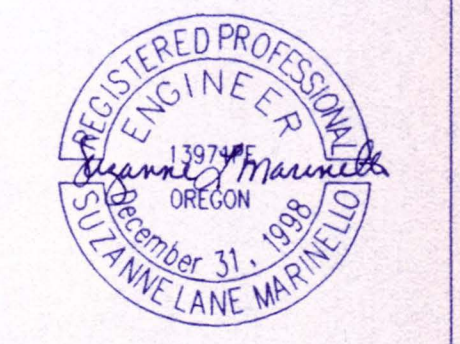


MECHANICAL PLAN NOTES

- 1 4" DOUBLE WALL TYPE "B" GAS VENT, UP TO ROOF.
- 2 12x12 EXHAUST DUCTS, UP IN CHASE TO ROOF MOUNTED EXHAUST FANS.
- 3 14x24 (LINED) SUPPLY, 20x14 RETURN DUCTS, UP IN CHASE
- 4 12"x12" EXHAUST DUCT FROM EXH. FANS, CONTINUE UP IN CHASE.
- 5 30"x20" (LINED) SUPPLY AND RETURN DUCTS, UP IN CHASE.
- 6 SUPPLY AND RETURN DUCTS, UP IN CHASE.
- 7 8"x8" (LINED) AIR TRANSFER DUCT, CONNECT TO 8"x8" CEILING GRILLES, PERFORATED FACE TYPE
- 8 1-HR. FLOOR ASSEMBLY AT 2ND FLOOR. SEE ARCHITECTURAL DRAWINGS.
- 9 SILL MOUNTED LINEAR DIFFUSER, STYLE PER SPECIFICATIONS. INSTALL DIFFUSER AT STAIR/WINDOW SILL, PER ARCHITECTURAL.
- 10 BRANCH DUCT TO STAIR/WINDOW SILL DIFFUSERS. DUCT ABOVE LOBBY CEILING, CONT. UNDER STAIRS AND FOLLOWS SLOPE OF STAIRWAY FROM LANDING.
- 11 12x12 CEILING RETURN GRILLE, 2 REQUIRED. CONNECT TO RETURN DUCT ABOVE CEILING.

HEATING, VENTILATION AND AIR CONDITIONING
FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"



MECHANICAL PLAN NOTES

- 1 12"x12" EXHAUST DUCT FROM FIRST FLOOR EXHAUST FANS, OFFSET ABOVE CEILING TO 12"x12" GRAVITY ROOF VENTILATOR, PROVIDE GREENHECK, FABRA-HOOD, OR EQUAL
- 2 14x20 (LINED) SUPPLY AND RETURN DUCTS DOWN IN CHASE (ZONE 2 - NIRSA SUPPORT)
- 3 30x20 (LINED) SUPPLY AND RETURN DUCTS DOWN IN CHASE (ZONE 3 - TENANT SPACE)
- 4 12x12 EXHAUST FROM LOCKERS AND RESTROOMS BELOW, CONTINUE UP AND TRANSITION TO CONNECTION AT ROOF MOUNTED EXHAUST FANS
- 5 SUPPLY AND RETURN DUCTS (LINED) DOWN IN CHASE (ZONE 1 - LOCKERS)
- 6 TYPE B DOUBLE WALL VENT FROM WATER HEATER, CONTINUE UP TO ROOF TERMINATION
- 7 COORDINATE LOCATION OF EXHAUST FANS, AC UNITS, GRAVITY RELIEF VENTS AND PLUMBING VENTS TO MAINTAIN REQ'D 10 FEET CLEARANCES TO OSA INTAKE AT UNITS
- 8 BRANCH DUCTS TO VOLUME DAMPERS PER EQUIPMENT SCHEDULE, SHEET M-3, TYPICAL AT ALL VARIABLE VOLUME DAMPERS
- 9 CEILING OUTLET NOTED, TYPICAL, AIR FLOW INDICATED REPRESENTS DESIGN CONDITIONS, ACTUAL AIR FLOWS TO VARY UNDER VARIABLE AIR VOLUME CONTROL, SEE EQUIPMENT SCHEDULE FOR ALLOWED VARIANCES IN VOLUME AT VAV BOXES
- 10 12x12 DOOR TRANSFER GRILLE
- 11 FOLDING PARTITION HEADER BEAM, SEE ARCHITECTURAL
- 12 HVAC CONTROL PANEL, REFER TO SPECIFICATIONS SECTION 19350
- 13 REFER TO EQUIPMENT SCHEDULE, SHEET M-3 FOR BY-PASS DAMPER SIZING, CONNECT DAMPER, FULL SIZE FROM SUPPLY DROP TO RETURN DROP AT AC UNIT, CONTROL PER CONTROL SPECIFICATIONS

HEATING, VENTILATION AND AIR CONDITIONING
SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0"



EQUIPMENT SCHEDULE						
PACKAGED GAS HEAT/ELECTRIC COOLING ROOFTOP UNITS						
UNIT	AC-1 4 TON	AC-2 4 TON	AC-3 4.5 TON	AC-4 4.5 TON	AC-5 6 TON	AC-6 4 TON
AREA SERVED	1ST FLOOR EXERCISE	1ST FL. NIRSA SUPPORT	1ST FLOOR TENANT	2ND FL. OFFICES	2ND FL. OFFICES	COMPUTERS 211
MANUFACTURER	TRANE CO.	TRANE CO.	TRANE CO.	TRANE CO.	TRANE CO.	TRANE CO.
MODEL	YCD075C4	YCD060C4	YCD103B4	YCD103B4	YCD075C4	YCD036C4
HEAT INPUT-BTUH	205,000	205,000	205,000	205,000	205,000	80,000
HEAT CAP.- BTUH	150,000	97,000	203,000	203,000	150,000	65,000
AFLUE	81.0 %	81.0 %	81.0 %	81.0 %	81.0 %	81.0 %
COOLING CAPACITY	72,000 BTUH	62,500 BTUH	99,000 BTUH	99,000 BTUH	72,000 BTUH	37,400 BTUH
EER	9.0	10.0	10.0	10.0	9.0	10.0
NO. OF HEATING STAGES	2	1	2	2	2	1
NO. OF COMPRESSORS	1	1	2	2	1	1
ELECTRICAL	460 VOLT 3-PH	460 VOLT 3-PH	460 VOLT 3-PH	460 VOLT 3-PH	460 VOLT 3-PH	460 VOLT 3-PH
INDOOR FAN FLA	32 FLA	25 AMP	34 AMP	34 AMP	32 FLA	11 FLA
COMPRESSOR FLA	9.1 AMP	10 AMP	10 AMP	10 AMP	9.1 AMP	5.5 FLA
CONDENSER FAN FLA	2.4 AMP	13 AMP	3.0 AMP	3.0 AMP	2.4 AMP	0.9 FLA
COMBUSTION BLOWER FLA	0.4 AMP	0.4 AMP	0.5 AMP	0.5 AMP	0.4 AMP	..
BLOWER EXHAUST FLA	3.1 AMP	..	3.2 AMP	3.2 AMP	3.1 AMP	..
BLOWER MTR. HP	1 HP	..	2 HP	2 HP	1 HP	..
AIR FLOW-CFM	2500 CFM	2000 CFM	3400 CFM	3400 CFM	2500 CFM	1100 CFM
E.S.P.	0.9 INCHES	0.9 INCHES	0.9 INCHES	0.9 INCHES	0.9 INCHES	0.9 INCHES
GAS CONN. INCHES	1/2 INCH	1/2 INCH	1/2 INCH	1/2 INCH	1/2 INCH	1/2 INCH
MIN. OSA-CFM	900 CFM	300 CFM	900 CFM	400 CFM	400 CFM	200 CFM
AIR SYSTEM	VAV	VAV	VAV	VAV	VAV	CONSTANT
CONTROL	TRANE VARITRAC	TRANE VARITRAC	TRANE VARITRAC	TRANE VARITRAC	TRANE VARITRAC	TRANE VARITRAC
OP. WEIGHT	1000 LBS	800 LBS	1530 LBS	1530 LBS	1000 LBS	400 LBS
	(1) (2)	(1) (2)	(1) (2)	(1) (2)	(1) (2)	(1) (2)

NOTES:
 (1) PROVIDE VIBRATION ISOLATION CURB SIZED TO MATCH UNIT.
 (2) PROVIDE SMOKE DETECTION IN AIR SUPPLY DUCT.

EQUIPMENT SCHEDULE										
EXHAUST FANS										
UNIT	EF 1	EF 2	EF 3	EF 4	EF 5	EF 6	EF 7	EF 8	EF 9	EF 10 EF-11 SAME AS EF-10
AREA SERVED	1ST FL. WOMEN'S	1ST FL. MEN'S	JAN 114	ELEV. EQPT. 104	MACH. RM 103	LOUNGE 110	2ND FL. MEN/WOMEN'S	JAN 223	COFFE 210	NIRSA SUPPORT, HOOD
MANUFACTURER	GREENHECK	GREENHECK	GREENHECK	GREENHECK	GREENHECK	GREENHECK	GREENHECK	GREENHECK	GREENHECK	GREENHECK
MODEL	GB-80	GB-80	SP-216	SP-216	SP-216	SP-216	SP-216	SP-216	SP-216	SP-216
CAPACITY-CFM	403	403	171	171	171	171	350	171	121	801
STATIC PRESS.	0.25 INCHES	0.25 INCHES	0.125 INCHES	0.125 INCHES	0.125 INCHES	0.125 INCHES	0.25 INCHES	0.125 INCHES	0.125 INCHES	0.125 INCHES
ELECTOR HP	1/4 HP	1/4 HP	53 WATTS	53 WATTS	53 WATTS	53 WATTS	1/4 HP	53 WATTS	53 WATTS	1/2 HP
MOTORICAL	120 V 1-PH	120 V 1-PH	115/60/1	115/60/1	115/60/1	115/60/1	240 V 1-PH	115/60/1	115/60/1	120 V 1-PH
CONTROL	WALL SWITCH	WALL SWITCH	INTERLOCK WITH LITES	WALL SWITCH	WALL SWITCH	WALL SWITCH	INTERLOCK WITH LITES	INTERLOCK WITH LITES	INTERLOCK WITH LITES	WALL SWITCH
DISCHARGE	ROOF CURB	ROOF CURB	GRAV. VENT ON ROOF	GRAV. VENT ON ROOF	GRAV. VENT ON ROOF	MODEL RCC-1 WITH CURB	INTERLOCK WITH LITES	MODEL RCC-1 WITH CURB	MODEL RCC-1 WITH CURB	WALL LOUVER
NOTES	(1)	(1)	(2)	(2)	(2)	(2)	(1)	(2)	(2)	

NOTES:
 (1) ROOF MOUNTED FAN WITH CURB.
 (2) CEILING MOUNTED WITH INTEGRAL GRILLE.
 (3) IN-LINE FAN.

EQUIPMENT SCHEDULE					
ZONE VARIABLE AIR DAMPERS					
UNIT	VAV 1-1	VAV 1-2	VAV 1-3	VAV 1-4	BP 1
AREA SERVED	1ST FLOOR	LOCKERS	EXERCISE	LOCKERS	AC-1
ROOM	LOBBY	MENS	EXERCISE	WOMEN'S	BY-PASS DAMPER
MANUFACTURER	TRANE	TRANE	TRANE	TRANE	TRANE
DAMPER SIZE	14"	10"	12"	10"	10"
MIN. AIR FLOW	500 CFM	300 CFM	600 CFM	300	....
MAX. AIR FLOW	1000 CFM	500 CFM	800 CFM	500 CFM	....
REHEAT KW	..	..	.....	.....	.....

EQUIPMENT SCHEDULE					
ZONE VARIABLE AIR DAMPERS					
UNIT	VAV 2-1	VAV 2-2	VAV 2-3	VAV 2-4	BP 2
AREA SERVED	NIRSA	NIRSA	NIRSA	NIRSA	AC-2
SUPPORT	SUPPORT	SUPPORT	SUPPORT	SUPPORT	BY-PASS DAMPER
ROOM	TRANE	TRANE	TRANE	TRANE	TRANE
MANUFACTURER	TRANE	TRANE	TRANE	TRANE	TRANE
DAMPER SIZE	6"	6"	12"	12"	8"
MIN. AIR FLOW	100 CFM	100 CFM	500	500	....
MAX. AIR FLOW	200 CFM	200 CFM	750 CFM	750 CFM	....
REHEAT KW	1.4 KW	1.4 KW	.....	.....	.....

EQUIPMENT SCHEDULE							
ZONE VARIABLE AIR DAMPERS							
UNIT	VAV 4-1	VAV 4-2	VAV 4-3	VAV 4-4	VAV 4-5	VAV 4-6	BP 4
AREA SERVED	DIRECTOR	BOARD RM	ADMIN	LOBBY	SUPPLY	RECEPTION	AC-4
ROOM	ROOM 206	ROOM 205	ROOM 207	ROOM 201	RM 210	RM 203	BY-PASS DAMPER
MANUFACTURER	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE
DAMPER SIZE	8"	10"	6"	12"	8"	12"	12"
MIN. AIR FLOW	200 CFM	500 CFM	100 CFM	800 CFM	200 CFM	500 CFM	....
MAX. AIR FLOW	400 CFM	800 CFM	200 CFM	1200 CFM	200 CFM	1000 CFM	....
REHEAT KW	5.1 KW	5.1 KW	1.4 KW	.....	.....	.....	.....

EQUIPMENT SCHEDULE											
ZONE VARIABLE AIR DAMPERS											
UNIT	VAV 5-1A	VAV 5-1A	VAV 5-2	VAV 5-3	VAV 5-4	VAV 5-5	VAV 5-6	VAV 5-7	VAV 5-8	VAV 5-9	BP 5
AREA SERVED	ACCOUNT.	ACCOUNT.	ASST. DIR.	CORR.	OFF. 4	OFF. 3	OFF. 2	OFF. 1	FOUND. 1	OFFEN OFFICE	AC-5
ROOM	ROOM 228	ROOM 218	ROOM 218	ROOM 221	ROOM 211	ROOM 216	ROOM 215	ROOM 214	ROOM 213	ROOM 209	BY-PASS DAMPER
MANUFACTURER	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE	TRANE
DAMPER SIZE	8"	8"	8"	12"	6"	6"	6"	6"	6"	10"	12"
MIN. AIR FLOW	100 CFM	100 CFM	200 CFM	150 CFM	100 CFM	100 CFM	100 CFM	100 CFM	100 CFM	500 CFM	....
MAX. AIR FLOW	200 CFM	200 CFM	400 CFM	300 CFM	200 CFM	200 CFM	200 CFM	200 CFM	200 CFM	750 CFM	....
REHEAT KW	5.1 KW	5.1 KW	5.1 KW	.....	1.4 KW	1.4 KW	1.4 KW	1.4 KW	1.4 KW	5.1 KW	.....

MECHANICAL LEGEND	
	CEILING DIFFUSER, T-BAR FRAME AND FLEX DUCT CONNECTION, ROUND NECK ADAPTER, NECK SIZE TO MATCH ASSOCIATED DUCT SIZE
	SIDEWALL REGISTER
	CEILING RETURN OR EXHAUST GRILLE
	OUTLET SIZE (INCHES), THROW INDICATED AIR QUANTITY, CFM
	RECTANGULAR DUCT, PLAN SIZE INDICATED FIRST, DIMENSIONS NOTED IN INCHES.
	ROUND DUCT, SIZE INDICATED IN INCHES
	SUPPLY DUCT SECTION
	RETURN DUCT SECTION
	OUTSIDE AIR DUCT SECTION
	FUSIBLE LINK DAMPER
	COMBINATION FIRE-SMOKE DAMPER
	MANUAL VOLUME CONTROL DAMPER
	THERMOSTAT
	SHEET NOTE REFERENCE
EDH-2	MECHANICAL EQUIPMENT SPECIFIED
MECHANICAL ABBREVIATIONS	
HP	HORSEPOWER
FLA	FULL LOAD AMPERAGE
RLA	RUNNING LOAD AMPERAGE
CFM	CUBIC FEET PER MINUTE
MVD	MANUAL VOLUME DAMPER
FLD	FUSIBLE LINK DAMPER
T	THERMOSTAT
ESP	EXTERNAL STATIC PRESSURE
BHP	BRAKE HORSEPOWER
F	FURNACE
CU	CONDENSING UNIT
EF	EXHAUST FAN
EDH	ELECTRIC DUCT HEATER
SF	SUPPLY FAN
IN	INCHES

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PROJECT NO. 9430
 DRAWN SLM
 CHECKED SLM/TVN
 DATE JUN. 09, 1997