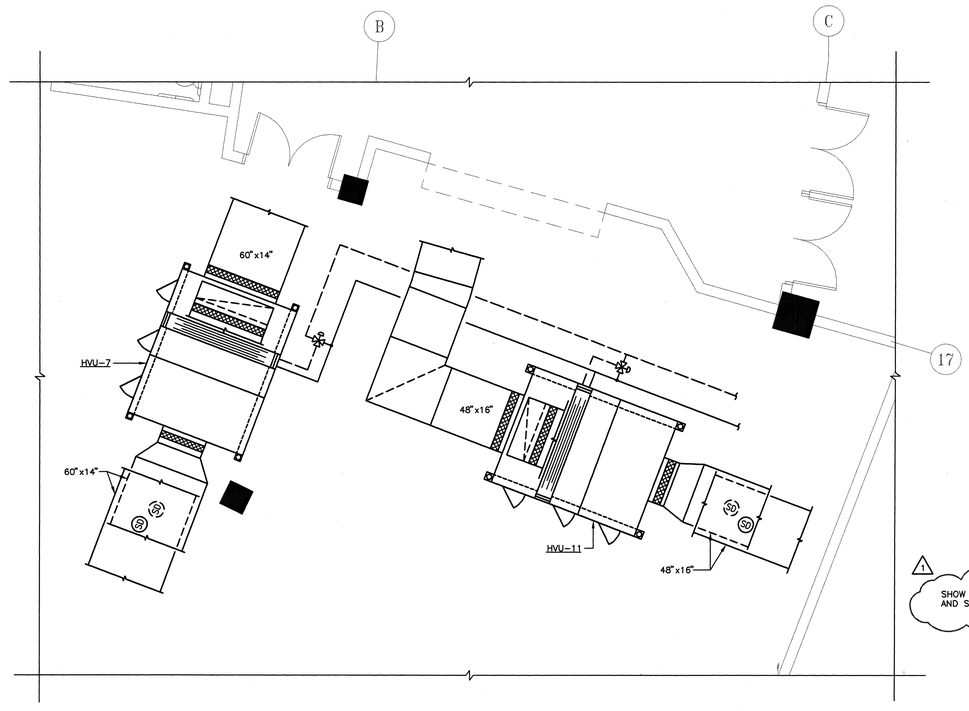
A M.3-07 PART PLAN – AHU – 13 & 14, HVU –6

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



B M.3-07 PART PLAN – HVU–5 & HVU–10

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



C M.3-07 PART PLAN – HVU–7 & HVU–11

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

1 SHOW FLEX CONNECTIONS AND SUPPORT HANGERS/RAILS

PROJECT NORTH

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04.27.97-12:52-5110M307 - RMF #95110

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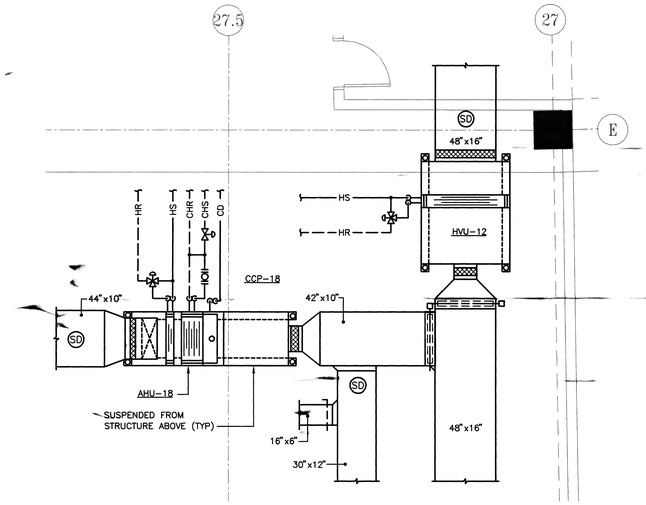
KEYPLAN

PROJECT NO. 95-675-00 | ISSUED BY:
DRAWN BY: JTP | REVIEWED BY:
ISSUED: 2-28-97

SHEET TITLE
MECHANICAL PART PLANS - AIR SYSTEMS SERVICE LEVEL

CATEGORY - SUB-CATEGORY - SHEET
M.3-07

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A / M.3-08 PART PLAN – AHU-18 AND HVU-12

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

1 SHOW FLEX CONNECTIONS AND SUPPORT HANGERS/RAILS

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04.27.97--15.07-5110M308 - RMF #95110

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Kansas City, Missouri 64105

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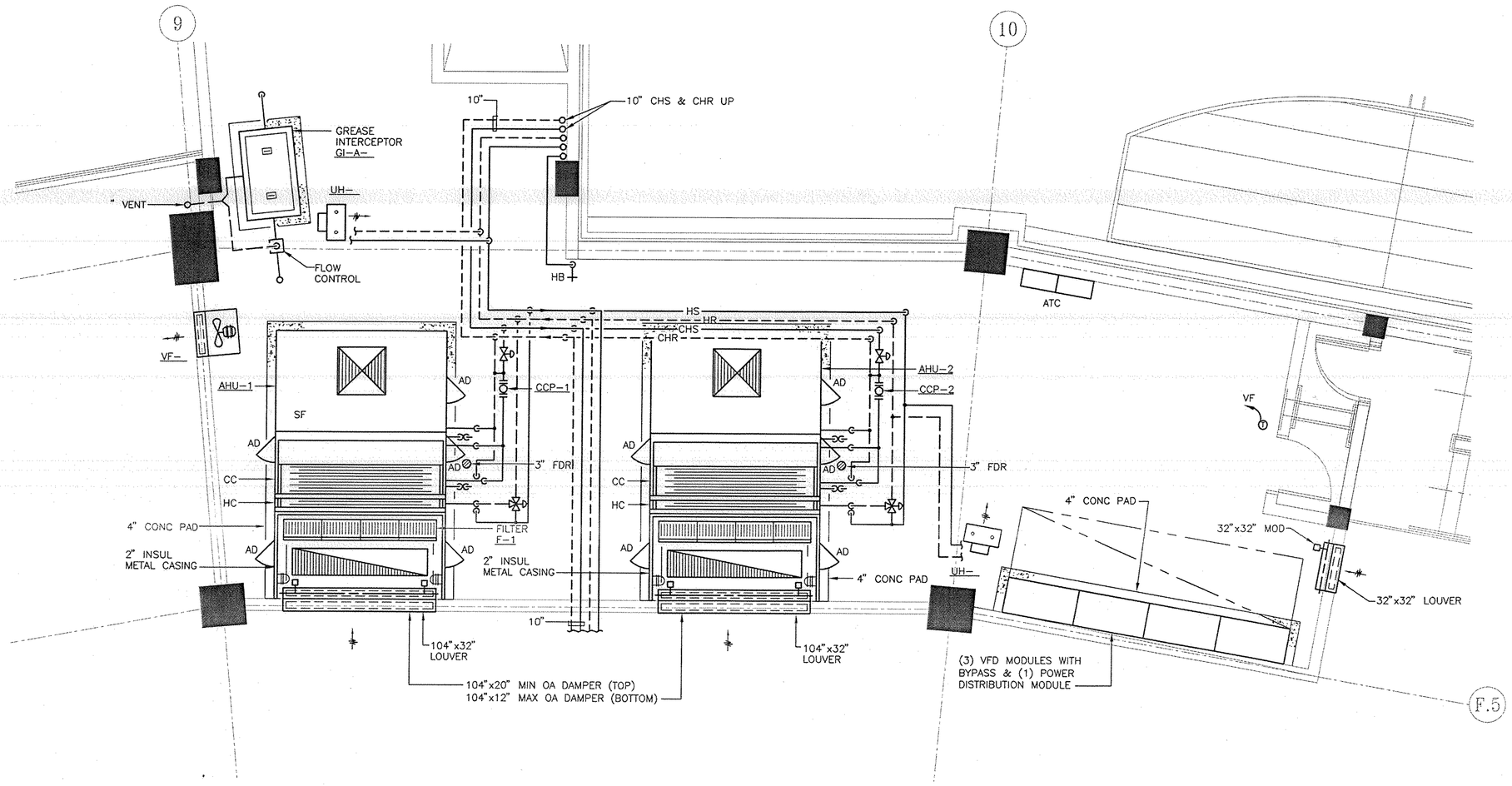
KEYPLAN

PROJECT NO. 95-675-00	ISSUED BY:
DRAWN BY: JFL	REVIEWED BY:
ISSUED: 2-28-97	

SHEET TITLE
MECHANICAL PART PLANS - AIR SYSTEMS SERVICE LEVEL

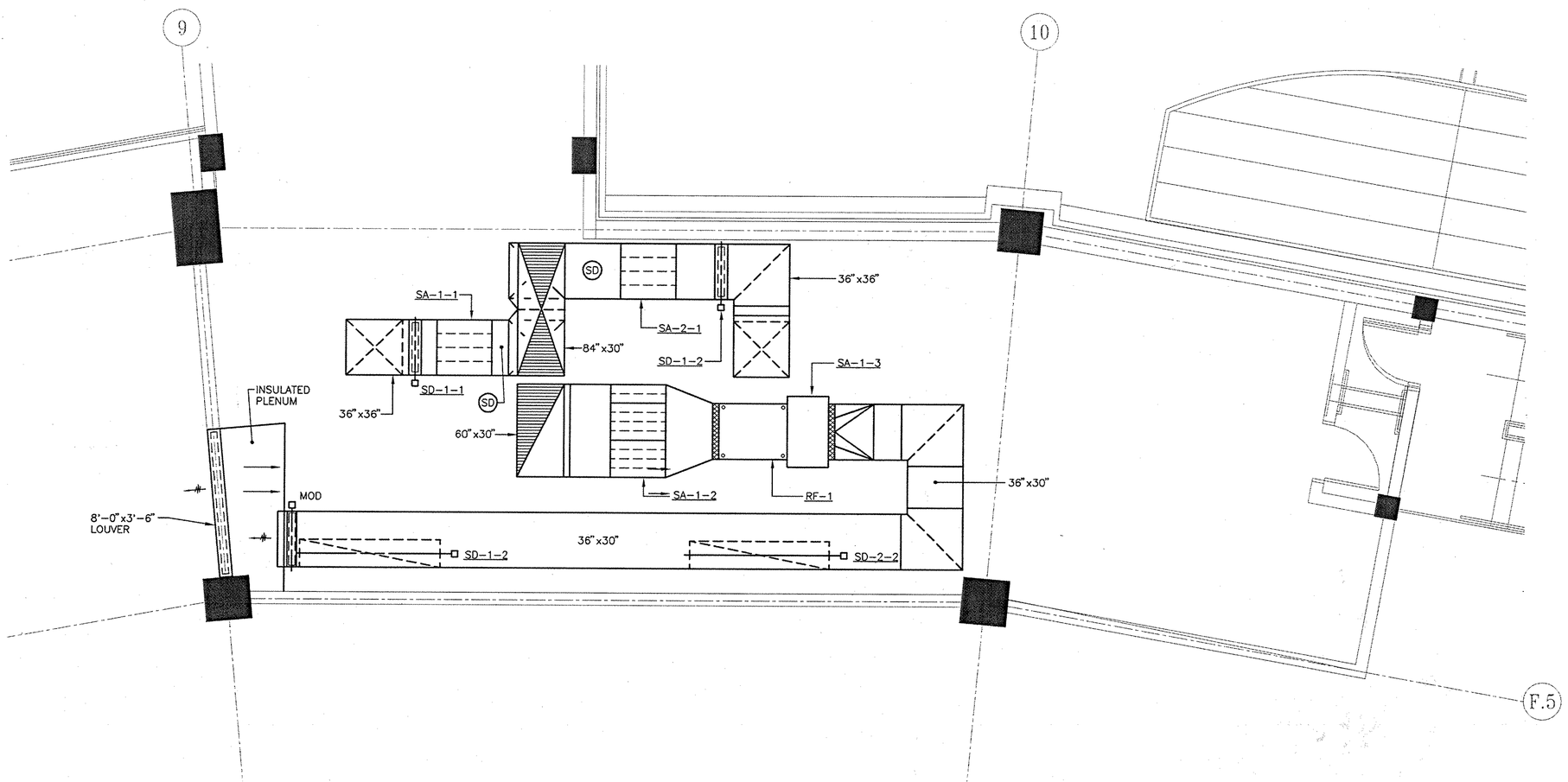
CATEGORY -- SUB-CATEGORY - SHEET
M.3-08

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MECHANICAL ROOM – PIPING PLAN

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



MECHANICAL ROOM – DUCTWORK PLAN

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

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Kansas City, Missouri 64105

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MIAMI, FLORIDA

MECHANICAL/ELECTRICAL/PLUMBING
BOSS MURPHY FINKELSTIEN, INC.
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NO.	DATE	DESCRIPTION

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DRAWN BY: JRJ	REVIEWED BY: PJH
ISSUED: 2-28-97	

SHEET TITLE

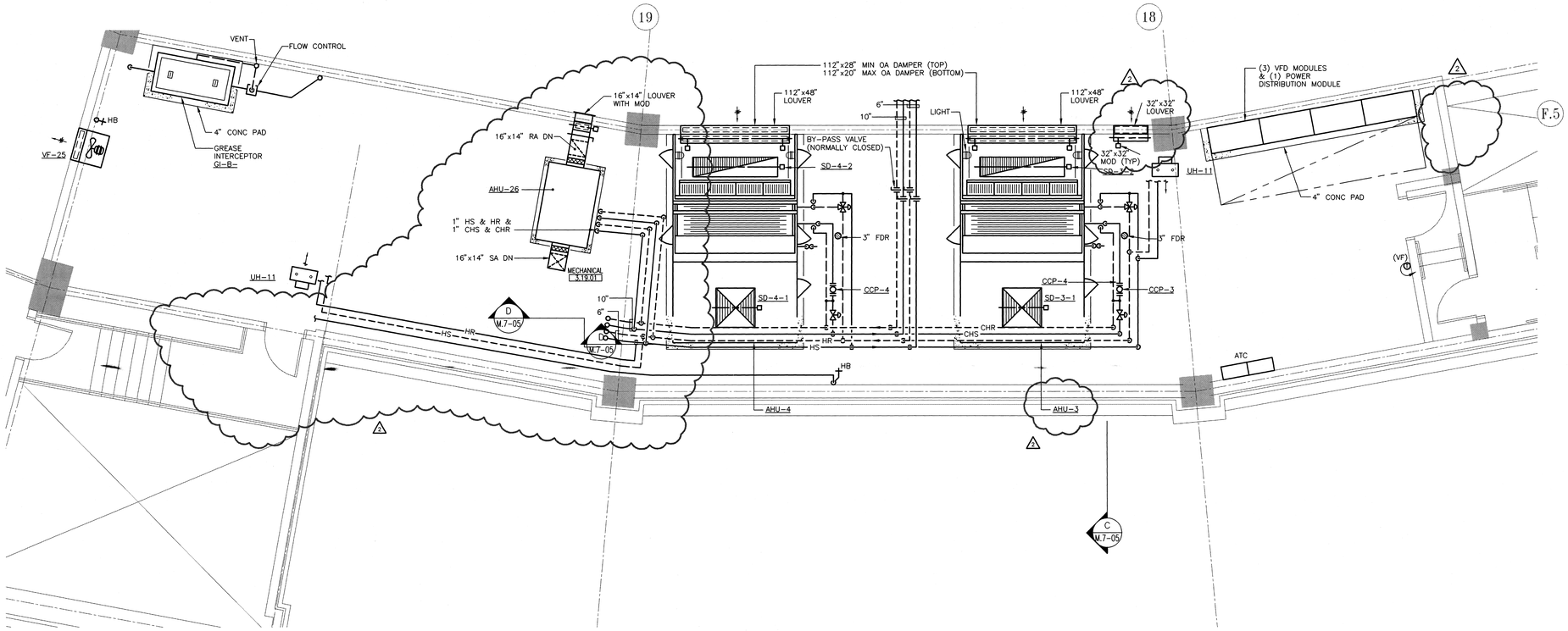
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CATEGORY - SUB-CATEGORY - SHEET

M.3-09

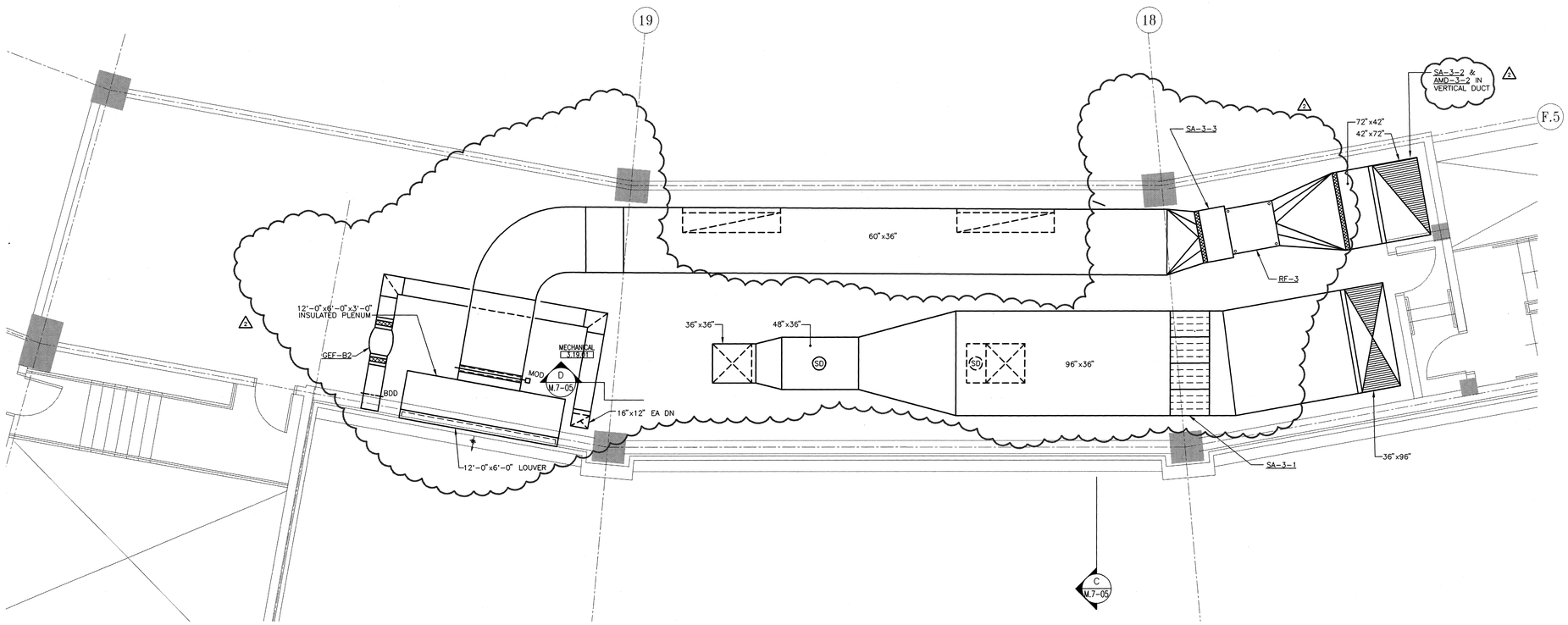
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03.02.97-23:14-5110M309 - RNF #95110



MECHANICAL ROOM – PIPING PLAN

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



MECHANICAL ROOM – DUCTWORK PLAN

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

PROJECT NORTH

0 1 2 4 8

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REVISIONS NO.	DATE	DESCRIPTION
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2	4-28-97	BULLETIN #44

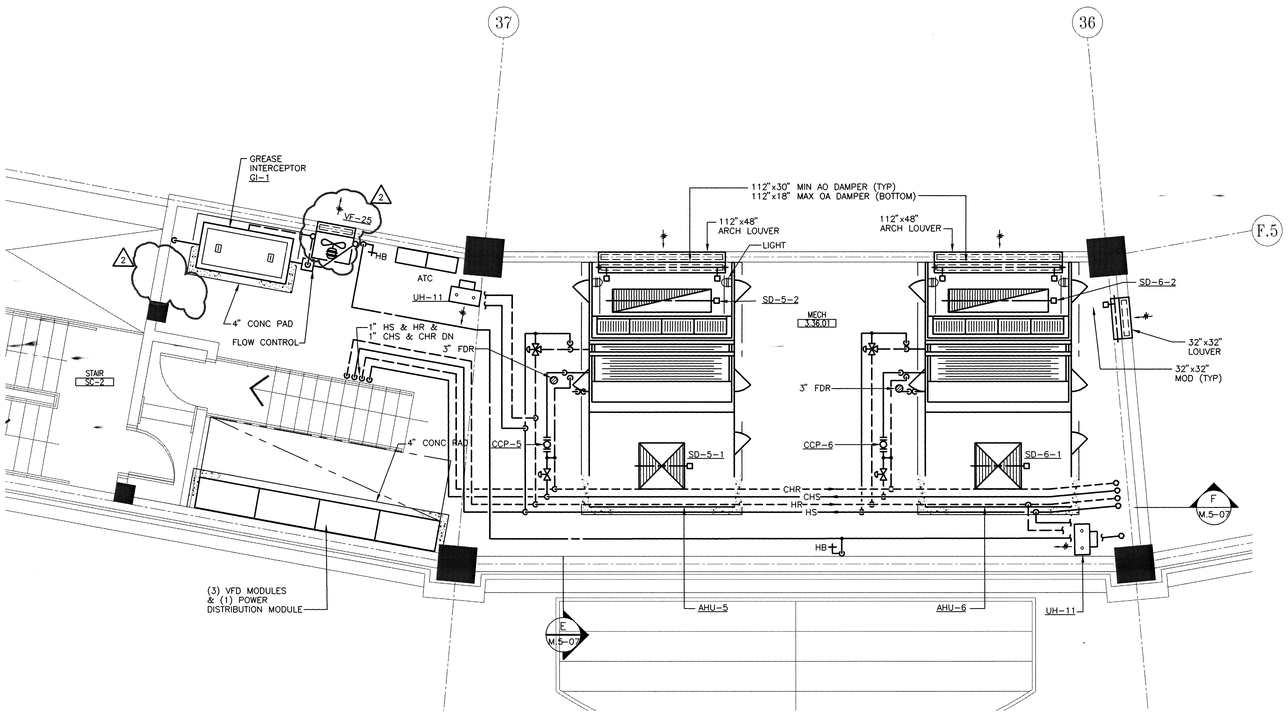
KEYPLAN

PROJECT NO. 95-675-00	ISSUED BY: ---
DRAWN BY: JRJ	REVIEWED BY: PJH
ISSUED: 2-28-97	

SHEET TITLE
MECHANICAL ROOMS
AIR SYSTEMS
PRESS LEVEL - B

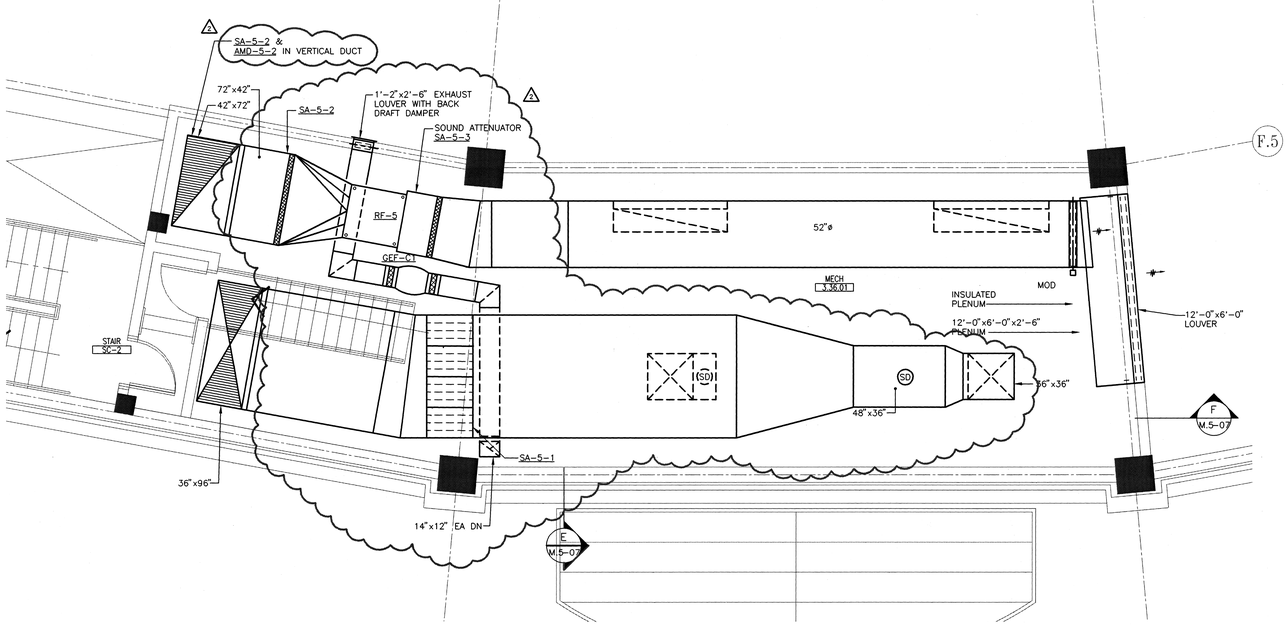
CATEGORY - SUB-CATEGORY - SHEET
M.3-10

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MECHANICAL ROOM – PIPING PLAN

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



MECHANICAL ROOM – DUCTWORK PLAN

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

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NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44

KEYPLAN

PROJECT NO. 95-675-00	ISSUED BY: ---
DRAWN BY: JRJ	REVIEWED BY: PJH
ISSUED: 2-28-97	

SHEET TITLE

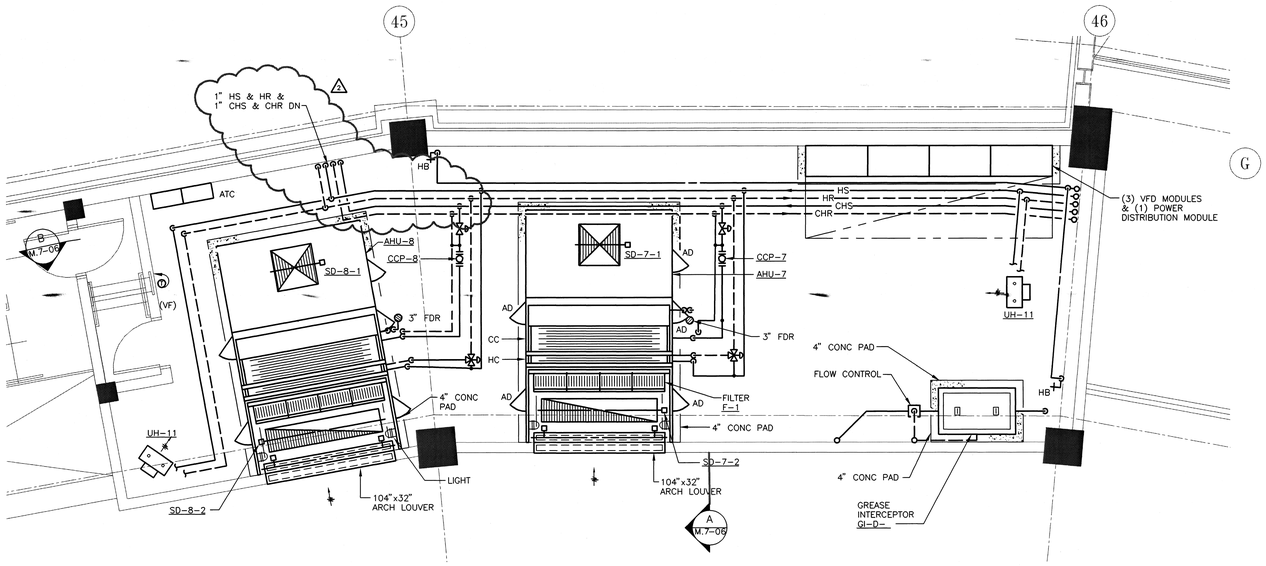
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AIR SYSTEMS
PRESS LEVEL - C

CATEGORY - SUB-CATEGORY - SHEET

M.3-11

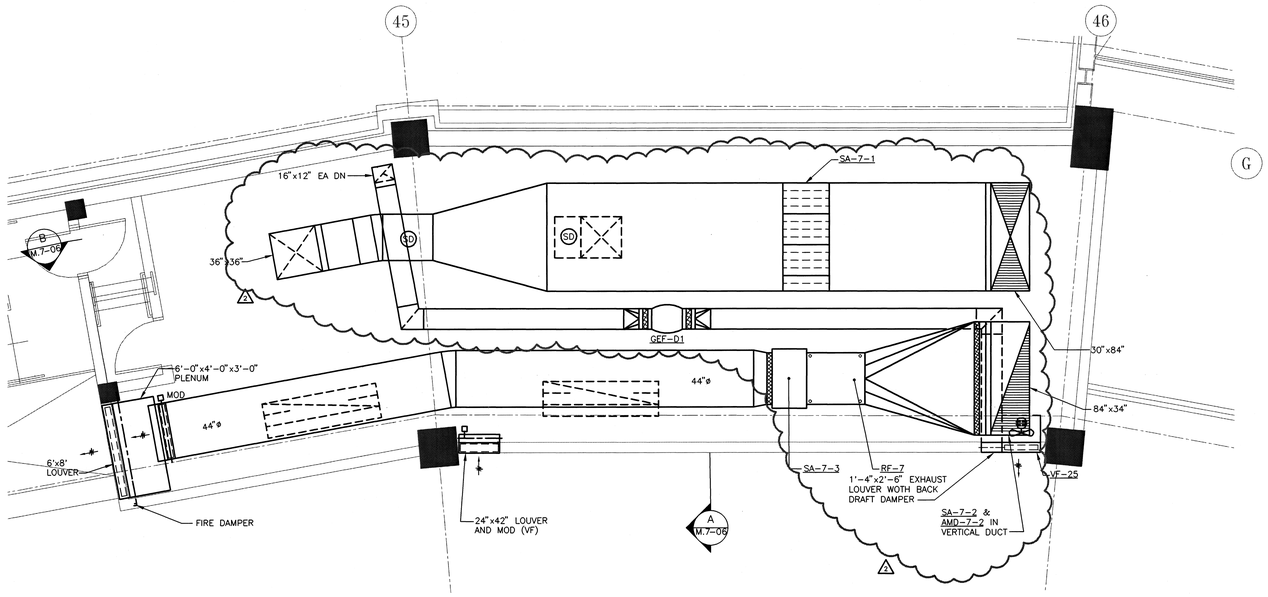
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MECHANICAL ROOM – PIPING PLAN

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



MECHANICAL ROOM – DUCTWORK PLAN

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

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REVISIONS

NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44

KEYPLAN

PROJECT NO. 95-675-00	ISSUED BY: ---
DRAWN BY: JRJ	REVIEWED BY: PJH
ISSUED: 2-28-97	

SHEET TITLE

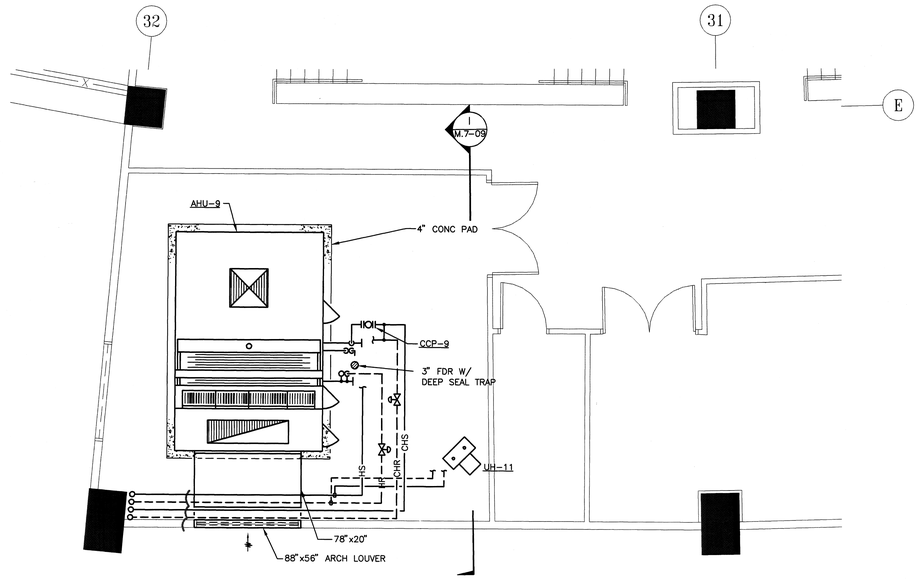
MECHANICAL ROOMS
AIR SYSTEMS
PRESS LEVEL - D

CATEGORY - SUB-CATEGORY - SHEET

M.3-12

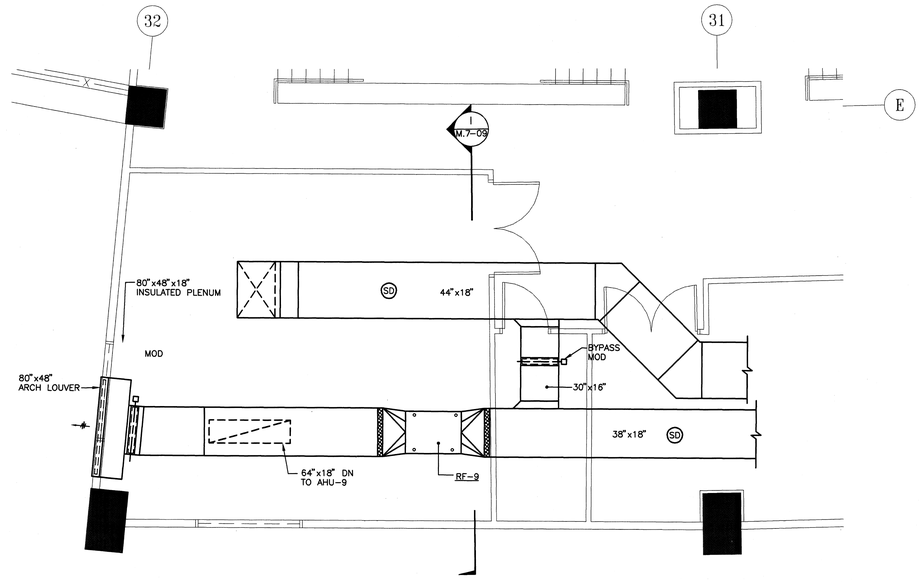
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MECHANICAL ROOM – PIPING

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



MECHANICAL ROOM – DUCTWORK

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

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NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44

KEYPLAN

PROJECT NO. 95-675-00	ISSUED BY:
DRAWN BY: JRJ	REVIEWED BY:
ISSUED: 2-28-97	

SHEET TITLE

MECHANICAL ROOMS
AIR SYSTEMS
PRESS LEVEL - C

CATEGORY - SUB-CATEGORY - SHEET

M.3-13

PROJECT NORTH

0 1 2 4 8

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MECHANICAL ROOM – PLANT SYSTEMS – EQUIPMENT PLAN – A

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

GENERAL NOTES:

1. FLOOR DRAINS SHALL HAVE DEEP SEAL TRAPS.

PROJECT NORTH

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04.27.97-17:43-5110M314 - RMF #95110

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REVISIONS

NO.	DATE	DESCRIPTION
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2	4-28-97	BULLETIN #44

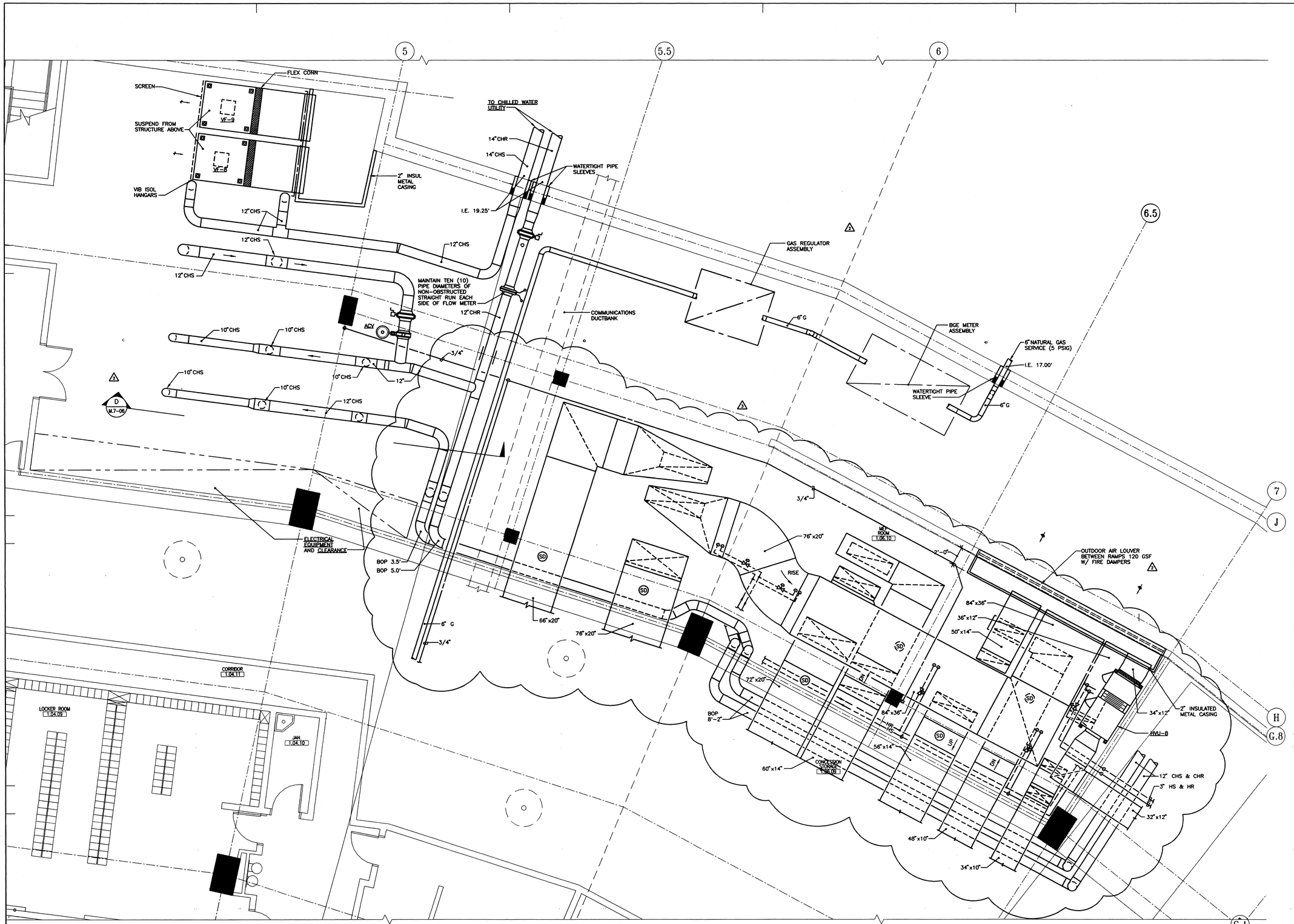
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PROJECT NO. 95-675-00	ISSUED BY: ---
DRAWN BY: JTP	REVIEWED BY: PMP
ISSUED: 2-28-97	

SHEET TITLE
MECHANICAL ROOM PLANT SYSTEMS EQUIPMENT PLAN - A

CATEGORY - SUB-CATEGORY - SHEET
M.3-14

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MECHANICAL ROOM – PLANT SYSTEMS DISTRIBUTION PLAN – A

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

GENERAL NOTES

1. FOR CONTINUATION OF PIPING REFER TO DRAWING P.2-01A.
   FOR CONTINUATION OF HVAC REFER TO DRAWING M.2-01A.

PROJECT NORTH

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REVISIONS

NO.	DATE	DESCRIPTION
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2	4-28-97	BULLETIN #44
3	7-9-97	BULLETIN #58

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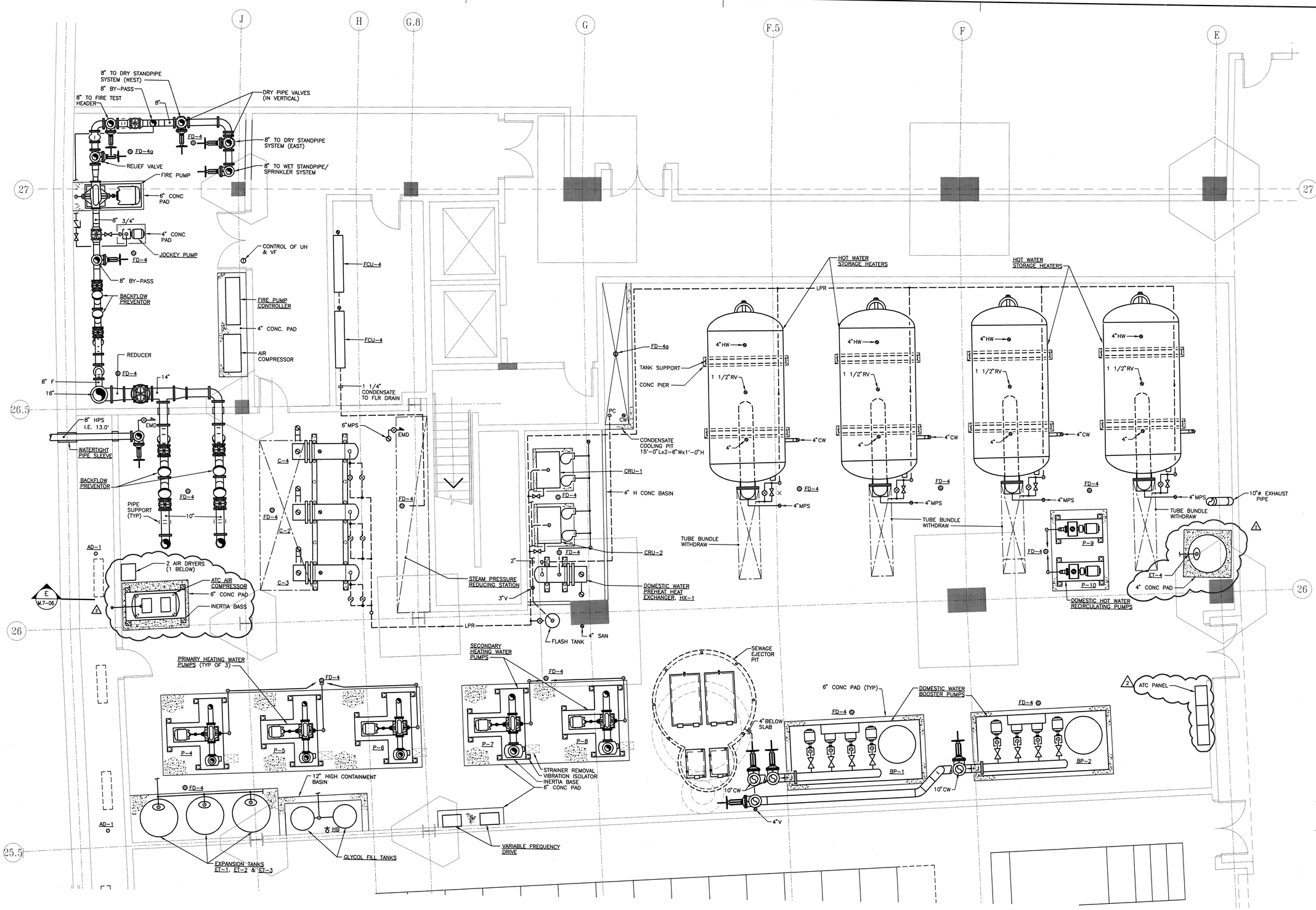
PROJECT NO. 95-675-00
ISSUED BY: ---
DRAWN BY: JTP
REVIEWED BY: PMP
ISSUED: 2-28-97

SHEET TITLE
MECHANICAL ROOM PLANT SYSTEMS DISTRIBUTION PLAN – A

CATEGORY – SUB-CATEGORY – SHEET
M.3-15

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MECHANICAL ROOM – PLANT SYSTEMS – EQUIPMENT PLAN

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

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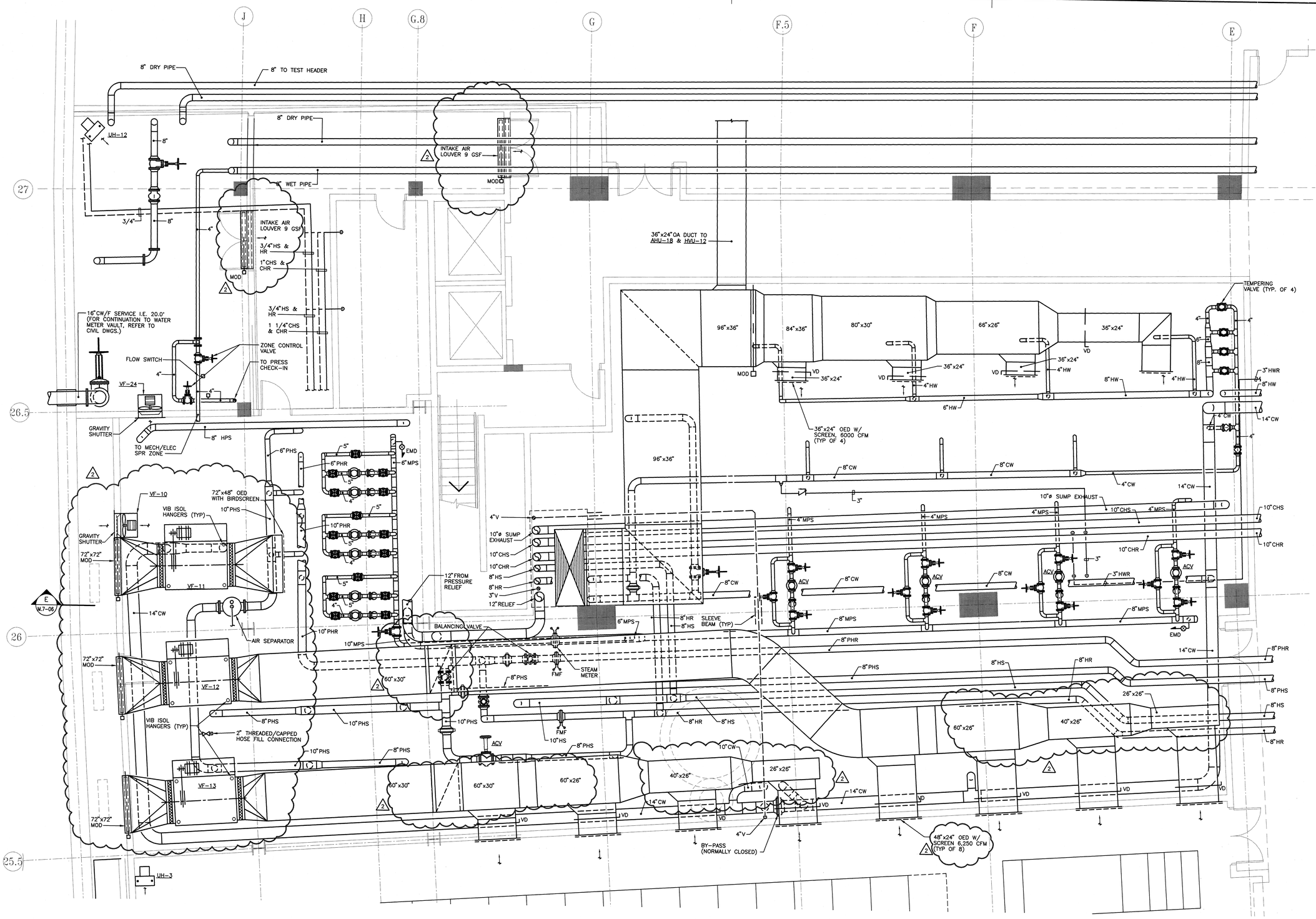
KEYPLAN

PROJECT NO. 95-675-00
ISSUED BY:
DRAWN BY: MWS
REVIEWED BY:
ISSUED: 2-28-97
SHEET TITLE
MECHANICAL ROOM PLANT SYSTEMS EQUIPMENT PLAN

CATEGORY - SUB-CATEGORY - SHEET
M.3-16

04.27.97-17:12-6110M316 - RmF #95110

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MECHANICAL ROOM – PLANT SYSTEMS – DISTRIBUTION PLAN – B

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

04.27.97-17:12-5110\0316 - RMF #95110

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NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44

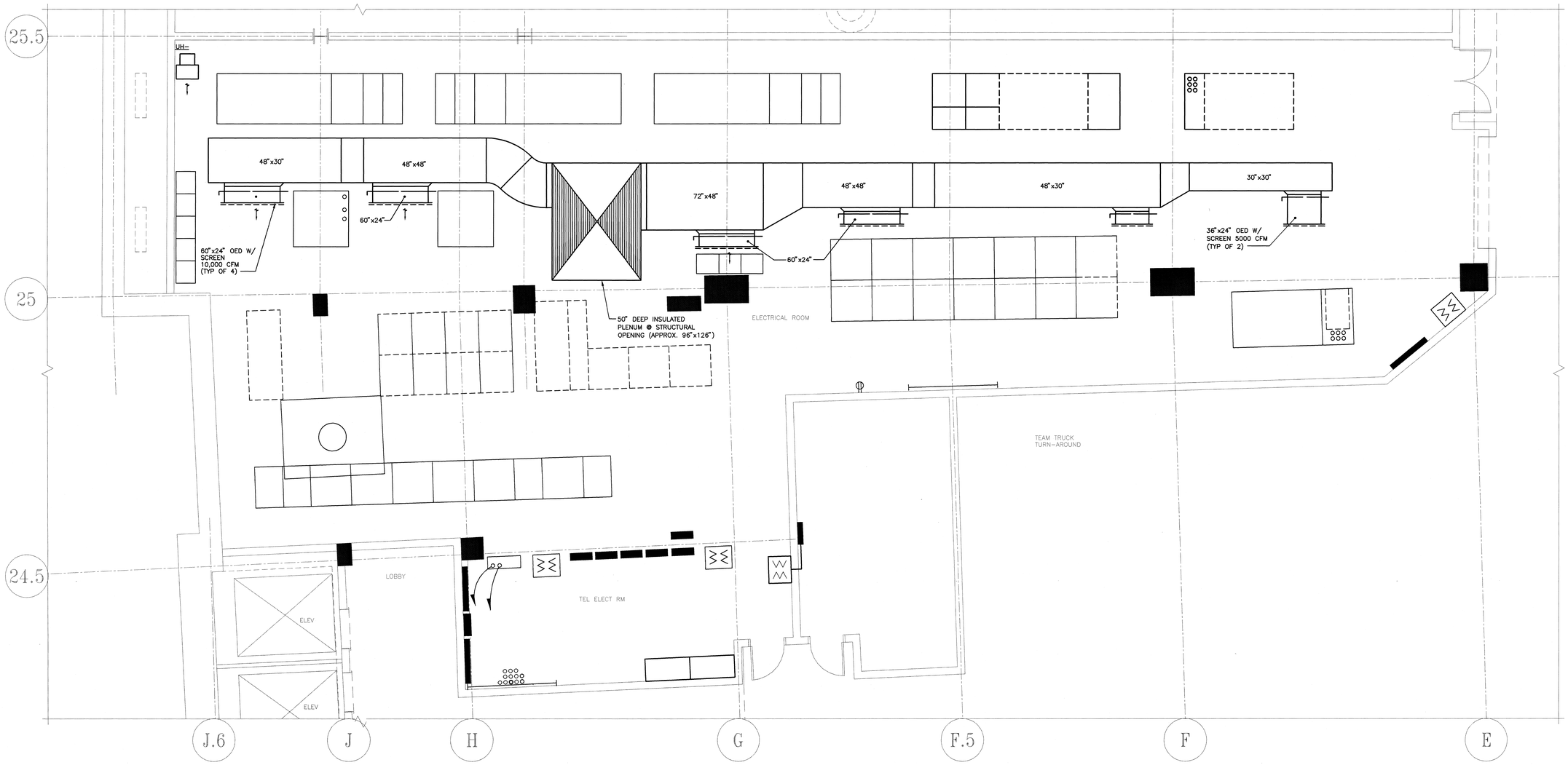
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PROJECT NO. 95-675-00
ISSUED BY:
DRAWN BY: MWS
REVIEWED BY:
ISSUED: 2-28-97

SHEET TITLE
MECHANICAL ROOM PLANT SYSTEMS DISTRIBUTION PLAN B

CATEGORY - SUB-CATEGORY - SHEET
M.3-17

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ELECTRICAL EQUIPMENT ROOM – SERVICE LEVEL – B

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

GENERAL NOTES:

1. FLOOR DRAINS SHALL HAVE DEEP SEAL TRAPS.

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NO.	DATE	DESCRIPTION
1	4-28-97	BULLETIN #44

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ISSUED: 2-28-97	

SHEET TITLE

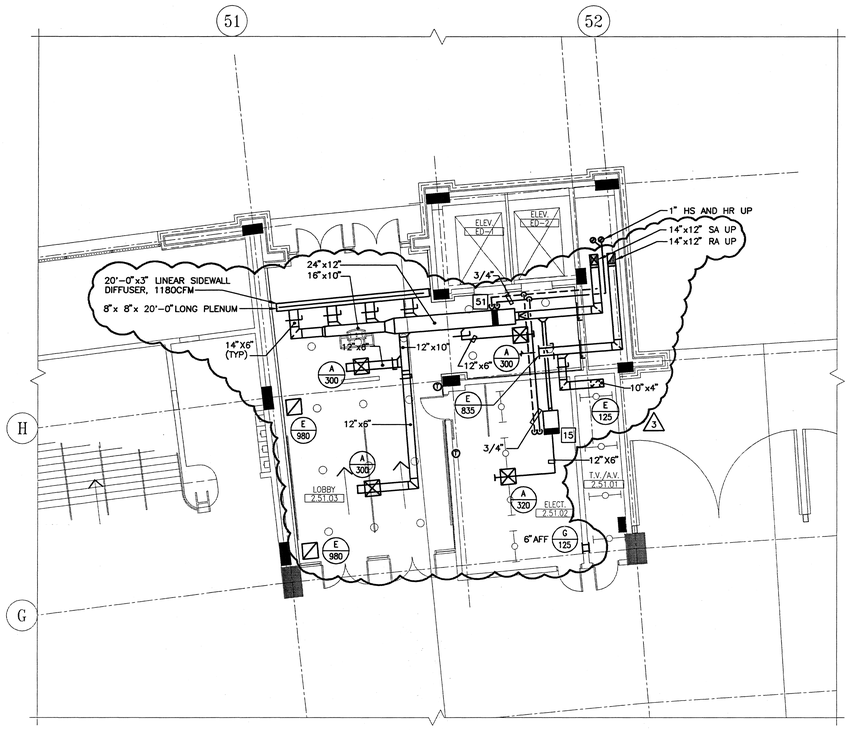
PART PLANS
SERVICE LEVEL

CATEGORY – SUB-CATEGORY – SHEET

M.3-18

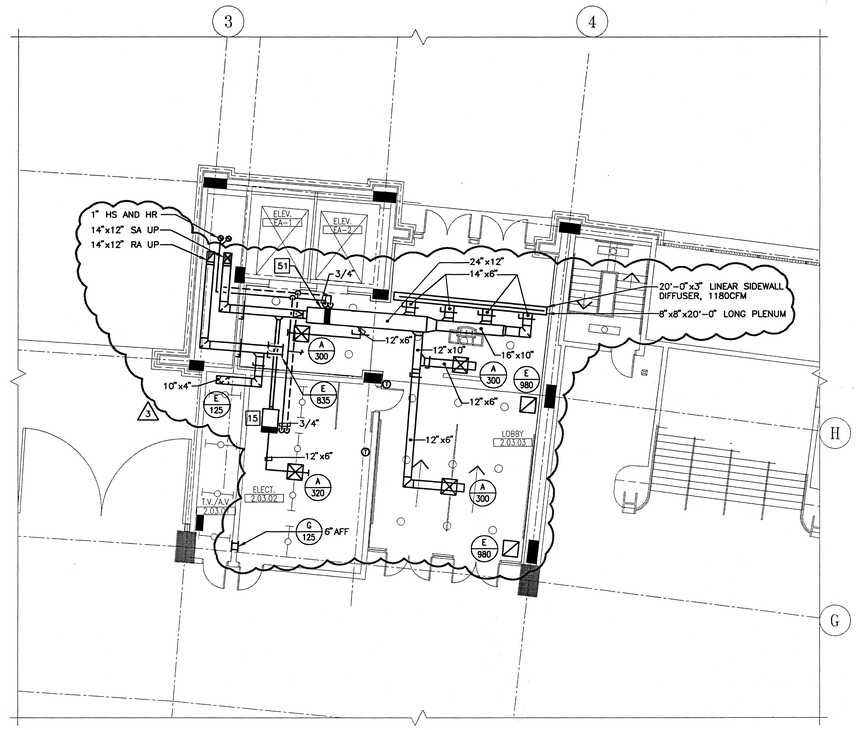
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01.14.97-16:14-5110M318 - RMF #95110



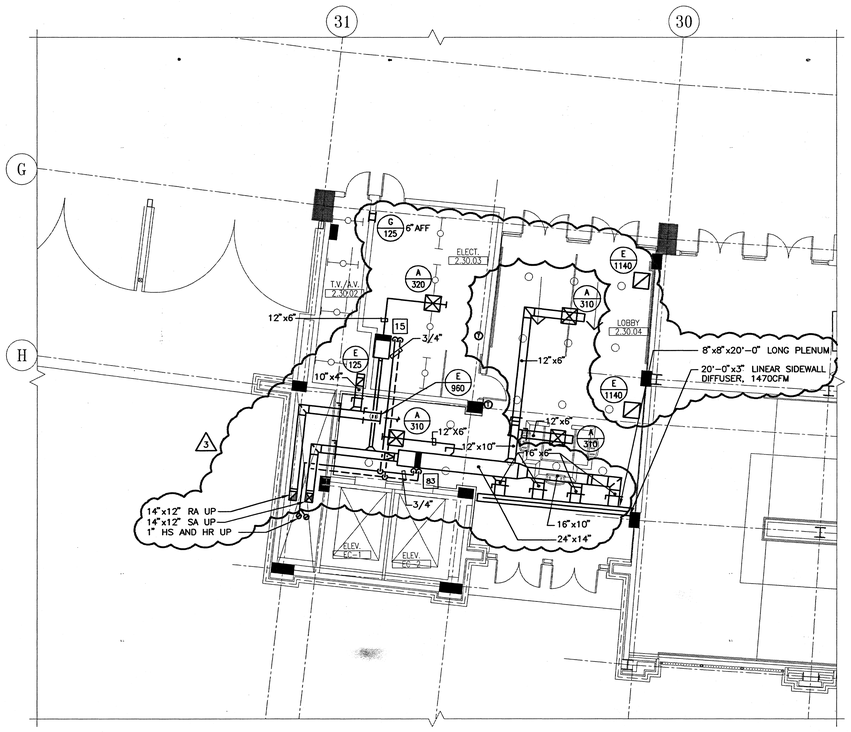
ELEVATOR CORE PLANS – MAIN CONCOURSE QUAD D

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



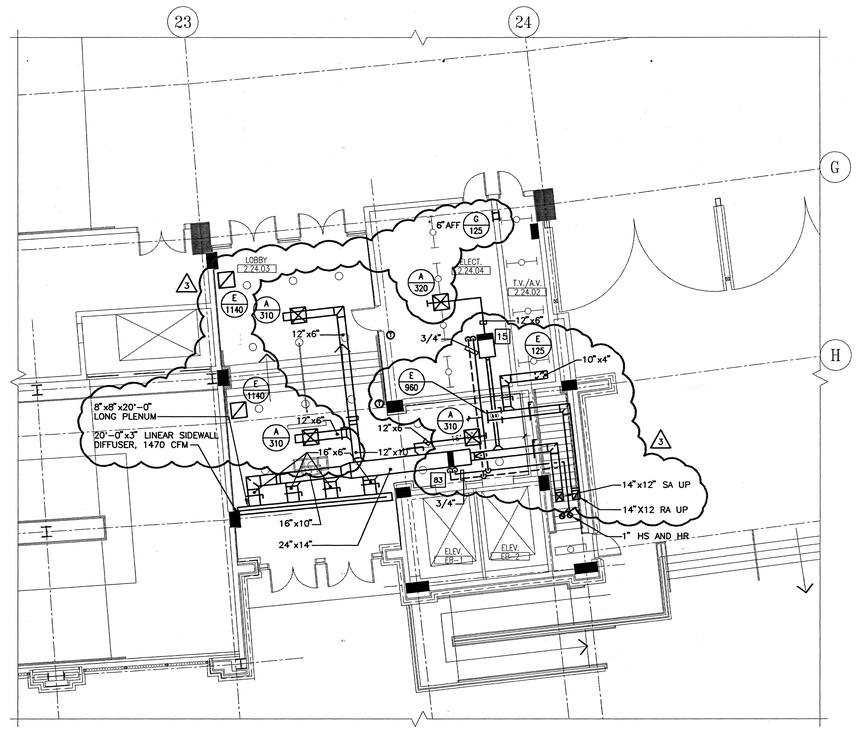
ELEVATOR CORE PLANS – MAIN CONCOURSE QUAD A

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



ELEVATOR CORE PLAN – MAIN CONCOURSE QUAD C

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



ELEVATOR CORE PLAN – MAIN CONCOURSE QUAD B

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

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MIAMI, FLORIDA

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ROSS MURPHY FINKELSTIEN, INC.
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NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44
3	2-13-98	NFL #349

KEYPLAN

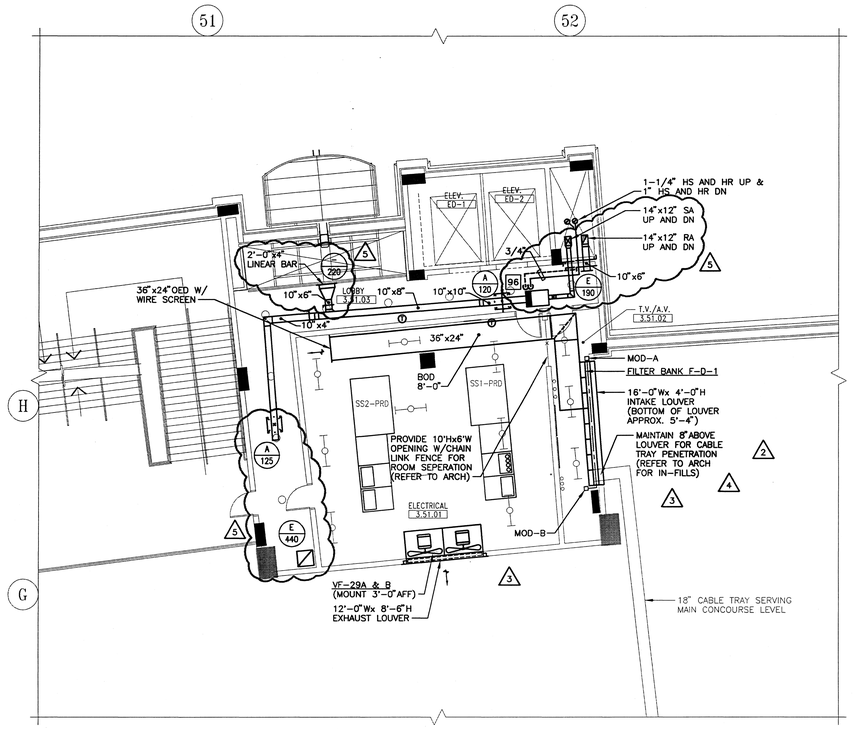
PROJECT NO. 95-675-00
ISSUED BY: ---
DRAWN BY: RHK
REVIEWED BY: PMP
ISSUED: 2-28-97

SHEET TITLE
ELEVATOR CORE PLANS – MAIN CONCOURSE QUADS A,B,C & D

CATEGORY – SUB-CATEGORY – SHEET
M.3-19

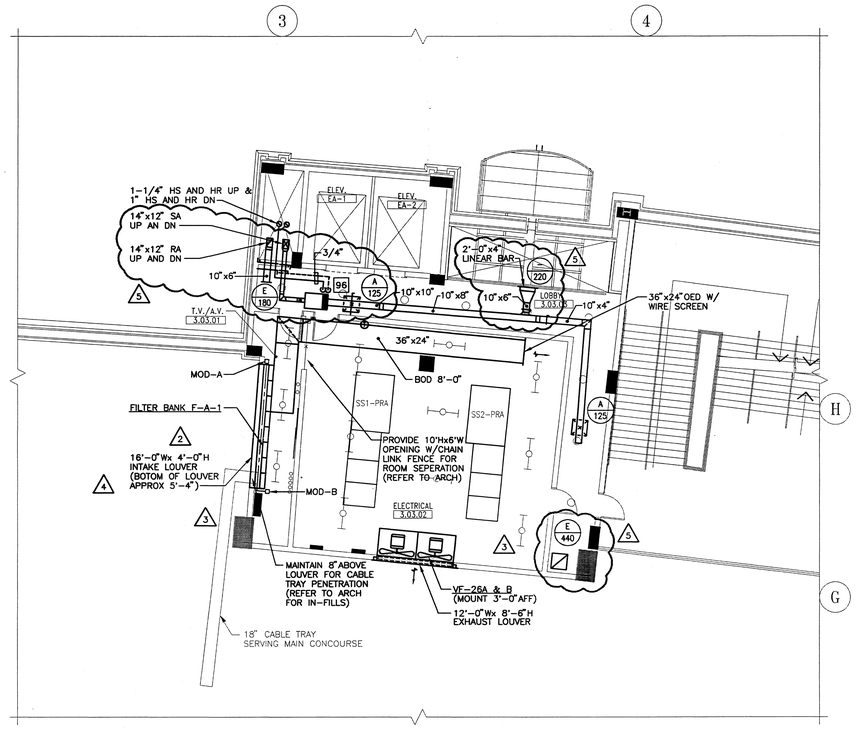
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02.12.98-14:08-5110M319 - RMF #95110



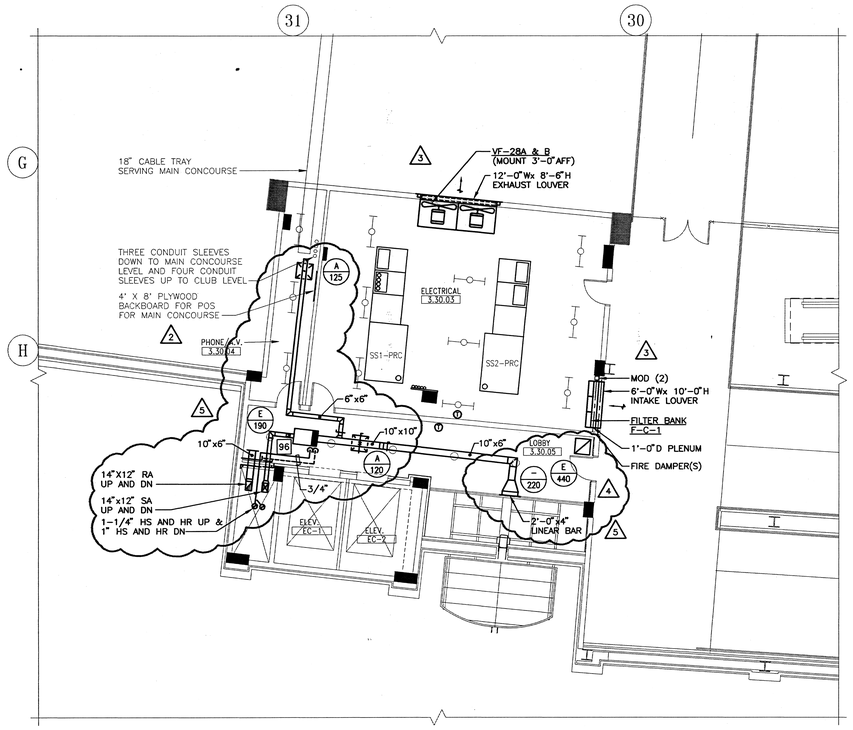
ELEVATOR CORE PLANS – PRESS LEVEL QUAD D

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



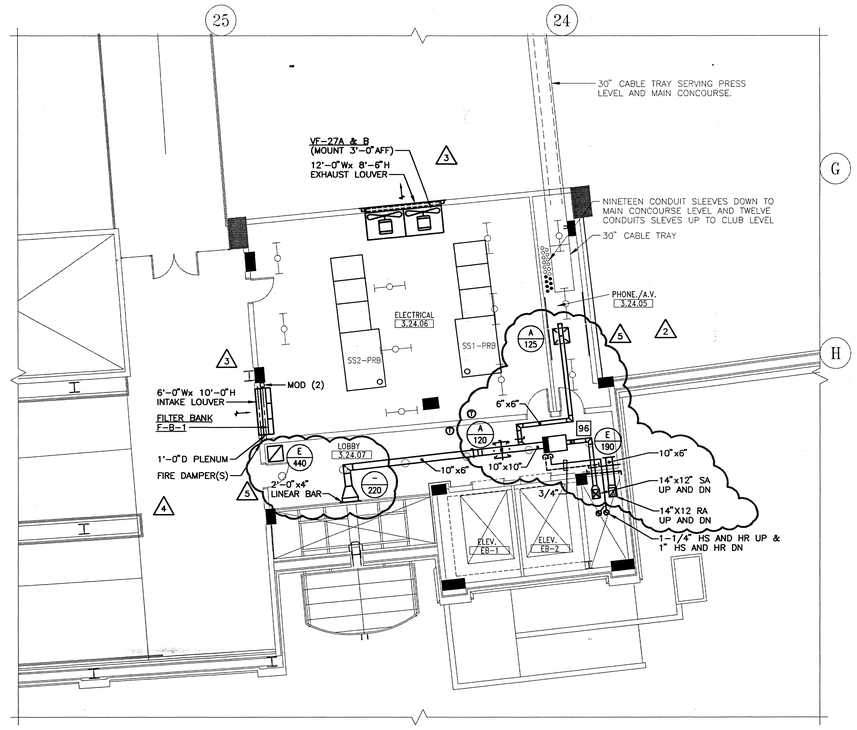
ELEVATOR CORE PLANS – PRESS LEVEL QUAD A

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



ELEVATOR CORE PLANS – PRESS LEVEL QUAD C

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



ELEVATOR CORE PLANS – PRESS LEVEL QUAD B

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

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REVISIONS

NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44
3	8-12-97	BULLETIN #76
4	12-11-97	NFL 297
5	2-13-98	NFL #349

KEYPLAN

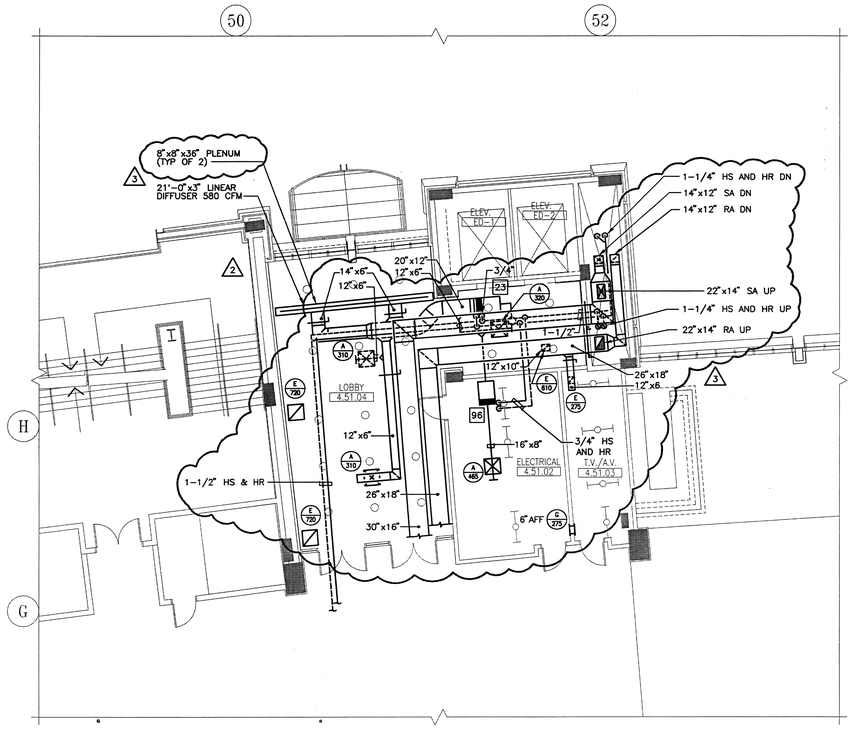
PROJECT NO. 95-675-00
ISSUED BY: ----
DRAWN BY: RHK
REVIEWED BY: PWP
ISSUED: 2-28-97

SHEET TITLE
ELEVATOR CORE PLANS – PRESS LEVEL QUADS A,B,C & D

CATEGORY – SUB-CATEGORY – SHEET
M.3-20

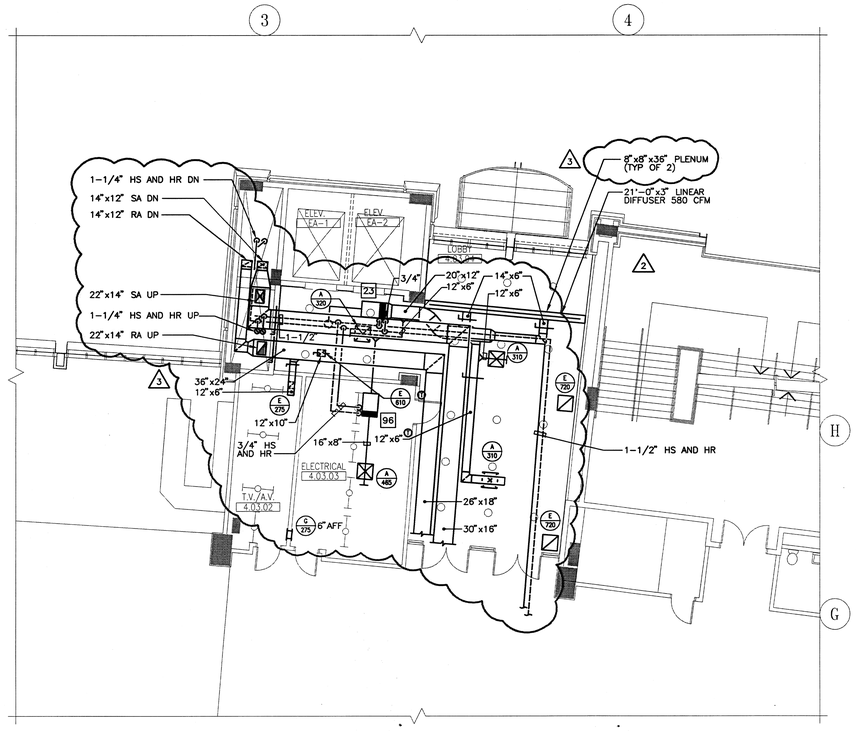
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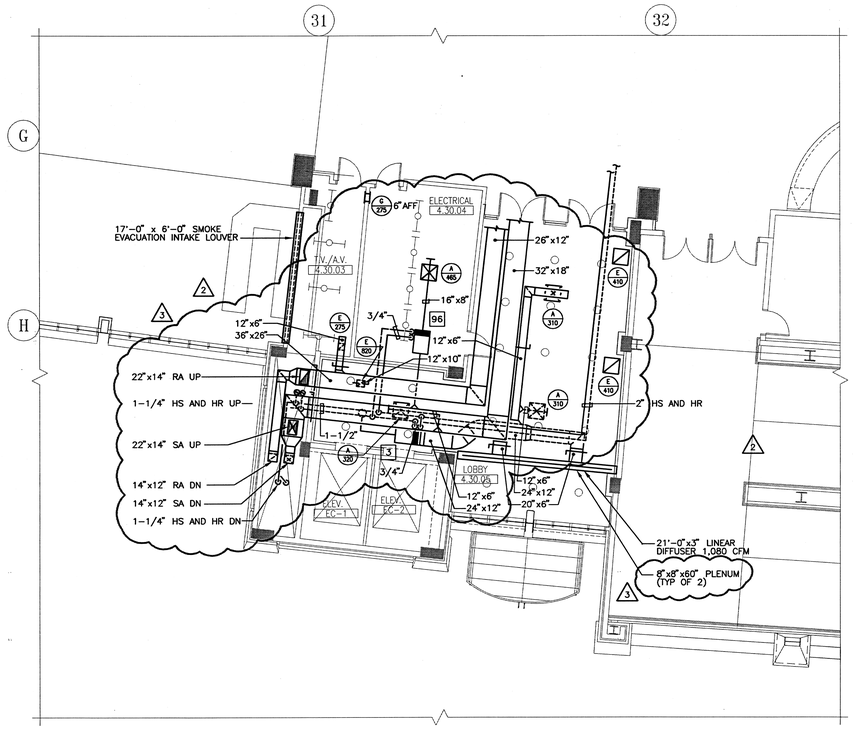
ELEVATOR CORE PLANS – CLUB LEVEL QUAD D

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



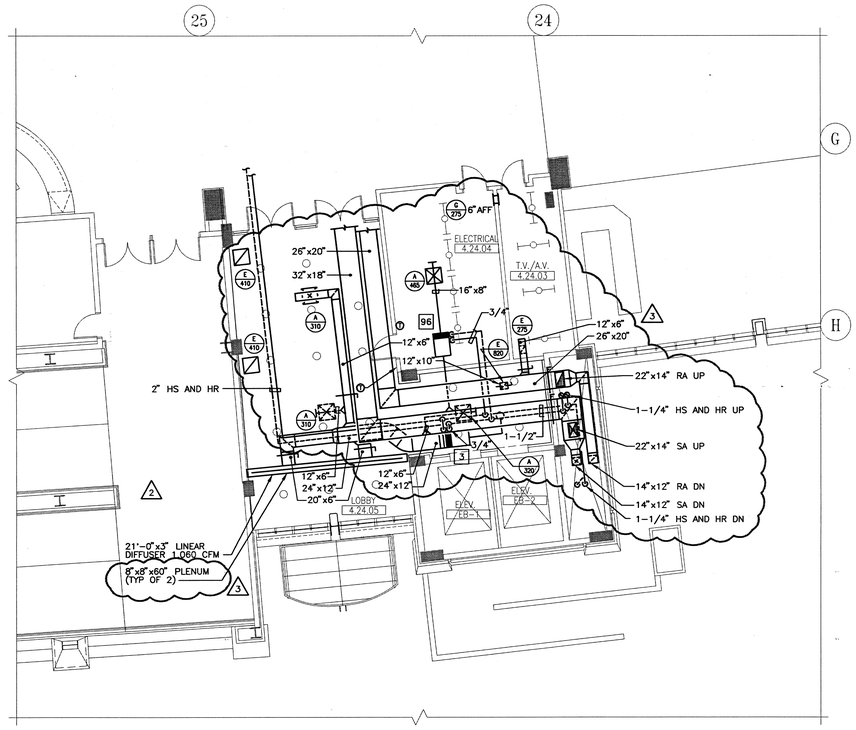
ELEVATOR CORE PLANS – CLUB LEVEL QUAD A

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



ELEVATOR CORE PLANS – CLUB LEVEL QUAD C

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



ELEVATOR CORE PLANS – CLUB LEVEL QUAD B

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

PROJECT NORTH

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REVISIONS

NO.	DATE	DESCRIPTION
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2	4-28-97	BULLETIN #44
3	2-13-98	NFL #349

KEYPLAN

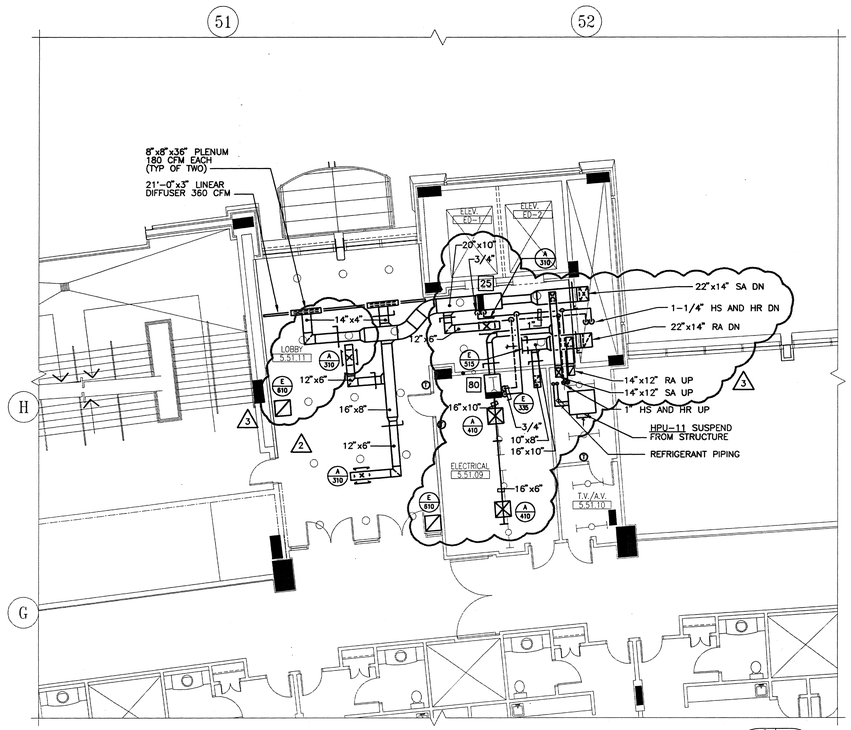
PROJECT NO. 95-675-00	ISSUED BY: ---
DRAWN BY: RHK	REVIEWED BY: PMP
ISSUED: 2-28-97	

SHEET TITLE
ELEVATOR CORE PLANS - CLUB LEVEL QUADS A,B,C & D

CATEGORY - SUB-CATEGORY - SHEET
M.3-21

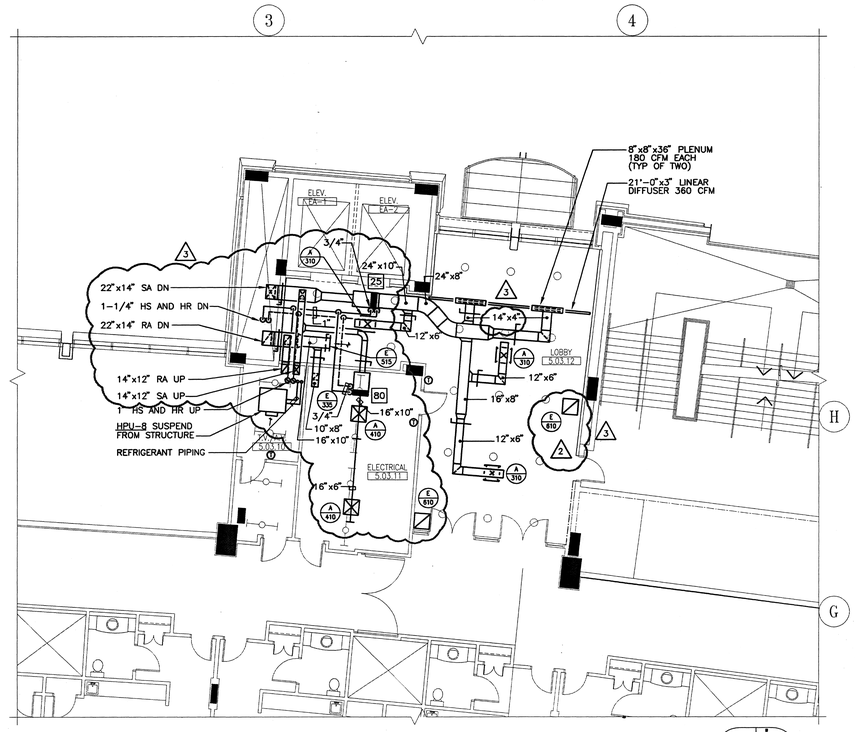
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02.12.98-14:06-5110M321 - RMF #95110



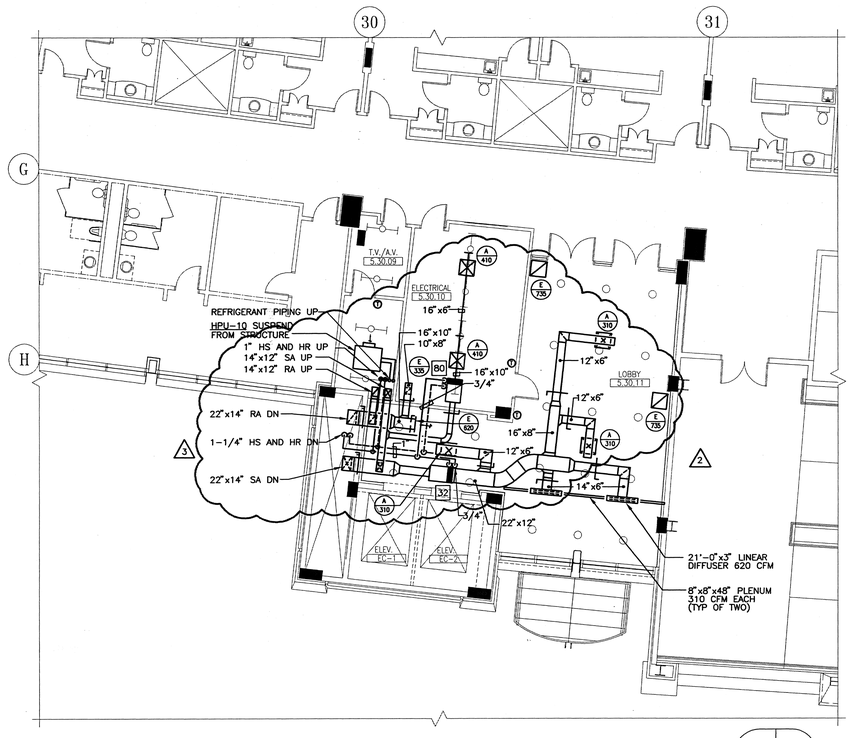
ELEVATOR CORE PLANS – LOWER SUITE LEVEL QUAD D

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



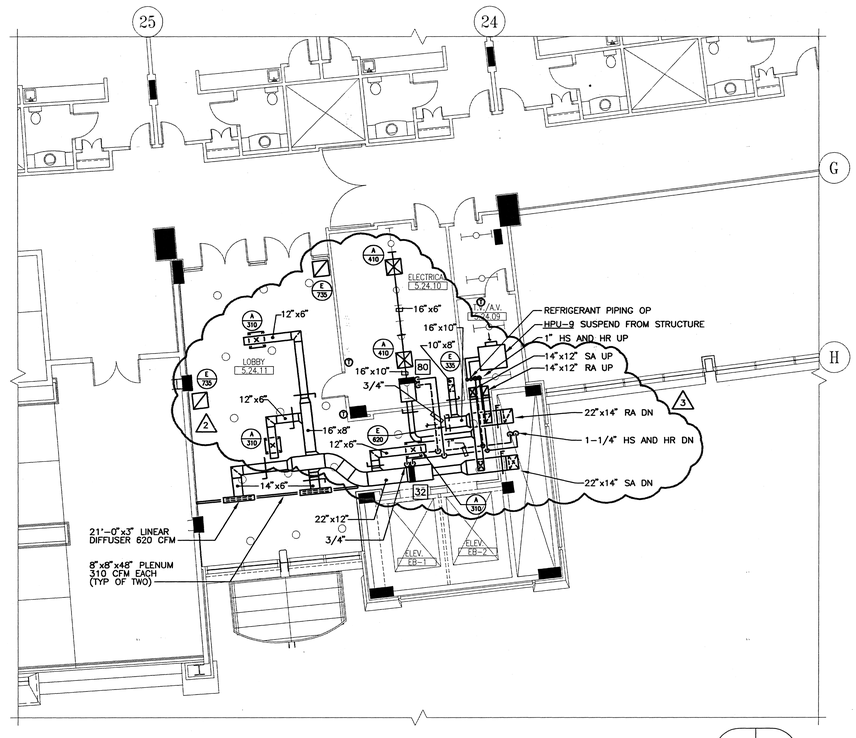
ELEVATOR CORE PLANS – LOWER SUITE LEVEL QUAD A

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



ELEVATOR CORE PLANS – LOWER SUITE LEVEL QUAD C

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



ELEVATOR CORE PLANS – LOWER SUITE LEVEL QUAD B

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

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02.12.98-14:04-5110M322 - RMF #95110

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REVISIONS

NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44
3	2-13-98	NFL #349

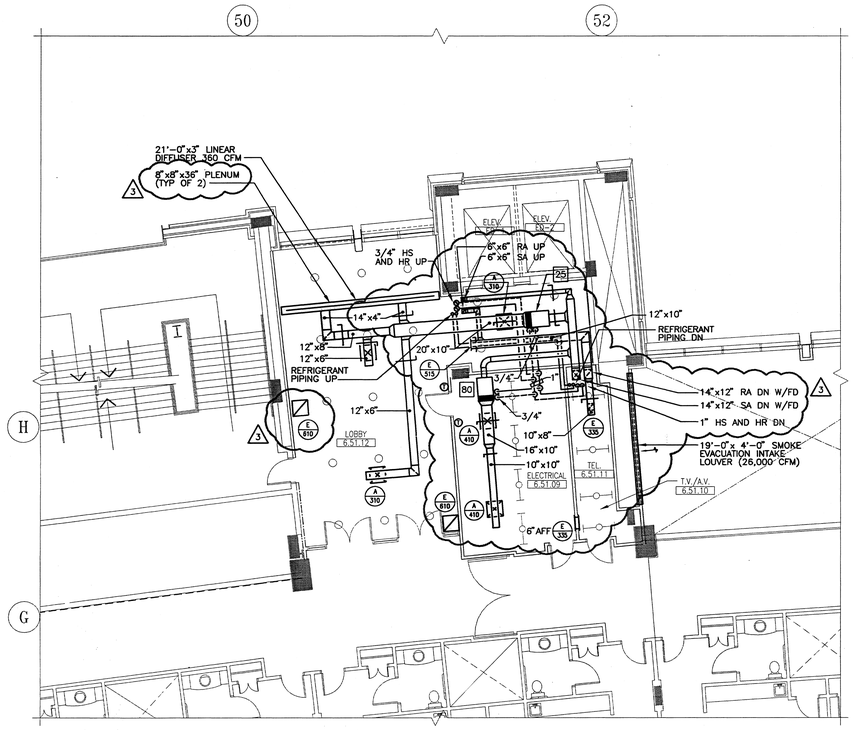
KEYPLAN

PROJECT NO. 95-675-00	ISSUED BY: ---
DRAWN BY: RHK	REVIEWED BY: FMP
ISSUED: 2-28-97	

SHEET TITLE
ELEVATOR CORE PLANS – LOWER SUITE LEVEL QUADS A,B,C & D

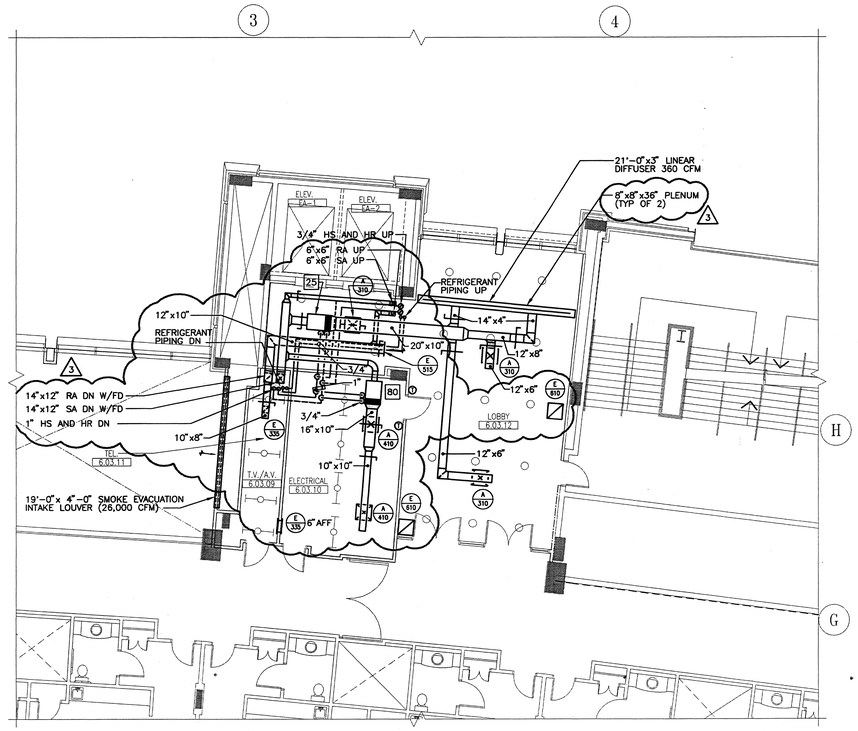
CATEGORY – SUB-CATEGORY – SHEET
M.3-22

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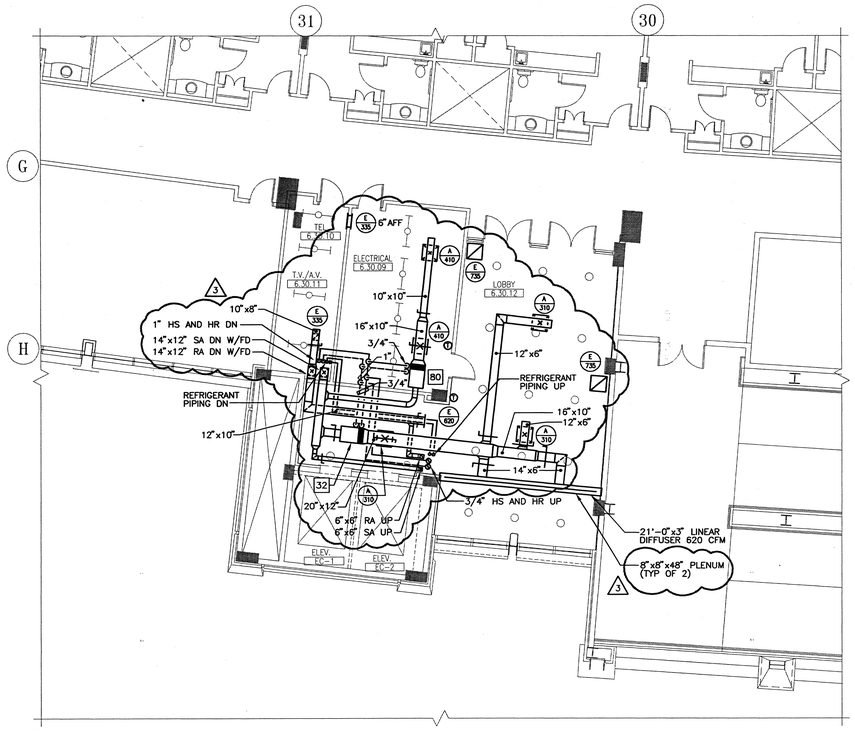
ELEVATOR CORE PLANS – UPPER SUITE LEVEL QUAD D

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



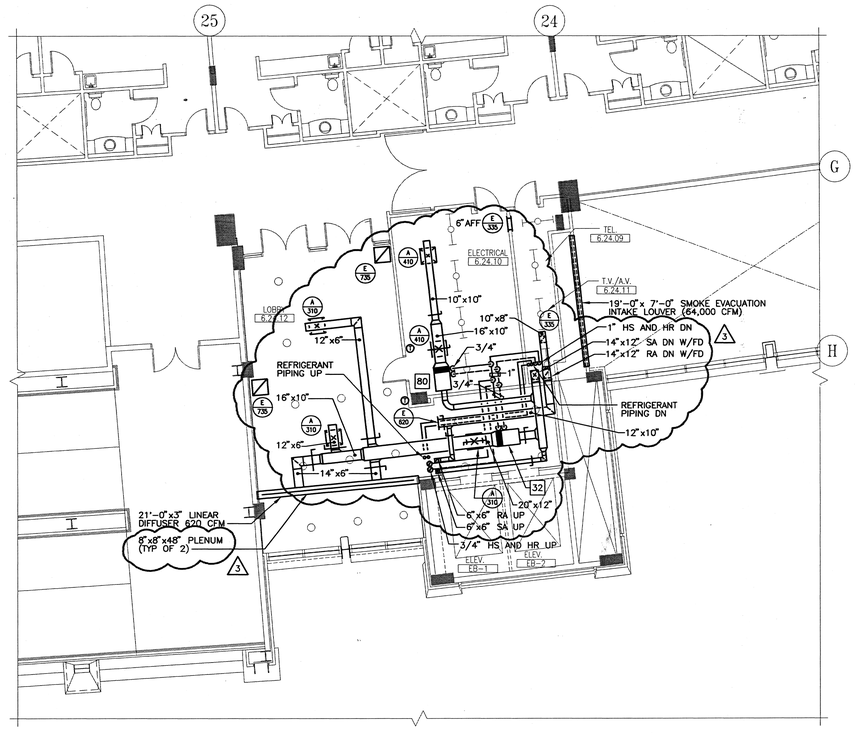
ELEVATOR CORE PLANS – UPPER SUITE LEVEL QUAD A

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



ELEVATOR CORE PLANS – UPPER SUITE LEVEL QUAD C

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



ELEVATOR CORE PLANS – UPPER SUITE LEVEL QUAD B

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

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REVISIONS

NO.	DATE	DESCRIPTION
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2	4-28-97	BULLETIM #44
3	2-13-98	NFL #349

KEYPLAN

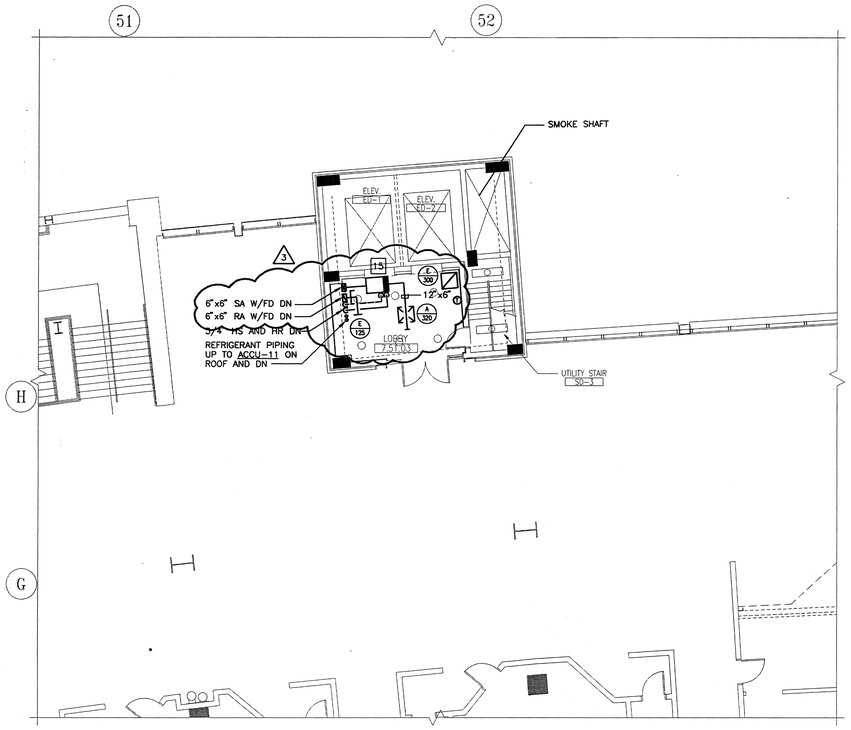
PROJECT NO. 95-675-00	ISSUED BY: ---
DRAWN BY: RHK	REVIEWED BY: PMP
ISSUED: 2-28-97	

SHEET TITLE
ELEVATOR CORE PLANS – UPPER SUITE LEVEL QUADS A,B,C & D

CATEGORY – SUB-CATEGORY – SHEET
M.3-23

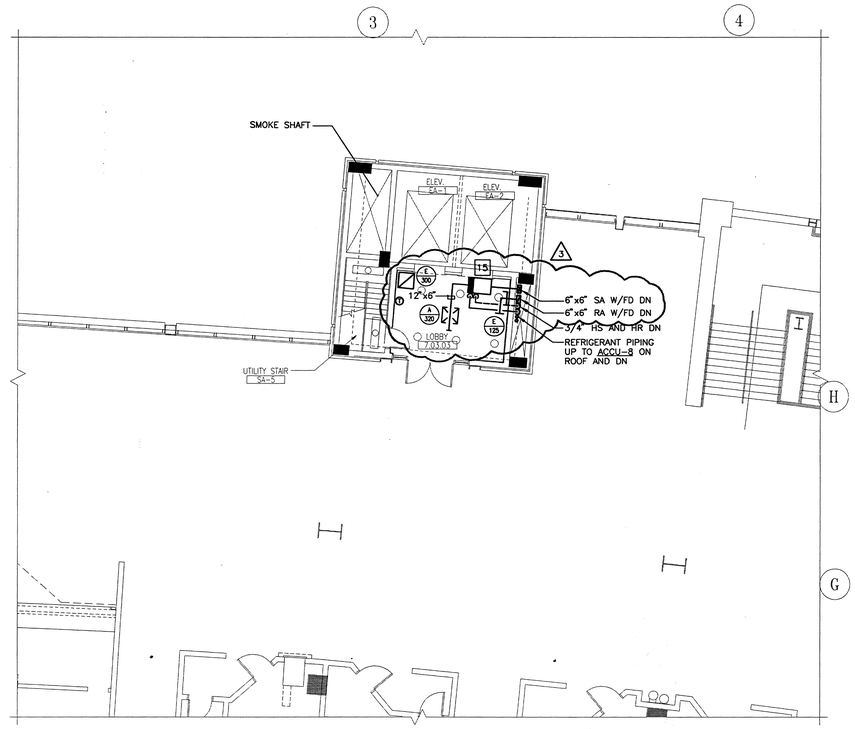
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02.12.98-14:03-5110#323 - RMF #95110



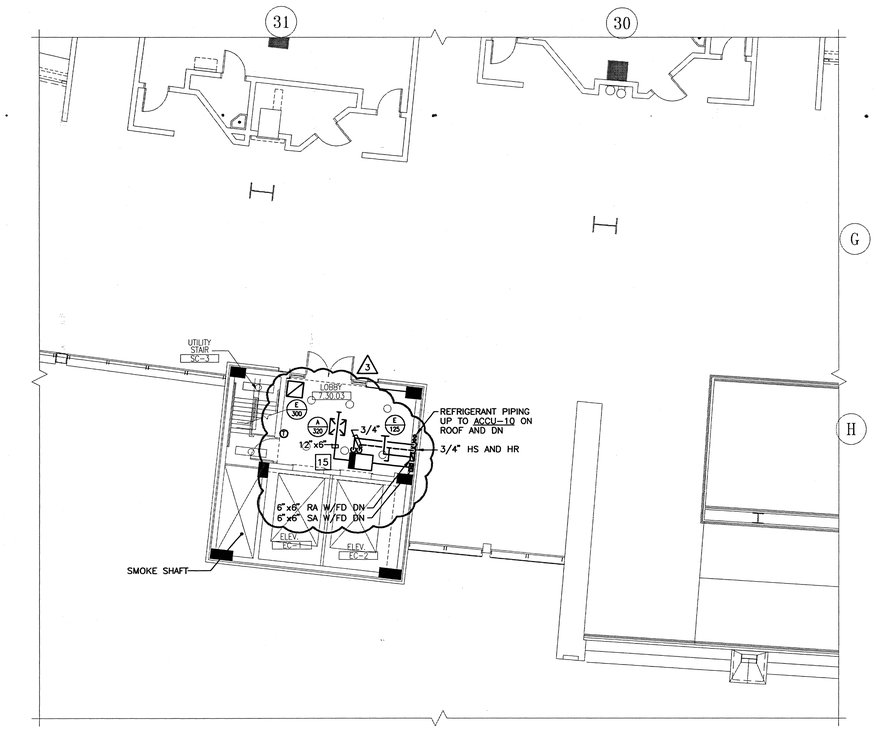
ELEVATOR CORE PLANS – UPPER CONCOURSE QUAD D

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



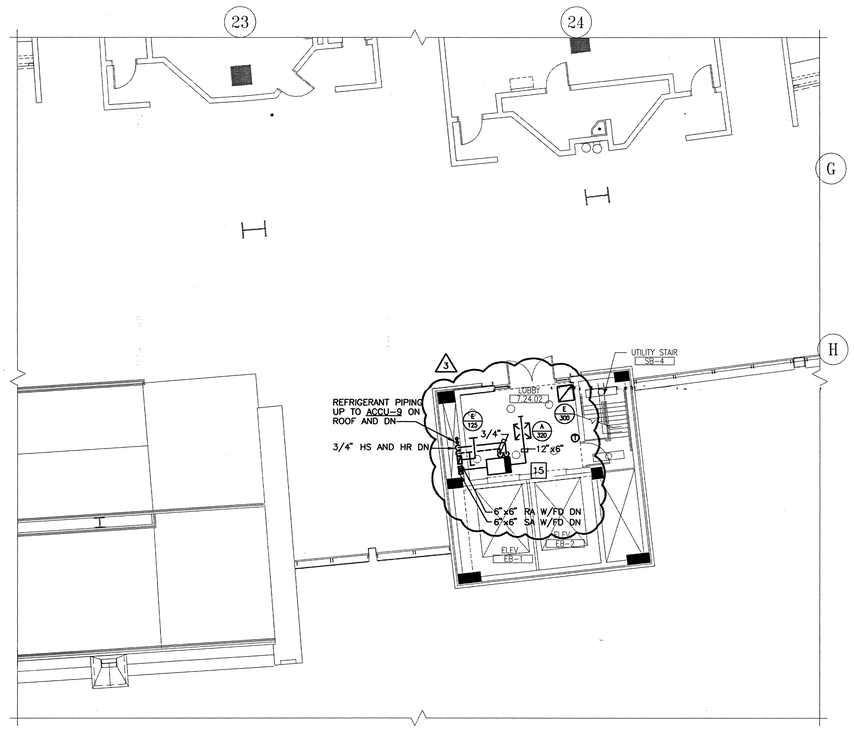
ELEVATOR CORE PLANS – UPPER CONCOURSE QUAD A

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



ELEVATOR CORE PLANS – UPPER CONCOURSE QUAD C

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



ELEVATOR CORE PLANS – UPPER CONCOURSE QUAD B

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

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NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44
3	2-13-98	NFL #349

KEYPLAN

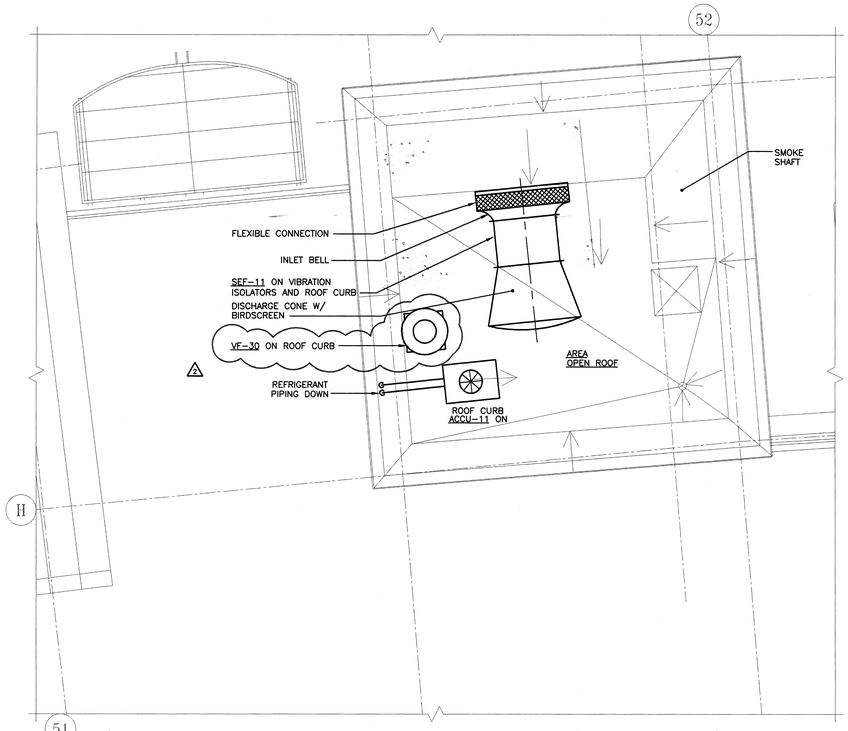
PROJECT NO. 95-675-00
ISSUED BY: ---
DRAWN BY: RHK
REVIEWED BY: PWP
ISSUED: 2-28-97

SHEET TITLE
ELEVATOR CORE PLANS UPPER CONCOURSE QUADS A,B,C & D

CATEGORY - SUB-CATEGORY - SHEET
M.3-24

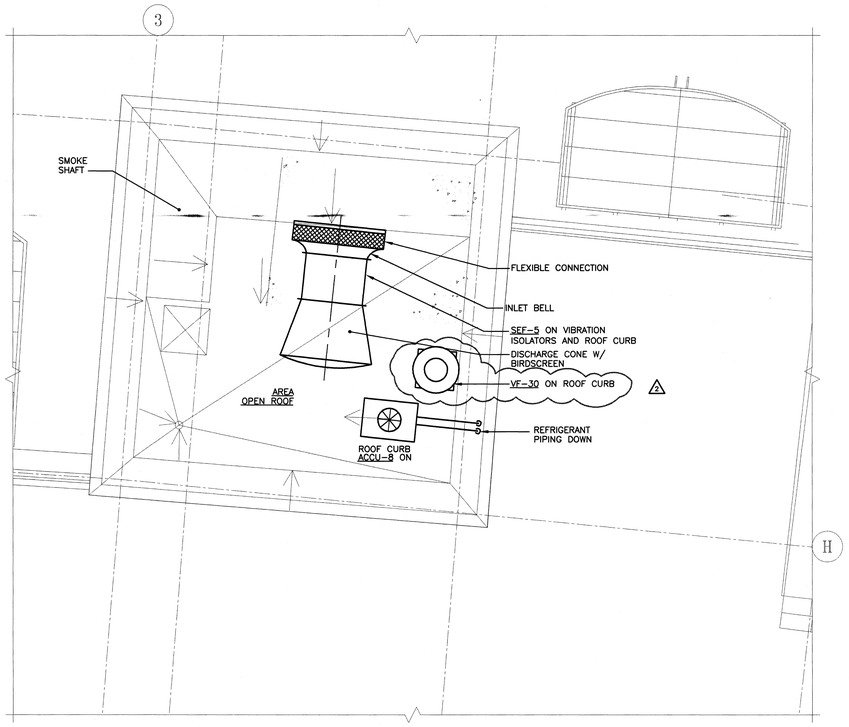
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02.12.98-14:01-61104324 - RMF #95110



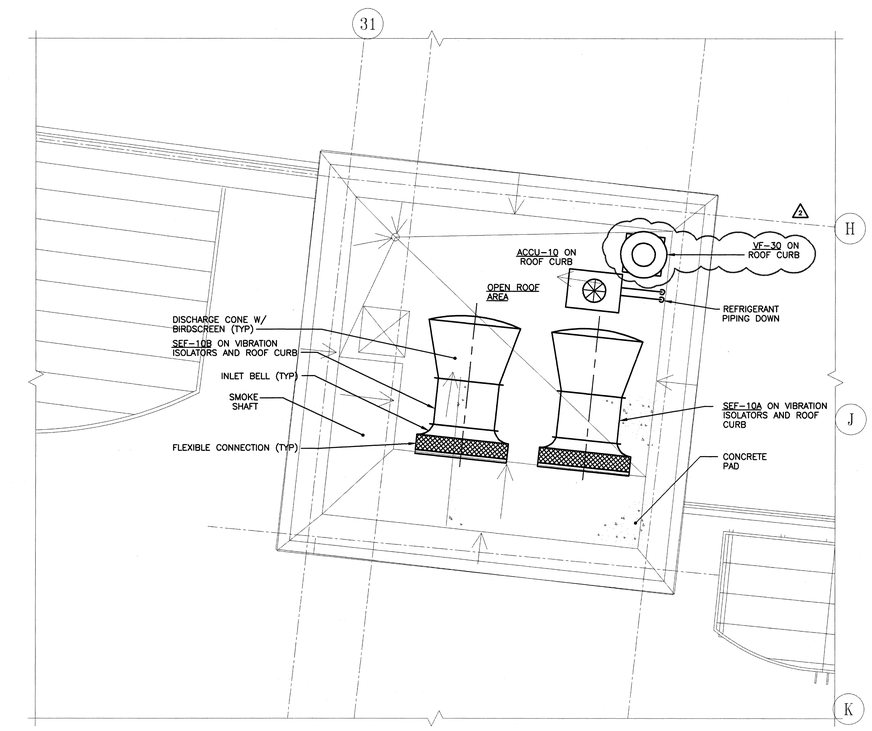
ELEVATOR CORE PLANS – ROOF – QUAD D

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



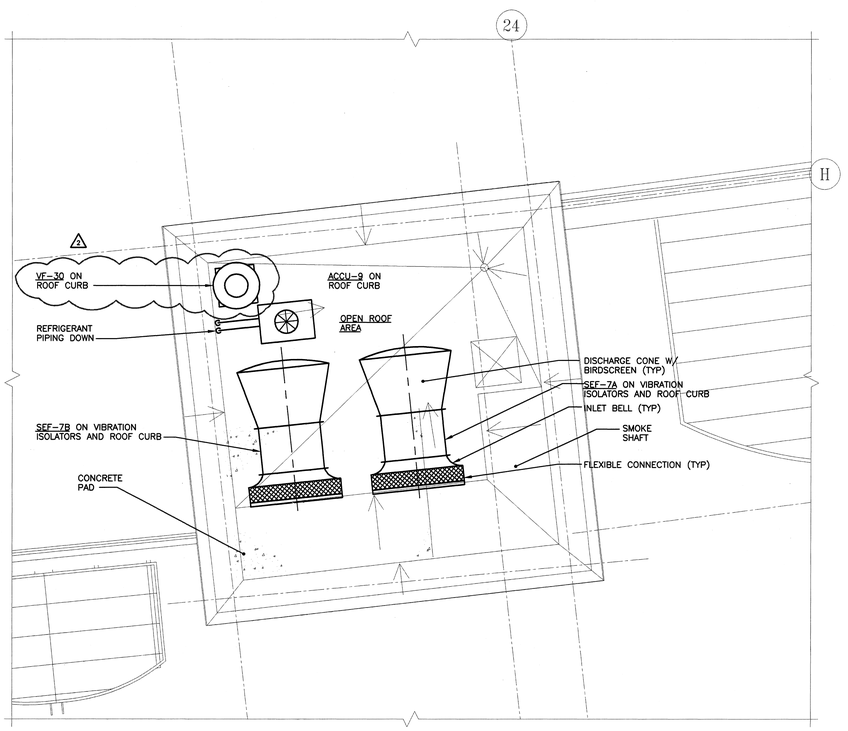
ELEVATOR CORE PLANS – ROOF – QUAD A

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



ELEVATOR CORE PLANS – ROOF – QUAD C

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



ELEVATOR CORE PLANS – ROOF – QUAD B

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

PROJECT NORTH

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REVISIONS

NO.	DATE	DESCRIPTION

KEYPLAN

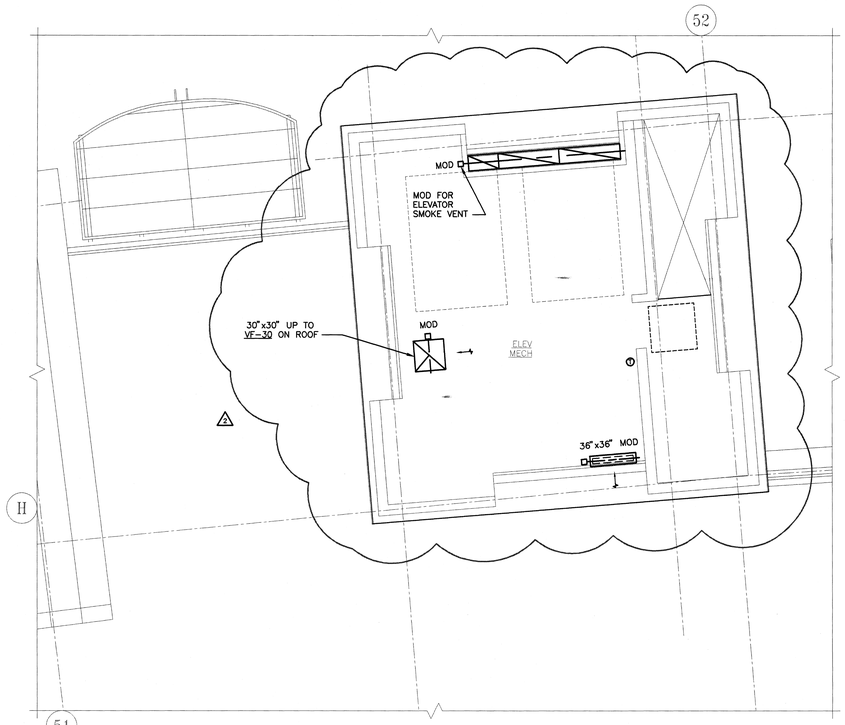
PROJECT NO. 95-675-00	ISSUED BY: ---
DRAWN BY: RHK	REVIEWED BY: PMP
ISSUED: 2-28-97	

SHEET TITLE
ELEVATOR CORE PLANS ROOF QUADS A,B,C & D

CATEGORY - SUB-CATEGORY - SHEET
M.3-25

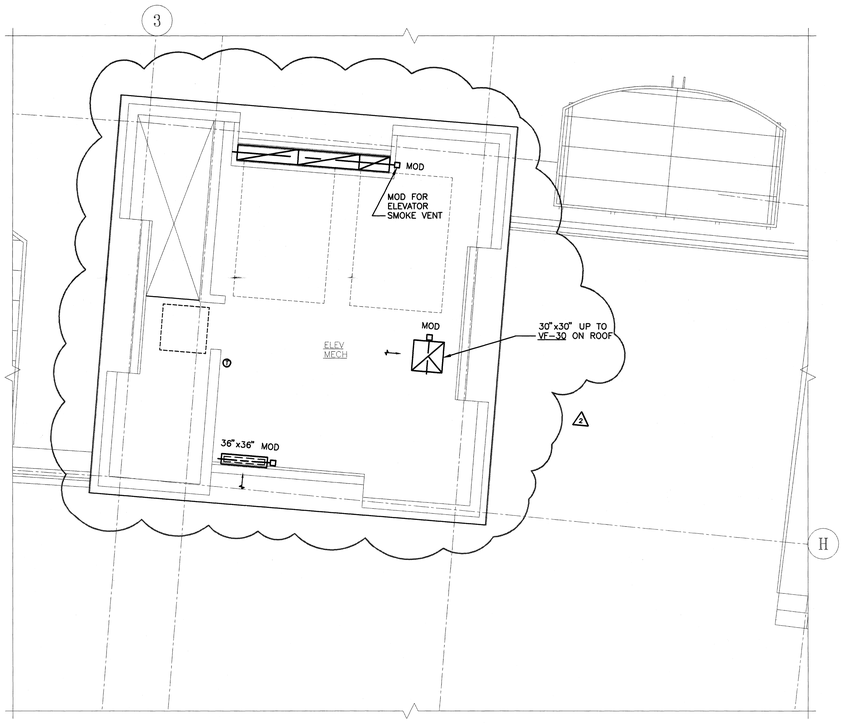
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03.03.97-01:13-5110M325 - RMF #95110



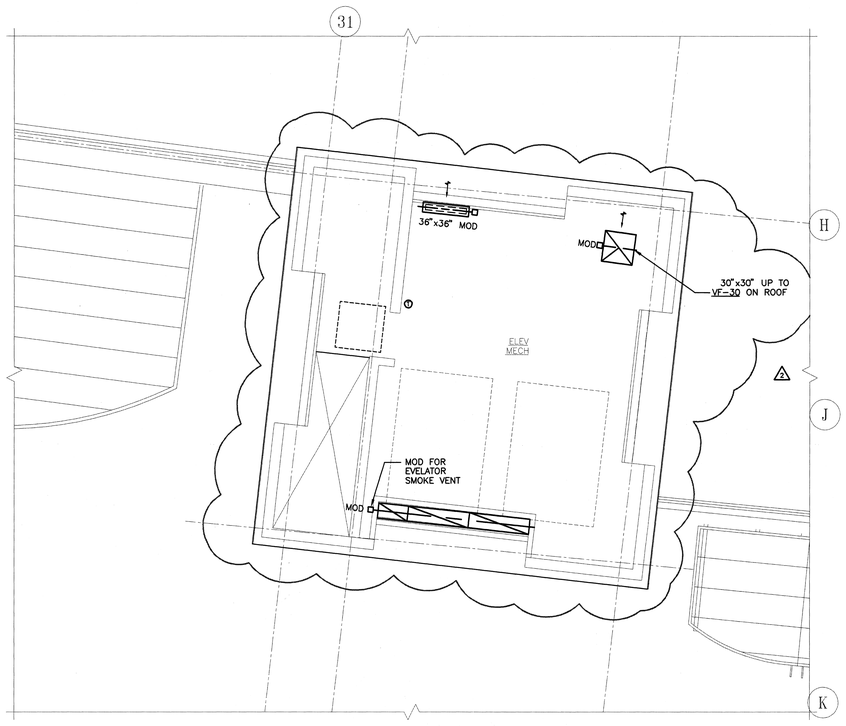
ELEVATOR CORE PLANS – MECH ROOM – QUAD D

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



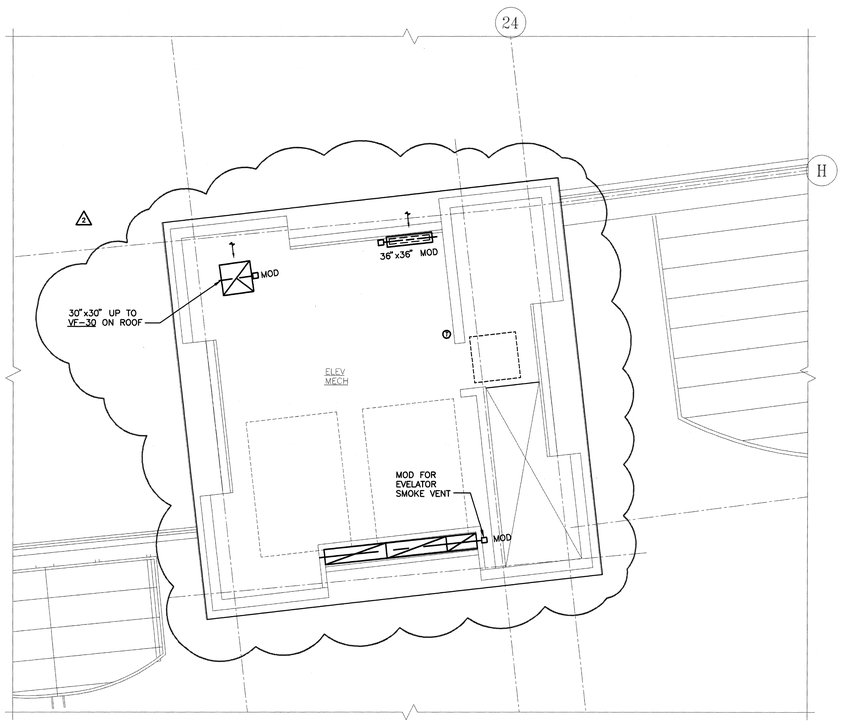
ELEVATOR CORE PLANS – MECH ROOM – QUAD A

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



ELEVATOR CORE PLANS – MECH ROOM – QUAD C

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



ELEVATOR CORE PLANS – MECH ROOM – QUAD B

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

PROJECT NORTH

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04.28.97-15:56-5110M326 - RMF #95110

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NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44

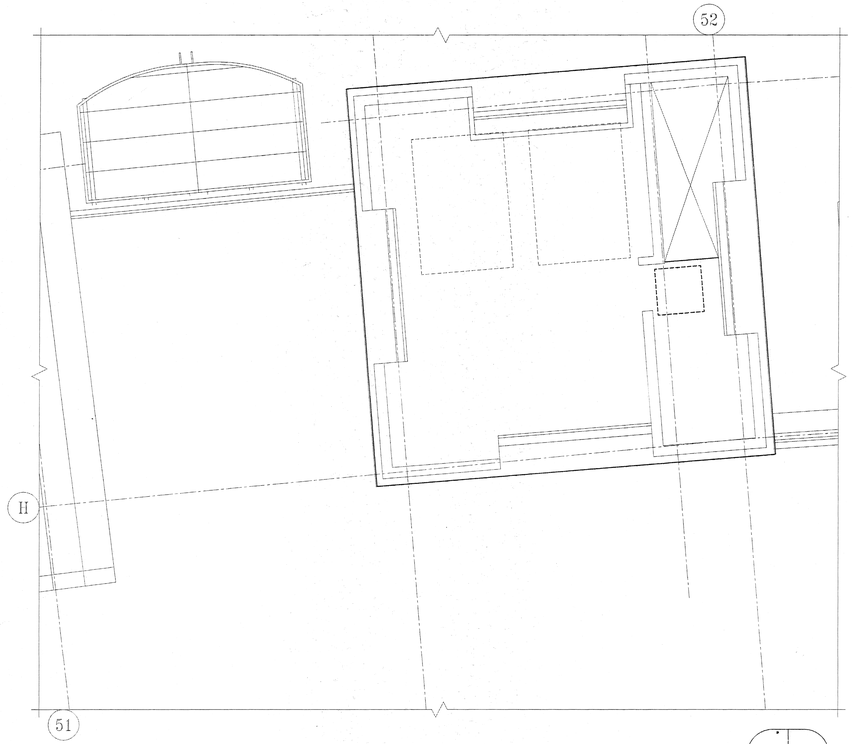
KEYPLAN

PROJECT NO. 95-675-00.
ISSUED BY: ---
DRAWN BY: RHK
REVIEWED BY: PMP
ISSUED: 2-28-97

SHEET TITLE
ELEVATOR
CORE PLANS
MECH ROOMS
QUADS A,B,C & D

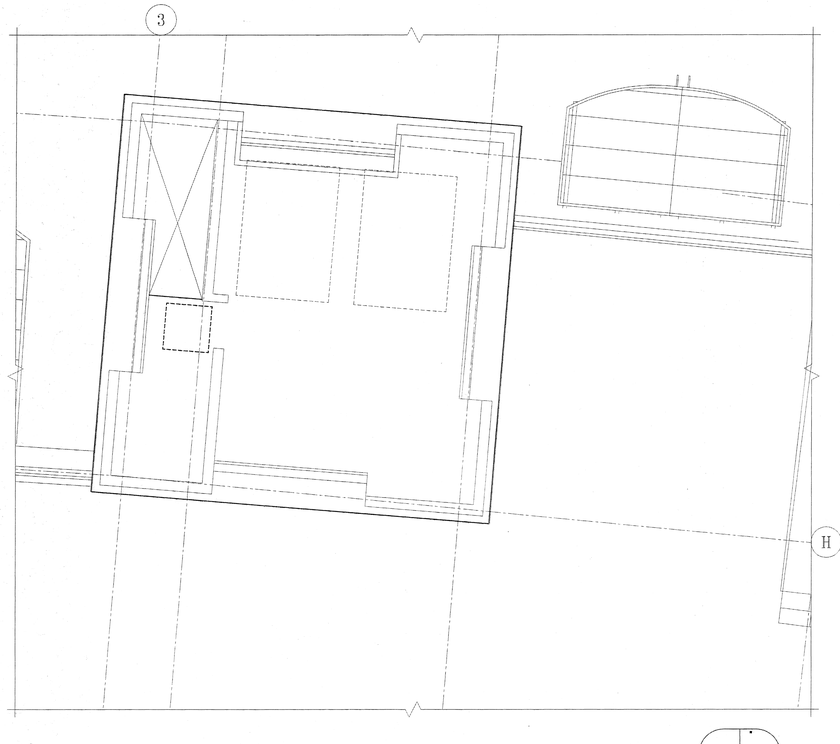
CATEGORY - SUB-CATEGORY - SHEET
M.3-26

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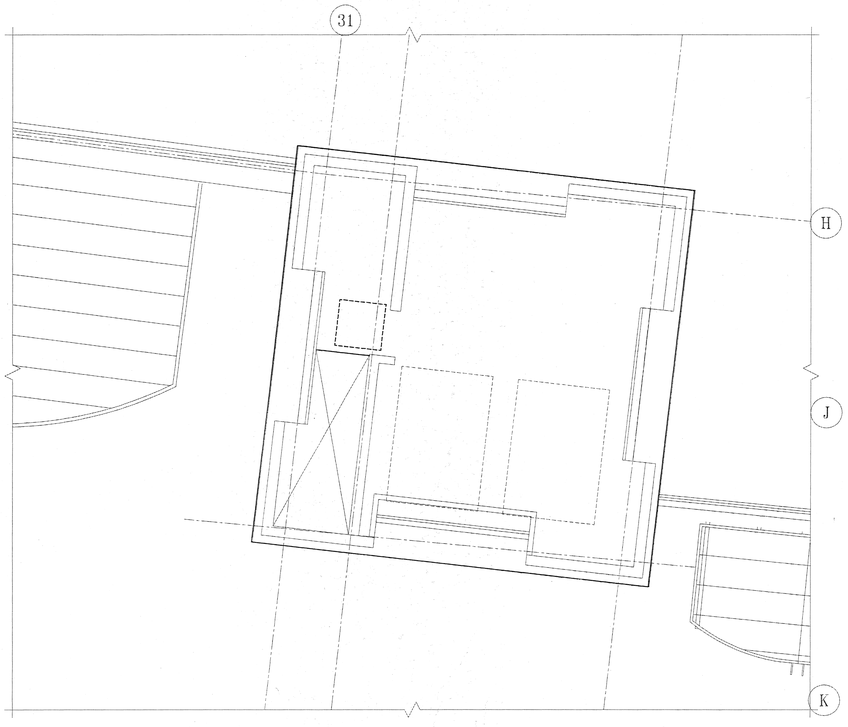
ELEVATOR CORE PLANS – MECH ROOM – QUAD D

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



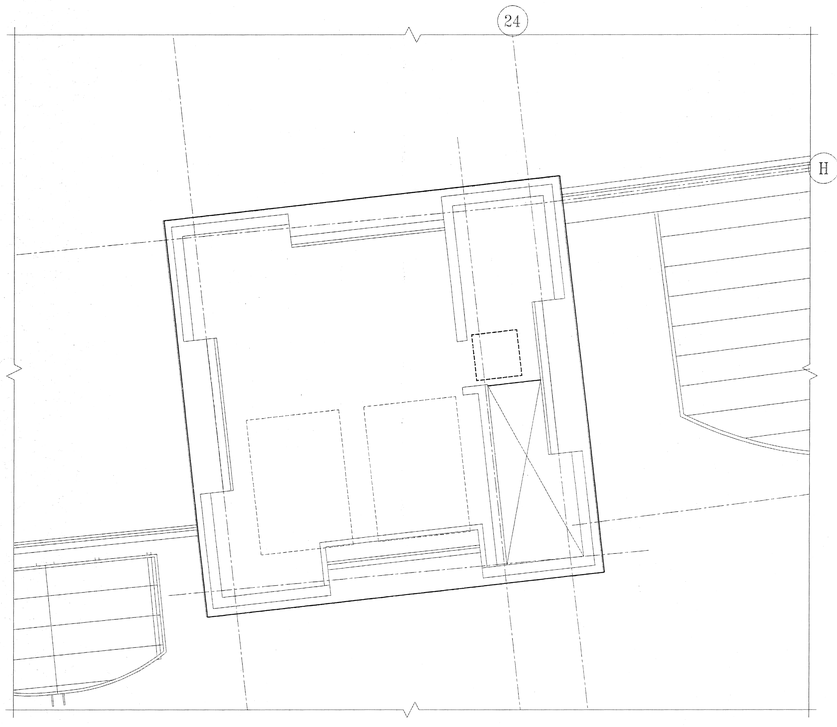
ELEVATOR CORE PLANS – MECH ROOM – QUAD A

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



ELEVATOR CORE PLANS – MECH ROOM – QUAD C

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



ELEVATOR CORE PLANS – MECH ROOM – QUAD B

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

PROJECT NORTH

0 1 2 4 8

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REVISIONS

NO.	DATE	DESCRIPTION

KEYPLAN

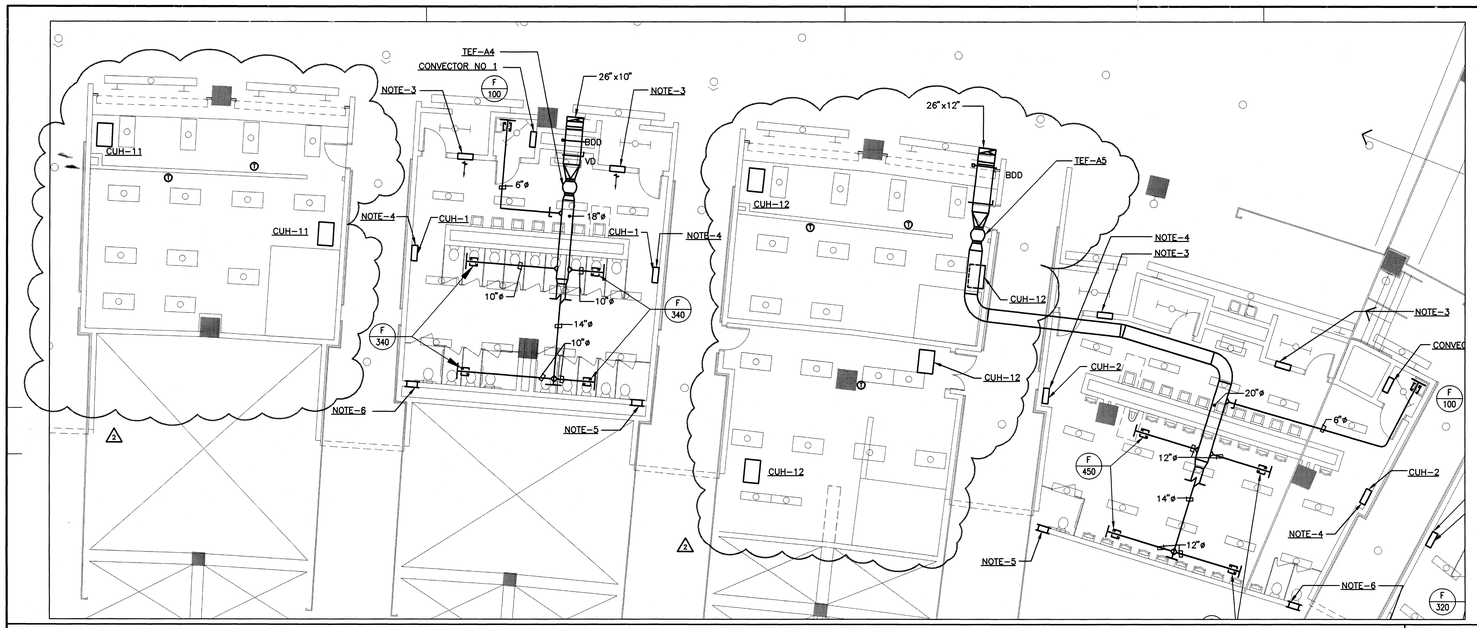
PROJECT NO. 95-675-00	ISSUED BY: ---
DRAWN BY: RHK	REVIEWED BY: PMP
ISSUED: 2-28-97	

SHEET TITLE
ELEVATOR
CORE PLANS
MECH ROOMS
QUADS A,B,C & D

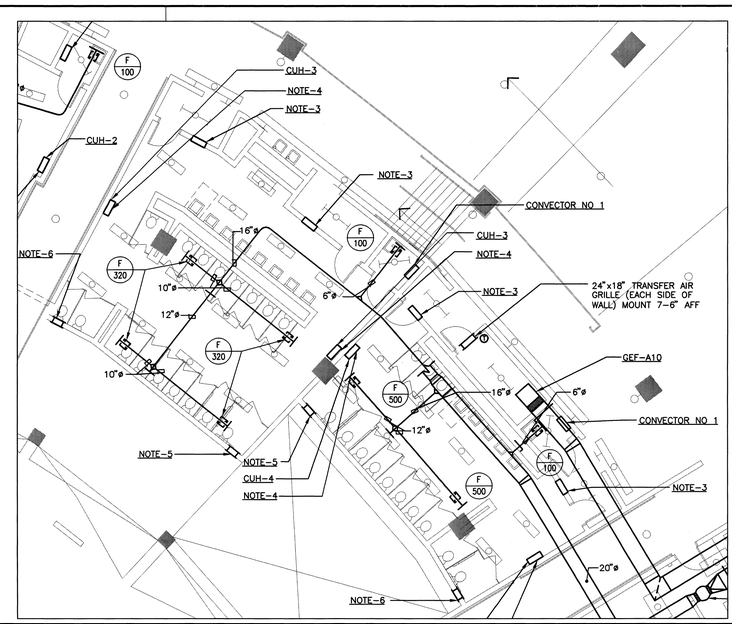
CATEGORY - SUB-CATEGORY - SHEET
M.3-27

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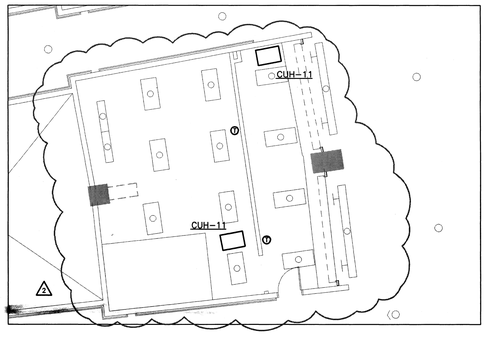
03.03.97-01:13-61104325 - RMF #95110



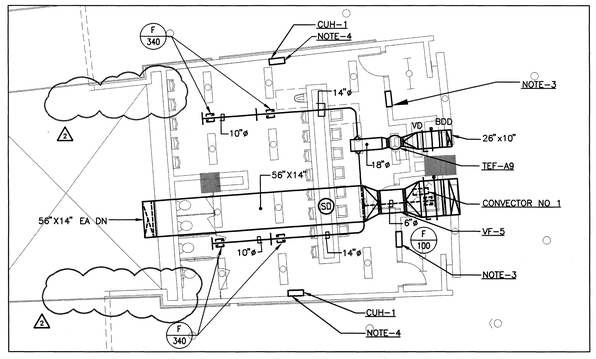
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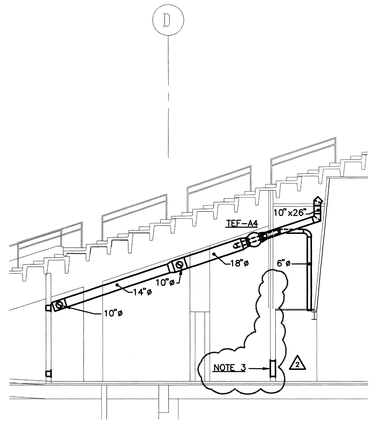
MCT-2 SCALE: 1/8"=1'0" (2)



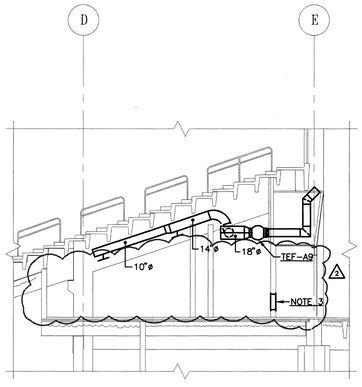
MCT-3 SCALE: 1/8"=1'0" (3)



MCT-4 SCALE: 1/8"=1'0" (4)



SECTION 'A' SCALE: 1/8"=1'0" (5)



SECTION 'B' SCALE: 1/8"=1'0" (6)

DRAWING NOTE

1. NOT USED
2. UNIIT HEATERS MOUNTED 8'-0" AFF.
3. 24"x24" TRANSFER AIR GRILLE (EACH SIDE OF WALL) WITH MOD MOUNT 8" AFF.
4. CABINET UNIT HEATERS MOUNTED 10'-0" AFF.
5. 16"x8" GRILLE MOUNTED 8" AFF.
6. 16"x8" GRILLE MOUNTED 6'-8" AFF.

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323 West 8th Street, Suite700
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REVISIONS

NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44

KEYPLAN

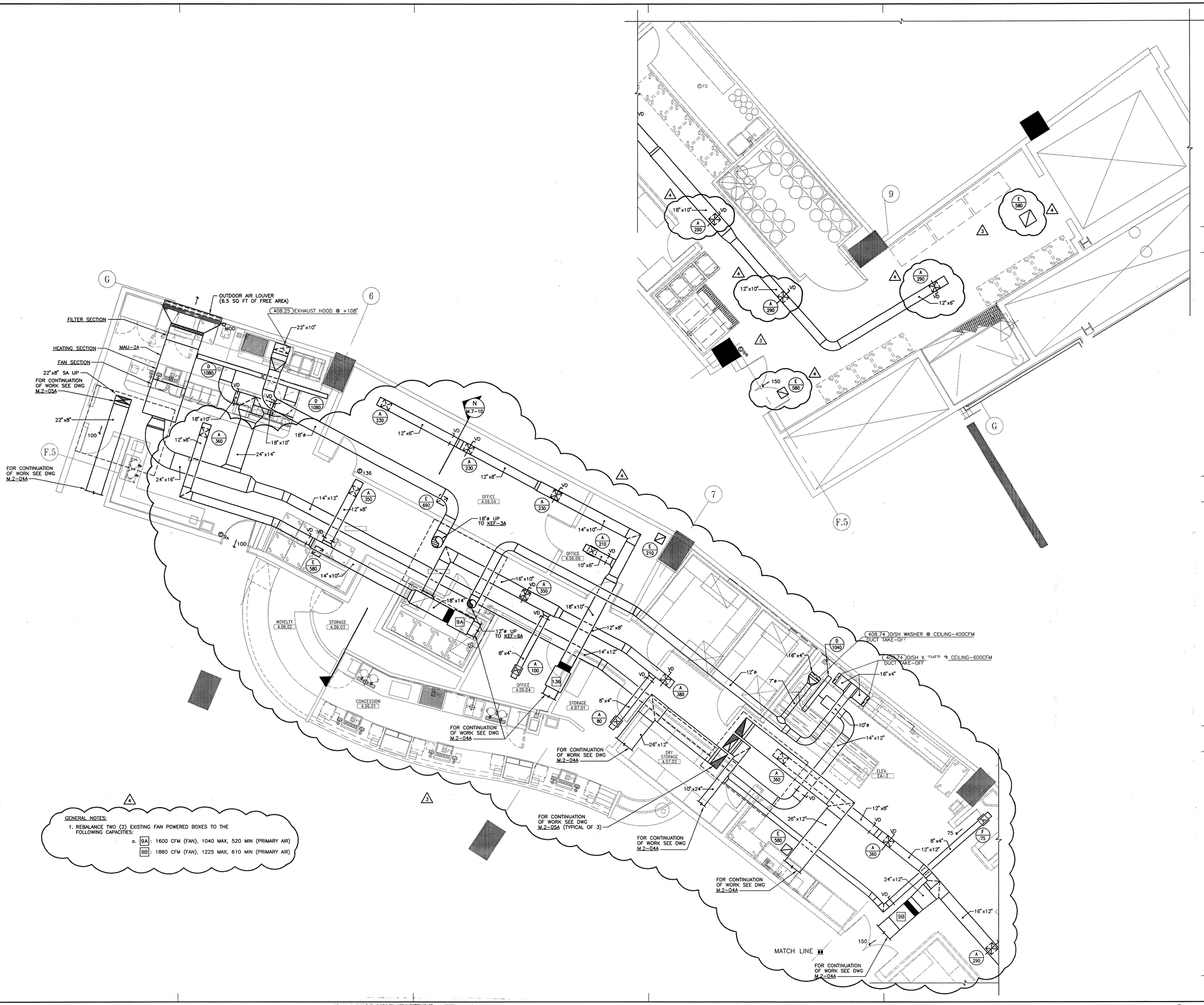
PROJECT NO. 95-675-00
ISSUED BY: ---
DRAWN BY:
REVIEWED BY: DSP
ISSUED: 2-28-97

SHEET TITLE
PART PLANS - TYPICAL TOILET ROOMS - HVAC

CATEGORY - SUB-CATEGORY - SHEET
M.3-28

03.02.97-16:17-5110M22 - RMF #95110

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NO.	DATE	DESCRIPTION
1	4-4-97	BULLETIN #43
2	4-28-97	BULLETIN #44
3	7-25-97	BULLETIN #71
4	12-10-97	BULLETIN #102

KEYPLAN

PROJECT NO. 95-675-00	ISSUED BY:
DRAWN BY: PBF	REVIEWED BY:
ISSUED: 2-28-97	

SHEET TITLE

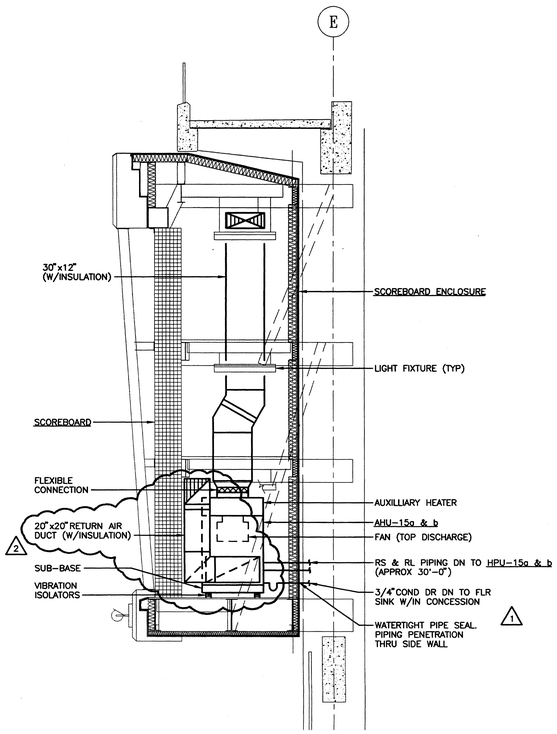
CLUB LEVEL FOOD SERVICE GRIDS 5.4 - 9.5

CATEGORY - SUB-CATEGORY - SHEET

M.3-29

12.10.97-11:33- M3-29 - RMF #95110

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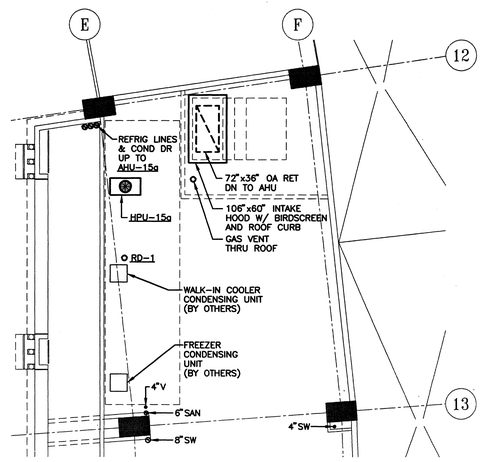


SECTION "A"

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

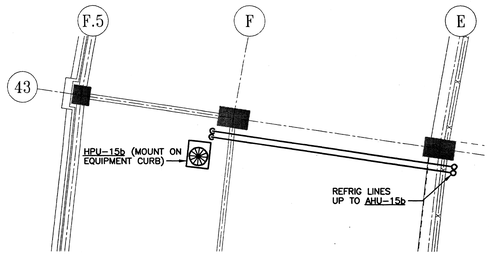
NOTES:

1. MAINTAIN 2'-0" CLEARANCE ON SIDE OF AHU FOR FILTER ACCESS.
2. SIZE REFRIGERANT LINES PER UNIT MANUFACTURER RECOMMENDATIONS. INSULATE AS REQUIRED, I.E SUCTION PIPING, OIL SEPERATOR, ETC.



CLUB LEVEL-KITCHEN ROOF-RM. 4.14.02

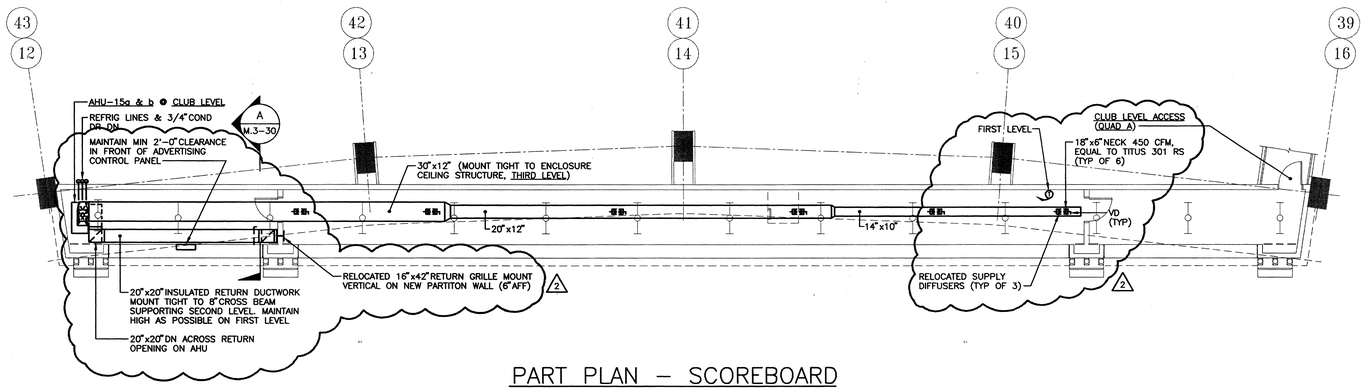
SCALE: 1/8"=1'-0"



1

MAIN CONCOURSE-OFFICE ROOF-RM. 2.42.05

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



PART PLAN - SCOREBOARD

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

HEAT PUMP DUTY

DESIG. :		AHU, HPU-15a & b
DUTY :		SCOREBOARD
CFM :		2700
TSP IN.H_2O :		1.0
FAN :	MOTOR (HP)	1.5
	RPM	1725
	DIAMETER	15"ø
COOLING :	EAT °F	79°F DB / 66°F WB
	LAT °F	55°F DB / 53°F WB
	TOTAL (MBH)	90.0
	SENSIBLE (MBH)	69.0
HEATING :	(LOW TEMP.)	
	17°F OA (MBH)	45.5
	AUX. HEAT	10.0 KW
CONDENSING UNIT :		
	NO. OF COMP.	1/7.5 HP
	FAN	1/.50 HP
	REFRIG.	R-22
ELECTRICAL :		208V/3ø

REMARKS :

1. PROVIDE (1) 7.5 TON SPLIT SYSTEM HEAT PUMP PACKAGE WITH THE FOLLOWING ACCESSORIES:
   a. INTEGRAL CONTROL PACKAGE WITH STANDARD ONE STAGE H/C THERMOSTAT
   b. RETURN AIR GRILLE
   c. MOUNTING SUB-BASE
   d. VIBRATION ISOLATORS
2. APPROX. SIZE :
   a. AHU - 6'-6"Hx4'-2"Wx2'-6"D ; 625 LBS
      HPU - 3'-6"Lx3'-0"Wx3'-4"H ; 500 LBS
   b. AIR HANDLING UNIT DIMENSIONS SHALL ACCOMMODATE INSTALLATION OF UNIT THRU STANDARD DOORWAY CLEARANCE.

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323 West 8th Street, Suite700
Kansas City, Missouri 64105

STRUCTURAL ENGINEER
BLISS & NITKAY, INC.
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DRAWING PACKAGE
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REVISIONS

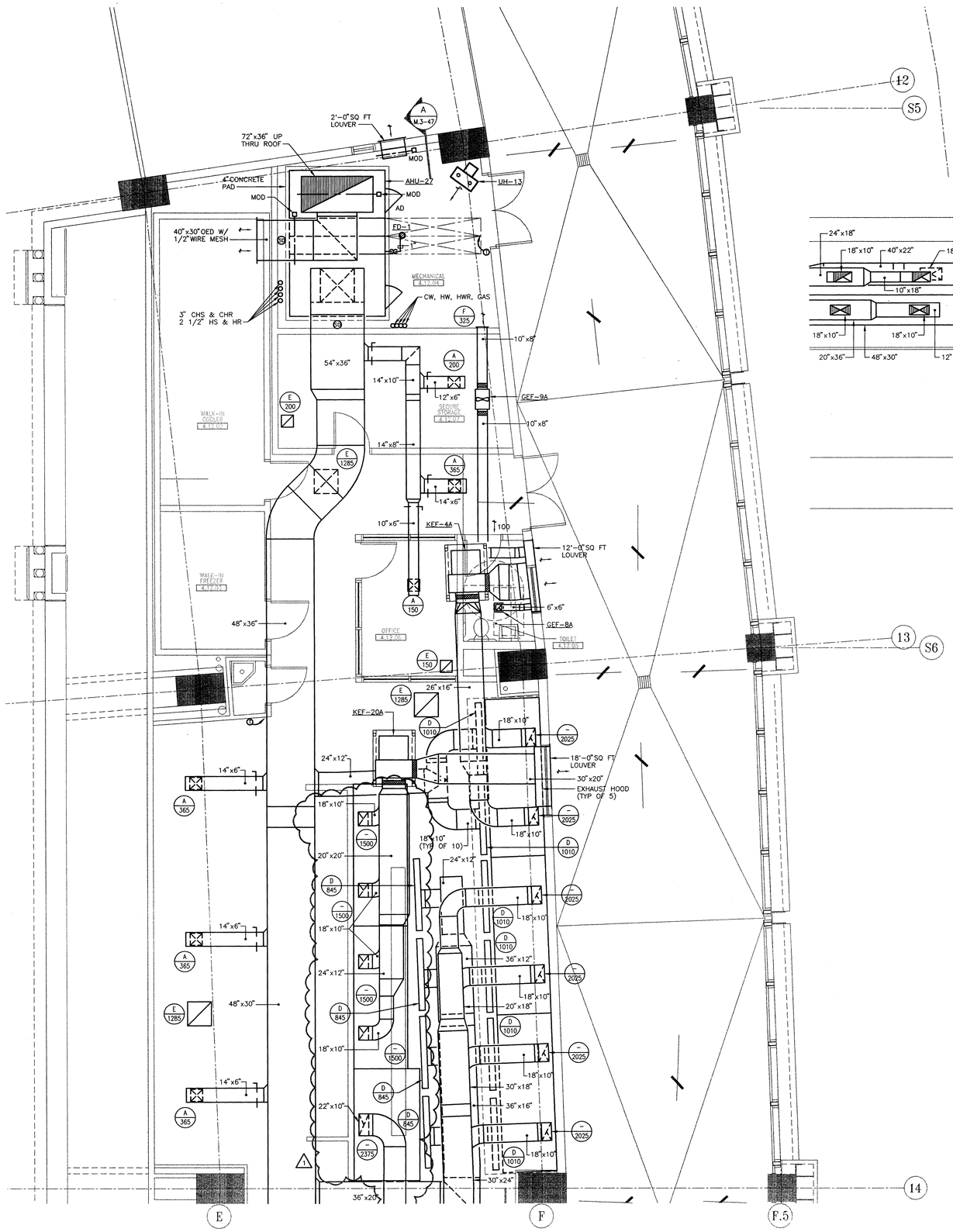
NO.	DATE	DESCRIPTION
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1	11-13-97	BULLETIN #101
2	4-30-98	NFL #470

KEYPLAN

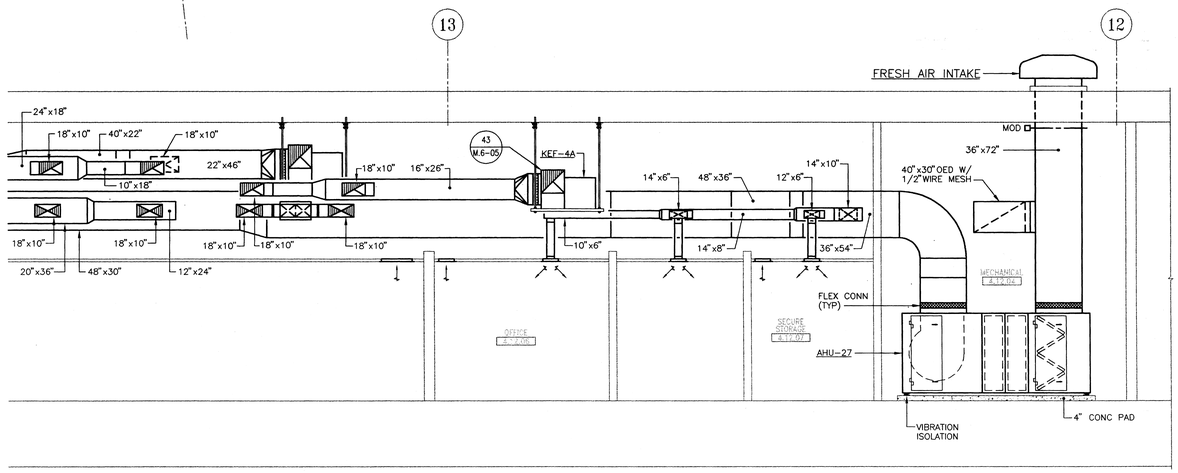
PROJECT NO. 95-675-00 | ISSUED BY:
DRAWN BY: MWS | REVIEWED BY: RMF
ISSUED: 9-12-97

SHEET TITLE
SCOREBOARD PART PLAN AND SECTION

CATEGORY - SUB-CATEGORY - SHEET
M.3-30



PART PLAN KITCHEN 4.14.02
CLUB LEVEL – NORTH
SCALE: 1/4"=1'-0"



PART PLAN KITCHEN 4.14.02
CLUB LEVEL – SECTION "A"
SCALE: 1/4"=1'-0"

GENERAL NOTES:

1. FOR GENERAL NOTES CONCERNING MECHANICAL ABD PLUMBING CONSTRUCTION REFER TO DRAWING P.3-12 OF ORIGINAL CONTRACT DOCUMENTS (4-28-97).
2. REBALANCE AHU-27 TO 19,000 CFM SUPPLY AIR.

1

PROJECT NORTH

4 2 0 4 8

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

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Kansas City, Missouri 64105

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MIAMI, FLORIDA

MECHANICAL/ELECTRICAL/PLUMBING
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NO.	DATE	DESCRIPTION
	11-14-97	BULLETIN #83
1	4-24-98	NFL #455

KEYPLAN

PROJECT NO. 95-675-00
ISSUED BY:
DRAWN BY: MWS
REVIEWED BY: RMF
ISSUED: 11-14-97
SHEET TITLE

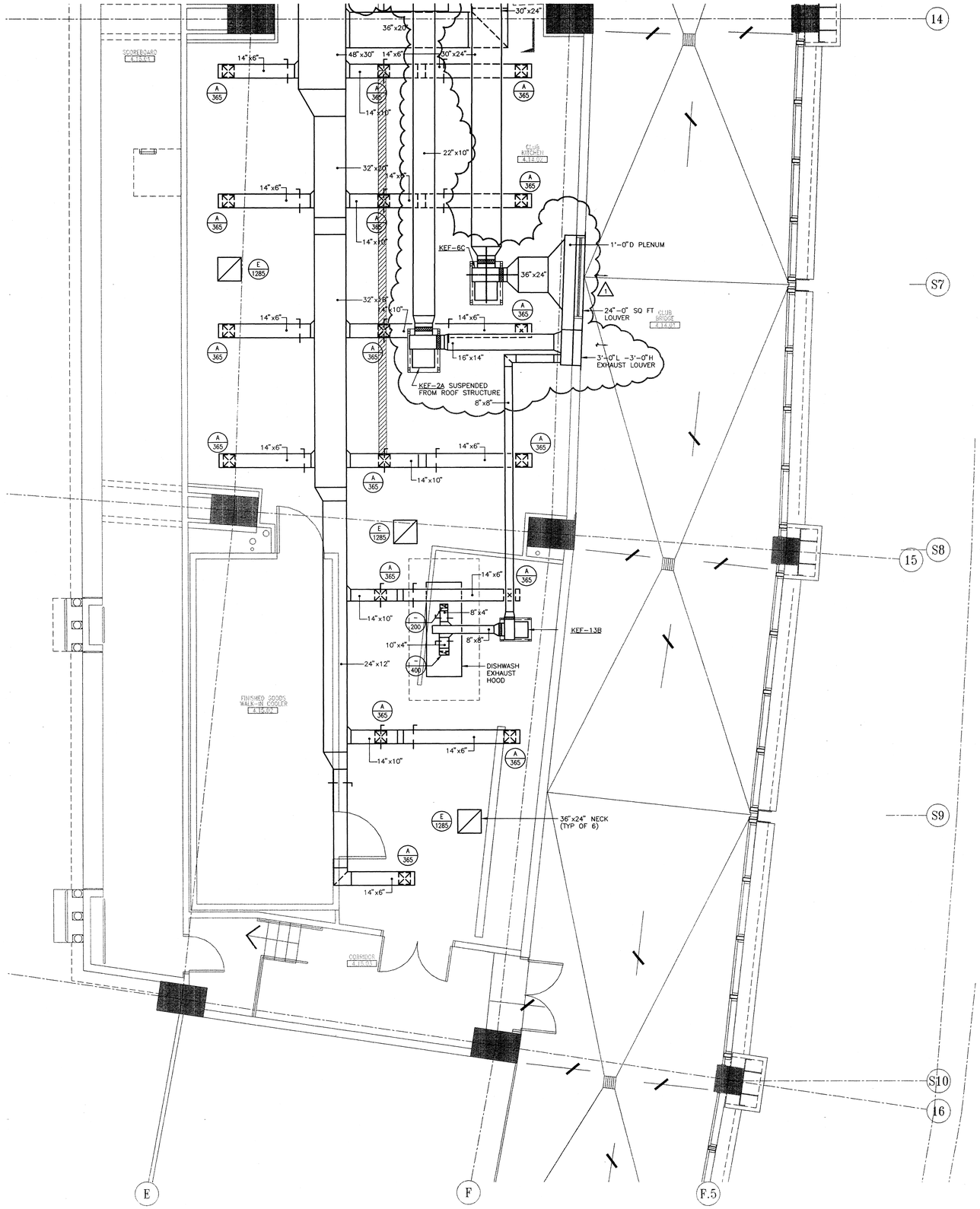
PART PLAN KITCHEN 4.14.02 - CLUB LEVEL - NORTH

CATEGORY - SUB-CATEGORY - SHEET

M.3-47

04.27.98-10:43-6110M347 - RMF #95110

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PART PLAN KITCHEN 4.14.02
CLUB LEVEL – SOUTH

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

GENERAL NOTES:

1. FOR GENERAL NOTES CONCERNING MECHANICAL ABD PLUMBING CONSTRUCTION REFER TO DRAWING P.3-19 OF ORIGINAL CONTRACT DOCUMENTS (4-28-97).

PROJECT NORTH

4 2 0 4 8

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

04.27.98-10.43-6110M347 - RMF #95110

h-k SPORT

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Kansas City, Missouri 64105

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MIAMI, FLORIDA

MECHANICAL/ELECTRICAL/PLUMBING
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REVISIONS

NO.	DATE	DESCRIPTION
	11-14-97	BULLETIN #83
1	4-24-98	NFL #455

KEYPLAN

PROJECT No. 95-675-00
ISSUED BY:
DRAWN BY: MWS
REVIEWED BY: RMF
ISSUED: 11-14-97

SHEET TITLE
PART PLAN KITCHEN 4.14.02 – CLUB LEVEL – SOUTH

CATEGORY - SUB-CATEGORY - SHEET
M.3-48

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AIR HANDLING UNIT SCHEDULE

DESIG	DUTY	FAN SECTION							COOLING SECTION												HEATING SECTION										ELECTRICAL	REMARKS
		CFM	MIN. OA CFM	ESP INCH H_2O	MOTOR BHP	MOTOR HP	RPM	WHEEL DIA INCH	EAT °F DB	EAT °F WB	LAT °F DB	LAT °F WB	TOTAL MBH	SENS MBH	GPM @ 36°F EWT 54°F LWT	MAX H_2O PD FT H_2O	MIN TOTAL FACE AREA	MAXIMUM FACE VEL FPM	No OF COILS	MAX FIN SPACING FIN/IN	MAXIMUM AIR PD IN H_2O	MIN ROWS	EAT °F	LAT °F	MBH @200°F EWT	GPM @30°F ΔT	MAXIMUM H_2O PD FT H_2O	MAXIMUM AIR PD IN H_2O	MIN TOTAL FACE AREA	MAXIMUM FACE VEL FPM	No OF COILS	MAX FIN SPACING FIN/IN	MIN ROWS		
AHU-27	CLUB - KITCHEN	17,500	17,500	1.5	11.5	15.0	1200	27 1/2	95	78	58	57.3	1,445	800	165.0	20.0	35 SQ FT	500	1	14	1.0	6	0	60	1,247	83.0	10.0	1.0	29.0	600	1	8	2	480V/3ø/60HZ	

NOTES:

(1) CHILLED AND HEATING WATER ARE 40% ETHYLENE GLYCOL SOLUTION.

(2) SUPPLY FAN MOTOR SHALL BE 2 SPEED / 2 WINDING, LOW SPEED : 8,060 CFM.

FAN SCHEDULE

DESIG	SERVICE ROOM No	LEVEL	TYPE	CFM	SP INCH H_2O	APPROX RPM	BHP	HP (MOTOR SIZE)	WHEEL DIA	DRIVE	ELECTRICAL	REMARKS
KEF-4A	KITCHEN HOOD	CLUB LEVEL	G	4,050	2.5	1,960	4.4	5.0	18	BELT	480V/3ø/60HZ	NOTE (1) (2) RELOCATED
KEF-20A	KITCHEN HOOD	CLUB LEVEL	G	6,750	2.5	1,300	4.0	5.0	24	BELT	480V/3ø/60HZ	NOTE (1) (2) NEW
KEF-6C	KITCHEN HOOD	CLUB LEVEL	G	8,100	2.5	1,200	7.0	10.0	27	BELT	480V/3ø/60HZ	NOTE (1) (2) RELOCATED
KEF-13B	DISHWASH HOOD	CLUB LEVEL	G	600	1.5	1,200	–	0.5	10	BELT	120V/3ø/60HZ	NOTE (1) (2) NEW
GEF-8A	KITCHEN BATH	CLUB LEVEL	E	100	0.50	1,200	–	.125	8"	BELT	120V/1ø/60HZ	NEW
GEF-9A	KITCHEN MECH RM	CLUB LEVEL	C	325	0.75	1,000	–	.250	10"	BELT	120V/1ø/60HZ	NEW

NOTES:

(1) FAN SHALL BE UL 762 APPROVED FOR MAXIMUM 375 DEGREES FARENHEIT, EQUIPPED WITH HINGED ACCESS DOOR AND DRAIN CONNECTION.

(2) FAN INFORMATION TRANSFERRED FROM ORIGINAL FAN SCHEDULE DWG. M.0-04 FOR CLARIFICATION PURPOSE.

UNIT HEATER SCHEDULE (HYDRONIC)

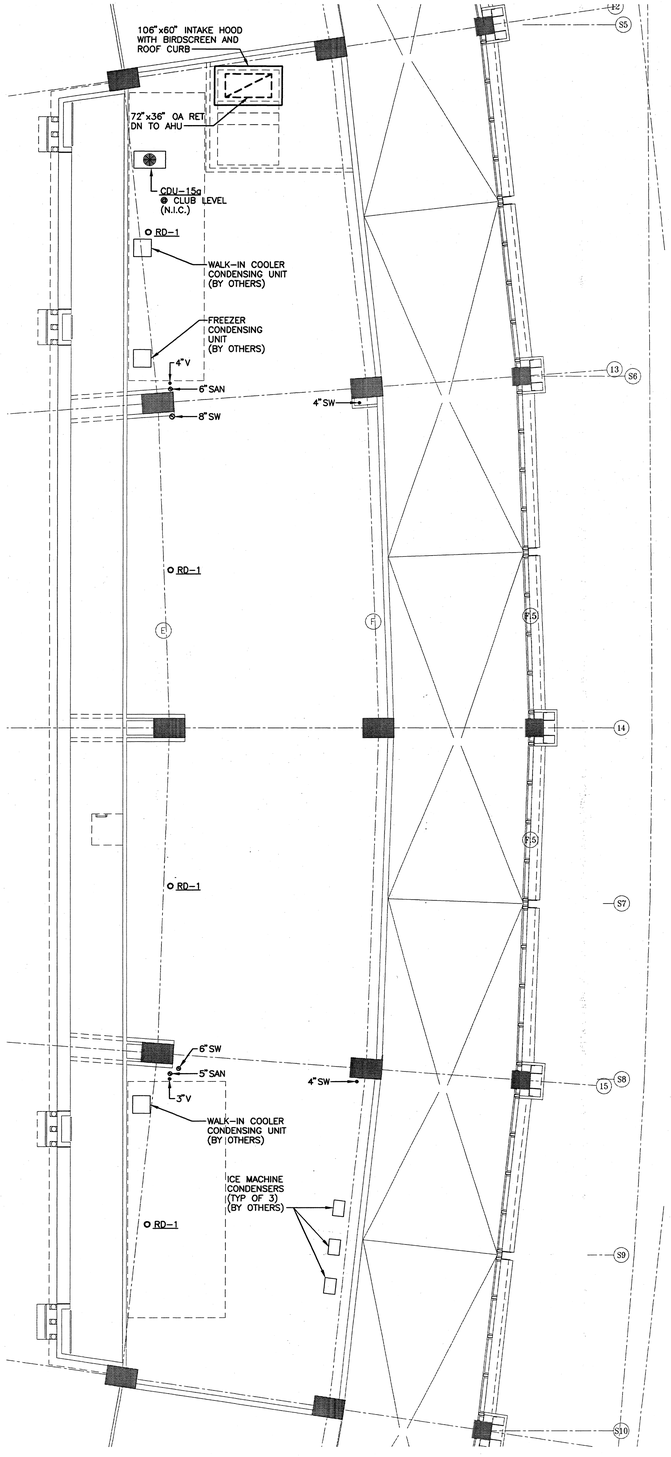
DESIG	NOMINAL CFM	CAP BTUH @ 200°F EWT	GPM @ 30°F ΔT H_2O	MAXIMUM H_2O PD FT H_2O	MOTOR HP	RPM	ELECTRICAL	REMARKS
UH-13	325	24,570	2.0	0.75	1/20	1,550	120V/1ø/60HZ	KITCHEN MECH ROOM

AIR DEVICE SCHEDULE

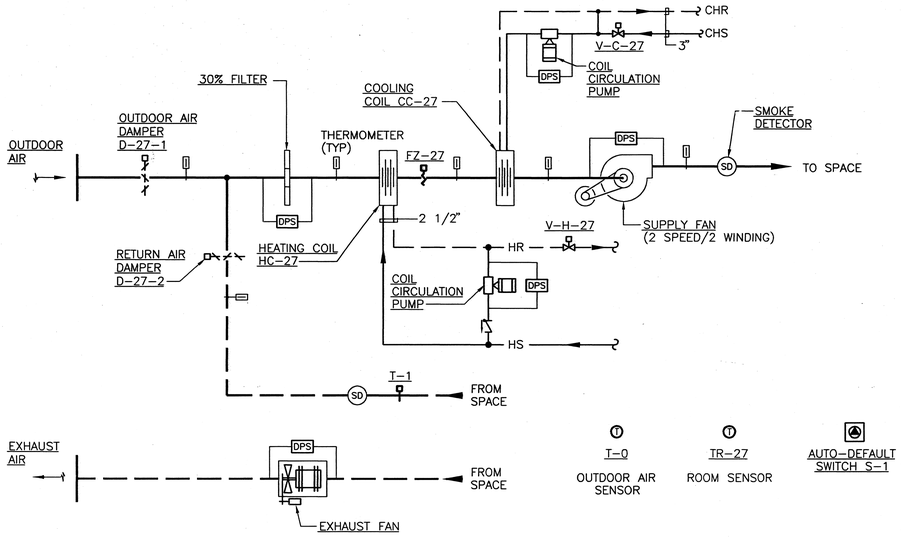
TYPE	DUTY	CFM	SIZE	BLOW	PD IN H_2O	NC	REMARKS
A	CEILING SUPLPY	151-280	9"x9"	4-WAY	0.12	21	
A	CEILING SUPPLY	281-500	12"x12"	4-WAY	0.12	23	
D	LINEAR SLOT SUPPLY	190/FT	6@1" SLOT	1-WAY	0.05	29	
E	RETURN REGISTER	171-230	8"x6"	0° DEFL	0.11	22	
E	RETURN REGISTER	231-310	10"x6"	0° DEFL	0.11	23	
E	RETURN REGISTER	311-370	12"x6"	0° DEFL	0.11	24	
E	RETURN REGISTER	1101-1500	22"x22"	0° DEFL	0.11	20	
F	EXHAUST GRILLE	0-170	6"x6"	0° DEFL	0.11	22	
F	EXHAUST GRILLE	231-310	10"x6"	0° DEFL	0.11	23	
F	EXHAUST GRILLE	311-370	12"x6"	0° DEFL	0.11	24	
F	EXHAUST GRILLE	371-460	12"x8"	0° DEFL	0.11	22	

COIL PUMP SCHEDULE

DESIG	DUTY	TYPE	GPM	HEAD FEET H_2O	SUCTION X DISCHARGE	MOTOR BHP	MOTOR HP	RPM	% EFFICIENCY	ELECTRICAL	REMARKS
CCP-27	AHU-27 COOLING OIL	C	165	35	2.5"x2.5"	2.25	3.0	1760	65%	460V/3ø/HZ	
HCP-27	AHU-27 HEATING COIL	C	30	20	1.5"x1.5"	0.7	0.5	1760	50%	460V/3ø/HZ	



PART PLAN KITCHEN 4.14.02
CLUB LEVEL - ROOF
SCALE: 1/8"=1'-0"



CONSTANT VOLUME AIR HANDLING UNIT - AHU-27

GENERAL NOTE:

1. REFER TO ORIGINAL CONTRACT DRAWINGS FOR PIPING DETAILS.

PROJECT NORTH

8 4 0 8 16

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

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Kansas City, Missouri 64105

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KEYPLAN: D A C B

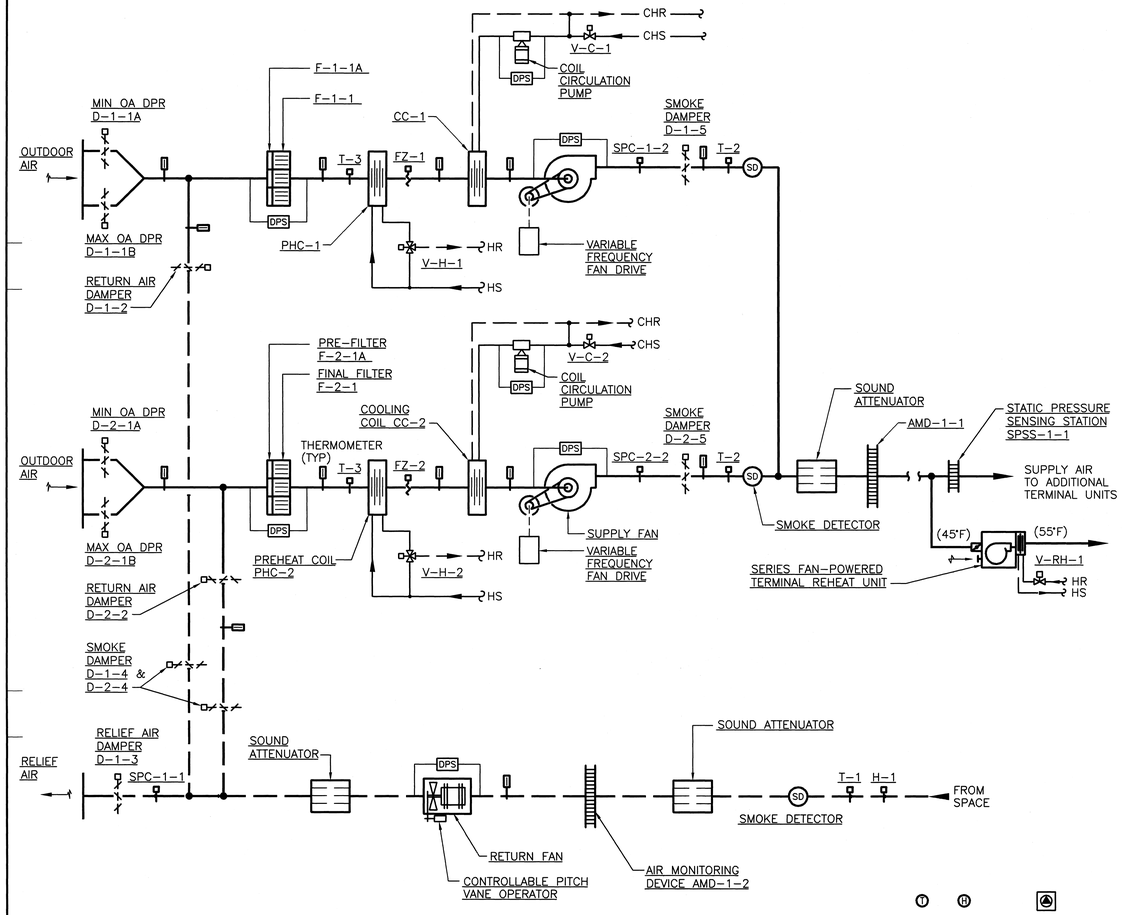
PROJECT NO. 95-675-00 | ISSUED BY:
DRAWN BY: JFL | REVIEWED BY: RMF
ISSUED: 11-14-97

SHEET TITLE
PART PLAN KITCHEN 4.14.02 - CLUB LEVEL - ROOF AND SCHEDULES

CATEGORY - SUB-CATEGORY - SHEET
M.3-49

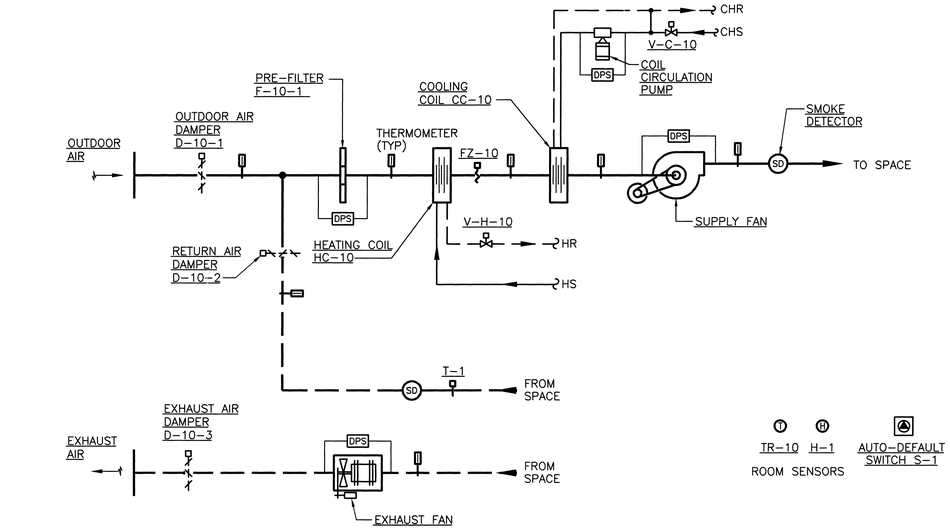
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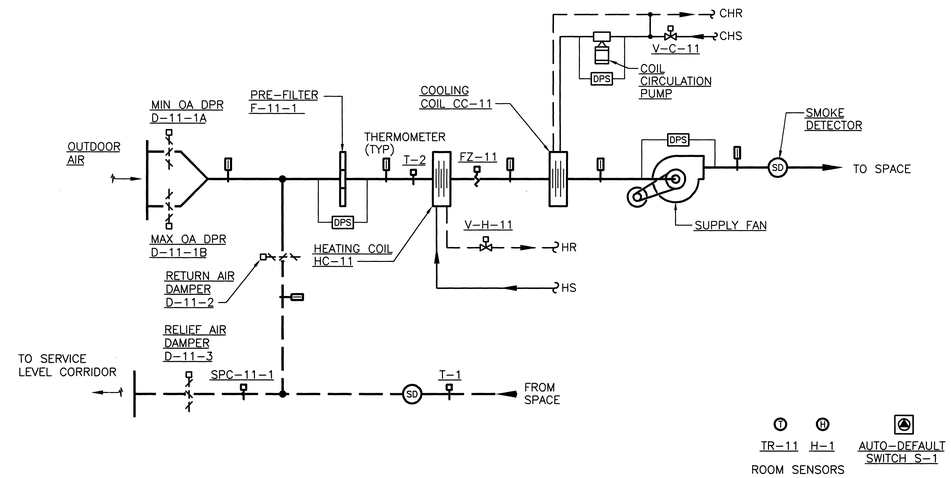
VARIABLE VOLUME AIR HANDLING UNIT – AHU-1 THRU 8

SCALE: NONE (1)



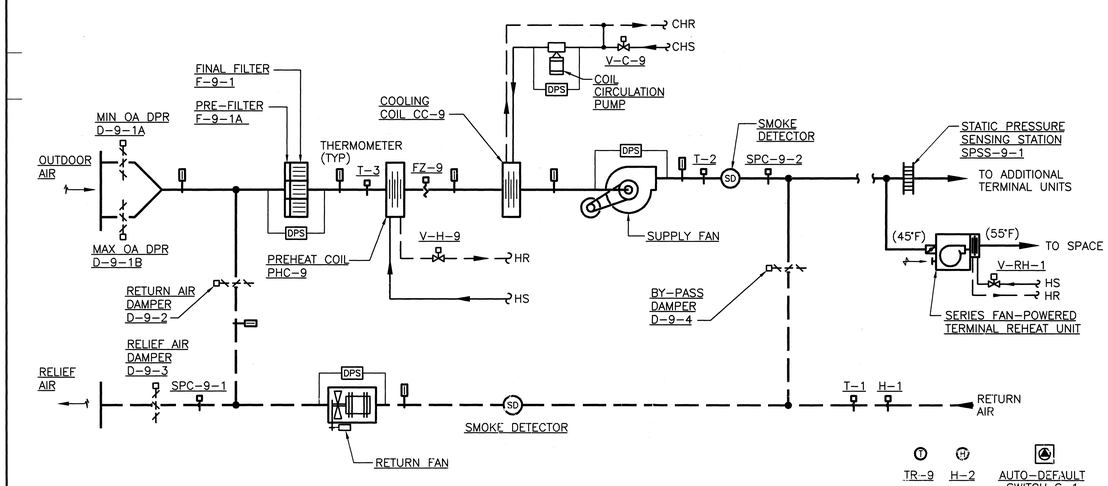
CONSTANT VOLUME AIR HANDLING UNIT – AHU-10, 14, 19

SCALE: NONE (3)



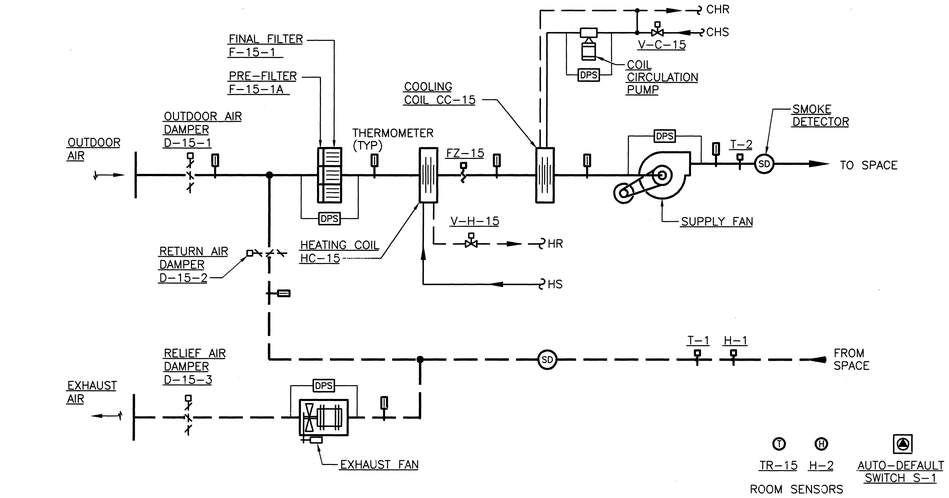
CONSTANT VOLUME AIR HANDLING UNIT – AHU-11, 12, 13, 18,

SCALE: NONE (4)



VARIABLE VOLUME (BYPASS) AIR HANDLING UNIT – AHU-9

SCALE: NONE (2)



CONSTANT VOLUME AIR HANDLING UNIT – AHU-15, 16, 17

SCALE: NONE (5)

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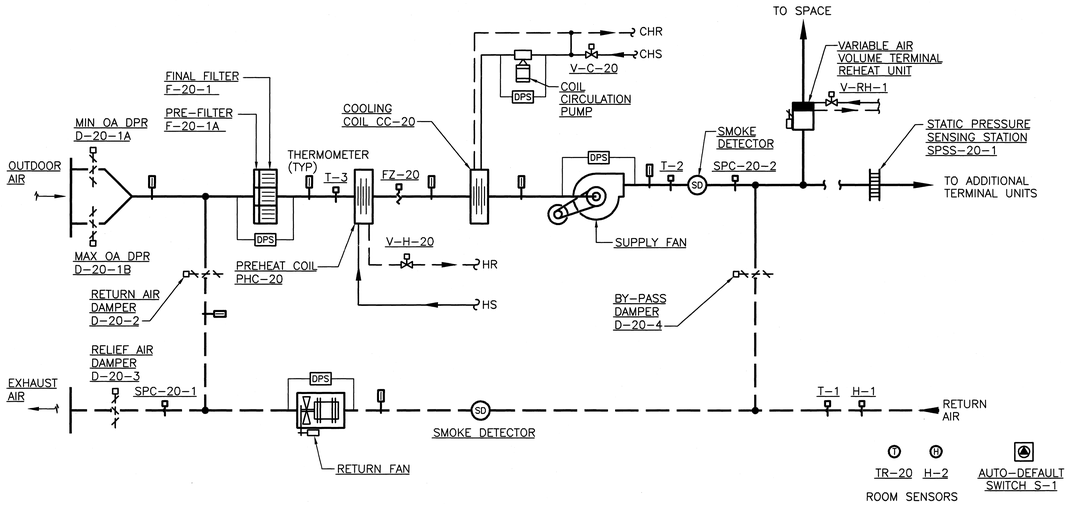
KEYPLAN

PROJECT NO.	ISSUED BY:
95-675-00	
DRAWN BY: SWS	REVIEWED BY: PJH
ISSUED: 2-28-97	

SHEET TITLE
AIR SYSTEM FLOW DIAGRAMS

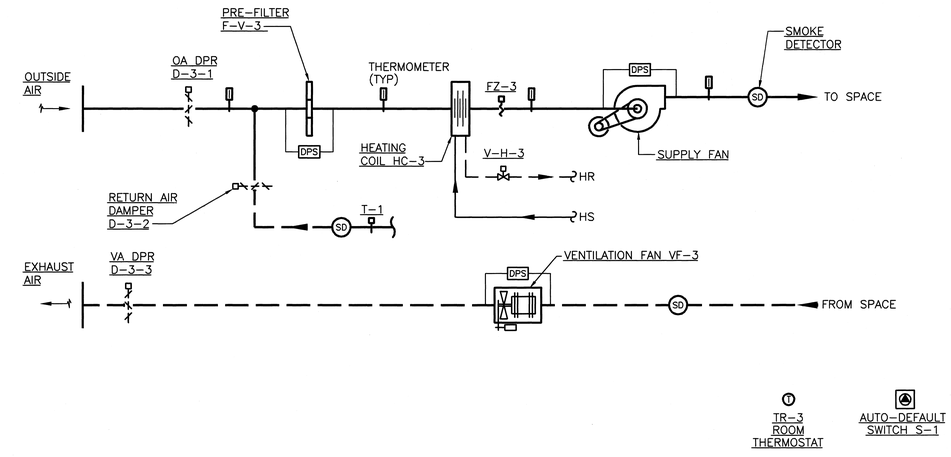
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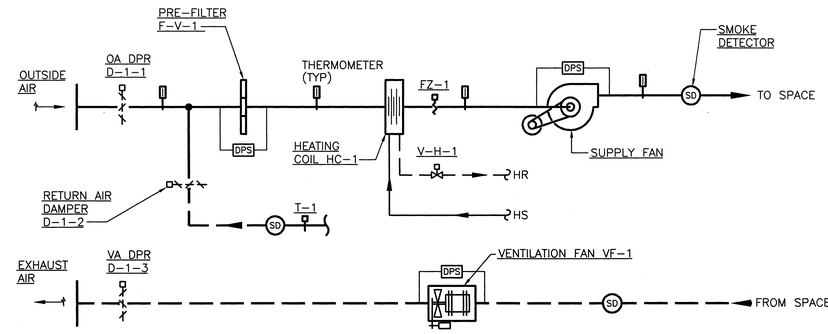
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SCALE: NONE (6)



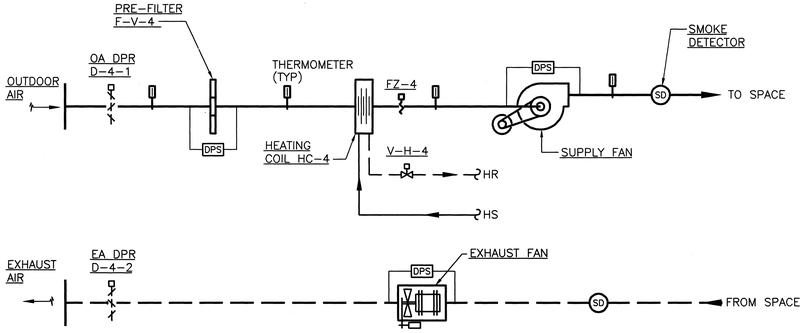
HEATING AND VENTILATING UNIT – HVU-3, 5

SCALE: NONE (9)



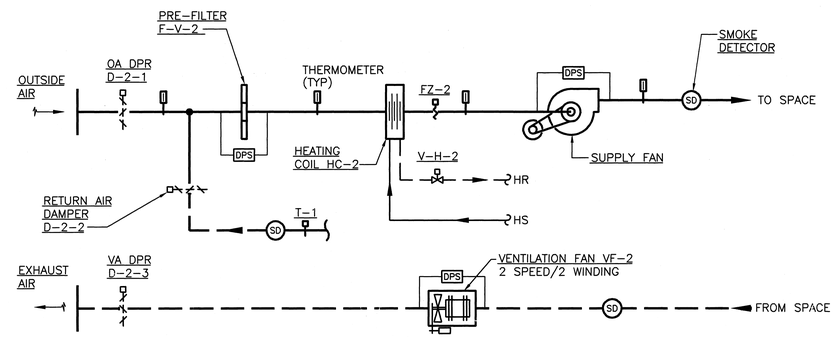
HEATING AND VENTILATING UNIT – HVU-1, 7

SCALE: NONE (7)



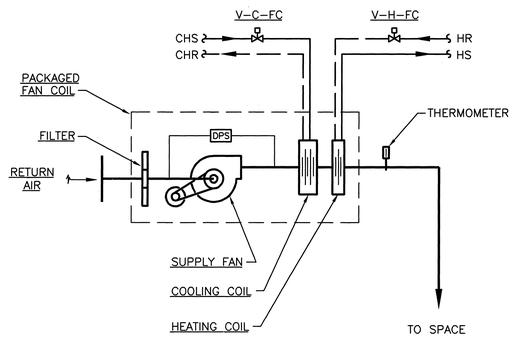
HEATING AND VENTILATING UNIT – HVU-4

SCALE: NONE (10)



HEATING AND VENTILATING UNIT – HVU-2, 6

SCALE: NONE (8)



TYPICAL – SUITE FAN COIL UNIT

SCALE: NONE (11)

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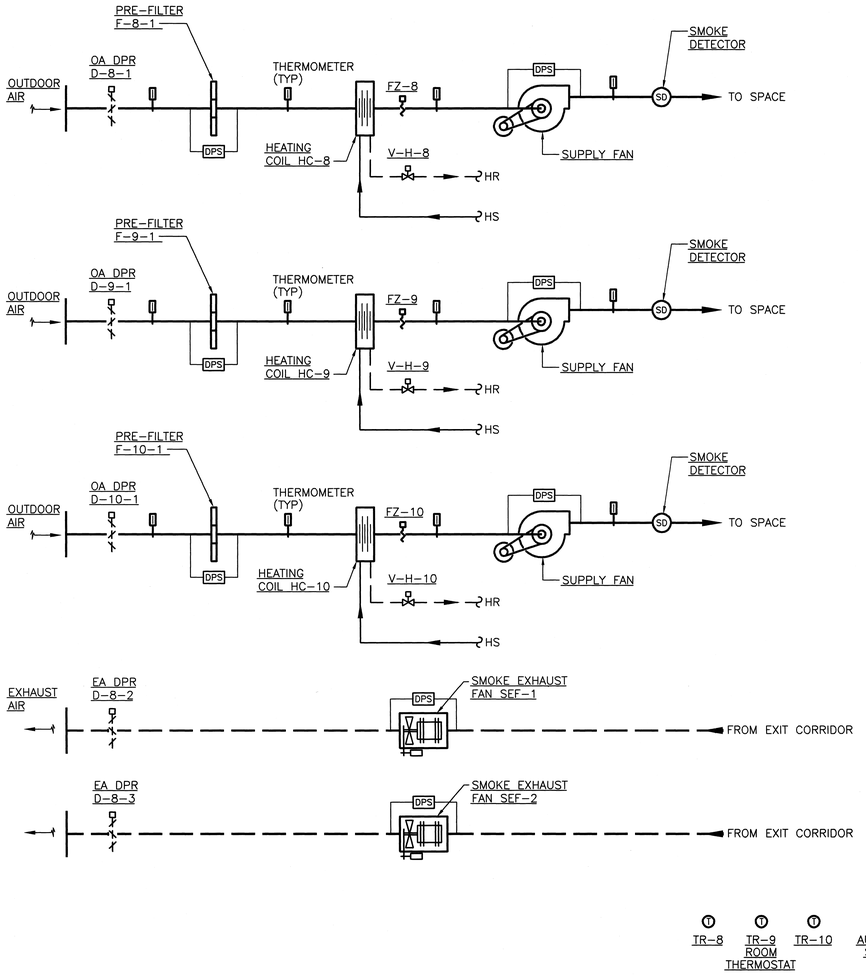
KEYPLAN

PROJECT NO. 95-675-00	ISSUED BY:
DRAWN BY: SWS	REVIEWED BY: PJH
ISSUED: 2-28-97	

SHEET TITLE
AIR SYSTEM FLOW DIAGRAMS

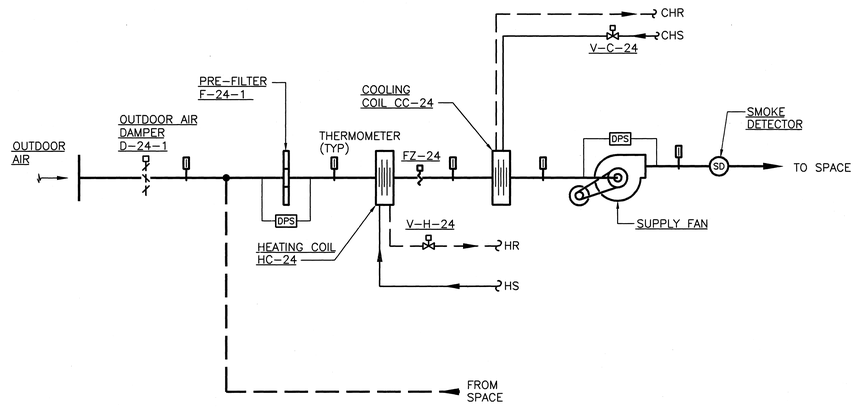
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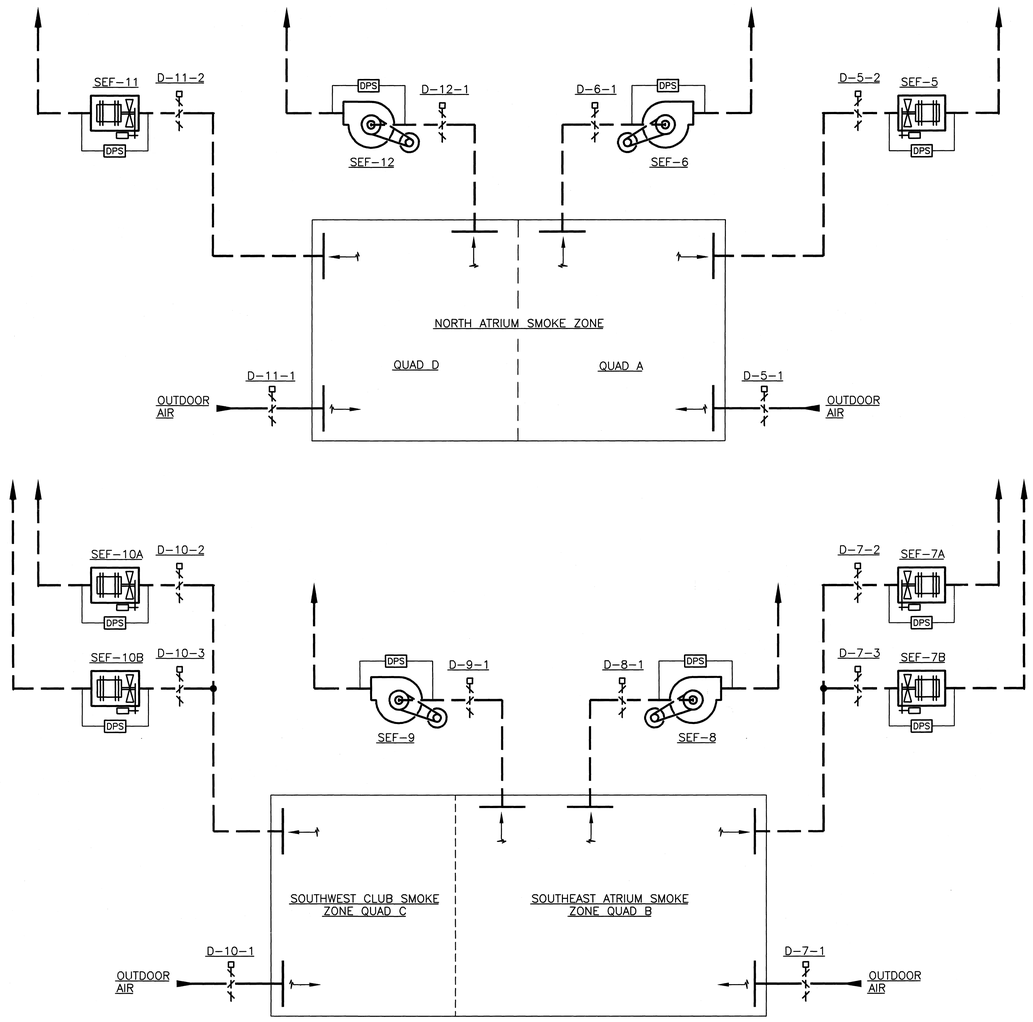
HEATING AND VENTILATING UNIT – HVU-8, 9, 10, 11, 12, 13

SCALE: NONE (12)



CONSTANT VOLUME AIR HANDLING UNIT – AHU-24, 25, 26

SCALE: NONE (13)



ATRIUM SMOKE EXHAUST SYSTEMS

SCALE: NONE (14)

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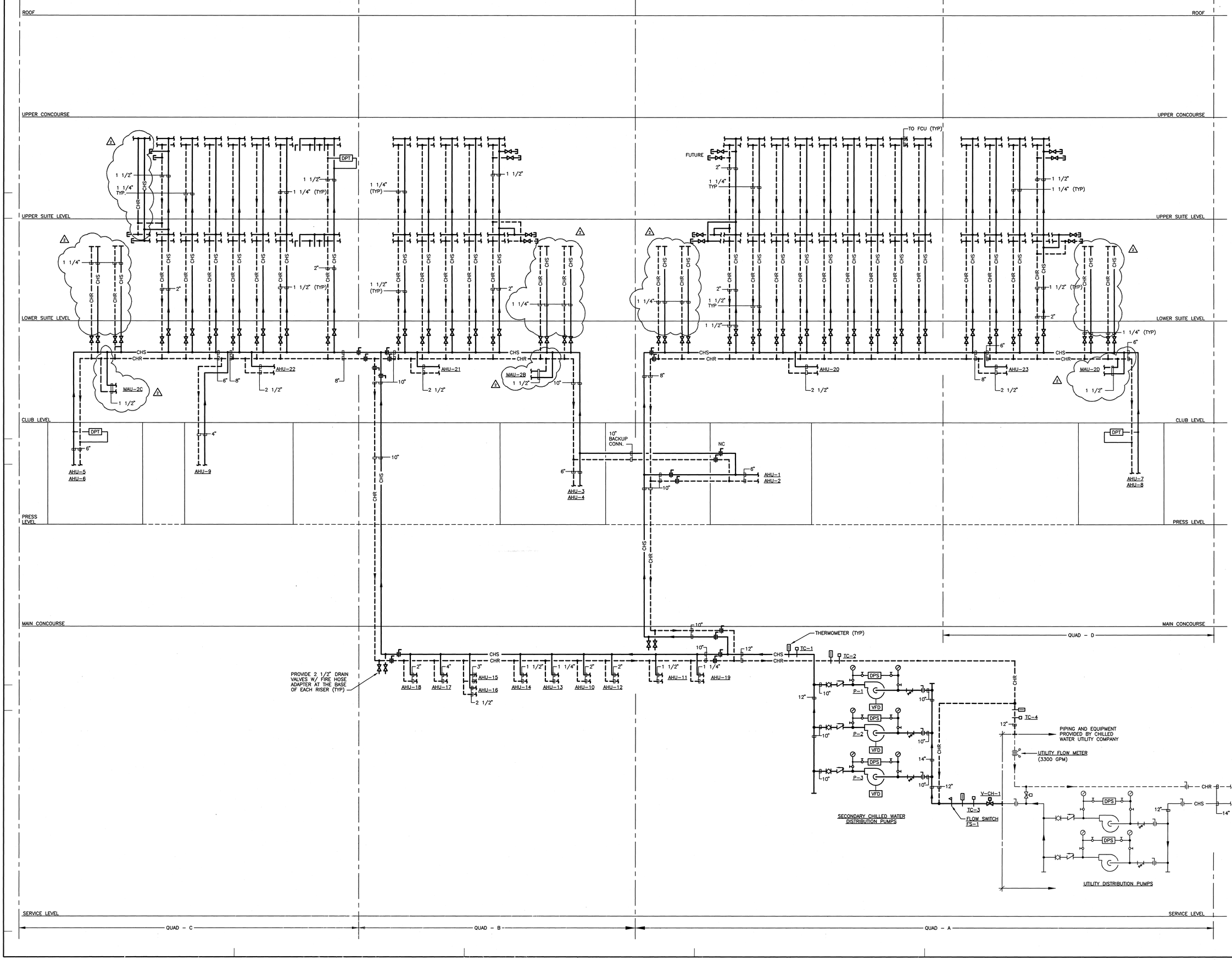
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ISSUED: 2-28-97

SHEET TITLE
AIR SYSTEM
FLOW DIAGRAMS

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NO.	DATE	DESCRIPTION
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2	4-28-97	BULLETIN #44

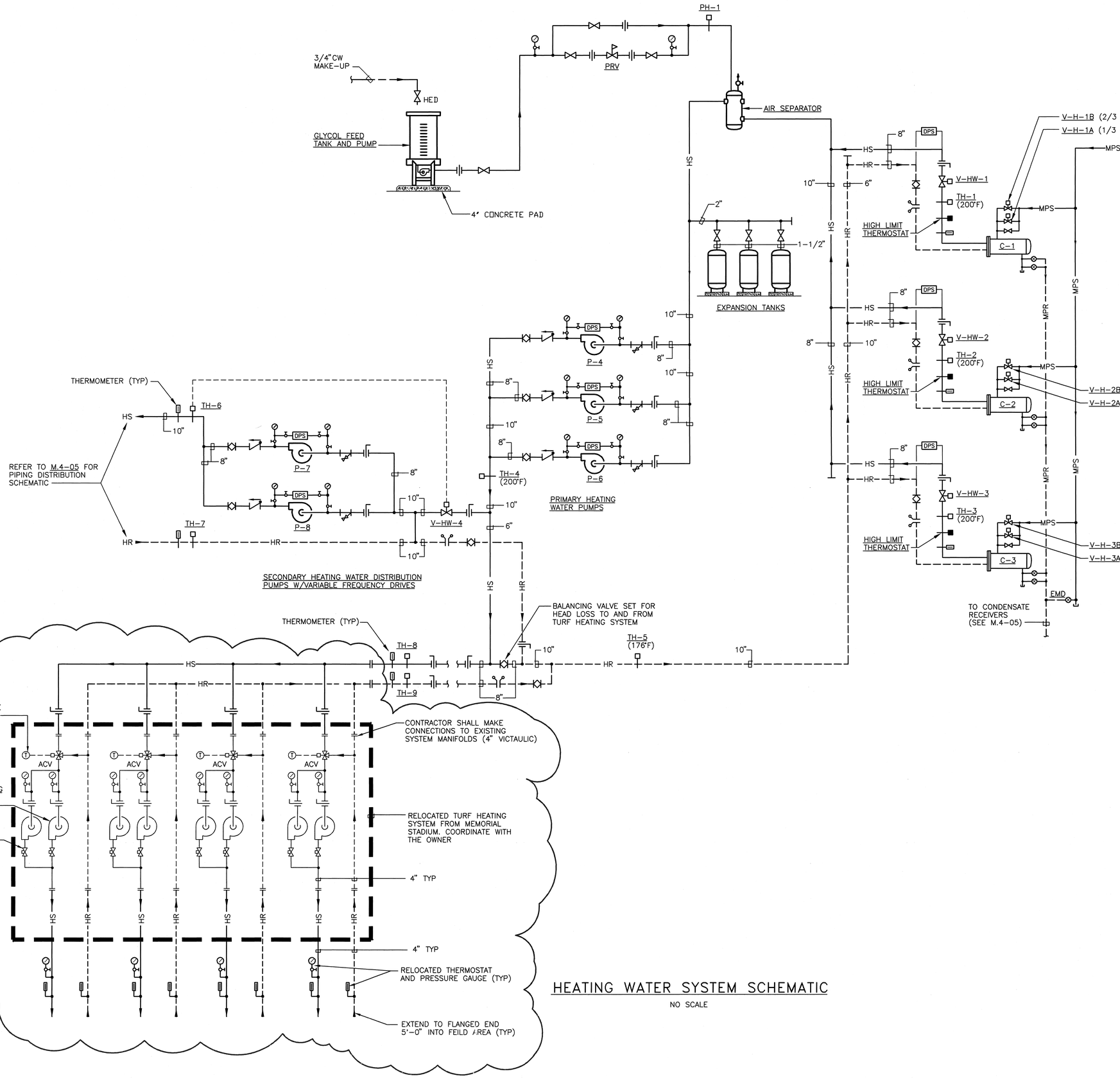
KEYPLAN

PROJECT NO. 95-675-00 | ISSUED BY:
DRAWN BY: RPB | REVIEWED BY: PJH
ISSUED: 2-28-97

SHEET TITLE
CHILLED WATER SYSTEM SCHEMATIC

CATEGORY - SUB-CATEGORY - SHEET
M.4-04

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HEATING WATER SYSTEM SCHEMATIC

NO SCALE

PROJECT NORTH

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NO.	DATE	DESCRIPTION
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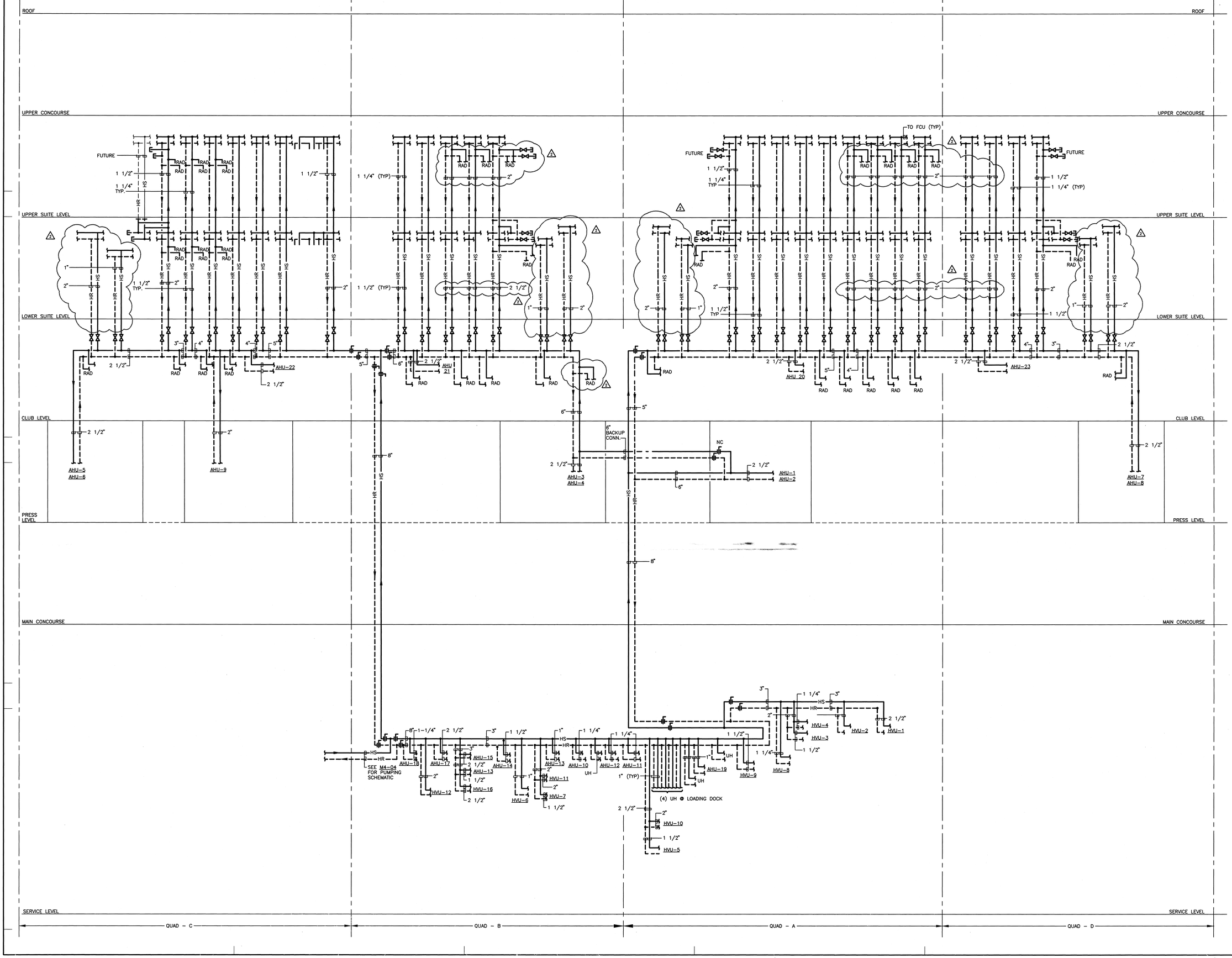
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PROJECT NO. 95-675-00
ISSUED BY:
DRAWN BY: MAL
REVIEWED BY: DSP
ISSUED: 2-28-97

SHEET TITLE
HEATING WATER SYSTEM SCHEMATIC

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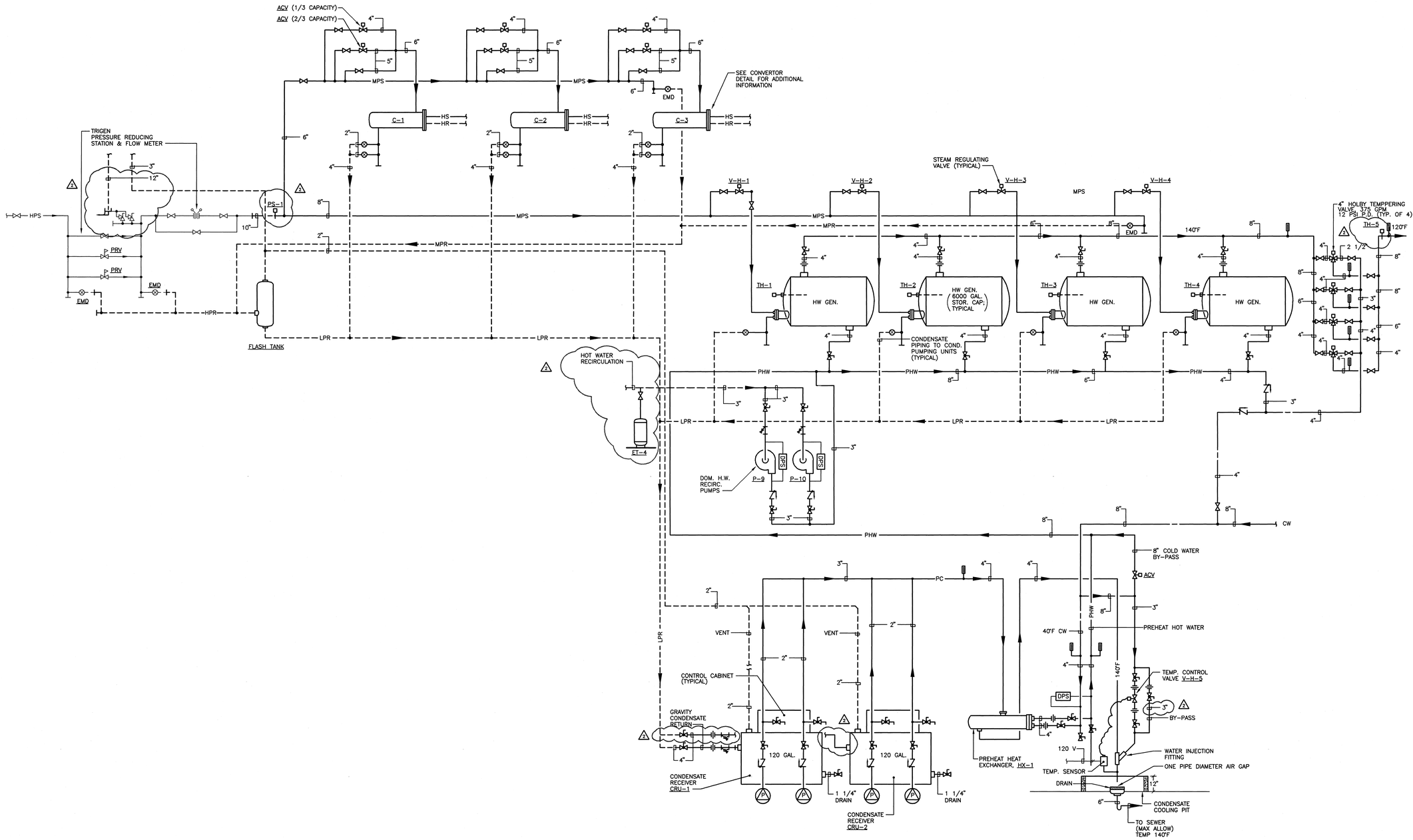
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PROJECT NO. 95-675-00 | ISSUED BY:
DRAWN BY: RPB | REVIEWED BY: PJH
ISSUED: 2-28-97
SHEET TITLE

HEATING WATER DISTRIBUTION SCHEMATIC

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NO.	DATE	DESCRIPTION
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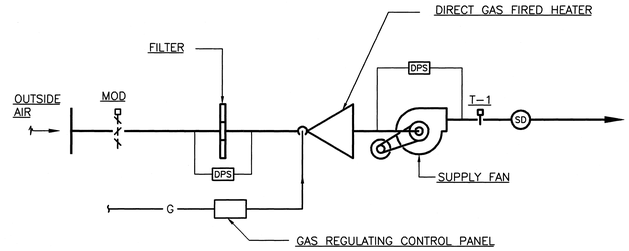
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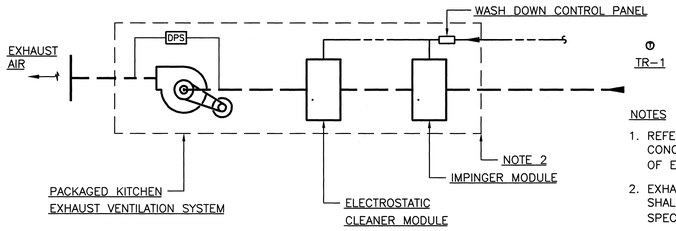
PROJECT NO. 95-675-00
ISSUED BY:
DRAWN BY: RPB
REVIEWED BY: PJH
ISSUED: 2-28-97
SHEET TITLE

STEAM SYSTEM SCHEMATIC

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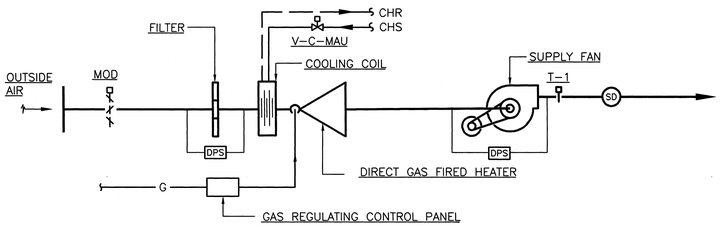


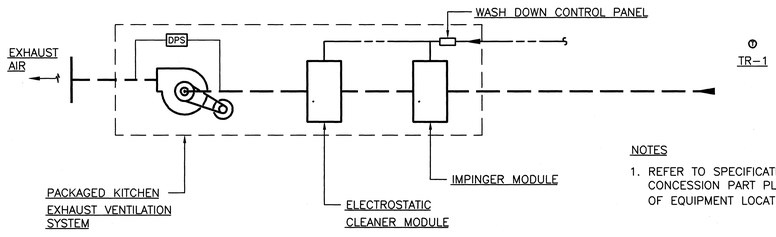
NOTES

1. REFER TO SPECIFICATION AND CONCESSION PART PLANS FOR COORDINATION OF EQUIPMENT LOCATION
2. EXHAUST VENTILATION SYSTEM TYPE SHALL BE COORDINATED WITH PROJECT SPECIFICATION AND CONCESSION PART PLANS

COOKING CONCESSION TYPE A

SCALE: NONE 12



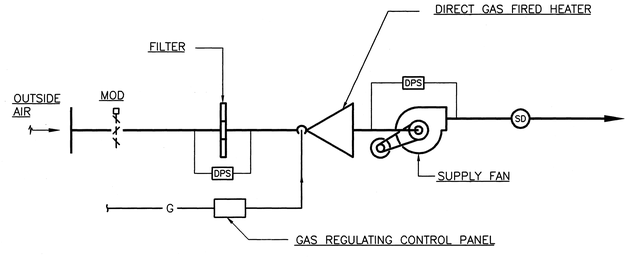


NOTES

1. REFER TO SPECIFICATION AND CONCESSION PART PLANS FOR COORDINATION OF EQUIPMENT LOCATION

COOKING CONCESSION TYPE B

SCALE: NONE 13



TR-1

NOTES

1. REFER TO SPECIFICATION AND CONCESSION PART PLANS FOR COORDINATION OF EQUIPMENT LOCATION

NON-COOKING CONCESSION

SCALE: NONE 14

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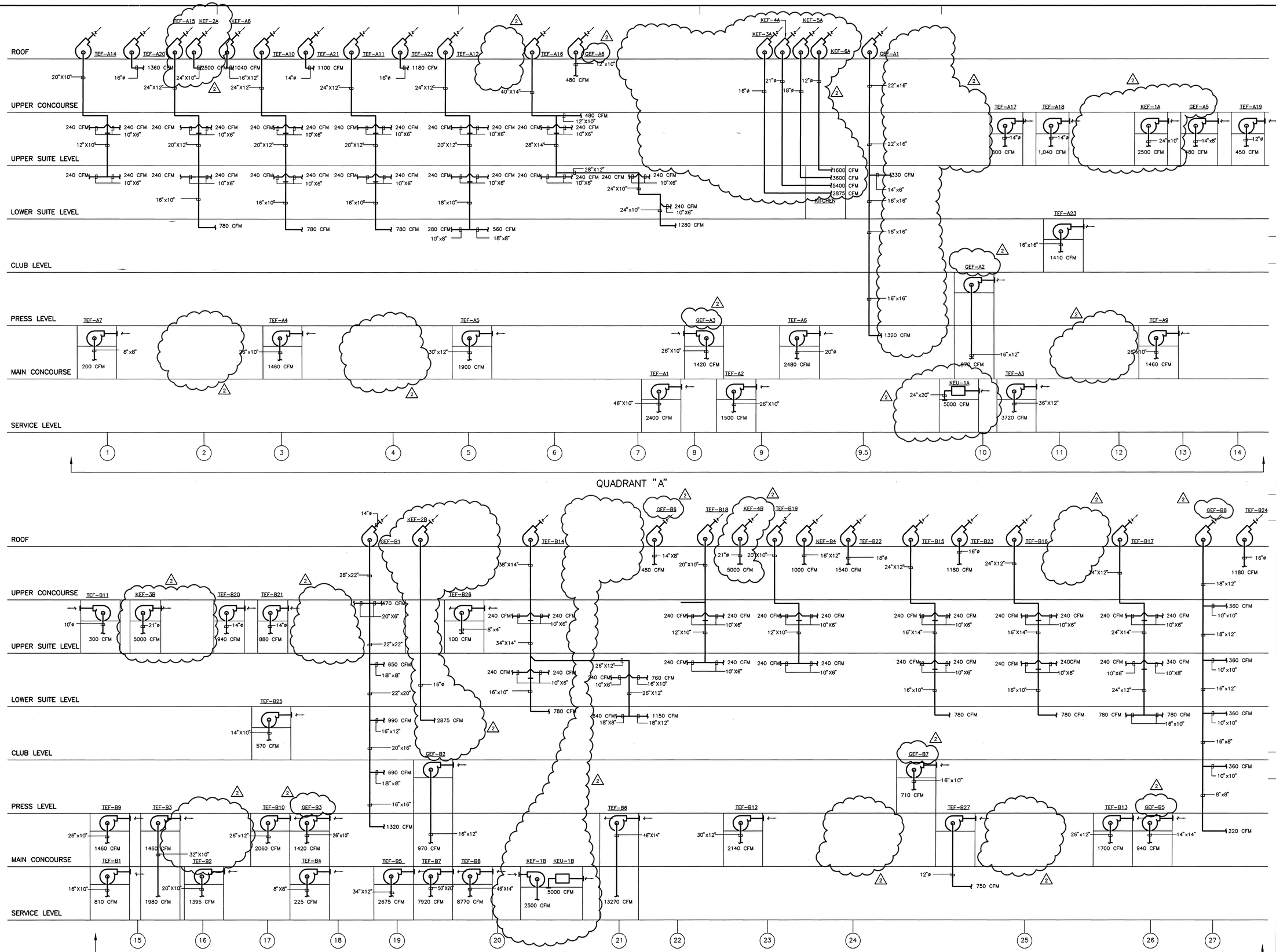
KEYPLAN

PROJECT NO. 95-675-00	ISSUED BY:
DRAWN BY: SWS	REVIEWED BY: PJH
ISSUED: 2-28-97	

SHEET TITLE
CONCESSION AIR SYSTEM FLOW DIAGRAMS

CATEGORY - SUB-CATEGORY - SHEET
M.4-08

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EXHAUST RISER DIAGRAM

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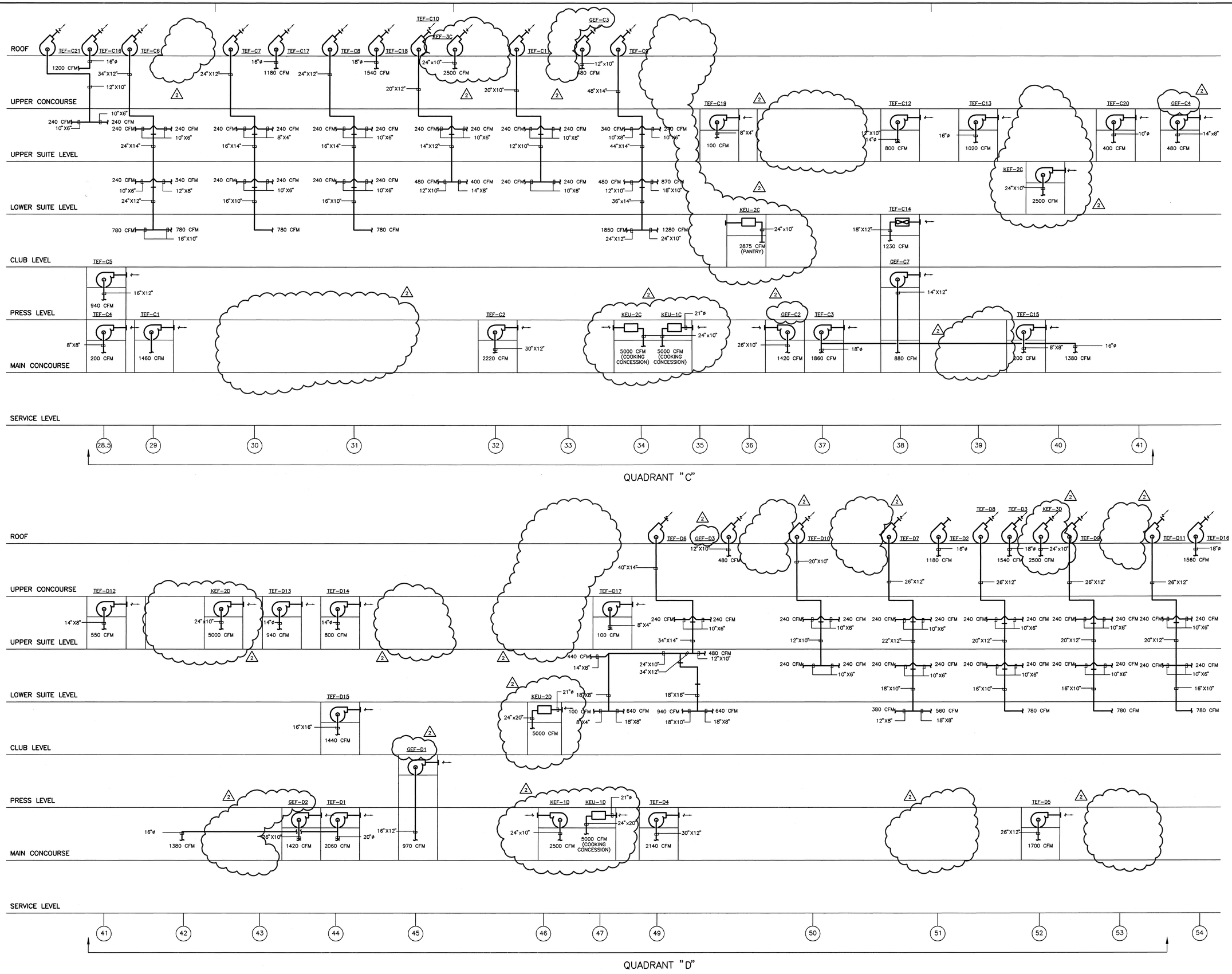
KEYPLAN

PROJECT NO. 95-675-00	ISSUED BY:
DRAWN BY:	REVIEWED BY:
ISSUED: 2-28-97	

SHEET TITLE
CONCESSION EXHAUST RISER DIAGRAM

CATEGORY - SUB-CATEGORY - SHEET
M.5-01

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EXHAUST RISER DIAGRAM

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2	4-28-97	BULLETIN #44

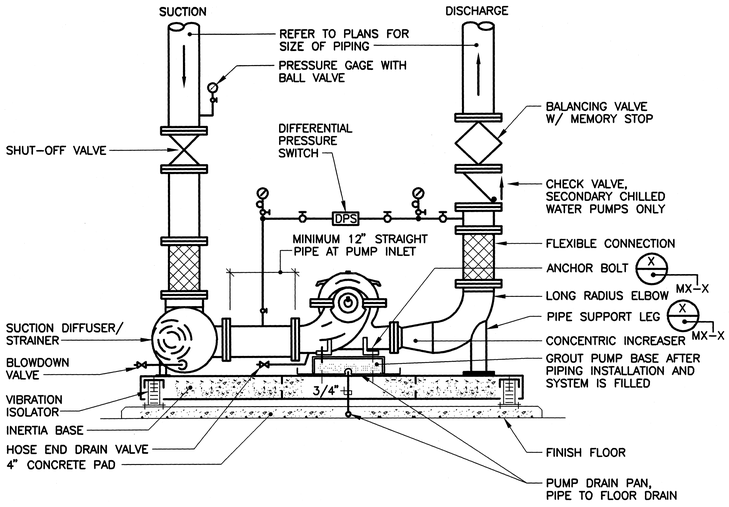
KEYPLAN

PROJECT NO. 95-675-00
ISSUED BY:
DRAWN BY:
REVIEWED BY:
ISSUED: 2-28-97

SHEET TITLE
AIR SYSTEM EXHAUST RISER DIAGRAM

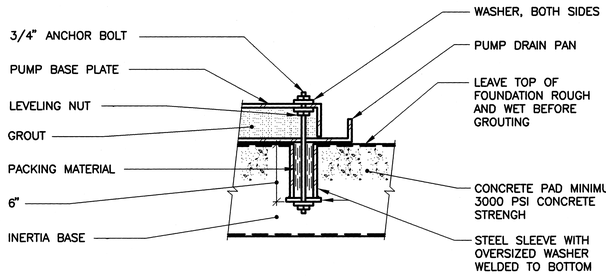
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M.5-02

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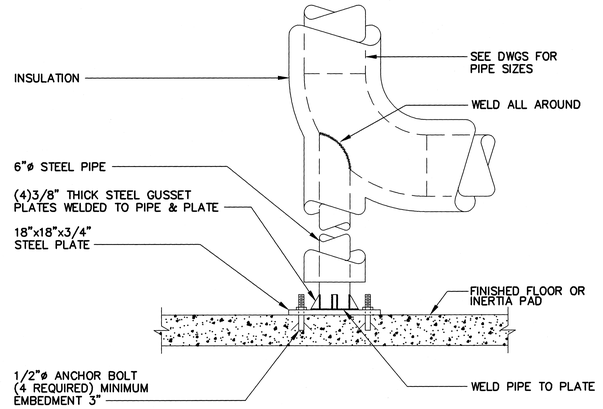
DETAIL – HORIZONTAL SPLIT CASE PUMP

SCALE: NONE (1)



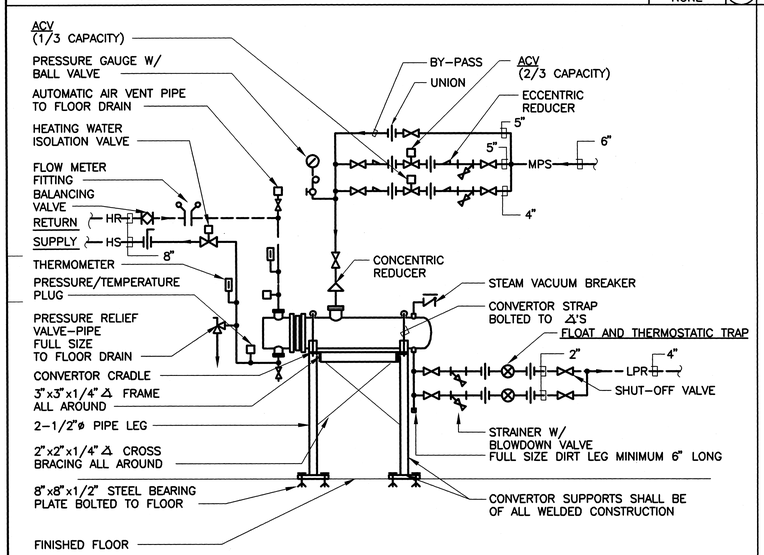
DETAIL – PUMP BASE ANCHOR SUPPORT (TYPICAL)

SCALE: NONE (2)



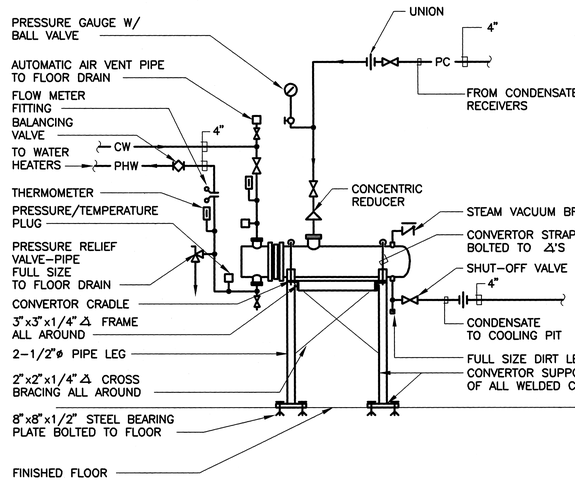
DETAIL – PIPE RISER SUPPORT

SCALE: NONE (3)



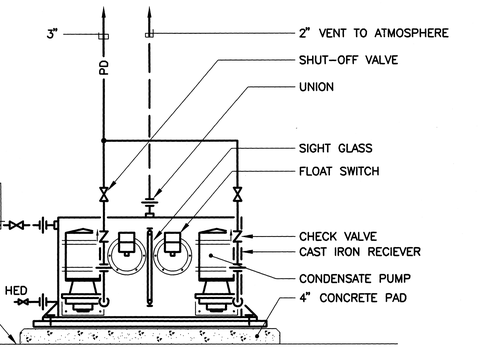
DETAIL – STEAM/HEATING WATER CONVECTOR

SCALE: NONE (4)



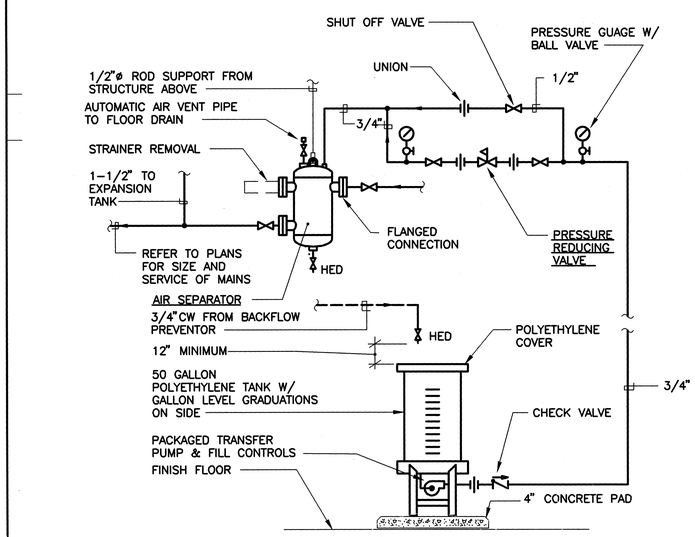
DETAIL – DOMESTIC HOT WATER PREHEATER

SCALE: NONE (5)



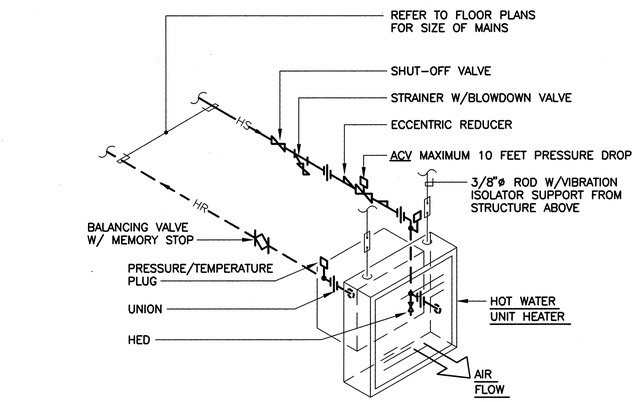
DETAIL – DUPLEX CONDENSATE PUMP

SCALE: NONE (6)



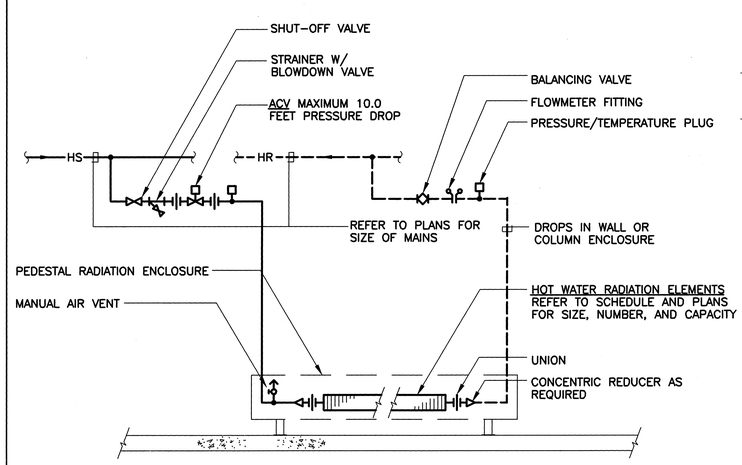
DETAIL – GLYCOL MAKE-UP SYSTEM

SCALE: NONE (7)



DETAIL – UNIT HEATER PIPING

SCALE: NONE (8)



DETAIL – HOT WATER RADIATION PIPING

SCALE: NONE (9)

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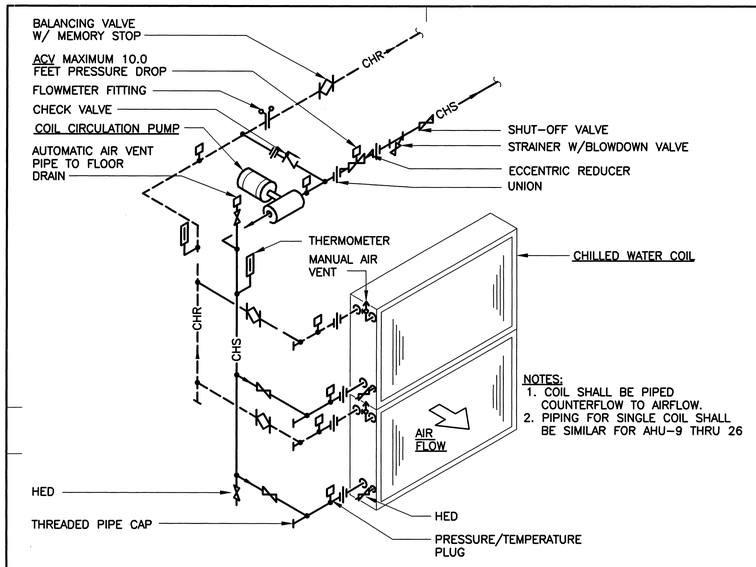
KEYPLAN

PROJECT NO. 95-675-00 | ISSUED BY:
DRAWN BY: CAS | REVIEWED BY:
ISSUED: 2-28-97

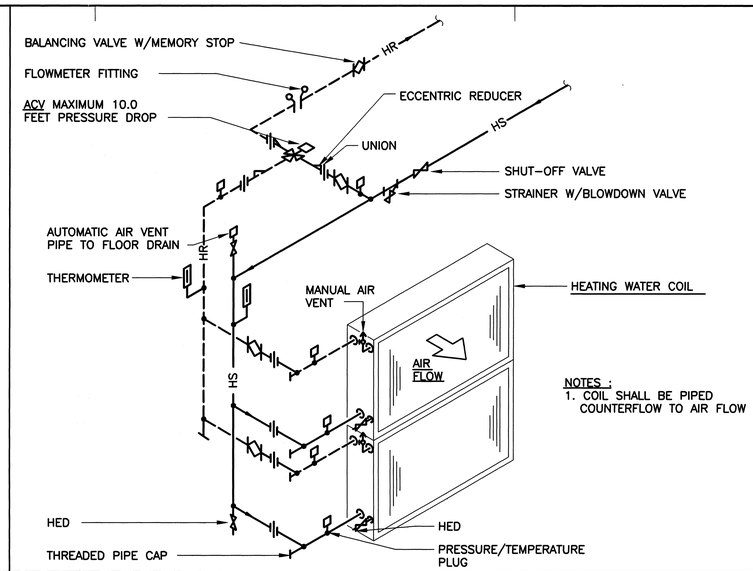
SHEET TITLE
MECHANICAL DETAILS

CATEGORY - SUB-CATEGORY - SHEET
M.6-01

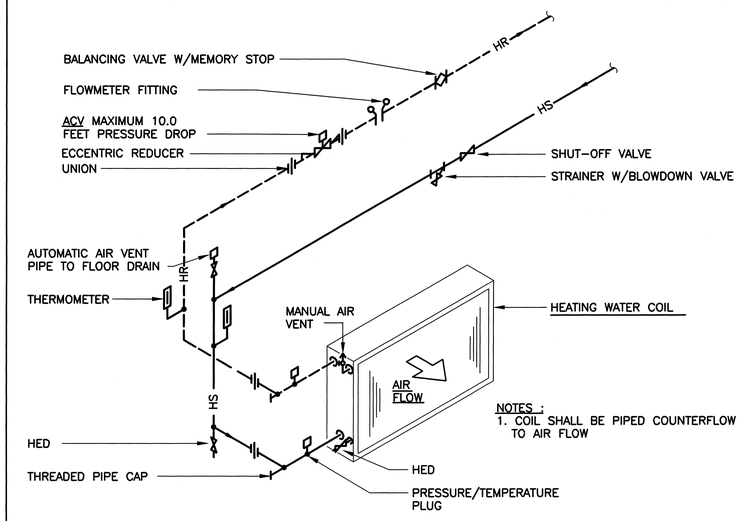
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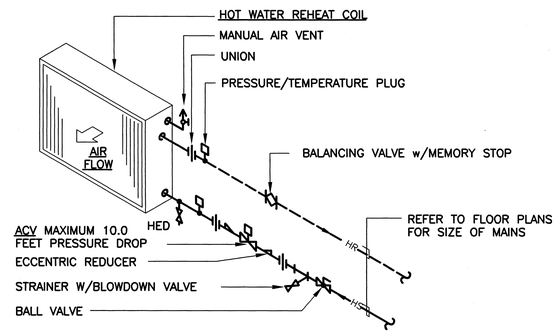
DETAIL – MULTIPLE COOLING COIL (AHU-1 THRU 8) | SCALE: NONE | 10



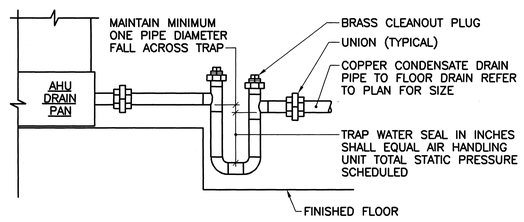
DETAIL – MULTIPLE HEATING COIL (AHU-1 THRU 8) | SCALE: NONE | 11



DTL-HEATING COIL(AHU-9 THRU 26 & HVU-1 THRU 13) | SCALE: NONE | 12

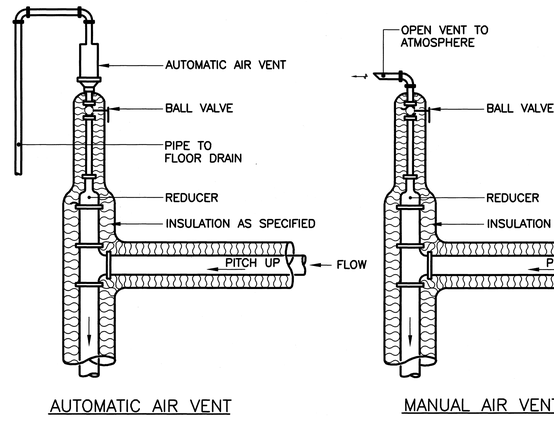


DETAIL – REHEAT COIL PIPING–2 WAY VALVE | SCALE: NONE | 13



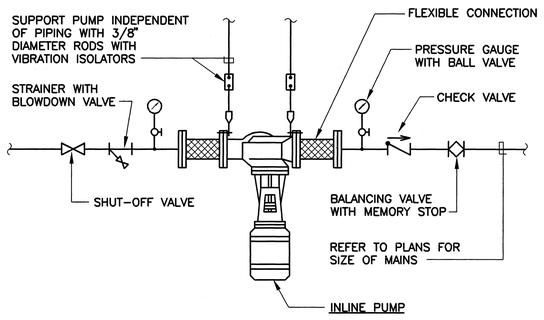
COIL CONDENSATE TRAP

DETAIL – COIL CONDENSATE TRAP | SCALE: NONE | 14



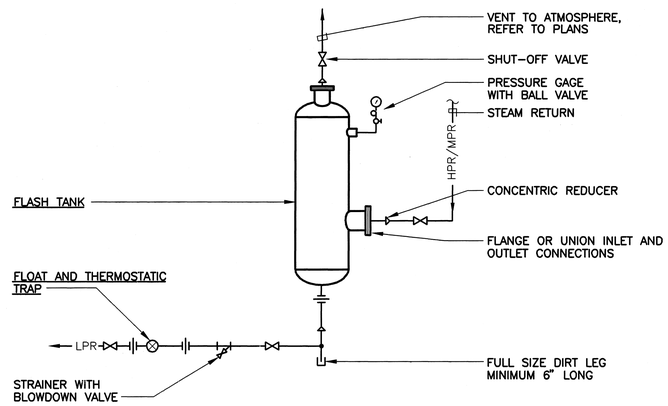
AUTOMATIC AIR VENT MANUAL AIR VENT

DETAIL – AIR VENT | SCALE: NONE | 15



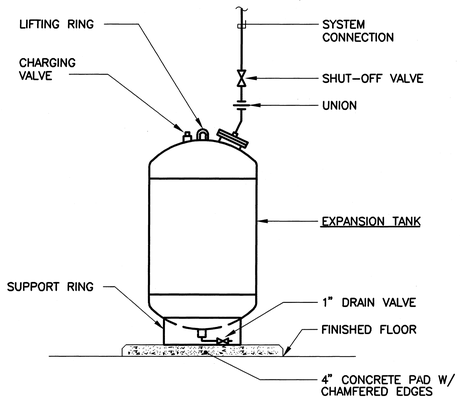
NOTE:
1. PUMP SHALL BE INSTALLED HORIZONTAL OR VERTICAL AS REQUIRED BY PUMP MANUFACTURER.

DETAIL – IN-LINE PUMP | SCALE: NONE | 16



NOTE:
REFER TO SCHEMATIC FOR ALL PIPE SIZES AND TRAP DESIGNATION

DETAIL -- FLASH TANK | SCALE: NONE | 17



DETAIL -- EXPANSION TANK | SCALE: NONE | 18

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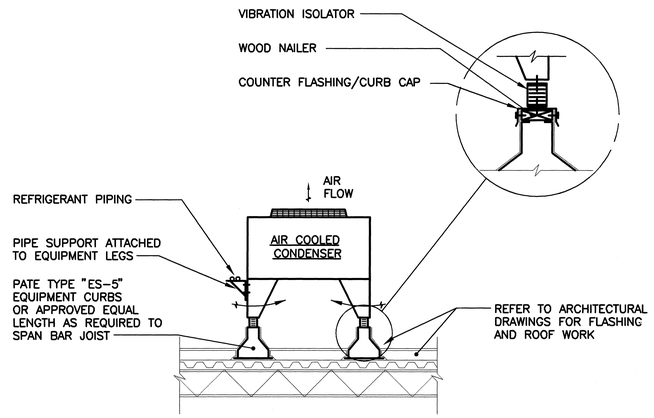
KEYPLAN

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ISSUED: 2-28-97	

SHEET TITLE
MECHANICAL DETAILS

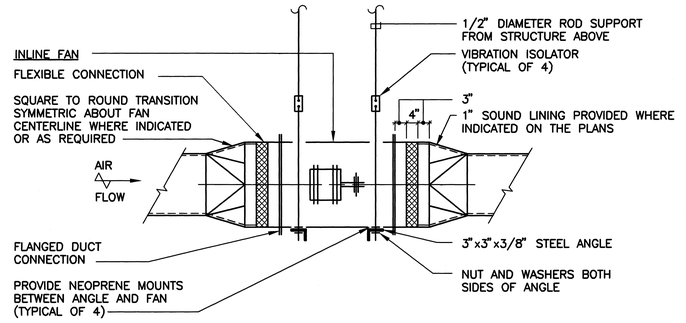
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DETAIL – AIR COOLED CONDENSING UNIT

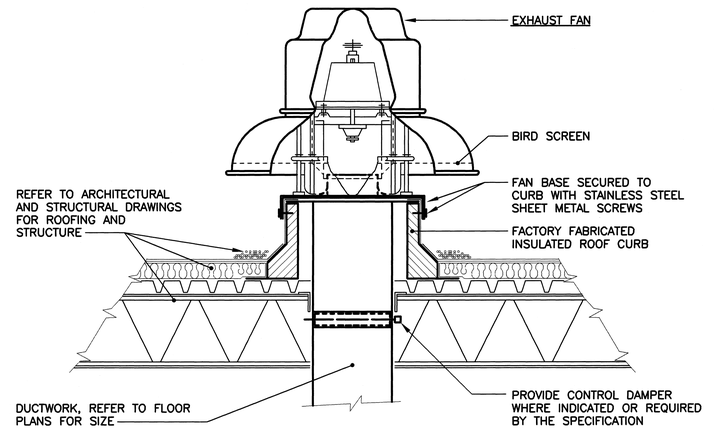
SCALE: NONE | 19



NOTE:
1. PROVIDE FLEXIBLE CONNECTIONS BEFORE OR AFTER TRANSITIONS AS INDICATED ON THE PLANS.

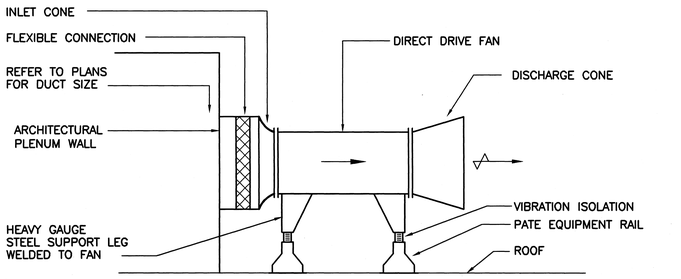
DETAIL – IN-LINE FAN INSTALLATION

SCALE: NONE | 20



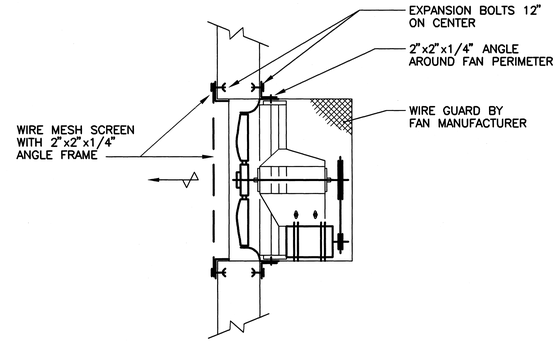
DETAIL – ROOF MOUNTED FAN

SCALE: NONE | 21



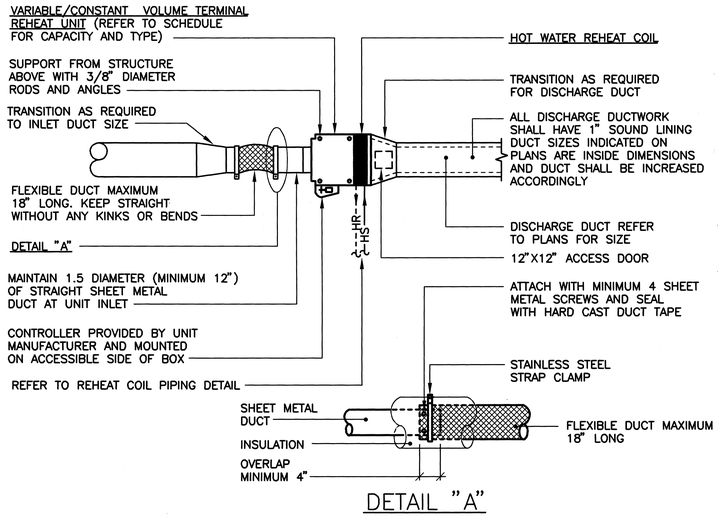
DETAIL – SMOKE EXHAUST FAN ROOF INSTALLATION

SCALE: NONE | 22



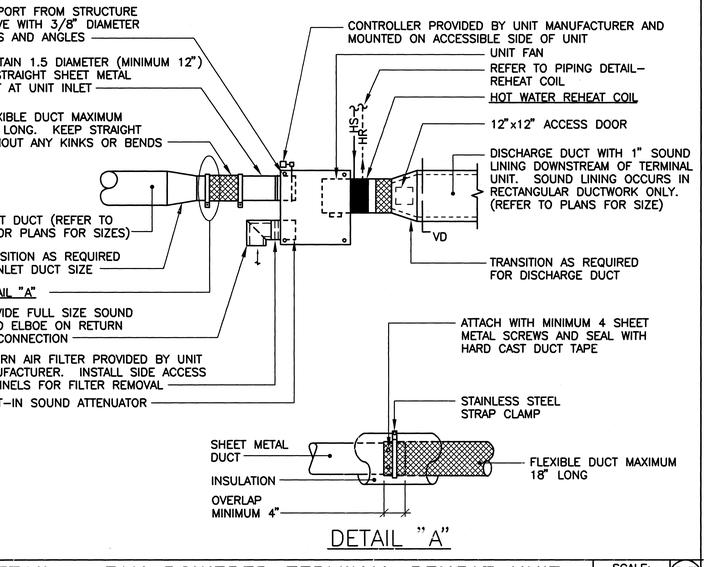
DETAIL – WALL MOUNTED FAN

SCALE: NONE | 23



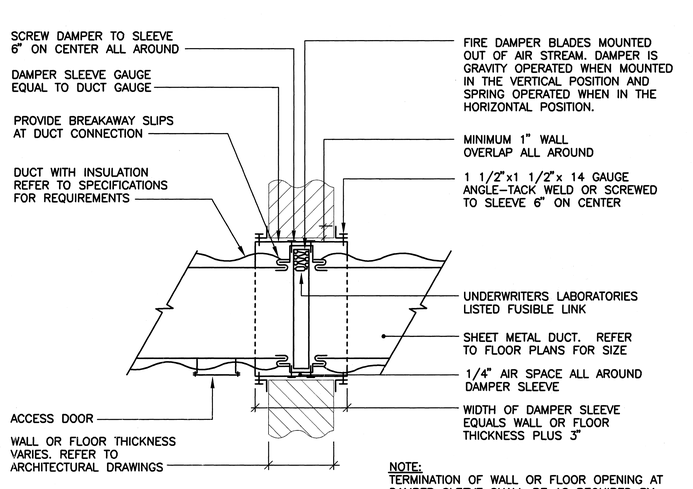
DETAIL – VAV TERMINAL REHEAT UNIT

SCALE: NONE | 24



DETAIL – FAN POWERED TERMINAL REHEAT UNIT

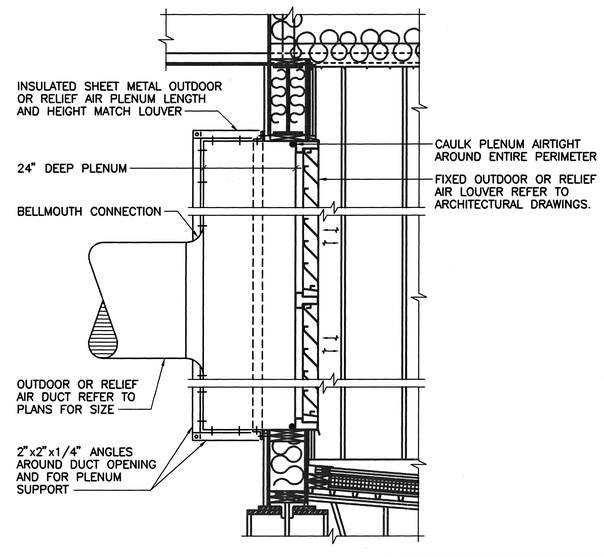
SCALE: NONE | 25



NOTE:
TERMINATION OF WALL OR FLOOR OPENING AT DAMPER SLEEVE SHALL BE AS REQUIRED BY UNDERWRITERS LABORATORIES AND AS DEFINED UNDER ANOTHER DIVISION OF THE SPECIFICATIONS

DETAIL – FIRE DAMPER INSTALLATION (TYPICAL)

SCALE: NONE | 26



DETAIL – OUTDOOR/RELIEF AIR PLENUM

SCALE: NONE | 27

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NO.	DATE	DESCRIPTION
1	4-28-97	BULLETIN #44

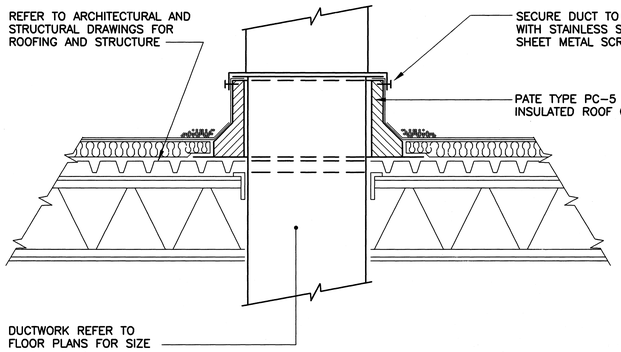
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DRAWN BY: CAS	REVIEWED BY:
ISSUED: 2-28-97	

SHEET TITLE
MECHANICAL DETAILS

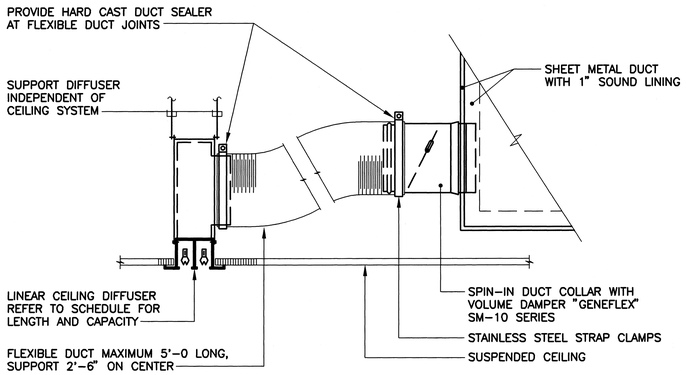
CATEGORY – SUB-CATEGORY – SHEET
M.6-03

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DETAIL – DUCT ROOF PENETRATION

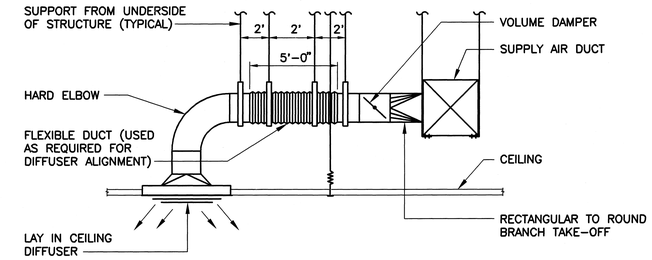
SCALE: NONE — 28



NOTES:
1. DUCT INSTALLATION SHALL BE PROVIDED AS SPECIFIED. PROVIDE ADDITIONAL ROUND, RIGID SHEET METAL DUCTWORK
2. AS REQUIRED TO LIMIT FLEXIBLE DUCT LENGTH TO 5'-0" MAXIMUM.

DETAIL – DIFFUSER INSTALLATION – TYPE 'B'

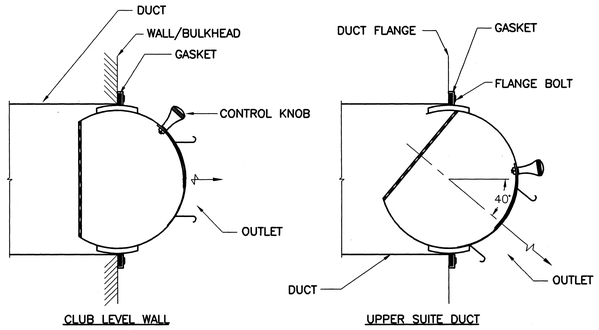
SCALE: NONE — 29



NOTE: MAXIMUM SAG 1/2" PER FOOT.

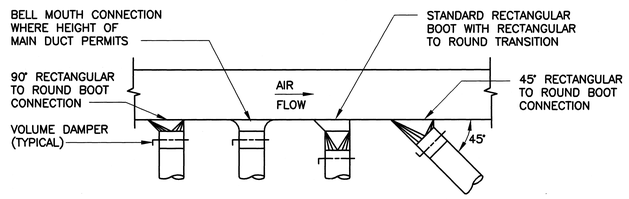
DETAIL – CEILING DIFFUSER BRANCH DUCTS

SCALE: NONE — 30

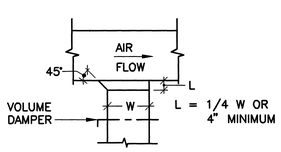


DETAIL – SPOT DIFFUSER (TYPE "J")

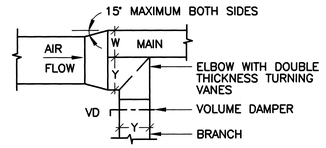
SCALE: NONE — 31



ALTERNATE RECTANGULAR TO ROUND DUCT BRANCH CONNECTIONS
(BRANCH FLOW LESS THEN 25% OF MAIN FLOW)



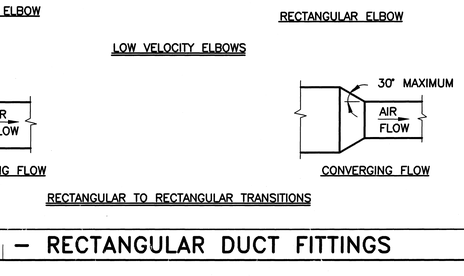
STANDARD RECTANGULAR DUCT BRANCH TAKE-OFF
(BRANCH FLOW LESS THAN 25% OF MAIN FLOW)



STANDARD RECTANGULAR BRANCH TAKE-OFF
(BRANCH FLOW GREATER THAN 25% OF MAIN FLOW)

DETAIL – LOW VELOCITY BRANCH TAKE-OFF

SCALE: NONE — 32



DETAIL – CONICAL DUCT TAP FITTING

SCALE: NONE — 33

NOTE:
1. DETAIL APPLIES TO ALL MAIN BUILDING CHILLED AND HEATING WATER FLOW METER FITTINGS.

STRAIGHT RUN CHART

INSTALLED CONDITION	INSTALLATION DIAGRAM	DIMENSION A: WITH STRAIGHTENING VANES	DIMENSION A: WITHOUT STRAIGHTENING VANES	DIMENSION B
ELBOW	SV, FM, A, B	7	7	3
MULTIPLE ELBOWS IN THE SAME PLANE	SV, FM, A, B	9	9	3
MULTIPLE ELBOWS IN DIFFERENT PLANES	SV, FM, A, B	9	18	3
INCREASE IN PIPE SIZE	SV, FM, A, B	8	8	3
REDUCTION IN PIPE SIZE	SV, FM, A, B	8	8	3
CONTROL VALVE OR THROTTLED VALVE	SV, FM, A, B	9	24	4

RECOMMENDED STRAIGHT PIPE LENGTHS EXPRESSED AS A FUNCTION OF INSTALLED PIPE DIAMETER

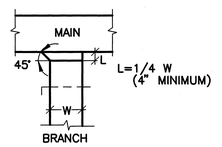
DIFFERENTIAL PRESSURE FLOW METER

DETAIL – DIFFERENTIAL PRESSURE FLOW METER

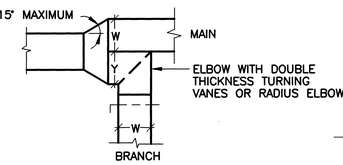
SCALE: NONE — 34



DUCT OFFSETS

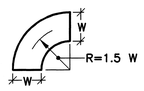


(BRANCH FLOW LESS THAN 25% OF MAIN FLOW)

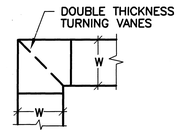


(BRANCH FLOW GREATER THAN 25% OF MAIN FLOW)

BRANCH TAKE-OFFS

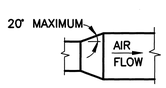


RADIUS ELBOW



RECTANGULAR ELBOW

LOW VELOCITY ELBOWS



DIVERGING FLOW

CONVERGING FLOW

RECTANGULAR TO RECTANGULAR TRANSITIONS

DETAIL – RECTANGULAR DUCT FITTINGS

SCALE: NONE — 35

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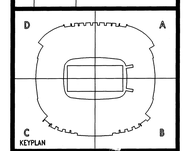
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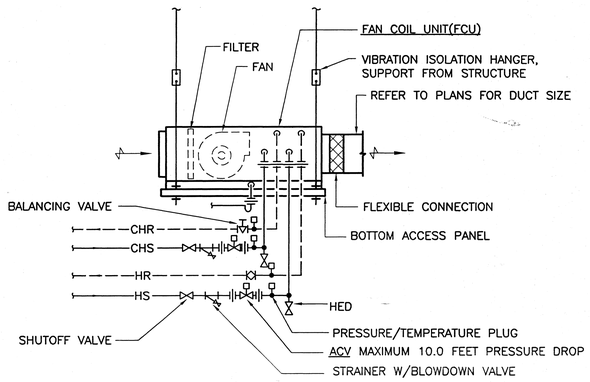
KEYPLAN

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DRAWN BY: MWS — REVIEWED BY:
ISSUED: 2-28-97

SHEET TITLE
MECHANICAL DETAILS

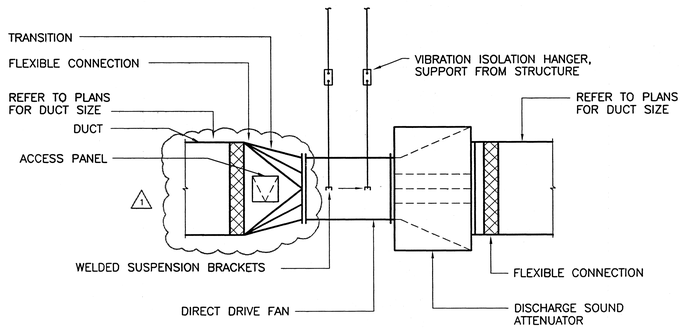
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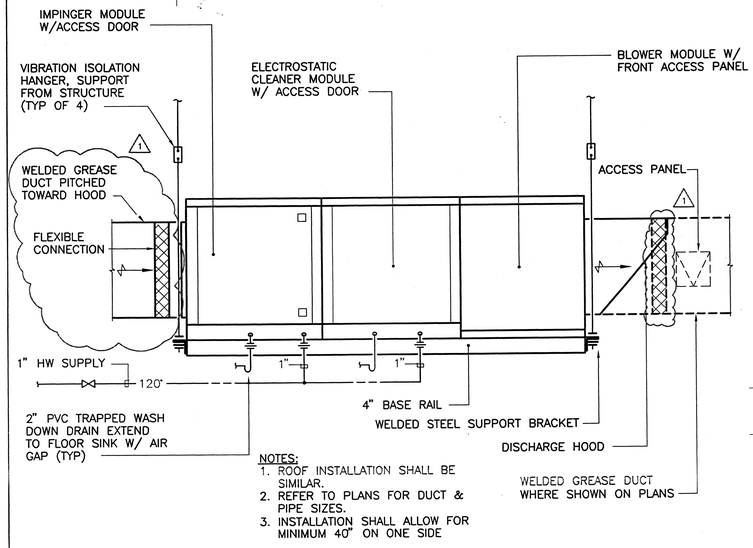
DETAIL – FAN COIL UNIT

SCALE: NONE 36



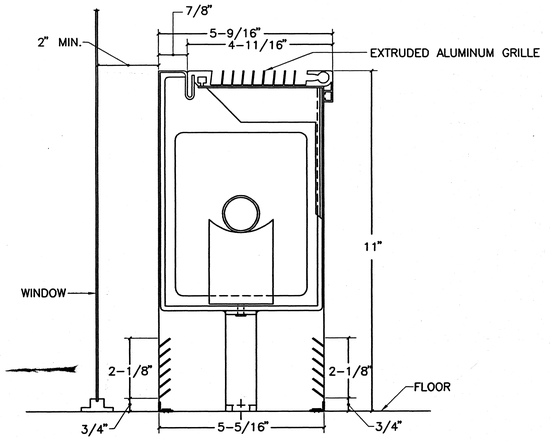
DETAIL – VANE AXIAL FAN – SUSPENDED

SCALE: NONE 37



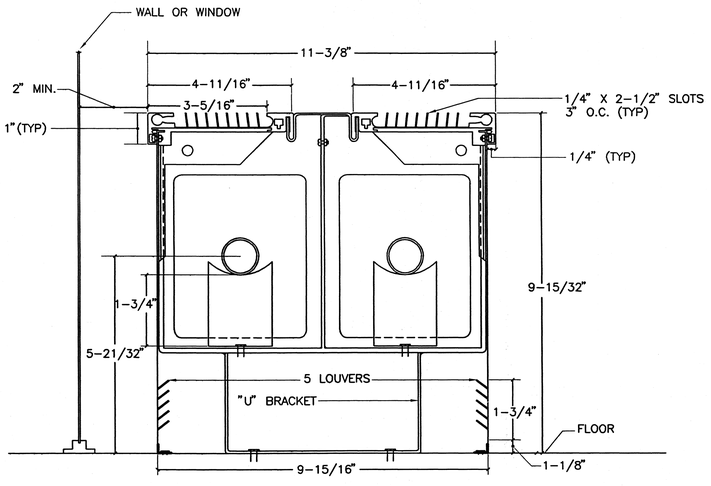
DETAIL – KITCHEN EXHAUST UNIT INSTALLATION

SCALE: NONE 38



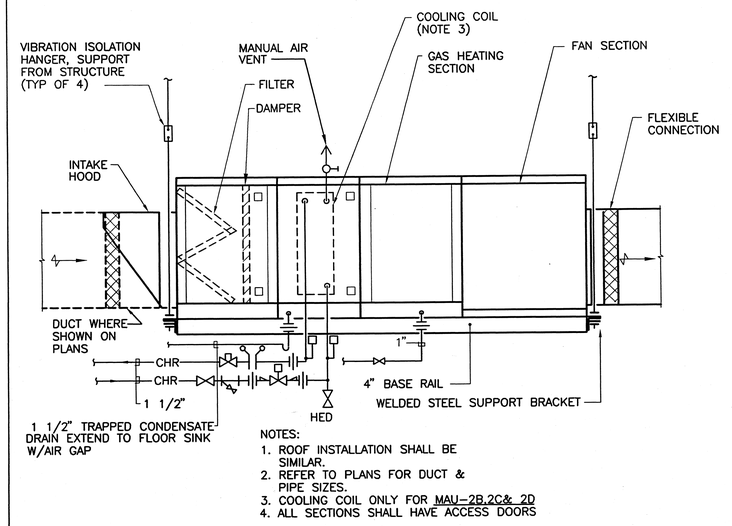
DETAIL – RADIATION – SINGLE

SCALE: NONE 39



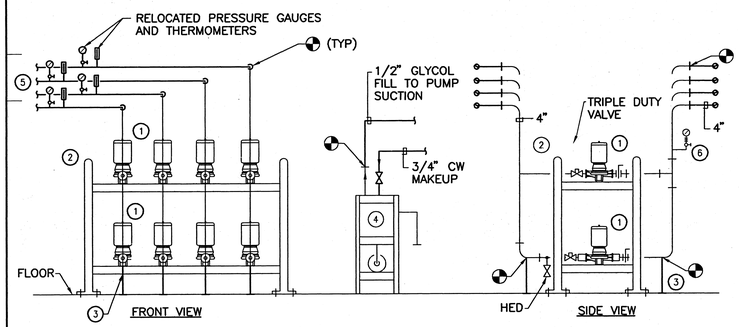
DETAIL – RADIATION – DOUBLE

SCALE: NONE 40



DIRECT GAS-FIRED MAKE UP AIR UNIT

SCALE: NONE 41



NOTES:
(1) RELOCATED EXISTING ZONE PUMP (PRIMARY & STANDBY)
(2) RELOCATED EXISTING STEEL FRAME; BOLT TO CONCRETE FLOOR.
(3) PROVIDE PIPE SUPPORT LEG AT EACH PIPE RISER ELBOW
(4) RELOCATED EXISTING GLYCOL FILL SYSTEM W/PUMP & CONTROLS.
(5) EXTEND TURF HEATING ZONE SUPPLY AND RETURN PIPING BELOW SLAB TO A FLANGED END CONNECTION 5'-0" BEYOND FIELD WALL (INTO FIELD). PIPING SYSTEM SHALL MATCH EXISTING SCH. 40 STEEL VICTAULIC SYSTEM.
(6) EXISTING PRESSURE GAUGE

DETAIL– TURF HEATING SYSTEM PIPING

SCALE: NONE 42

NOTE:
REFER TO SHEET P.6-04 FOR GENERAL PIPING DETAILS WHICH APPLY TO MECHANICAL/HVAC PIPING SYSTEMS.

x SCALE: x 43

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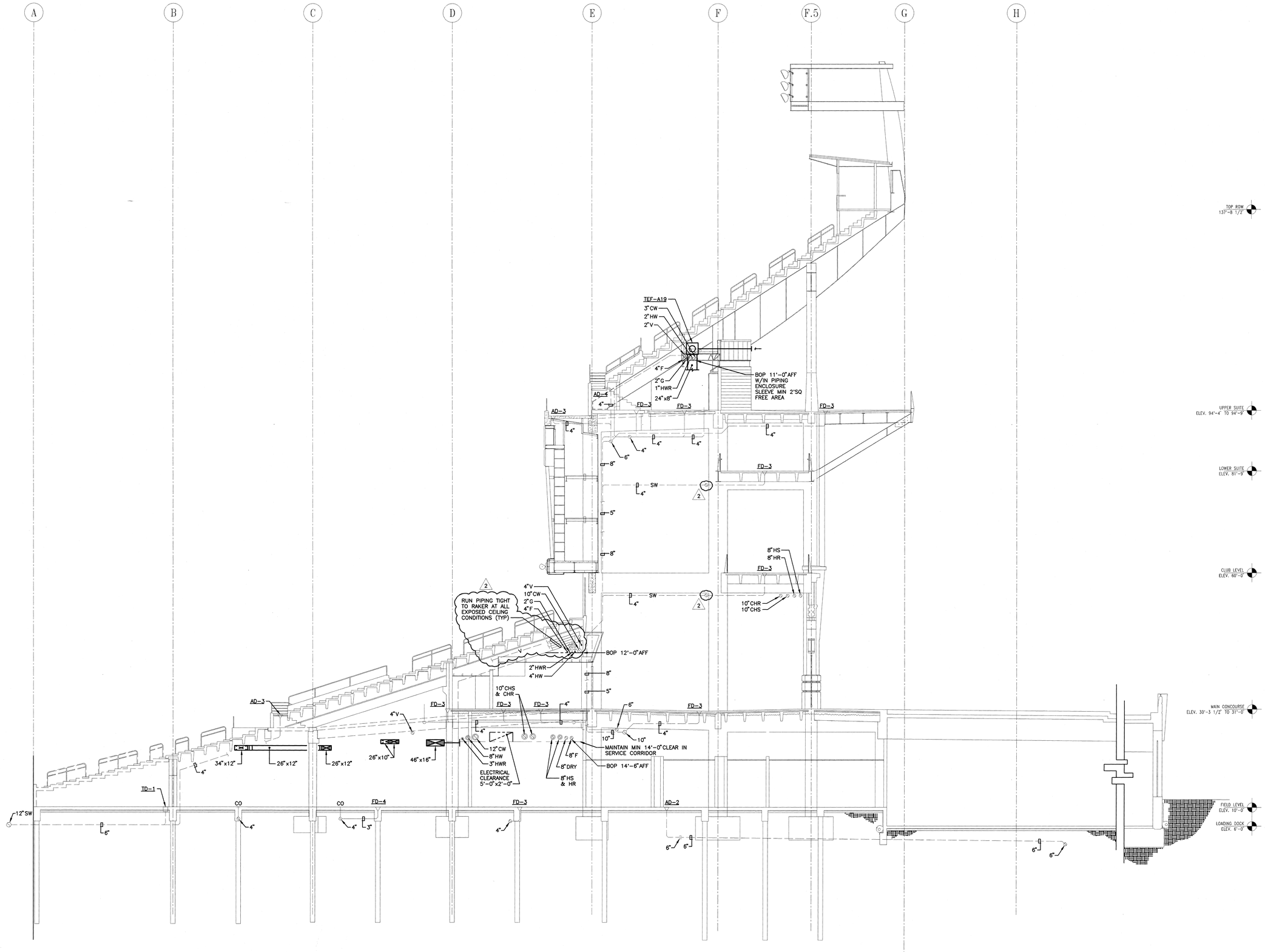
KEYPLAN

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REVIEWED BY:
ISSUED: 2-28-97

SHEET TITLE
MECHANICAL DETAILS

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2	4-28-97	BULLETIN #44

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ISSUED: 2-28-97

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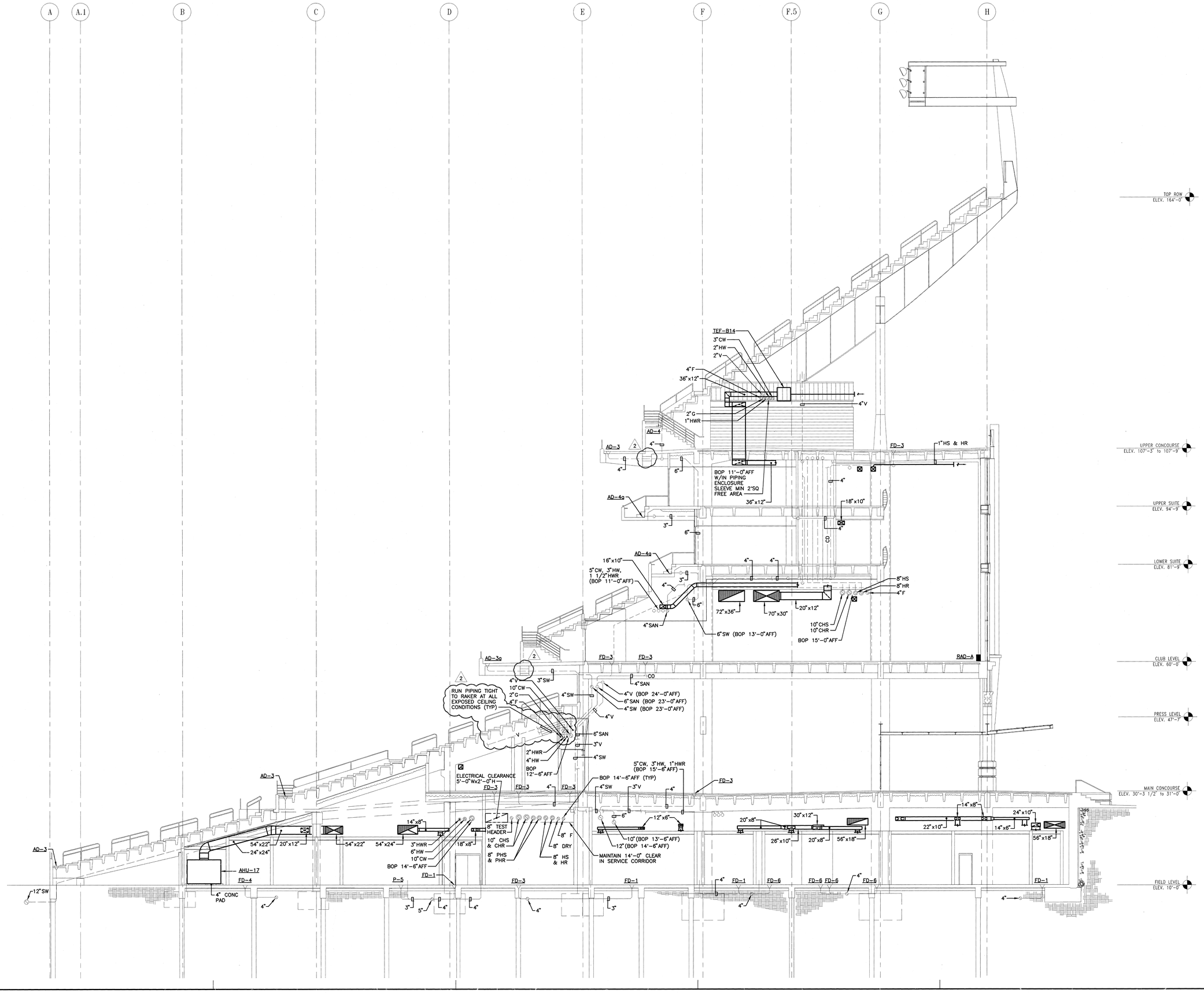
BUILDING SECTION A @ COL 14

CATEGORY - SUB-CATEGORY - SHEET

M.7-01

04.29.97-21:57- 5110P71 - RMF #95110

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2	4-28-97	BULLETIN #44

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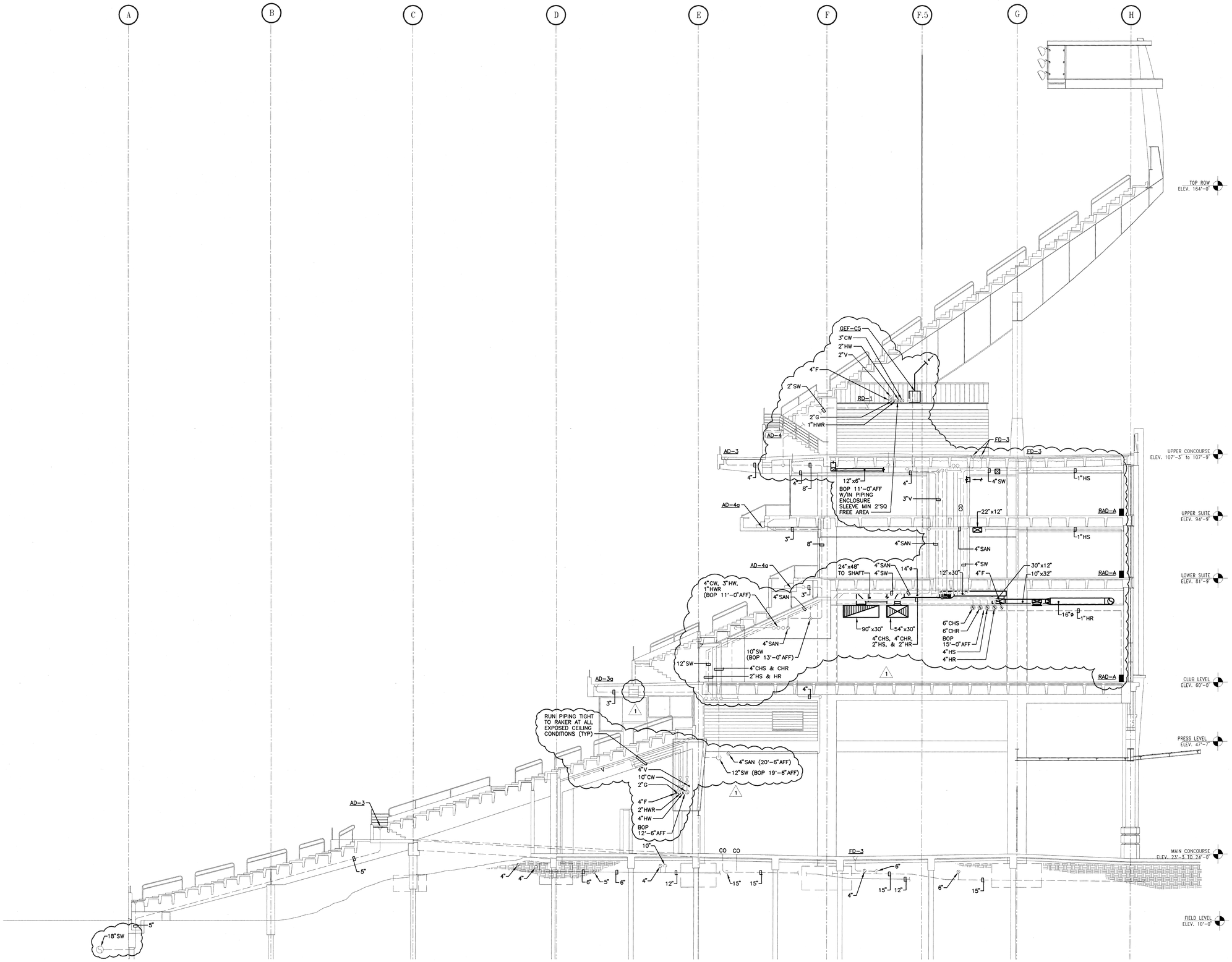
SHEET TITLE

BUILDING SECTION B @ COL 22

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M.7-02

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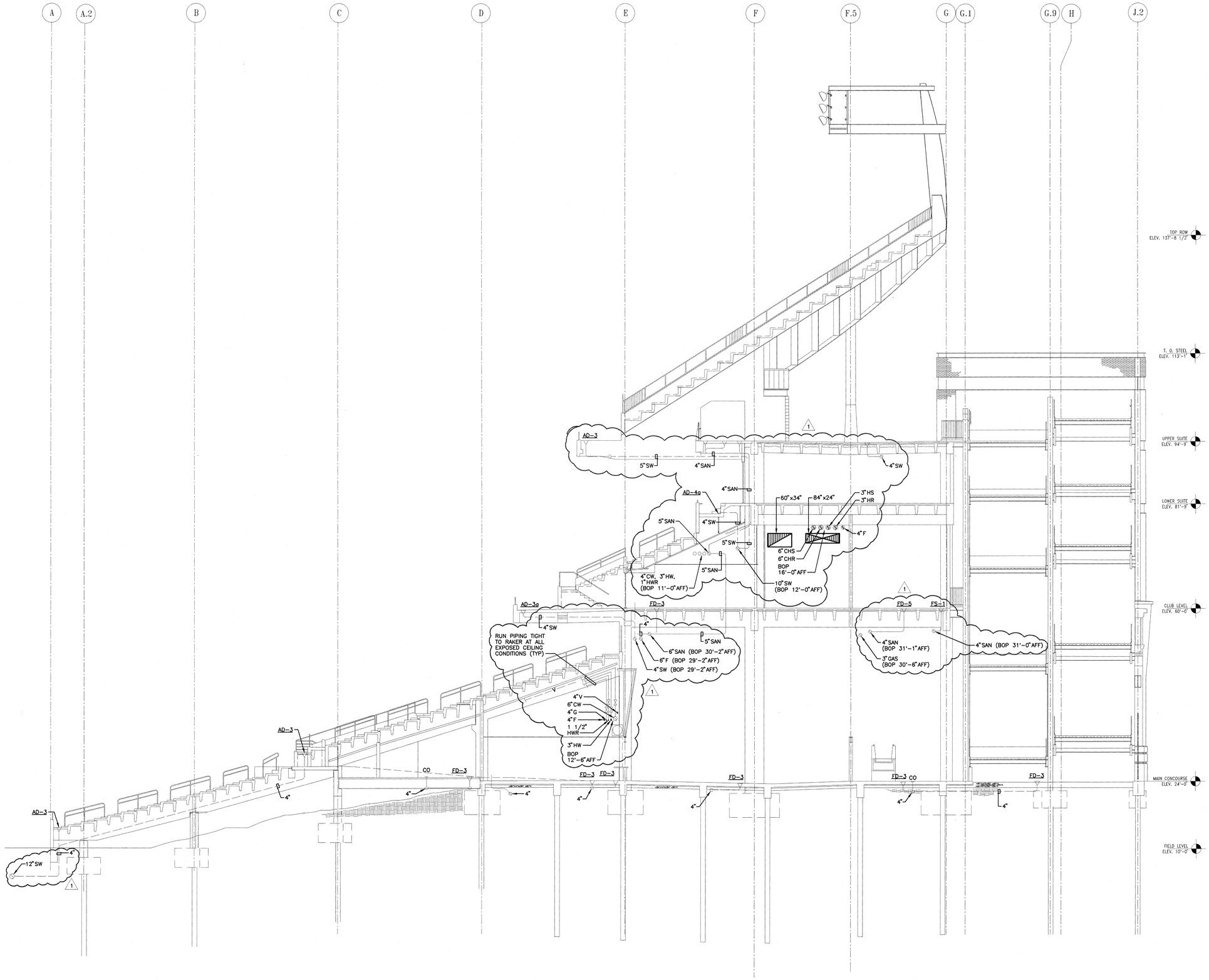
SHEET TITLE

BUILDING SECTION C
@ COL 32

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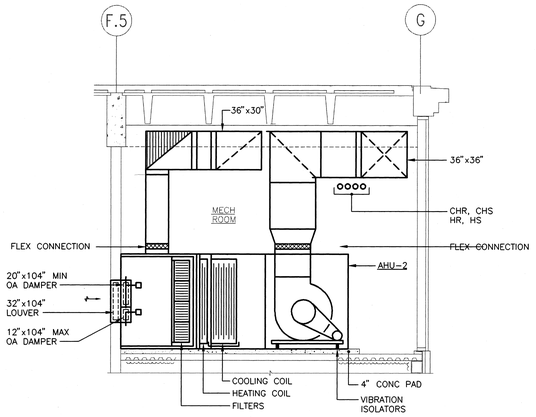
BUILDING SECTION D
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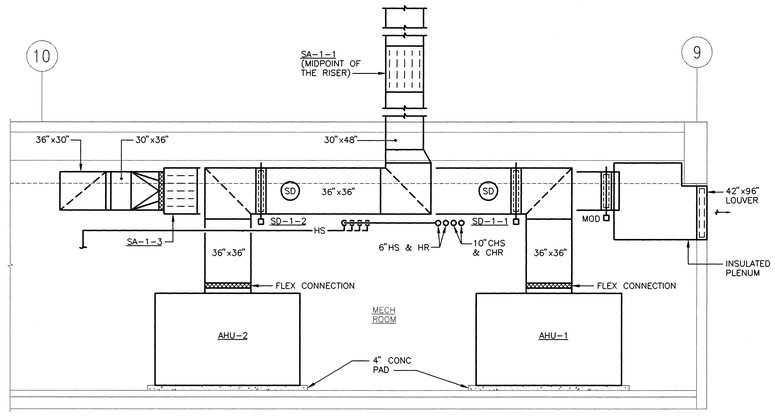
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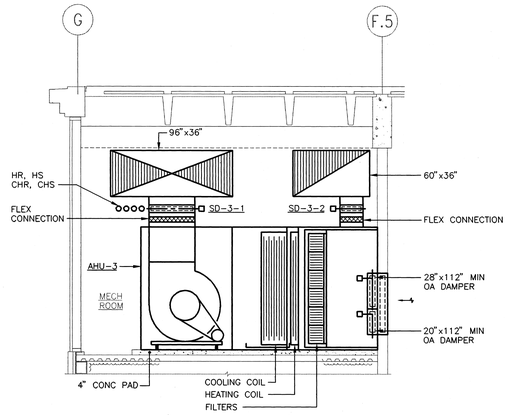
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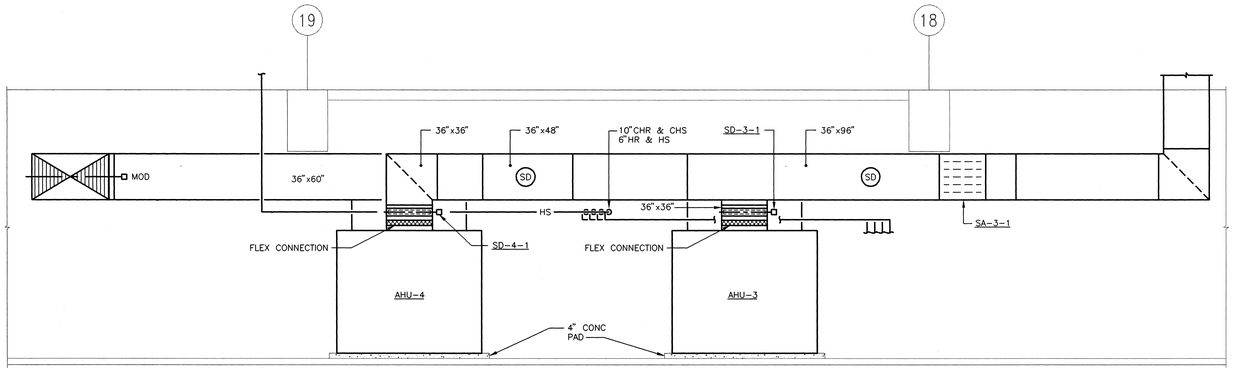
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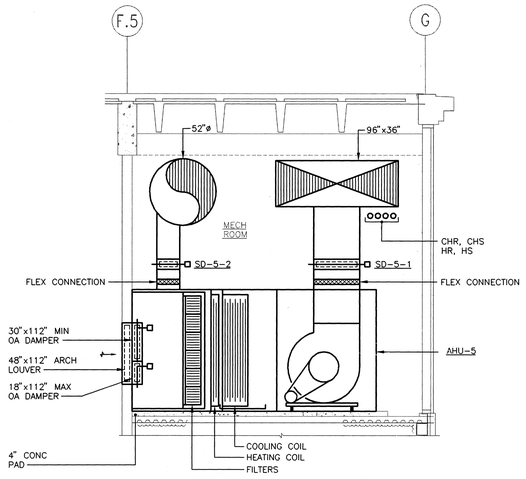
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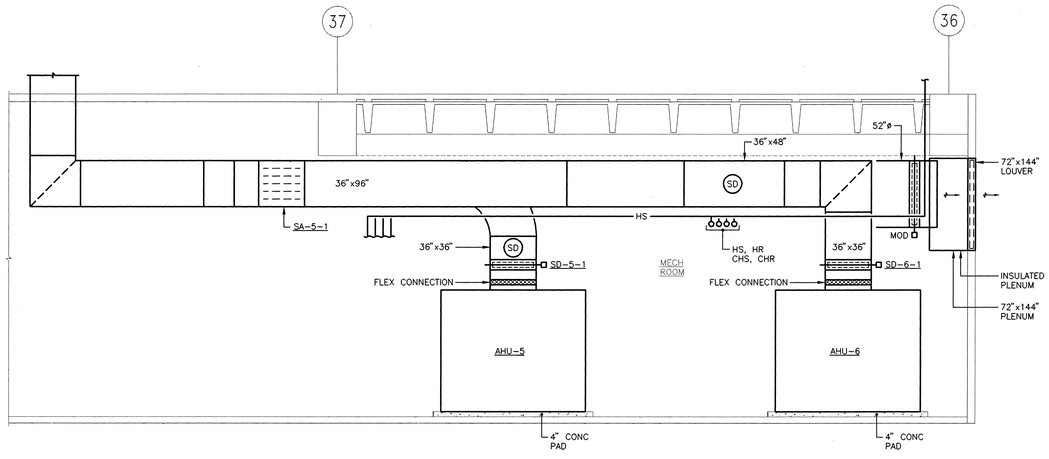
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D M.3-10 SECTION
SCALE: 1/4"=1'-0"



E M.3-11 SECTION
SCALE: 1/4"=1'-0"



F M.3-11 SECTION
SCALE: 1/4"=1'-0"

PROJECT NORTH
0 1 2 4 8

29.04.97-13:45-5110M705 - RMF #95110

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NO.	DATE	DESCRIPTION
1	4-28-97	BULLETIN #44

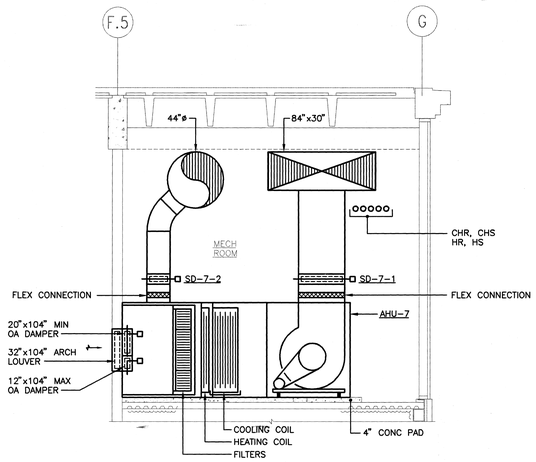
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PROJECT NO. 95-675-00 | ISSUED BY: ---
DRAWN BY: JRJ | REVIEWED BY: PJH
ISSUED: 4-28-97

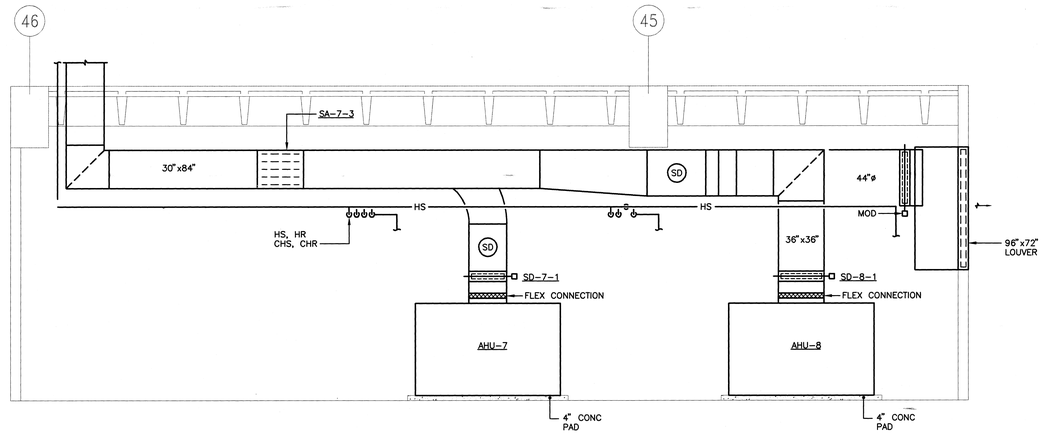
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MECHANICAL ROOM SECTIONS

CATEGORY - SUB-CATEGORY - SHEET
M.7-05

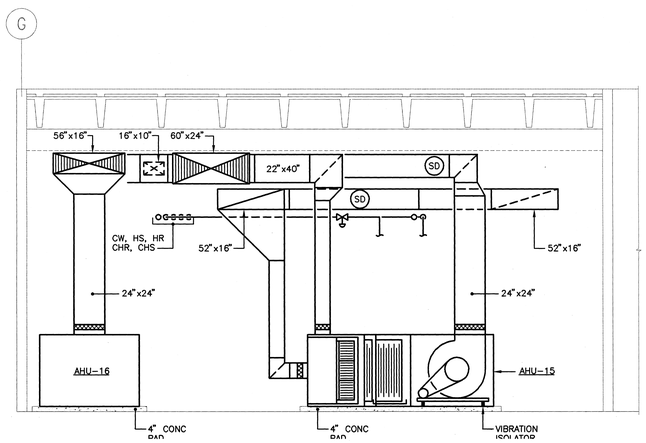
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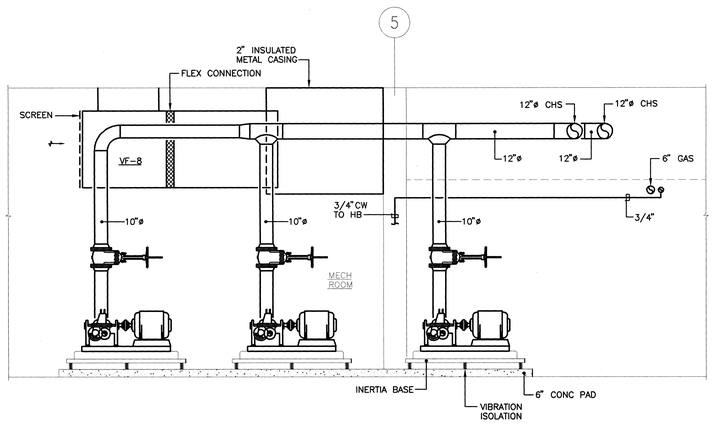
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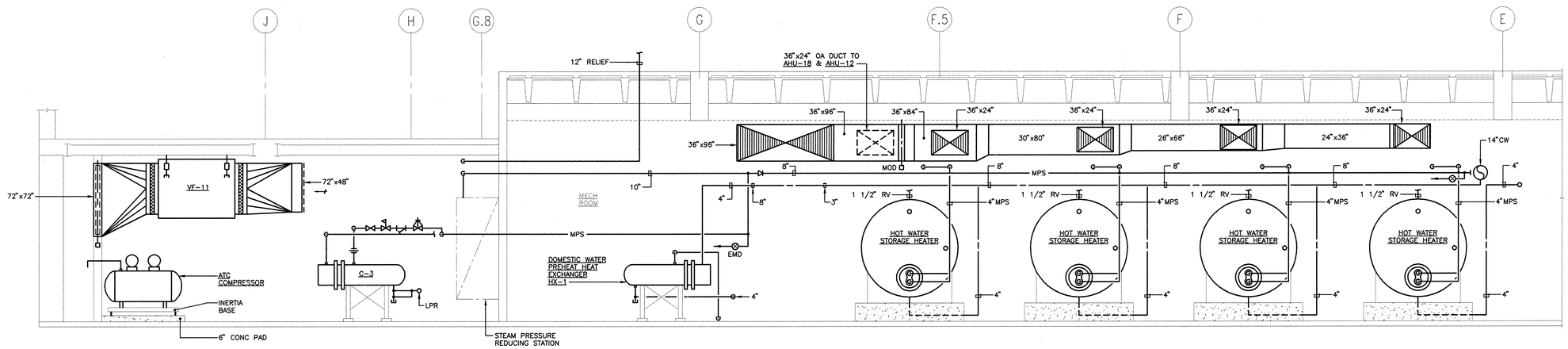
B M.3-09 SECTION
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C M.3-10 SECTION
SCALE: 1/4"=1'-0"



D M.3-10 SECTION
SCALE: 1/4"=1'-0"



E M.3-11 SECTION
SCALE: 1/4"=1'-0"

PROJECT NORTH
0 1 2 4 8

29.04.97-13:54-51104706 - RMF #95110

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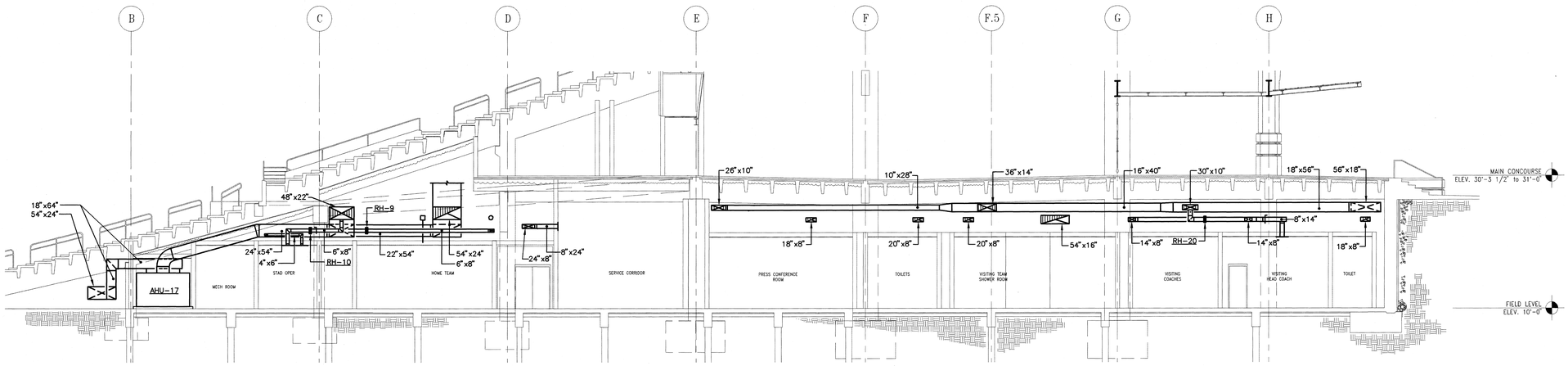
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KEYPLAN

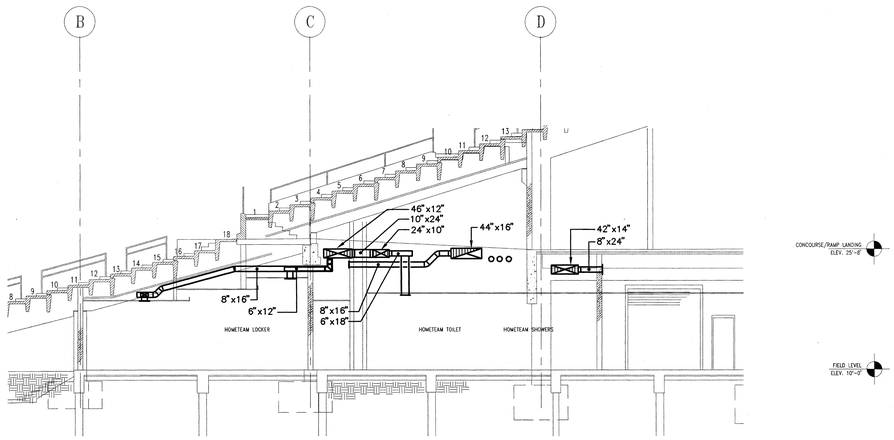
PROJECT NO. 95-675-00	ISSUED BY: ---
DRAWN BY: JRJ	REVIEWED BY: PJH
ISSUED: 4-28-97	

SHEET TITLE
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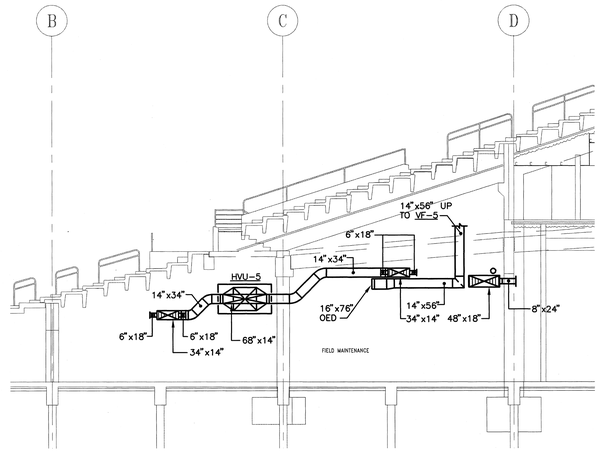
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M.7-06



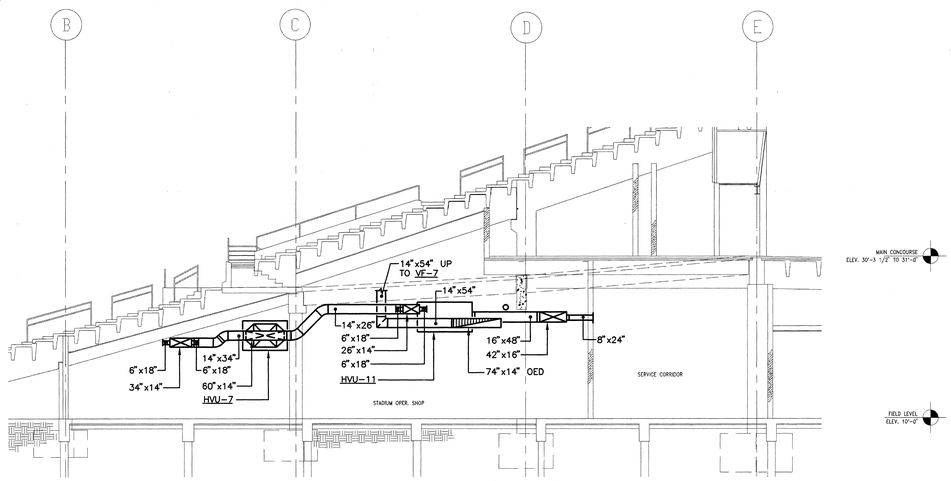
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B M.2-018 SECTION "B"
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C M.2-018 SECTION "C"
SCALE: 1/8"=1'-0"



D M.2-018 SECTION "D"
SCALE: 1/8"=1'-0"

0 2 4 8 16

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KEYPLAN

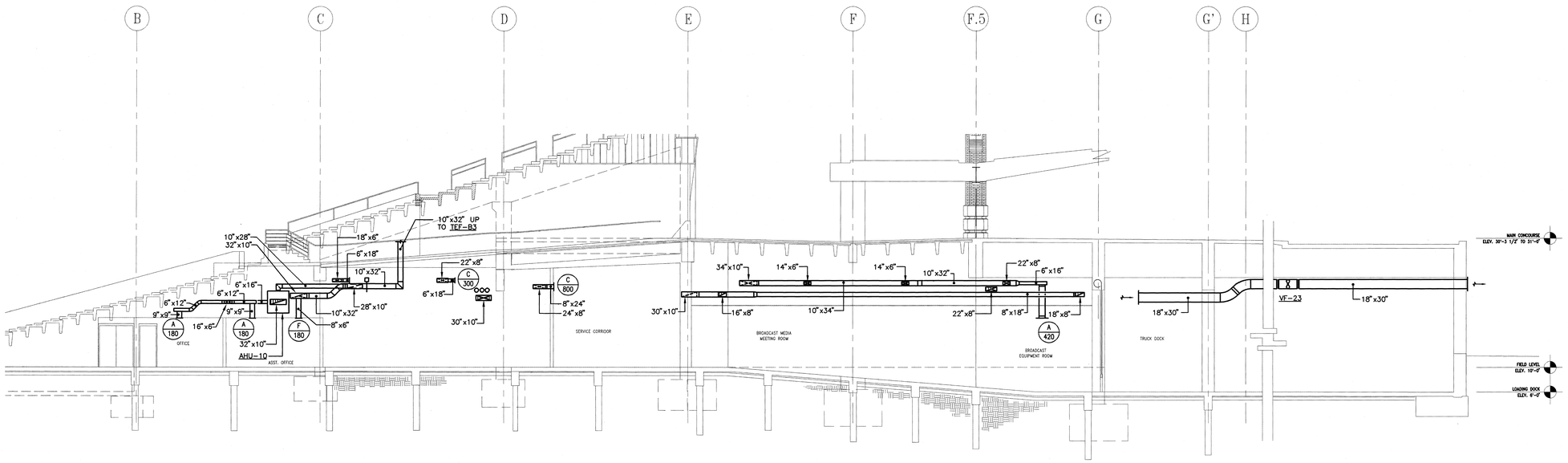
PROJECT NO. 95-675-00 | ISSUED BY:
DRAWN BY: MWS | REVIEWED BY:
ISSUED: 4-4-97

SHEET TITLE
MECHANICAL SECTIONS

CATEGORY - SUB-CATEGORY - SHEET
M.7-07

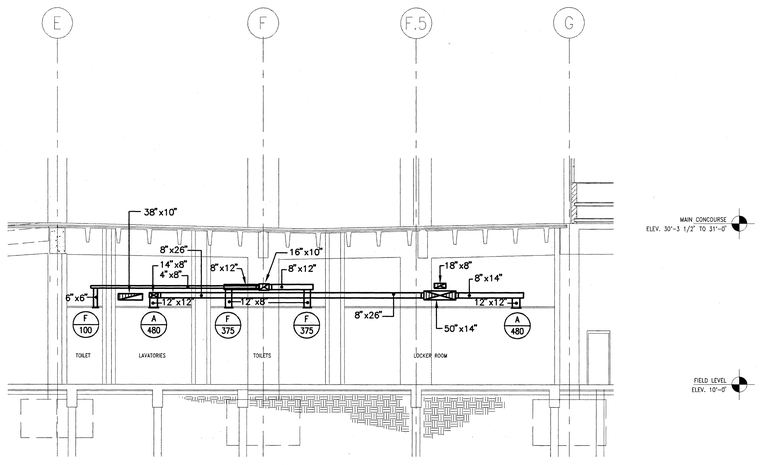
28.04.97-08:58-6110M707 - RMF #95110

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E M.2-018 SECTION "E"

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



F M.2-01A SECTION "F"

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

0 2 4 8 16

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DALLAS, TEXAS

INTERIOR ARCHITECTURE CONSULTANT
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BALTIMORE, MARYLAND

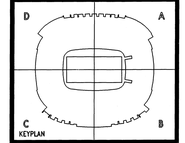
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NO.	DATE	DESCRIPTION

KEYPLAN



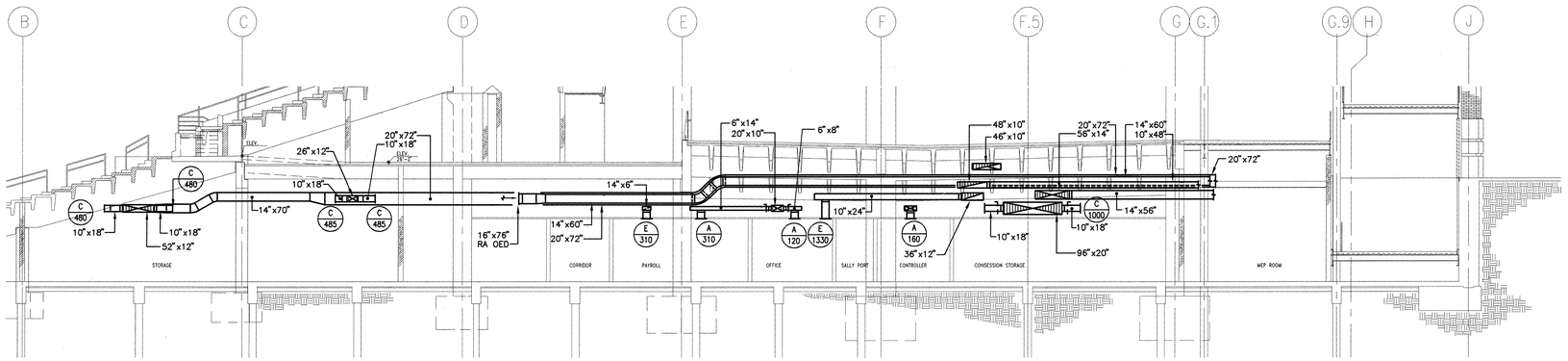
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ISSUED BY:
DRAWN BY: MWS
REVIEWED BY:
ISSUED: 4-4-97

SHEET TITLE
MECHANICAL SECTIONS

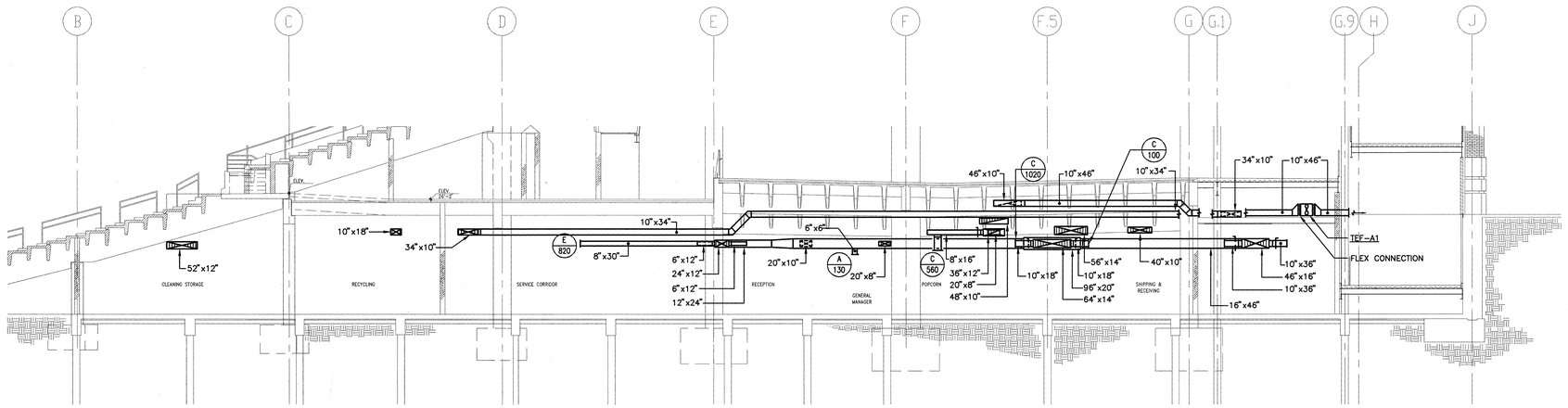
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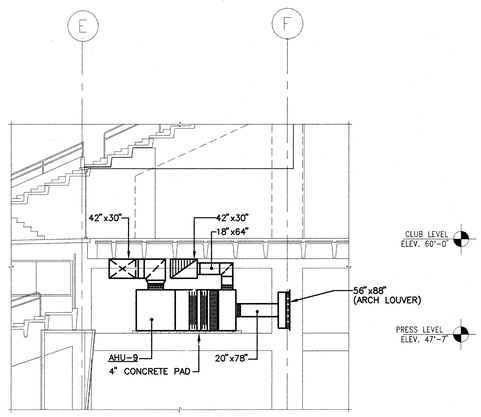
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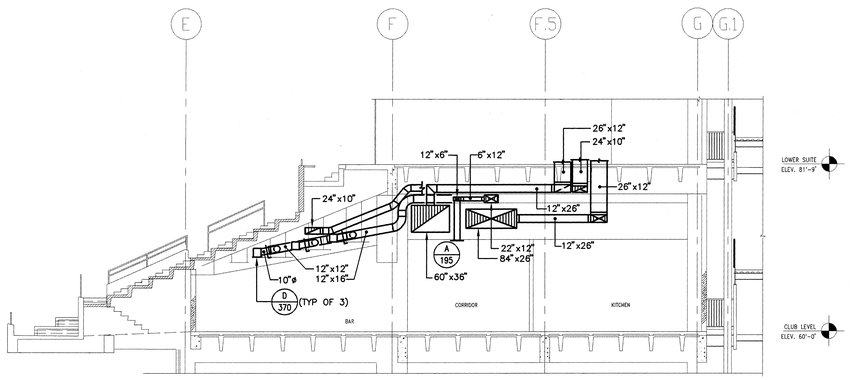
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H/M.2-01A SECTION "H"
SCALE: 1/8"=1'-0"



I/M.3-13 SECTION "I"
SCALE: 1/8"=1'-0"



J/M.2-04A SECTION "J"
SCALE: 1/8"=1'-0"

0 2 4 8 16

8.04.97-09:09-5110M709 - RMF #95110

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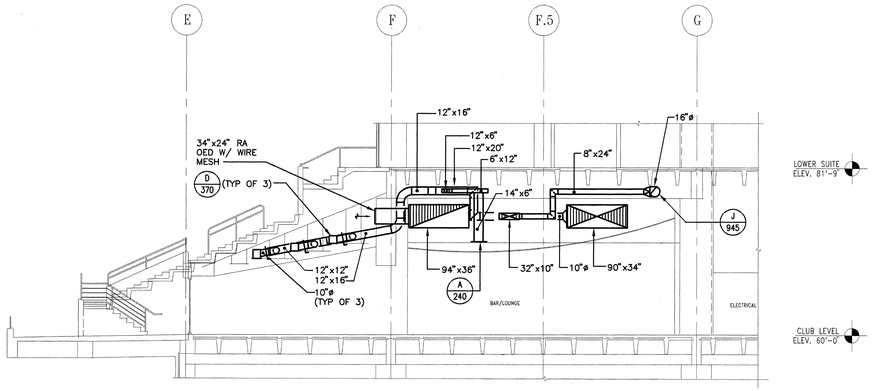
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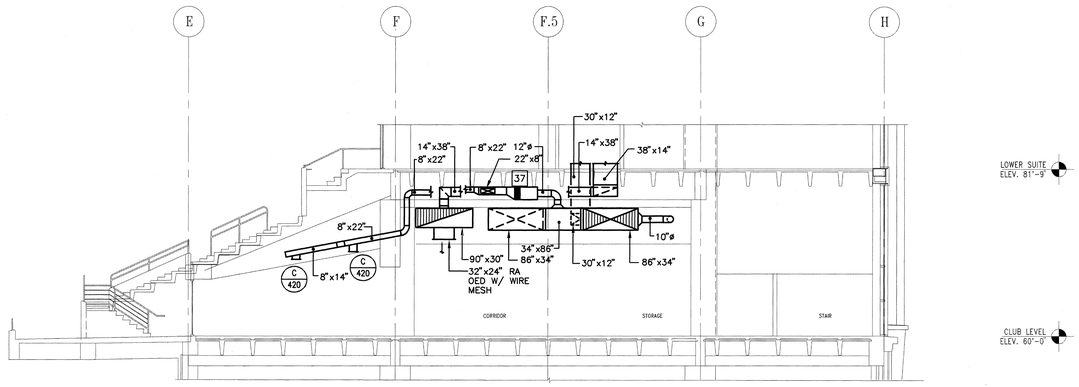
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DRAWN BY: MWS	REVIEWED BY:
ISSUED: 4-4-97	

SHEET TITLE
MECHANICAL SECTIONS

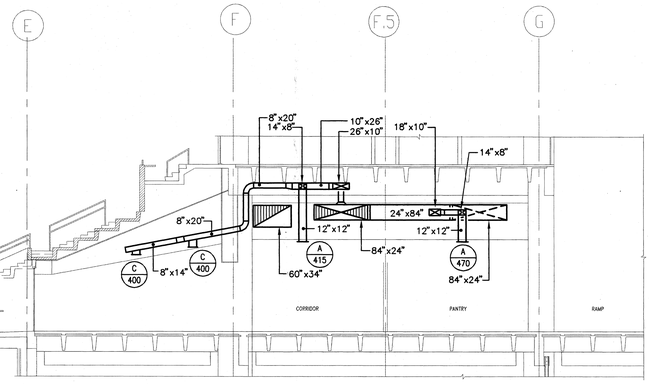
CATEGORY - SUB-CATEGORY - SHEET
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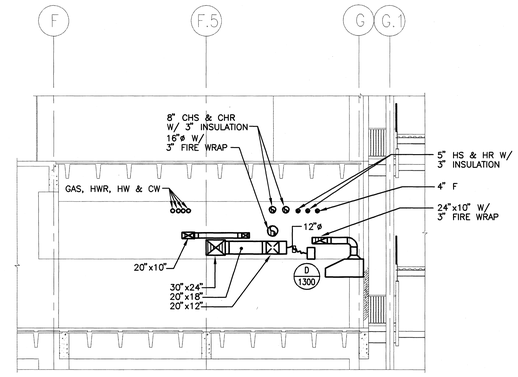
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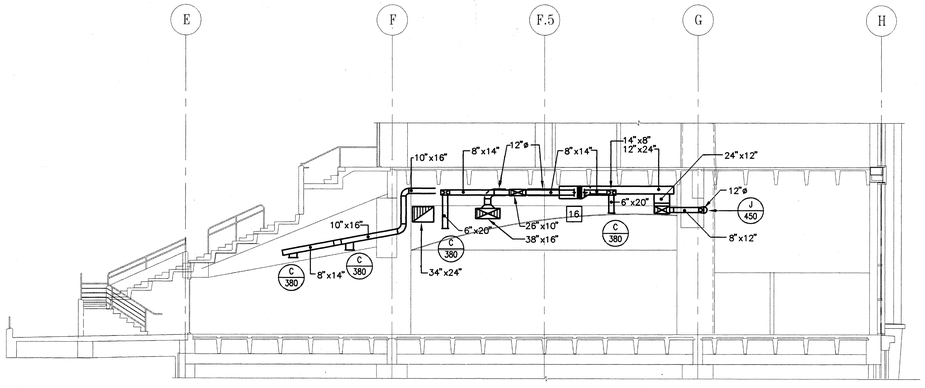
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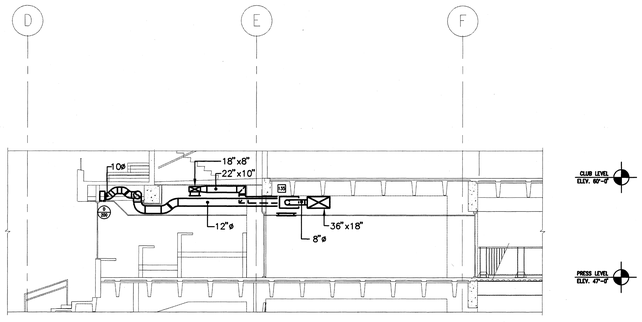
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N M3-29 SECTION "N"
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SCALE: 1/8"=1'-0"



K M2-03C SECTION "P"
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0 2 4 8 16

28.04.97-09:13-6110M710 - RMF #95110

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DALLAS, TEXAS

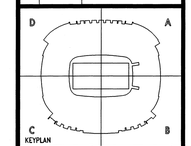
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NO.	DATE	DESCRIPTION



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PROJECT NO. 95-675-00	ISSUED BY:
DRAWN BY: JFL	REVIEWED BY:
ISSUED: 4-4-97	

SHEET TITLE
MECHANICAL SECTIONS

CATEGORY - SUB-CATEGORY - SHEET
M.7-10

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I/O POINT SUMMARY

SYSTEM DESIG	POINT OR EQUIPMENT DESIGNATION	INDICATION – INPUTS: ANALOG: TEMP DRY BULB	HUMIDITY	PRESSURE	FLOW	ENERGY UNITS	KILOWATT	AMPERES	KVA	KVAR	POWER FACTOR	INDICATION – INPUTS: DIGITAL: STATUS	PRESSURE	DIFF PRESSURE	FLOW	FREEZESTAT	SMOKE DETECTOR	CONTACT	LEVEL	CONTROL – OUTPUTS: ANALOG: DAMPER	VALVE	SPEED (VFD)	SET POINT	VANE OPERATOR	CONTROL – OUTPUTS: DIGITAL: ON/OFF	OFF/LOW SPEED	OFF/HIGH SPEED	OPEN/CLOSE	ALARM RESET	SOFTWARE FUNCTIONS: STATUS	ALARM	HIGH LEVEL	LOW LEVEL	FIRE ALARM	START/STOP	LEAD/LAG	SYSTEM GRAPHIC	PROGRAM: FLOW	RUN TIME	SS OPTIMIZATION	TREND	TOTALIZATION	ENERGY UNITS	REMARKS
AHU-1	MIN OA DPR D-1-1A/T-1	●																		●																✕							
& AHU-2	MAX OA DPR D-1-1B																			●																✕							
(AHU 3&4	FILTER													●																✕						✕							
;5 & 6;	LOW LIMIT T-3	●																													✕					✕							ALARM LOW (T)
7 & 8;	PREHEAT COIL V-H-1/T-2	●														●				●											✕					✕							ALARM LOW (T)
ARE	COOLING COIL V-C-1/H-1		●																	●											✕					✕							ALARM HIGH (T)
SIMILAR)	COIL CIRCULATION PUMP													●											●					✕	✕			✕		✕							ALARM FAILURE
	SUPPLY FAN SF-1													●											●					✕	✕			✕		✕							ALARM FAILURE
	DISCHARGE STATIC PRESS												●																	✕					✕							ALARM HIGH LIMIT
	SMOKE DPR & DETECTOR																●											●						✕		✕							SEE DIV 16000
	MIN OA DPR D-2-1A																			●																✕							
	MAX OA DPR D-2-1B																			●																✕							
	FILTER													●																✕						✕							
	LOW LIMIT T-3	●																													✕					✕							ALARM LOW (T)
	PREHEAT COIL V-H-2/T-2	●														●				●											✕					✕							ALARM LOW (T)
	COOLING COIL V-C-2																			●											✕					✕							ALARM HIGH (T)
	COIL CIRCULATION PUMP													●											●					✕	✕			✕		✕							ALARM FAILURE
	SUPPLY FAN SF-2													●											●					✕	✕			✕		✕							ALARM FAILURE
	DISCHARGE STATIC PRESS												●																	✕					✕							ALARM HIGH LIMIT
	SMOKE DPR & DETECTOR																●											●						✕		✕							SEE DIV 16000
	AMD-1-1/SPSS-1-1		●	●																															✕							
	RETURN DPR D-1-2																			●																✕							
	RETURN DPR D-2-2																			●																✕							
	RELIEF DPR D-1-3																			●																✕							
	RELIEF STATIC PRESS			●																																✕							
	RETURN FAN RF-1/AMD-1-2			●										●				●		●					✕	✕					✕					✕							INTERLOCK W/SF'S
	SMOKE DPR'S (2) & DETECTOR																●											●						✕		✕							SEE DIV 16000
	ROOM TEMPERATURE TR-1	●																																	✕							
	ROOM HUMIDITY H-2		●																																✕							
	AUTO-DEFAULT S-1																	●													✕					✕							ALARM FAILURE
	CARBON DIOXIDE MONITOR																	●													✕					✕							ALARM HIGH LEVEL
AHU-9	MIN OA DPR D-9-1A/T-1	●																		●																✕							
	MAX OA DPR D-9-1B																			●																✕							
	FILTER													●																✕						✕							
	LOW LIMIT T-3	●																													✕					✕							ALARM LOW (T)
	PREHEAT COIL V-H-9/T-2	●														●				●											✕					✕							ALARM LOW (T)
	COOLING COIL V-C-9/H-1		●																	●											✕					✕							ALARM HIGH (T)
	COIL CIRCULATION PUMP													●											●					✕	✕			✕		✕							ALARM FAILURE
	SUPPLY FAN SF-9													●											●					✕	✕			✕		✕							ALARM FAILURE
	DISCHARGE STATIC PRESS.												●																	✕					✕							ALARM HIGH LIMIT
	SMOKE DETECTOR																●											●						✕		✕							SEE DIV 16000
	SPSS-9-1/BY-PASS DPR D-9-4			●																●																✕							
	RETURN DPR D-9-2																			●																✕							
	RELIEF DPR D-9-3																			●																✕							
	RELIEF STATIC PRESS			●																																✕							
	RETURN FAN RF-9													●											●					✕	✕			✕		✕							INTERLOCK W/SF'S
	SMOKE DETECTOR																●											●						✕		✕							SEE DIV 16000
	ROOM TEMPERATURE TR-9	●																													✕					✕							
	ROOM HUMIDITY H-2		●																																✕							
	AUTO-DEFAULT S-1																	●													✕					✕							ALARM FAILURE
	CARBON DIOXIDE MONITOR																	●													✕					✕							ALARM HIGH LEVEL
AHU-10	OA DPR D-10-1/T-1	●																		●																✕							
(AHU-14	FILTER													●																✕						✕							
& 19	HEATING COIL V-C-10/TR-10	●														●				●											✕					✕							ALARM LOW (T)
ARE	COOLING COIL V-C-10/H-1		●																	●											✕					✕							ALARM HIGH (T)
SIMILAR)	COIL CIRCULATION PUMP													●											●					✕	✕			✕		✕							ALARM FAILURE
	SUPPLY FAN SF-10													●											●					✕	✕			✕		✕							ALARM FAILURE
	SMOKE DETECTOR																●											●						✕		✕							SEE DIV 16000
	RETURN DPR D-10-2																			●																✕							
	EXHAUST DPR D-10-3																			●																✕							
	EXHAUST FAN													●											●					✕	✕			✕		✕							INTERLOCK W/OA
	SMOKE DETECTOR																●											●						✕		✕							SEE DIV 16000
	AUTO-DEFAULT S-1																	●													✕					✕							ALARM FAILURE
	CARBON DIOXIDE MONITOR																	●													✕					✕							ALARM HIGH LEVEL
AHU-11	MIN OA DPR D-11-1A/T-1	●																		●																✕							
(AHU-12,	MAX OA DPR D-11-1B																			●																✕							
13 & 18	FILTER													●																✕						✕							
ARE	LOW LIMIT T-2	●																													✕					✕							ALARM LOW (T)
SIMILAR)	HEATING COIL V-H-11/TR-11	●														●				●											✕					✕							ALARM LOW (T)
	COOLING COIL V-C-11/H-1		●																	●											✕					✕							ALARM HIGH (T)
	COIL CIRCULATION PUMP													●											●					✕	✕			✕		✕							ALARM FAILURE
	SUPPLY FAN SF-11													●											●					✕	✕			✕		✕							ALARM FAILURE
	SMOKE DETECTOR																●											●						✕		✕							SEE DIV 16000
	RETURN DPR D-11-2																			●																✕							
	RELIEF DPR D-11-3																			●																✕							
	RELIEF STATIC PRESS			●																																✕							
	SMOKE DETECTOR																●											●						✕		✕							SEE DIV 16000
	AUTO-DEFAULT S-1																	●													✕					✕							ALARM FAILURE
	CARBON DIOXIDE MONITOR																	●													✕					✕							ALARM HIGH LEVEL
AHU-15	OA DPR D-15-1/T-1	●																		●																✕							
(AHU-16,	FILTER													●																✕						✕							
& 17	HEATING COIL V-H-15/T-2	●														●				●											✕					✕							ALARM LOW (T)
ARE	COOLING COIL V-C-10/H-1		●																	●											✕					✕							ALARM HIGH (T)
SIMILAR)	COIL CIRCULATION PUMP													●											●					✕	✕			✕		✕							ALARM FAILURE
	SUPPLY FAN SF-15													●											●					✕	✕			✕		✕							ALARM FAILURE
	SMOKE DETECTOR																●											●						✕		✕							SEE DIV 16000
	RETURN DPR D-15-2																			●																✕							
	EXHAUST DPR D-15-3																			●																✕							
	EXHAUST FAN													●											●					✕	✕			✕		✕							INTERLOCK W/OA
	SMOKE DETECTOR																●											●						✕		✕							SEE DIV 16000
	ROOM TEMPERATURE TR-15	●																													✕					✕							
	ROOM HUMIDITY H-2		●																												✕					✕							
	AUTO-DEFAULT S-1																	●													✕					✕							ALARM FAILURE
	CARBON DIOXIDE MONITOR																	●													✕					✕							ALARM HIGH LEVEL

I/O POINT SUMMARY

SYSTEM DESIG	POINT OR EQUIPMENT DESIGNATION	INDICATION – INPUTS: ANALOG: TEMP DRY BULB	HUMIDITY	PRESSURE	FLOW	ENERGY UNITS	KILOWATT	AMPERES	KVA	KVAR	POWER FACTOR	INDICATION – INPUTS: DIGITAL: STATUS	PRESSURE	DIFF PRESSURE	FLOW	FREEZESTAT	SMOKE DETECTOR	CONTACT	LEVEL	CONTROL – OUTPUTS: ANALOG: DAMPER	VALVE	SPEED	SET POINT	CONTROL – OUTPUTS: DIGITAL: ON/OFF	OFF/LOW SPEED	OFF/HIGH SPEED	OPEN/CLOSE	ALARM RESET	SOFTWARE FUNCTIONS: STATUS	ALARM	HIGH LEVEL	LOW LEVEL	FIRE ALARM	START/STOP	LEAD/LAG	SYSTEM GRAPHIC	PROGRAM: FLOW	RUN TIME	SS OPTIMIZATION	TREND	TOTALIZATION	ENERGY UNITS	REMARKS
AHU-20	MIN OA DPR D-20-1A/T-1	●																		●																✕							
(AHU-21,	MAX OA DPR D-20-1B																			●																✕							
22, 23	FILTER													●																✕						✕							
ARE	LOW LIMIT T-3	●																													✕					✕							ALARM LOW (T)
SIMILAR)	PREHEAT COIL V-H-20/T-2	●														●				●											✕					✕							ALARM LOW (T)
	COOLING COIL V-C-20/H-1		●																	●											✕					✕							ALARM HIGH (T)
	COIL CIRCULATION PUMP													●											●					✕	✕			✕		✕							ALARM FAILURE
	SUPPLY FAN SF-20													●											●					✕	✕			✕		✕							ALARM FAILURE
	DISCHARGE STATIC PRESS												●																	✕					✕							ALARM HIGH LIMIT
	SMOKE DETECTOR																●											●						✕		✕							SEE DIV 16000
	SPSS-20-1/BY-PASS DPR D-20-4			●																●																✕							
	RETURN DPR D-20-2			●																●																✕							
	RELIEF DPR D-20-3			●																●																✕							
	RELIEF STATIC PRESS			●																																✕							
	RETURN FAN RF-20													●											●					✕	✕			✕		✕							INTERLOCK W/SF
	SMOKE DETECTOR																●											●						✕		✕							SEE DIV 16000
	ROOM TEMPERATURE TR-20	●																													✕					✕							
	ROOM HUMIDITY H-2		●																												✕					✕							
	AUTO-DEFAULT S-1																	●													✕					✕							ALARM FAILURE
	CARBON DIOXIDE MONITOR																	●													✕					✕							ALARM HIGH LEVEL
AHU-24	OA DPR D-24-1																			●																✕							
(AHU-25,	FILTER													●																✕						✕							
26 ARE	HEATING COIL V-H-24/TR-24	●														●				●											✕					✕							ALARM LOW (T)
SIMILAR)	COOLING COIL V-C-24																			●											✕					✕							ALARM HIGH (T)
	COIL CIRCULATION PUMP													●											●					✕	✕			✕		✕							ALARM FAILURE
	SUPPLY FAN													●											●					✕	✕			✕		✕							ALARM FAILURE
	SMOKE DETECTOR																●											●						✕		✕							SEE DIV 16000
	CARBON DIOXIDE MONITOR																●											●						✕		✕							ALARM HIGH LEVEL
HVU-1	OA DPR D-1-1/T-1	●																		●																✕							
(HVU-3,	FILTER													●																✕						✕							
5 & 7	HEATING COIL V-H-1/TR-2	●														●				●											✕					✕							ALARM LOW (T)
ARE	SUPPLY FAN													●											●					✕	✕			✕		✕							ALARM FAILURE
SIMILAR)	SMOKE DETECTOR																●											●						✕		✕							SEE DIV 16000
	RETURN DPR D-1-2																			●																✕							
	EXHAUST DPR D-1-3																			●																✕							
	EXHAUST FAN													●											●					✕	✕			✕		✕							INTERLOCK W/OA
	RETURN SMOKE DETECTOR																●																		✕		✕							SEE DIV 16000
	EXHAUST SMOKE DETECTOR																●																		✕		✕							SEE DIV 16000
	AUTO-DEFAULT S-1																	●													✕					✕							ALARM FAILURE
	CARBON DIOXIDE MONITOR																	●													✕					✕							ALARM HIGH LEVEL
HVU-2	OA DPR D-2-1/T-1	●																		●																✕							
(HVU-6,	FILTER													●																✕						✕							
IS	HEATING COIL V-H-2/TR-2	●														●				●											✕					✕							ALARM LOW (T)
SIMILAR)	SUPPLY FAN													●											●					✕	✕			✕		✕							ALARM FAILURE
	SMOKE DETECTOR																●											●						✕		✕							SEE DIV 16000
	RETURN DPR D-2-2																			●																✕							
	VENTILATION DPR D-2-3																			●																✕							
	VENTILATION FAN VF-2													●												●	●			✕	✕			✕		✕							INTERLOCK W/OA
	RETURN SMOKE DETECTOR																●																		✕		✕							SEE DIV 16000
	VENT SMOKE DETECTOR																●																		✕		✕							SEE DIV 16000
	AUTO-DEFAULT S-1																	●													✕					✕							ALARM FAILURE
	CARBON DIOXIDE MONITOR																	●													✕					✕							ALARM HIGH LIMIT
HVU-4	OA DPR D-4-1																			●																✕							
	FILTER													●																✕						✕							
	HEATING COIL V-H-4/TR-4	●														●				●											✕					✕							ALARM LOW (T)
	SUPPLY FAN													●											●					✕	✕			✕		✕							ALARM FAILURE
	SMOKE DETECTOR																●											●						✕		✕							SEE DIV 16000
	EXHAUST DPR D-4-2																			●																✕							
	EXHAUST FAN													●											●					✕	✕			✕		✕							INTERLOCK W/SF
	SMOKE DETECTOR																●											●						✕		✕							SEE DIV 16000
	AUTO-DEFAULT S-1																	●													✕					✕							ALARM FAILURE
	CARBON DIOXIDE MONITOR																	●													✕					✕							ALARM HIGH LEVEL
HVU-8	OA DPR D-8-1																			●																✕							
9 & 10	FILTER													●																✕						✕							
(HVU-11,	HEATING COIL V-H-8/TR-8	●														●				●											✕					✕							ALARM LOW (T)
12 & 13	SUPPLY FAN													●											●					✕	✕			✕		✕							ALARM FAILURE
ARE	SMOKE DETECTOR																●											●						✕		✕							SEE DIV 16000
SIMILAR)	OA DPR D-9-1																			●																✕							
	FILTER													●																✕						✕							
	HEATING COIL V-H-9/TR-9	●														●				●											✕					✕							ALARM LOW (T)
	SUPPLY FAN													●											●					✕	✕			✕		✕							ALARM FAILURE
	SMOKE DETECTOR																●											●						✕		✕							SEE DIV 16000
	OA DPR D-10-1																			●																✕							
	FILTER													●																✕						✕							
	HEATING COIL V-H-10/TR-10	●														●				●											✕					✕							ALARM LOW (T)
	SUPPLY FAN													●											●					✕	✕			✕		✕							
	SMOKE DETECTOR																●											●						✕		✕							SEE DIV 16000
	EXHAUST DPR D-8-2																			●																✕							ALARM FAILURE
	SMOKE EXHAUST FAN SEF-1													●											●					✕	✕			✕		✕							INTERLOCK W/SF
	EXHAUST DPR D-8-3																			●																✕							
	SMOKE EXHAUST FAN SEF-2													●											●					✕	✕			✕		✕							
	AUTO-DEFAULT S-1																	●													✕					✕							ALARM FAILURE
	CARBON DIOXIDE MONITOR																	●													✕					✕							ALARM HIGH LEVEL
SUITE	SUPPLY FAN													●											●					✕	✕			✕		✕				✕	✕		ALARM FAILURE
FAN	HEATING COIL/TR-1	●																				●									✕					✕							ALARM LOW (T)
COIL	COOLING COIL/H-1		●																			●									✕					✕							ALARM HIGH (T)
UNIT	EXHAUST DPR (TYP OF 25)																																										
(TYP OF	EXHAUST FAN (TYP OF 25)													●											●					✕	✕			✕		✕							ALARM FAILURE
108)																																											
FAN	SUPPLY FAN													●											●					✕	✕			✕		✕				✕			ALARM FAILURE
COIL	HEATING COIL/TR-1	●																				●									✕					✕							ALARM LOW (T)
UNITS	COOLING COIL																					●									✕					✕							ALARM HIGH (T)
(TYP OF																																											
3)																																											

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I/O POINT SUMMARY

SYSTEM DESIG	POINT OR EQUIPMENT DESIGNATION	INDICATION – INPUTS: ANALOG: TEMP DRY BULB	HUMIDITY	PRESSURE	FLOW	ENERGY UNITS	KILOWATT	AMPERES	KVA	KVAR	POWER FACTOR	DIFF PRESSURE	INDICATION – INPUTS: DIGITAL: STATUS	DIFF PRESSURE	FLOW	FREEZESTAT	SMOKE DETECTOR	CONTACT	LEVEL	CONTROL – OUTPUTS: ANALOG: DAMPER	VALVE	SPEED	SET POINT	CONTROL – OUTPUTS: DIGITAL: ON/OFF	OFF/LOW SPEED	OFF/HIGH SPEED	OPEN/CLOSE	ALARM RESET	HIGH LIMIT	SOFTWARE FUNCTIONS: STATUS	ALARM	HIGH LEVEL	LOW LEVEL	FIRE ALARM	START/STOP	LEAD/LAG	SYSTEM GRAPHIC	PROGRAM: FLOW	RUN TIME	SS OPTIMIZATION	TREND	TOTALIZATION	ENERGY UNITS	REMARKS
ATRIUM SMOKE EXHAUST	SMOKE EXHAUST FAN SEF-5												●											●							X	X				X	X							ALARM FAILURE
	SMOKE EXHAUST FAN SEF-6												●											●							X	X				X	X							ALARM FAILURE
	OA DPR D-5-1																																				X	X							ALARM FAILURE
	SMOKE EXHAUST FAN SEF-11												●											●							X	X				X	X							ALARM FAILURE
	SMOKE EXHAUST FAN SEF-12												●											●							X	X				X	X							ALARM FAILURE
	OA DPR D-11-1																																								X					
	FIRE ALARM INTERFACE																●												●						X										SEE DIV 16000
	SMOKE EXHAUST FAN SEF-7A												●											●							X	X				X	X							ALARM FAILURE
	SMOKE EXHAUST FAN SEF-7B												●											●							X	X				X	X							ALARM FAILURE
	SMOKE EXHAUST FAN SEF-8												●											●							X	X				X	X							ALARM FAILURE
	OA DPR D-7-1																																								X					
	SMOKE EXHAUST FAN SEF-9												●											●							X	X				X	X							ALARM FAILURE
	SMOKE EXHAUST FAN SEF-10A												●											●							X	X				X	X							ALARM FAILURE
	SMOKE EXHAUST FAN SEF-10B												●											●							X	X				X	X							ALARM FAILURE
	OA DPR D-10-1																																								X					
	FIRE ALARM INTERFACE																●												●						X										SEE DIV 16000
HEATING WATER SYSTEM	STEAM CONVERTOR C-1	●											●								●						●		●	●	X	X				X	X							ALARM HIGH (T)
	STEAM CONVERTOR C-2	●											●								●						●		●	●	X	X				X	X							ALARM HIGH (T)
	STEAM CONVERTOR C-3	●											●								●						●		●	●	X	X				X	X							ALARM HIGH (T)
	HEATING PUMP P-4												●											●							X	X			X	X	X		X		X			ALARM FAILURE
	HEATING PUMP P-5												●											●							X	X			X	X	X		X		X			ALARM FAILURE
	HEATING PUMP P-6												●											●							X	X			X	X	X		X		X			ALARM FAILURE
	PRIMARY HEATING SUPPLY TH-4	●																														X				X							ALARM LOW (T)
	PRIMARY HEATING RETURN TH-5	●																																		X							
	HEATING PUMP P-7												●									●			●							X	X			X	X	X		X		X			ALARM FAILURE
	HEATING PUMP P-8												●									●			●							X	X			X	X	X		X		X			ALARM FAILURE
	SECONDARY HEATING SUPPLY TH-6	●																				●											X				X							ALARM LOW (T)
	SECONDARY HEATING RETURN TH-7	●																																		X							
	TURF HEATING SUPPLY TH-8	●																																		X							
	TURF HEATING RETURN TH-9	●																																		X							
	GLYCOL TANK/FILL		●										●					●														X		X		X							ALARM LOW LEVEL
	DIFF PRESSURE AHU-5 &6	●										●																				X				X							ALARM LOW (P)
	DIFF PRESS TRANS FAN COILS	●										●																				X				X							ALARM LOW (P)
	DIFF PRESS TRANS AHU-7& 8	●										●																				X				X							ALARM LOW (P)
CHILLED WATER SYSTEM	UTILITY FLOWMETER			●																																X							
	PRIMARY CHILLED SUPPLY TC-3	●																														X				X							ALARM HIGH (T)
	PRIMARY CHILLED RETURN TC-4	●																																		X							
	FLOW SWITCH FS-1																●												●			X				X							
	CHILLED PUMP P-1												●									●			●							X	X			X	X	X		X		X			ALARM FAILURE
	CHILLED PUMP P-2												●									●			●							X	X			X	X	X		X		X			ALARM FAILURE
	CHILLED PUMP P-3												●									●			●							X	X			X	X	X		X		X			ALARM FAILURE
	SECONDARY CHILLED SUPPLY TC-1	●																				●											X				X							ALARM HIGH (T)
	SECONDARY CHILLED RETURN TC-2	●																																		X							
	DIFF PRESS TRANS AHU-5 & 6	●										●																				X				X							ALARM LOW (P)
	DIFF PRESS TRANS FAN COILS	●										●																				X				X							ALARM LOW (P)
	DIFF PRESS TRANS AHU-7 & 8	●										●																				X				X							ALARM LOW (P)
STEAM SYSTEM	UTILITY FLOWMETER			●																																X							
	STEAM PRESSURE		●																													X				X							ALARM LOW (P)
	CONDENSATE DISCHARGE V-H-5	●																			●										X				X							ALARM HIGH (T)
	CONDENSATE RECEIVER CRU-1																●														X				X							ALARM HIGH LEVEL
	CONDENSATE RECEIVER CRU-2																●														X				X							ALARM HIGH LEVEL
DOMESTIC WATER HEATERS	TANK TEMPERATURE (TYP OF 4)	●																														X				X							ALARM LOW (T)
	HW RECIRC PUMP												●											●							X	X			X	X	X		X		X			ALARM FAILURE
	HW RECIRC PUMP												●											●							X	X			X	X	X		X		X			
	LOOP TEMP SENSORS (TYP OF 4)	●																														X				X							ALARM LOW (T)
	HW MAIN SUPPLY TEMP TH-5	●																														X				X							ALARM LOW (T)
DOMESTIC WATER BOOSTER PUMPS	BOOSTER PUMP (TYP OF 8)												●																			X	X				X							ALARM FAILURE
	PRESSURE SENSOR (TYP OF 8)		●																													X				X							ALARM LOW (P)
	TEMPERATURE SENSOR	●																																		X							
	COMMON SUCTION		●																													X				X							ALARM LOW (P)
	COMMON DISCHARGE		●																													X				X							ALARM LOW (P)
CONC TOILET ROOMS (TYP OF 39)	TOILET EXHAUST FAN												●												●							X	X				X							ALARM FAILURE
	INTAKE DPR																									●											X							
	CABINET HEATER(S)																								●												X							
NON COOKING CONCESS (TYP OF 33)	MAKE-UP AIR UNIT/T-1	●											●												●							X	X			X	X							ALARM FAILURE
	OA DPR																					●															X							
	FILTER												●																			X					X							
	GAS REGULATOR/TR-1	●																				●											X				X							ALARM LOW (T)
	CABINET HEATER(S)																								●												X							
	SMOKE DETECTOR																●																			X							
COOKING CONCESS TYPE A (TYP OF 12)	OA DPR																					●															X							
	FILTER												●																			X					X							
	MAKE-UP AIR UNIT/T-1	●											●												●							X	X			X	X							ALARM FAILURE
	GAS REGULATOR/TR-1	●																				●											X				X							ALARM LOW (T)
	SMOKE DETECTOR																●																			X							
	EXHAUST SYSTEM(S)												●												●							X	X				X							ALARM FAILURE
	WASH DOWN CONTROL(S)																								●												X							
	CABINET HEATER(S)																								●												X							
COOKING CONCESS TYPE B (TYP OF 4)	OA DPR																					●															X							
	FILTER												●																			X					X							
	MAKE-UP AIR UNIT/T-1	●											●												●							X	X			X	X							ALARM FAILURE
	COOLING COIL																					●											X				X							ALARM HIGH (T)
	GAS REGULATOR/TR-1	●																				●											X				X							ALARM LOW (T)
	SMOKE DETECTOR																●																			X							
	EXHAUST SYSTEM(S)												●												●							X	X				X							ALARM FAILURE
	WASH DOWN CONTROL(S)																								●												X							
	CABINET HEATER(S)																								●												X							

I/O POINT SUMMARY

SYSTEM DESIG	POINT OR EQUIPMENT DESIGNATION	INDICATION – INPUTS: ANALOG: TEMP DRY BULB	HUMIDITY	PRESSURE	FLOW	ENERGY UNITS	KILOWATT	AMPERES	KVA	KVAR	POWER FACTOR	DIFF PRESSURE	INDICATION – INPUTS: DIGITAL: STATUS	DIFF PRESSURE	FLOW	FREEZESTAT	SMOKE DETECTOR	CONTACT	LEVEL	CONTROL – OUTPUTS: ANALOG: DAMPER	VALVE	SPEED	SET POINT	CONTROL – OUTPUTS: DIGITAL: ON/OFF	OFF/LOW SPEED	OFF/HIGH SPEED	OPEN/CLOSE	ALARM RESET	HIGH LIMIT	SOFTWARE FUNCTIONS: STATUS	ALARM	HIGH LEVEL	LOW LEVEL	FIRE ALARM	START/STOP	LEAD/LAG	SYSTEM GRAPHIC	PROGRAM: FLOW	RUN TIME	SS OPTIMIZATION	TREND	TOTALIZATION	ENERGY UNITS	REMARKS
BLDG SERVICES	XFORMER TEMP (TYP OF 13)																	●																											
	DIGITAL METERING (TYP OF 14)			●														●																									X	X		
	HEAT TRACE ALARM QUAD A																	●														X													ALARM FAILURE
	HEAT TRACE ALARM QUAD B																	●														X													ALARM FAILURE
	HEAT TRACE ALARM QUAD C																	●														X													ALARM FAILURE
	HEAT TRACE ALARM QUAD D																	●														X													ALARM FAILURE
	OUTDOOR AIR TEMP	●																																							X				
	ATC AIR COMPRESSOR(S)			●														●														X													ALARM LOW (P)
	ATC AIR DYER(S)																	●														X													ALARM HIGH (T)
	FIRE ALARM																	●														X													
	SEWAGE EJECTOR SP-1 QUAD B													●				●														X													ALARM HIGH LEVEL
	SEWAGE EJECTOR SP-2 QUAD B													●				●														X													ALARM HIGH LEVEL
	BOWL DRAINAGE SP-3 QUAD A													●				●														X													ALARM HIGH LEVEL
	BOWL DRAINAGE SP-4 QUAD B													●				●														X													ALARM HIGH LEVEL
	LOADING DOCK SP-5													●				●														X													ALARM HIGH LEVEL
	FIELD DRAINAGE SP-6 EAST													●				●														X													ALARM HIGH LEVEL
	FIELD DRAINAGE SP-7 WEST													●				●														X													ALARM HIGH LEVEL
	ELECTRIC MANHOLE SP-8													●				●														X													ALARM HIGH LEVEL

I/O POINT SUMMARY NOTES:

1. CONTRACTOR MUST REVIEW THE ENTIRE CONSTRUCTION DOCUMENT PACKAGE TO VERIFY THE TOTAL NUMBER OF CONTROL POINTS AND EQUIPMENT ITEMS.
2. WHEN ADDITIONAL CONTROL POINTS , OTHER THAN THOSE INDICATED, ARE REQUIRED TO EFFECT THE SPECIFIED CONTROL SEQUENCES THEY SHALL BE PROVIDED AT NO ADDITIONAL COST.
3. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR COORDINATION OF TRANSFORMER, DIGITAL METERING, HEAT TRACE, AND FIRE ALARM POINTS. PROVIDE WIRING TO ALL ELECTRICAL POINTS.
4. SYSTEM GRAPHICS WITH FINAL POINT IDENTIFICATION SHALL BE DEVELOPED FOR EACH SYSTEM OR SUB-SYSTEM. GRAPHICS SHALL CLEARLY SHOW THE ARRANGEMENT AND OVERALL LAYOUT OF COMPONENTS.
5. LABELING AND NUMBERING SEQUENCE FOR ALL POINTS SHALL BE SUBMITTED FOR APPROVAL BEFORE ANY PROGRAMMING PROCEEDS. LABEL AND NUMBER SHALL RELATE TO UNIT OR SYSTEM AND IMPLY FUNCTION OF POINT.

h+k SPORT

HELLMUTH OBATA & KASSABAUM, INC.
Architecture, Engineering, Planning,
Interiors, Facility Programming
323 West 8th Street, Suite700
Kansas City, Missouri 64105

STRUCTURAL ENGINEER
BLISS & NITRAY, INC.
MIAMI, FLORIDA

MECHANICAL/ELECTRICAL/PLUMBING
ROSS MURPHY FINKELSTEIN, INC.
BALTIMORE, MARYLAND

LANDSCAPE ARCHITECT/PLANNING
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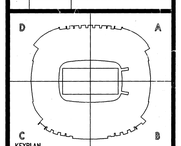
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BALTIMORE, MARYLAND

BALTIMORE NFL STADIUM

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DRAWING PACKAGE
90B SUBMITTAL

REVISIONS

NO.	DATE	DESCRIPTION
	4-28-97	BULLETIN #44



KEYPLAN

PROJECT NO. 95-675-00 | ISSUED BY:
DRAWN BY: JTP | REVIEWED BY: DSP
ISSUED: 4-28-97

SHEET TITLE
CONTROL POINT LIST

CATEGORY - SUB-CATEGORY - SHEET
M.8-02

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