

DATE	REVISION	NO	CD	ISSUED FOR:	ISSUE DATE:	SCALE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:
			4/10/20	AS NOTED		PJF / GMS	PJF	PJF	PJF

LAKETRAN WICKLIFFE PARK-N-RIDE LOT
 29610 LAKELAND BLVD., WICKLIFFE, OH 44092

MECHANICAL PLAN
 PROJECT NO. **190065**
 DISCIPLINE **MECHANICAL**
 SHEET NAME **M-1**
 SHEET **44** OF **49**

FAN SCHEDULE

MARK	MANUFACTURER	MODEL	TYPE	CFM	ESP	MOTOR HP or W	MAXIMUM RPM	DRIVE	VOLTAGE	SONES	WEIGHT	REMARKS
EF-1	COOK	GC14B	CEILING FAN	75	0.25	44 W	1075	D	120V/1PH	3	12 LBS.	1 THRU 6
EF-2	COOK	GC14B	CEILING FAN	75	0.25	44 W	1075	D	120V/1PH	3	12 LBS.	1 THRU 6
EF-3	COOK	GC14B	CEILING FAN	75	0.25	44 W	1075	D	120V/1PH	3	12 LBS.	1 THRU 6
EF-4	COOK	30XLPH	WALL PROP. FAN	5,000 CFM; 1,500 FUTURE	0.25	1.5 HP	762	B	460V/3PH	22	254 LBS.	4 & 7

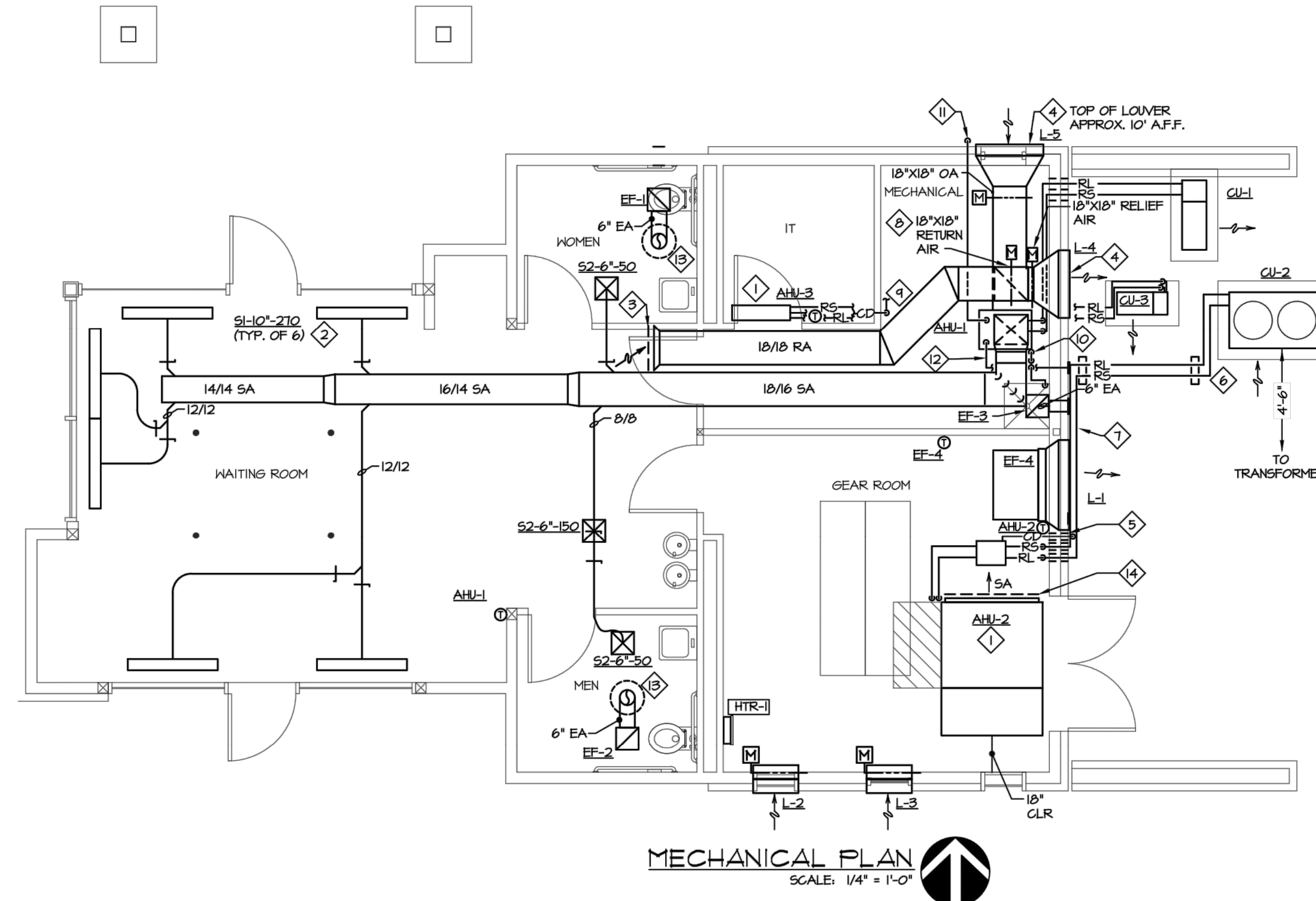
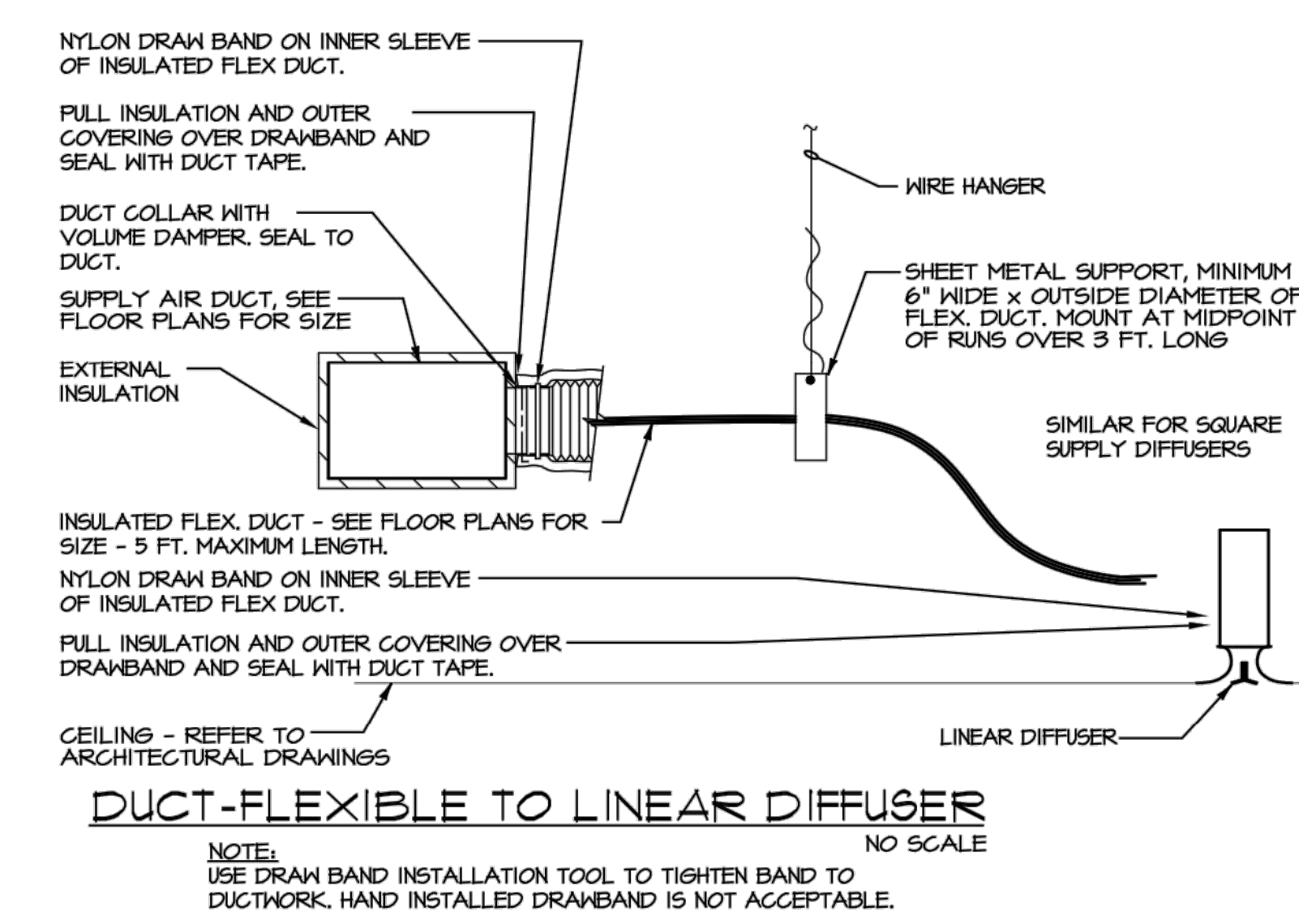
REMARKS:
 1. INCLUDE SPEED CONTROL.
 2. DISCONNECT.
 3. VIBRATION ISOLATION.
 4. BACKDRAFT DAMPER.
 5. WALL CAP.
 6. CONTROL THROUGH LIGHT SWITCH.
 7. PROVIDE BELT DRIVE & WALL SLEEVE.
 ELECTRICAL TRADES TO PROVIDE HAND, OFF, AUTO SWITCH. AUTO MODE IS CONTROLLED VIA T-STAT IN ROOM.

REGISTERS, GRILLES, AND DIFFUSERS SCHEDULE

MARK	MANUFACTURER	MODEL	DESCRIPTION	MATERIAL	COLOR/FINISH	FRAME TYPE	NECK SIZE	MAX. NC	REMARKS
S1	TITUS	ML-34	LINEAR SLOT SUPPLY DIFFUSER	STEEL	BY ARCHITECT	DRYWALL	10"	30	1
S2	TITUS	OMNI	CEILING DIFFUSER	STEEL	BY ARCHITECT	12" X 12" LAY-IN	REFER TO PLAN	30	1-2
RI	TITUS	50F	RETURN GRILLE	ALUMINUM	BY ARCHITECT	DRYWALL	-	30	-

REMARKS:
 1. S1 SHALL BE 1 INCH SPACING, 3 SLOT, 2-WAY THROW. INCLUDE SUPPLY PLENUM WITH ROUND INLET ABOVE DIFFUSER.
 2. INCLUDE BALANCING DAMPER OR IN BRANCH DUCT.

- #### PLAN NOTES
- ROUTE 3/4 INCH PVC CONDENSATE DRAIN FROM EVAPORATOR TO EXTERIOR SPLASH BLOCK ON GRADE.
 - BALANCE AIRFLOW TO DIFFUSER WITH DAMPER IN DIFFUSER.
 - RA DUCT FULL-SIZE LINED. PROVIDE AT INLET, PROVIDE BELMOUTH FITTING WITH WIRE MESH OVER OPENING.
 - PROVIDE NEW LOUVER, L-3, COORDINATE HEIGHT WITH ARCHITECT, BEFORE INSTALLATION.
 - SLEEVE THRU WALL AND SEAL WEATHER TIGHT (TYPICAL).
 - SUPPORT REFRIGERANT PIPING EVERY 5'
 - SUPPORT FROM WALL EVERY 5'
 - INSTALL RETURN AIR DAMPER IN RETURN DUCT, DOWNSTREAM OF RELIEF AIR DUCT/DAMPER.
 - ROUTE 3/4 INCH PVC CONDENSATE DRAIN FROM EVAPORATOR DRAIN PAN TO NEAREST FLOOR DRAIN.
 - ROUTE 3/4 INCH PVC CONDENSATE DRAIN FROM EVAPORATOR DRAIN PAN TO MOP SINK. PROVIDE AC TRAP AT EVAPORATOR PER DETAIL. EXTEND CONDENSATE PIPING TO 2" ABOVE MOP SINK. SUPPORT PIPING FROM WALL.
 - EXTEND 3" COMBUSTION AIR INLET PIPE TO EXTERIOR WALL WITH WALL CAP. EXTEND THRU WALL A MINIMUM OF 3" ABOVE GRADE. SEAL AIR TIGHT.
 - EXTEND 3" EXHAUST AIR PIPE TO EXTERIOR WALL WITH WALL CAP. EXTEND THRU WALL A MINIMUM OF 3" ABOVE GRADE. SEAL AIR TIGHT.
 - PROVIDE COOK GRAVITY ROOF VENTILATOR TYPE PR SIZE 8 AND A 8" HIGH ROOF CURB. GRAVITY ROOF VENTILATOR SHALL BE PAINTED, COLOR TO BE SELECTED BY ARCHITECT.
 - PROVIDE 1/4" WIRE MESH OVER SUPPLY OPENING.



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

INDOOR AIR HANDLING UNIT SCHEDULE

MARK	FURNACE MANUFACTURER AND MODEL NUMBER	NOMINAL TONS	CFM	MIN O.A. CFM	WEIGHT (LBS)	INDOOR UNIT										OUTDOOR UNIT						REMARKS					
						ELECTRICAL			SUPPLY FAN		DX COOLING COIL			HEATING COIL		MARK	MODEL	AIR ON CONDENSER (DEG F)	VOLTAGE	MCA	MOCP		WEIGHT (LBS)	EER			
						MCA	MOCP	VOLTAGE	E.S.P.	HP	TOTAL MBH	SENSIBLE MBH	E.D.B. (DEG. F)	E.W.B. (DEG. F)	FUEL										MBH IN	MBH OUT	EAT (DEG F)
AHU-1	DAIKIN DM46VCOB04CN	5	1870	225	140	10.6	15	120 V, 1 PH.	1.0	3/4	48	34	74.7	64.7	NGAS	80	76	58.8	CJ-1	DXTV55-601AA	45	208/3	35.5	40	181	14.6	1-1

REMARKS:
 1. MOUNT ON 4" CONCRETE PAD
 2. INCLUDE LOW AMBIENT COOLING KIT
 3. EXTEND 2" FLUE & 2" AIR INTAKE PIPE THROUGH EXTERIOR WALL. FLUE SHALL BE 10'-0" FROM OA INTAKE.
 4. SIDE RETURN AIR INLET.
 5. ROUTE CONDENSATE DRAIN, SAFE-WASTE (AIR GAP) TO FLOOR DRAIN.
 6. M.C. TO PROVIDE DISCONNECT SWITCH FOR CONDENSING UNIT AND AHU. E.G. TO FIELD INSTALL.
 7. INVERTER COMPRESSOR.
 8. VERTICAL, UPFLOW.
 9. PROVIDE ECONOMIZER CONTROL WITH HONEYWELL WT212 CONTROLLER, ADJUSTABLE DRY BULB SENSOR, HONEYWELL DAMPER ACTUATORS, WIRE DAMPERS, CONTROLLERS, TEMPERATURE SENSORS, TO MAKE SYSTEM COMPLETE AND FULLY OPERATIONAL.

LOUVER SCHEDULE

MARK	LOCATION	MANUFACTURER	MODEL	CFM	FREE AREA (FT2)	VELOCITY (FFM)	SIZE (WIDTH X HEIGHT)	REMARKS
L-1	GEAR RM.	RUSKIN	ELF63T5DX	7500	9.45	753	48"X48"	1-3
L-2, 3	GEAR RM.	RUSKIN	ELF63T5DX	7500	6	625	24"X62"	1-3
L-4, 5	MECH. RM.	RUSKIN	ELF63T5DX	2000	3.05	667	36"X24"	1-3

REMARKS:
 1. PROVIDE FLANGED LOUVER, CAULK AROUND LOUVER, WATER TIGHT.
 2. COLOR SELECTION BY ARCHITECT.
 3. COORDINATE LOCATION/SIZE OF LOUVER AND LINTEL WITH GENERAL TRADES.

SPLIT SYSTEM HEATING/COOLING UNIT SCHEDULE

MARK	MANUFACTURER	MODEL	NOMINAL TONS	TOTAL CFM	MOTOR (WATTS)	INDOOR UNIT						OUTDOOR UNIT						REMARKS			
						COOLING			HEATING			ELECTRICAL			MODEL	VOLTAGE	MCA		MOCP	AIR ON CONDENSER (degrees F)	SEER
						TOTAL MBH	SENSIBLE MBH	EAT DB (degrees F)	EAT MB (degrees F)	HEATING AT 47 F (MBH)	HEATING AT 17 F (MBH)	VOLTAGE	MCA	MOCP							
AHU-2/CU-2	DAIKIN	FXM96	8	2541	1,212	96	67	75.4	62.7	-	-	208/1	10.7	15	REY946	208/1	21.1	25	45	17	2-7
AHU-3/CU-3	DAIKIN	FTX12-NVJJ	1	434	28	10.9	9.4	75.4	62.7	13.50	8.1	FED FROM OUTDOOR UNIT	RX12N-MVJJ	208/1	12.2	15	45	19	19	1-3	

REMARKS:
 1. DISCONNECT KIT
 2. MOUNT ON EQUIPMENT RAILS
 3. WALL MOUNTED THERMOSTAT.
 4. PROVIDE DISCONNECTS & INDEPENDENT POWER FEED TO INDOOR UNITS AND OUTDOOR UNIT.
 5. PROVIDE REFRIGERANT BRANCH SELECTOR BOX MODEL B5046TVJ FOR LOW AMBIENT COOLING DOWN TO -4 DEGREES F. BOX REQUIRES 208 VOLT, 1 PHASE Q10 MCA & 15 MOCP. CONNECT REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS.
 6. PROVIDE 2" FILTER BOX, ACCESSIBLE FROM BELOW.
 7. PROVIDE SMOKE DETECTOR IN RETURN AIR TO AUTOMATICALLY SHUT DOWN AHU/CU UPON SMOKE DETECTION AND SEND A LOCAL ALARM.

ELECTRIC HEATER SCHEDULE

MARK	AREA SERVED - DESCRIPTION	MANUFACTURER	MODEL	TYPE	MBH	KN	VOLTAGE	REMARKS
HTR-1	GEAR ROOM	QMARK	CHB504F	WALL MOUNTED - SURFACE	16.3	4.8	208 V, 1 PH	1-3

REMARKS:
 1. PROVIDE INTEGRAL DISCONNECT & THERMOSTAT.
 2. PROVIDE OVERLOAD PROTECTION.
 3. SURFACE MOUNTED.

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