

DETAILED UNIT INFORMATION

BUILDING	AHU #	LOCATION	SYSTEM TYPE	EXISTING CONTROLS	DIMENSIONS (LxWxH)	DUCT CONNECTIONS			CFM	S.P.	HP	FILTER RACK	NOTES
						SUPPLY	RETURN	O.A.					
POTTER	AHU-B	ROOM 115	DX	PNEUMATIC	57x121x70	47x43 (END)	117x60 (END)	NA	73,680	5.5	30		1.2
POTTER	NEW ADDITION AHU	ROOM 208	DX	PNEUMATIC	141x115x85	111x38 (END)	115x32 (END)	108x31 (TOP)	19,565	3.75	30		1.2
POPPELWELL	3RD FLOOR (AHU-C)	ROOM 310	DX	PNEUMATIC	57x123x60	114x54 (END)	114x52 (END)	NA	18,950	6.5	30		1.2
BLUM S.U.	AHU-A	ROOM 232	CHILLED WATER	AUTOMATED LOGIC	100x93x78	91x25 (TOP)	93x42 (END)	NA	13,170	2.25	7.5	108x46	1.3
BLUM S.U.	SOUTH DINING (AHU-E)	ROOM 232	CHILLED WATER	AUTOMATED LOGIC	100x93x78	86x24 (TOP)	93x42 (END)	NA	13,170	2.25	7.5	108x48	1.3
BLUM S.U.	NORTH DINING (AHU-F)	ROOF PENTHOUSE	CHILLED WATER	AUTOMATED LOGIC	41x88x80	64x20 (TOP)	85x45 (END)	NA	9,550	2.25	7.5		1.3
BLUM S.U.	KITCHEN (AHU-G)	ROOF PENTHOUSE	CHILLED WATER	AUTOMATED LOGIC	41x88x80	60x20 (TOP)	85x45 (END)	NA	8,550	2.25	7.5		1.3
LOONEY	ATHLETICS AHU	ATHLETICS OFFICE	DX	PNEUMATIC	41x70x80	43x19 (TOP)	66x44 (END)	NA	6,000	2.25	5		1.2
LOONEY	HYPER OFFICE (AHU-E)	ROOM 213	DX	PNEUMATIC	82x78x38	72x30 (TOP)	75x33 (END)	NA	6,740	2.0	5		1.2
					37x64x49	58x23 (TOP)	61x26 (END)	NA	4,170	2.0	3		1.2

Notes:

1. Installation, check, test, and factory start-up.
2. Install new associated condensing unit.
3. Install new owner furnished control valves.

1.0 General

A. Existing as-built drawings and schedules provided for reference only.

1.1 Potter Hall

A. Existing unit schedules.

CONDITIONER SCHEDULE														
COND. NO.	SUPPLY AIR BLOWER			AIR FILTERS			COOLING COIL			RETURN-EXHAUST BLOWER			REMARKS	
	C.F.M.	TOTAL S.F.	HP	OVERALL SIZE	UNIT	W.T.U.M. CAPACITY	ENTERING AIR D.B.	N.B.	ENTERING AIR D.B.	N.B.	C.F.M.	S.F.		
1"	14,125	5 1/2"	20	6'0" x 6'0"	1/2"	459,900	75.0	60.4	50.0	49.5	14,125	5 1/2"	30"	
8"	23,600	5 1/2"	30	11'3 1/2" x 7'4 1/2"	1/2"	604,000	75.0	60.5	50.0	49.6	21,740	5 1/2"	30"	
12"	30,550	5 1/2"	5	4'10" x 25' x 2"	—	99,200	79.6	65.6	50.0	48.4	—	—	—	
20"	11,550	8 1/2"	10	8'18" x 5'3 1/2" x 2'1 1/4"	1/2"	931,000	80.4	66.4	50.0	49.5	10,550	8 1/2"	30"	
24"	4,000	8 1/2"	6	5'3 1/2" x 2'1 1/4"	1/2"	192,000	75.0	60.8	50.0	49.7	6,000	8 1/2"	27"	

New Addition AHU Schedule

CONDITIONER - 19,565 ϕ - 3.75" E.S.P. - 5.25" T.S.P. -
24.5" AF FAN - 30 HP - 460V - 3 ϕ - 590 MBH
SENSIBLE & 780 MBH TOTAL COOLING - 83° EDB -
67° EWB - 55° LDB - 54° LWB - MAX. 45° SST -
35 ϕ COIL FACE AREA - MAX. 1" WET COIL P.D. -
210 KW, ELECTRIC HEAT COIL - 460V - 3 ϕ -
4,000 ϕ MIN. OUTSIDE AIR - PIPE CONDENSATE
DRAIN TO RFD FULL SIZE OF UNIT TAPPING -
INSTALL TRAP WITH 6" WATER SEAL IN LINE
AT COIL

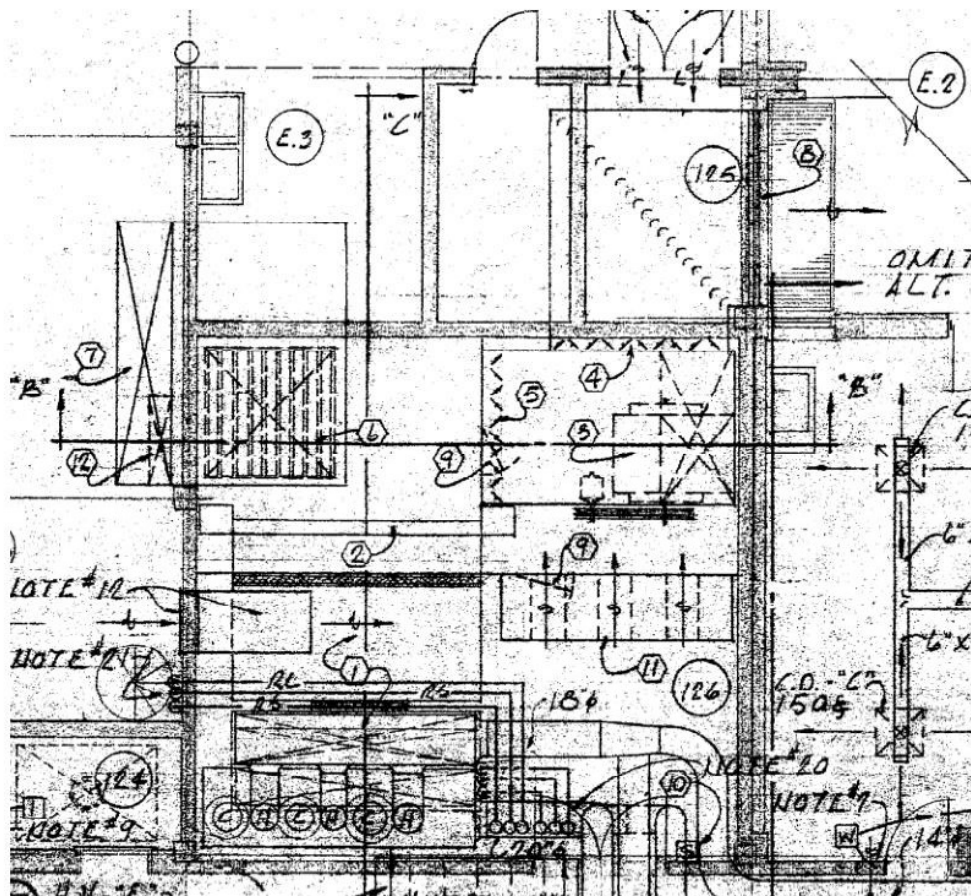
CONDENSER - 150 FLA - 460V - 3 ϕ -
780 MBH AT 105° OAT - MAX. 45° SST -
MINIMUM OF 4 CAPACITY STEPS
WITH LOWEST STEP TO HAVE HOT
GAS BYPASS - ELECTRICAL CONTRACTOR
TO CONNECT UP POWER & CONTROL
WIRING FOR DX SOLENOID VALVES
& HOT GAS BYPASS VALVE

B. AHU-B:

Remove and replace existing return fan in return plenum.

Retain existing condensing unit (R407c) and refrigerant piping for reconnection.

Reuse existing refrigerant piping where applicable and provide all new appurtenances.







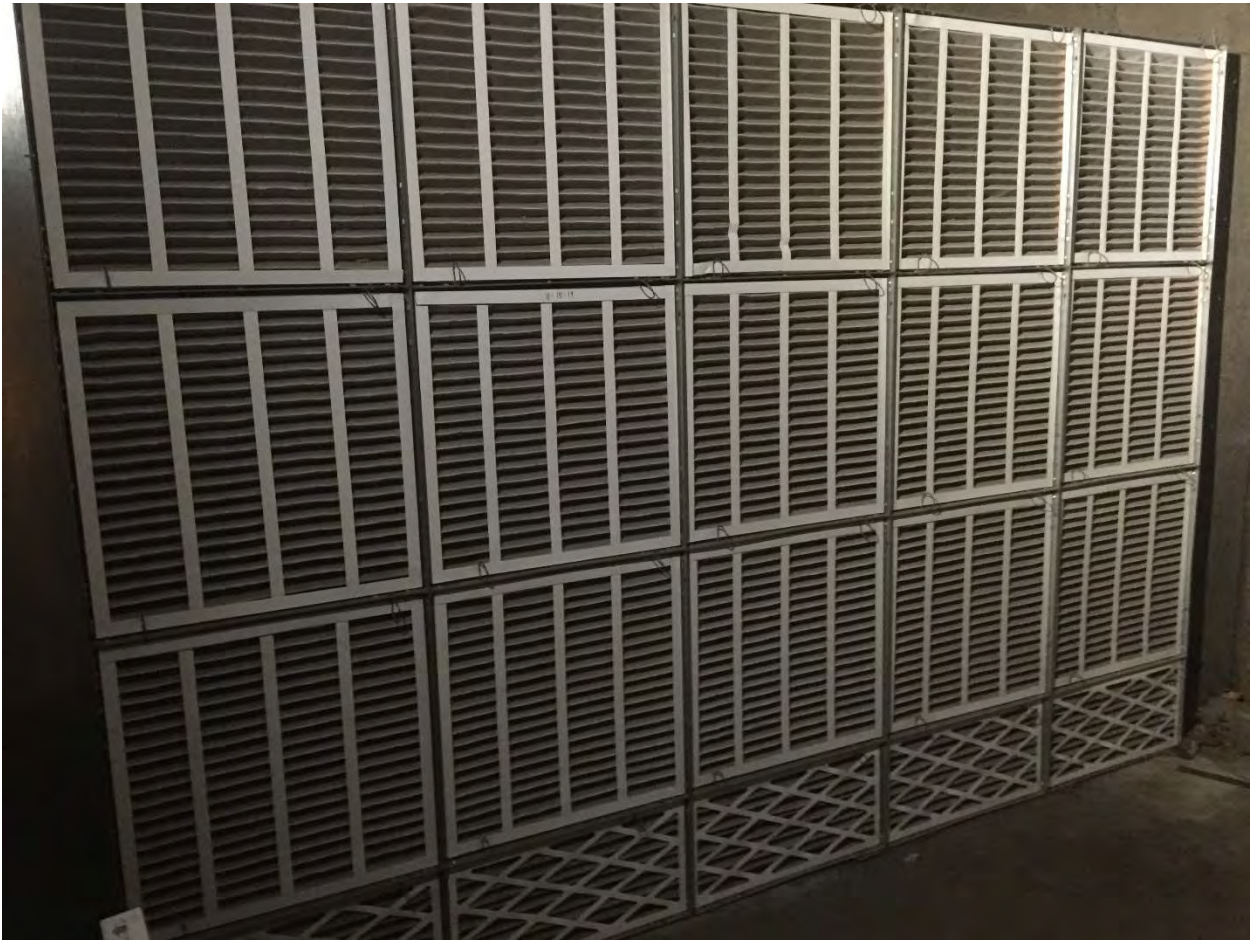
Supply fan connection



Return air connection



Unit mounting

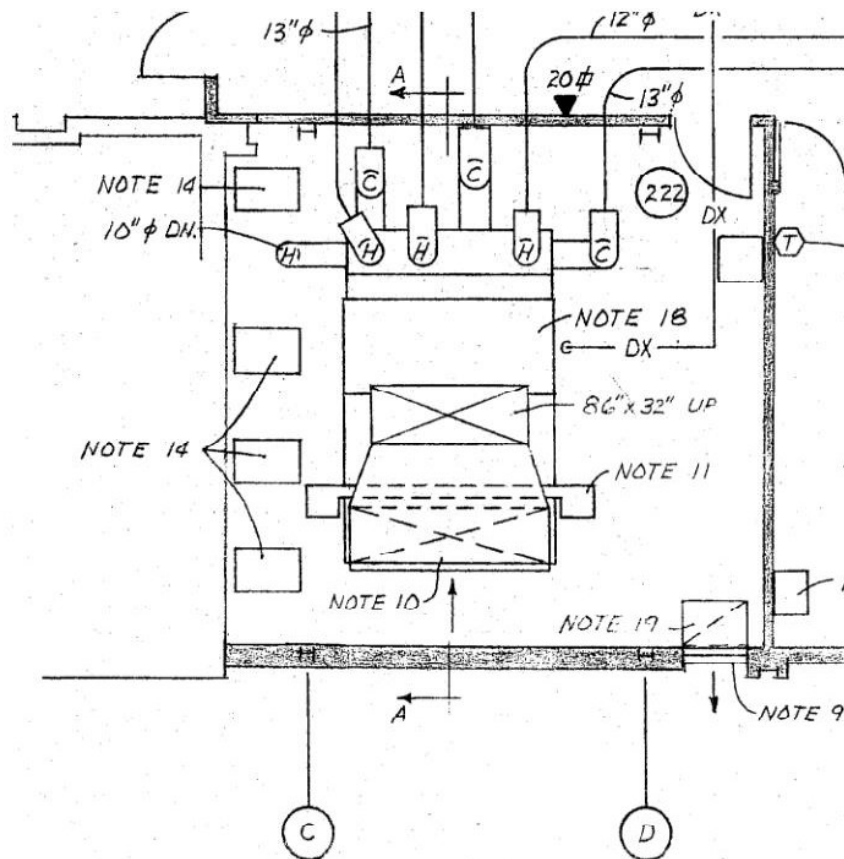


Filter rack



Mechanical room access

- C. New addition AHU:
Replace existing associated condensing unit and refrigerant piping.







Supply air connection



Return air (open) and outside air connection



Unit mounting



Unit mounting



Mechanical room access

1.2 Popplewell Hall

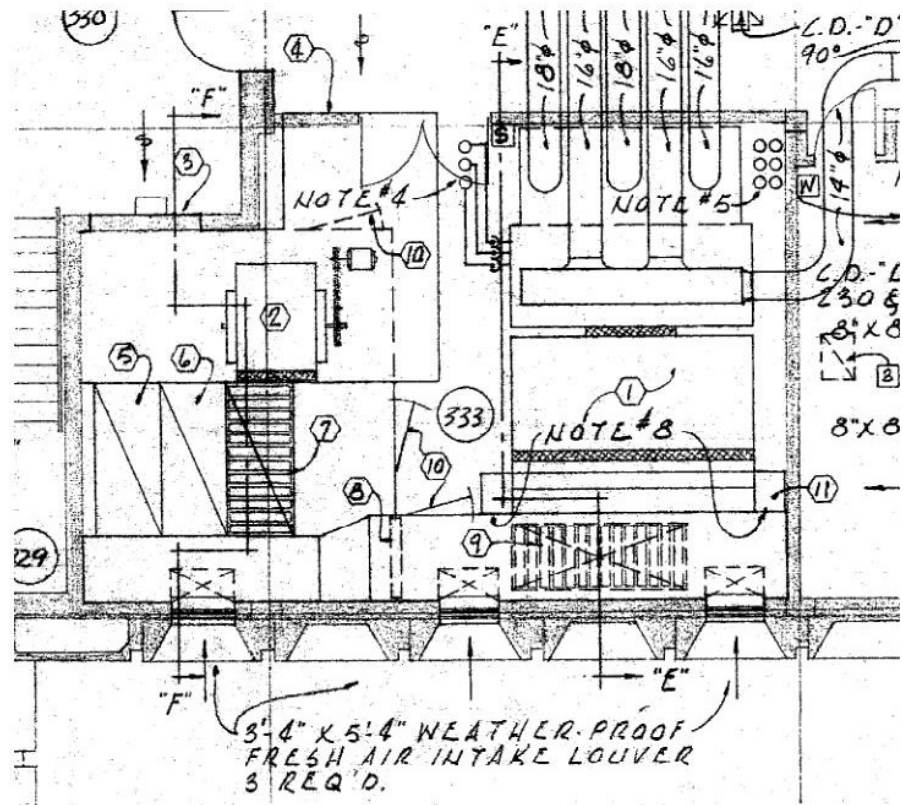
A. Existing unit schedule.

CONDITIONER SCHEDULE														
COND. NO.	SUPPLY AIR BLOWER			SE FANS			COOLING COIL			RETURN AIR FILTER			REMARKS	
	TOT. S.P.	W.P.	HP	OVERALL EFF.	WATER WASH	WATER WASH	ST. CAPACITY	EVAPORATOR	LEAVING AIR	W.P.	W.P.	W.P.	W.P.	W.P.
"A"	99,000	6 1/2"	50	90°	12 3/4" x 6 3/4"	1/2"	554,000	75.6	61.0	50.0	41.6	6	15,835	5
"B"	84,940	6 1/2"	40	90°	10 3/4" x 6 3/4"	1/2"	468,000	72.7	60.4	48.0	41.6	6	10,220	5
"C"	10,960	6 1/2"	80	27°	11 3/4" x 6 1/2"	1/2"	511,000	73.6	61.8	48.5	41.6	6	16,745	5

B. AHU-C:

Remove and replace existing return fan in return plenum.

Replace existing associated condensing unit and refrigerant piping.







Supply fan connection



Return air connection



Filter rack



Mechanical room access

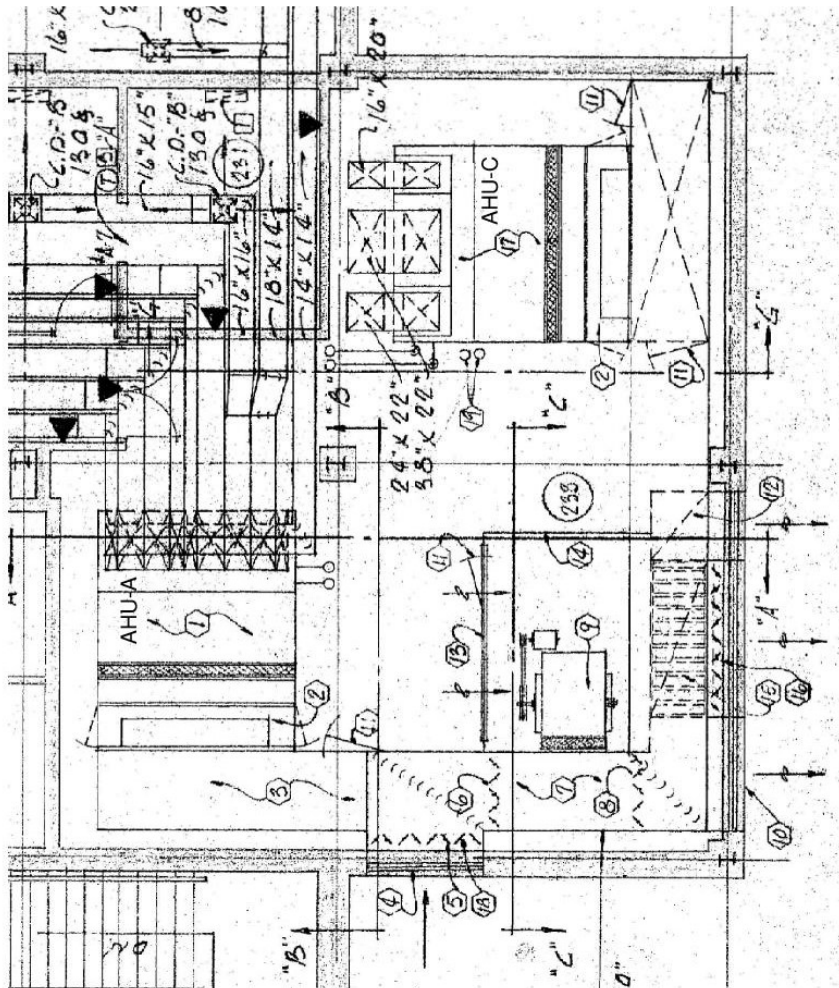
1.3 Blum Student Union

A. Existing unit schedule.

CONDITIONER SCHEDULE														
COND NO.	SUPPLY AIR BLOWER			AIR FILTERS			COOLING COIL			RETURN EXHAUST BLOWER			REMARKS	
	TOTAL C.F.M.	SIZE	HP	OVERALL WIDTH X HGT.	WIDE	WIDE	ENTERING AIR	LEAVING AIR	W.B.	W.B.	C.F.M.	SIZE		
"1"	15,190	8"	7 1/2	2'-20"	10'-0" X 5'-6 3/4"	1/2	70.3	58.0	50.0	49.0	15,190	5"	50"	MIN. 10% F.A. COOLING
"5"	5,800	8"	7 1/2	2'-20"	10'-0" X 5'-6 3/4"	1/2	70.7	57.2	50.0	49.0	5,800	5"	50"	" 10% "
"2"	13,115	8"	7 1/2	2'-20"	10'-0" X 5'-6 3/4"	1/2	70.0	55.3	50.0	49.0	13,115	5"	50"	" 20% "
"3"	23,455	8"	7 1/2	2'-15"	7'-8" X 3'-0"	1/2	70.0	57.2	50.0	49.0	23,455	5"	50"	" 10% "
"4"	2,550	8"	7 1/2	2'-15"	7'-8" X 3'-0"	1/2	75.7	64.1	50.0	49.0	2,550	5"	50"	" 50% "
"6"	6,000	8"	7 1/2	2'-15"	7'-8" X 3'-0"	1/2	77.7	64.8	50.0	49.0	6,000	5"	50"	" 50% "
"7"	20,000	10"	10	2'-15"	10'-0" X 5'-6 3/4"	1/2	100.0	78.0	75.0	68.5	20,000	5"	50"	HEATING ONLY
"11"	2,500	8"	7 1/2	2'-15"	7'-8" X 3'-0"	1/2	70.0	55.3	50.0	49.0	2,500	5"	50"	MIN. 25% F.A. COOLING

B. AHU-A:

- Replace chilled water piping back to isolation valve and provide new valve.
- Reuse existing circulation pumps.
- Provide new temperature gauges.
- Provide new drain valve and piping.
- Provide new circuit setters and pressure gauges.
- Insulate and label chilled water piping.







Supply air connection



Return air connection



Unit mounting



Filter rack – left end



Filter rack – right end



Mechanical room access

- C. AHU-C (see plan above):
- Replace chilled water piping back to isolation valve and provide new valve.
 - Reuse existing circulation pump.
 - Provide new temperature gauges.
 - Provide new drain valve and piping.
 - Provide new circuit setters and pressure gauges.
 - Insulate and label chilled water piping.





Supply air connection



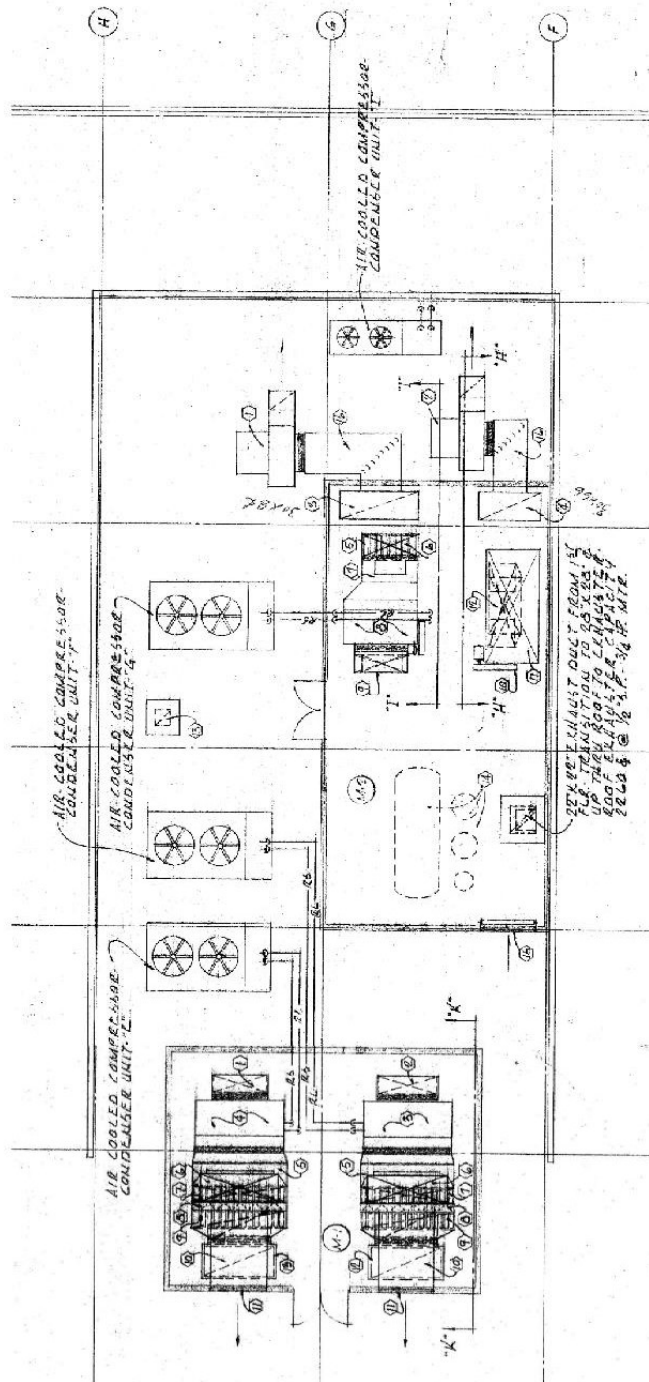
Return air connection



Filter rack

D. AHU-E (South Dining):

- Replace chilled water piping back to isolation valve and provide new valve.
- Reuse existing circulation pump.
- Provide new temperature gauges.
- Provide new drain valve and piping.
- Remove existing return fan. New return fans internal to new unit.
- Provide new circuit setters and pressure gauges.
- Insulate and label chilled water piping.







Supply air connection



Return and outside air connection

- E. AHU-F (North Dining) See plan above:
Replace chilled water piping back to isolation valve and provide new valve.
Reuse existing circulation pump.
Provide new temperature gauges.
Provide new drain valve and piping.
Remove existing return fan. New return fans internal to new unit.
Provide new circuit setters and pressure gauges.
Insulate and label chilled water piping.





Supply air connection



Return and outside air connection

- F. AHU-G (Kitchen) See plan above:
Replace chilled water piping back to isolation valve and provide new valve.
Reuse existing circulation pump.
Provide new temperature gauges.
Provide new drain valve and piping.
Provide new circuit setters and pressure gauges.
Insulate and label chilled water piping.





Supply air connection



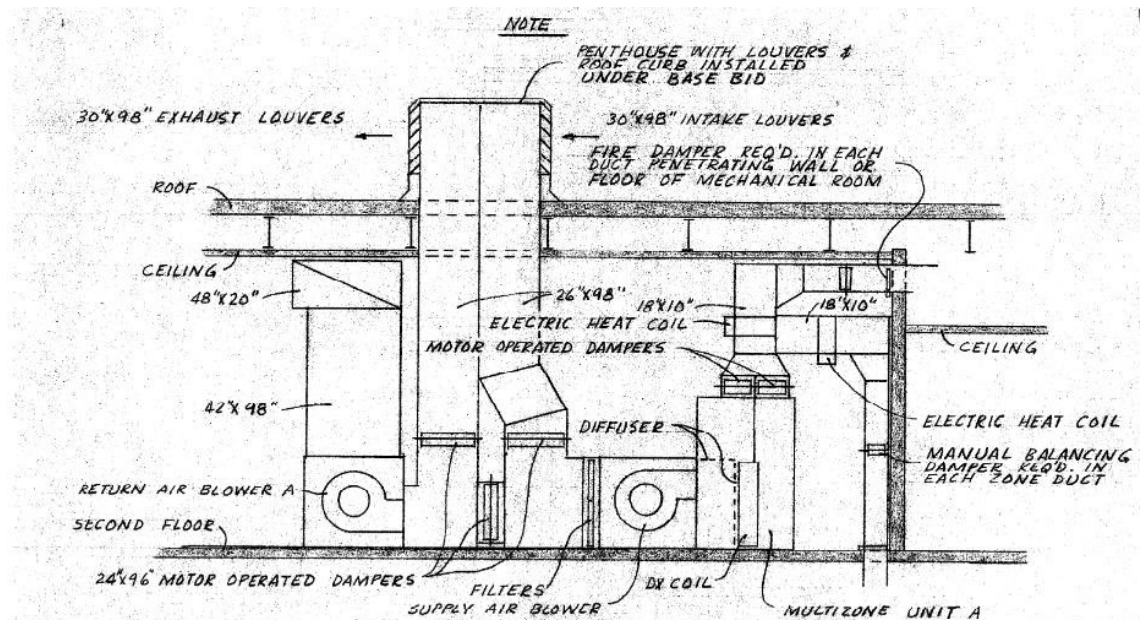
Return and outside air connection

1.4 Looney Hall

A. Existing unit schedule.

CONDITIONER SCHEDULE												
COND. NO.	SUPPLY AIR BLOWER			FILTERS	COOLING COIL					B.F.P. FACE	MIN. FLOW	REMARKS
	C.F.M.	TOTAL S.P.	MTR. HP.	SUPPLYER DIA.	NUMBER & SIZE	SENSIBLE	TOTAL	D.B.	W.B.	O.B.	W.B.	
"A"	14,080	2"	7½	2-18"	15-20" X 25" X 2"	395,000	647,000	73.0	60.8	50.0	49.5	28.5
"B"	14,080	2"	7½	2-18"	15-20" X 25" X 2"	395,000	647,000	73.0	60.8	50.0	49.5	28.5
"C"	13,510	2"	7½	2-18"	12-20" X 25" X 2"	381,500	631,200	73.0	60.8	50.0	49.5	19.4
"D"	13,090	2"	7½	2-18"	12-20" X 25" X 2"	367,000	615,500	73.0	60.8	50.0	49.5	19.4
"E"	4,170	2"	5	15"	4-20" X 25" X 2"	80,000	110,000	73.0	60.8	50.0	49.5	7.2

Athletics Office AHU Schedule/Detail



SECTION A

SCALE 1/4"=1'-0"

MULTIZONE A

6,740 CFM - 0.5" ESP - 2.0 TSP - 3 HP - 18" DIA. FC FAN - 1050 CFM MIN. OA -
DX COIL - 164 MBH SENSIBLE - 240 MBH TOTAL - 14 FT.
FACE AREA - 17 IN. X 10 IN. - 80° EDB - 6 TZW'S - 11 DAMPER SETS
PIPE DX COIL DRAIN PAN TO FLOOR DRAIN

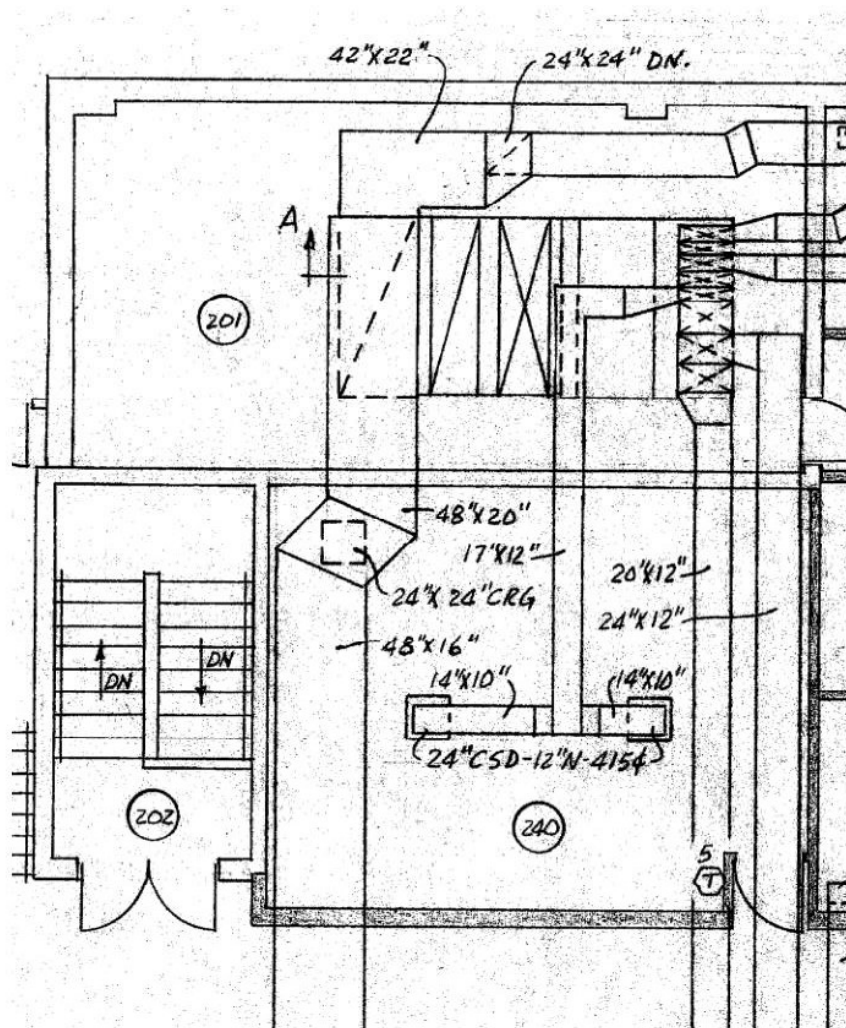
ZONE	CFM	NO. DAMPER SETS	HEAT COIL KW
1	775	1	10
2	545	1	10
3	645	1	10
4	545	1	10
5	830	1	10
6	1,100	2	10
7	1,020	2	10
8	1,280	2	10

RETURN BLOWER A

6,740 CFM - 0.375" SP - 1 1/2 HP -
20" DIA. FC FAN

B. Athletics Office AHU:

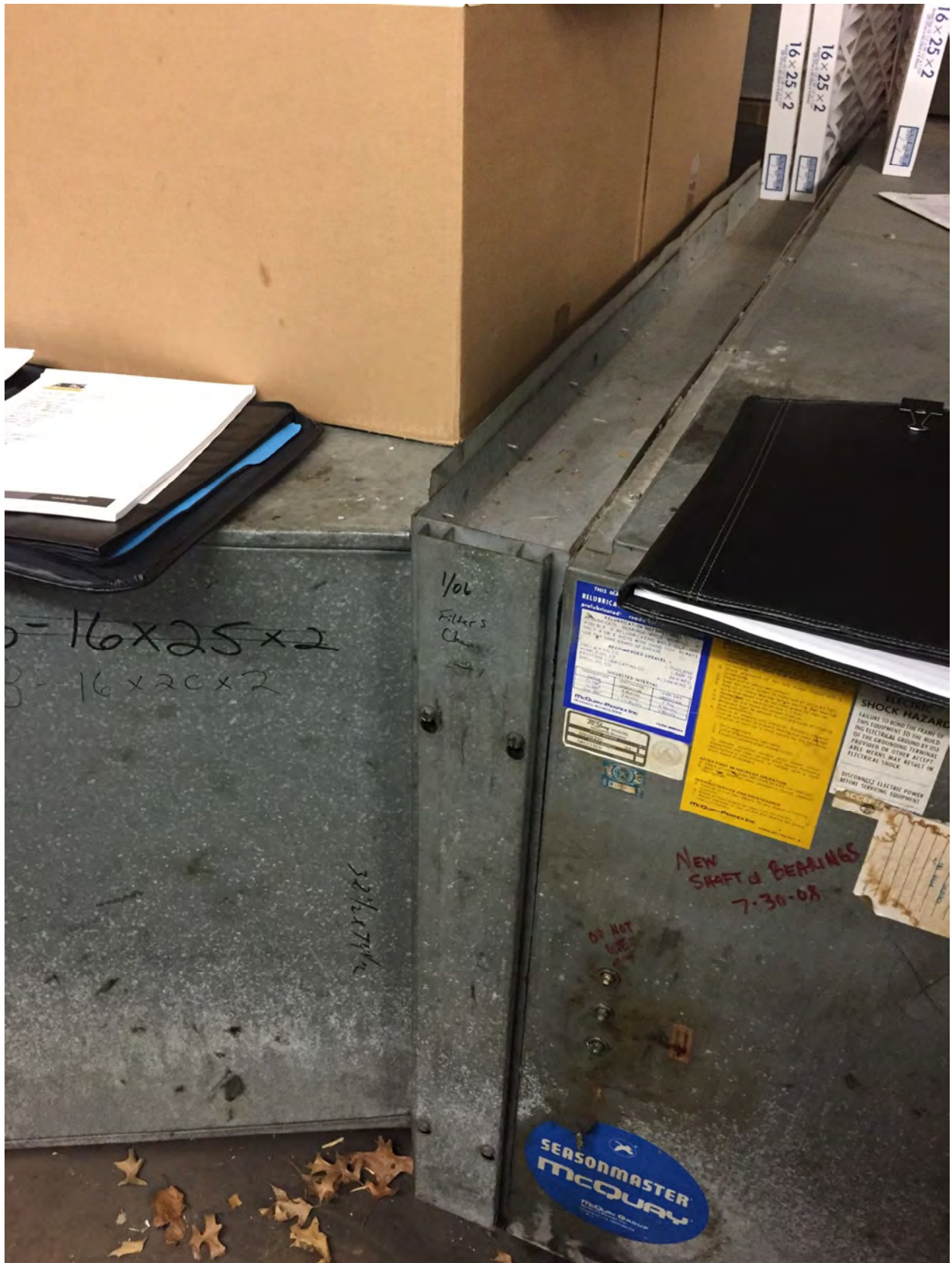
Replace existing associated condensing unit and refrigerant piping.
Remove existing return fan. New return fans internal to new unit







Supply air connection



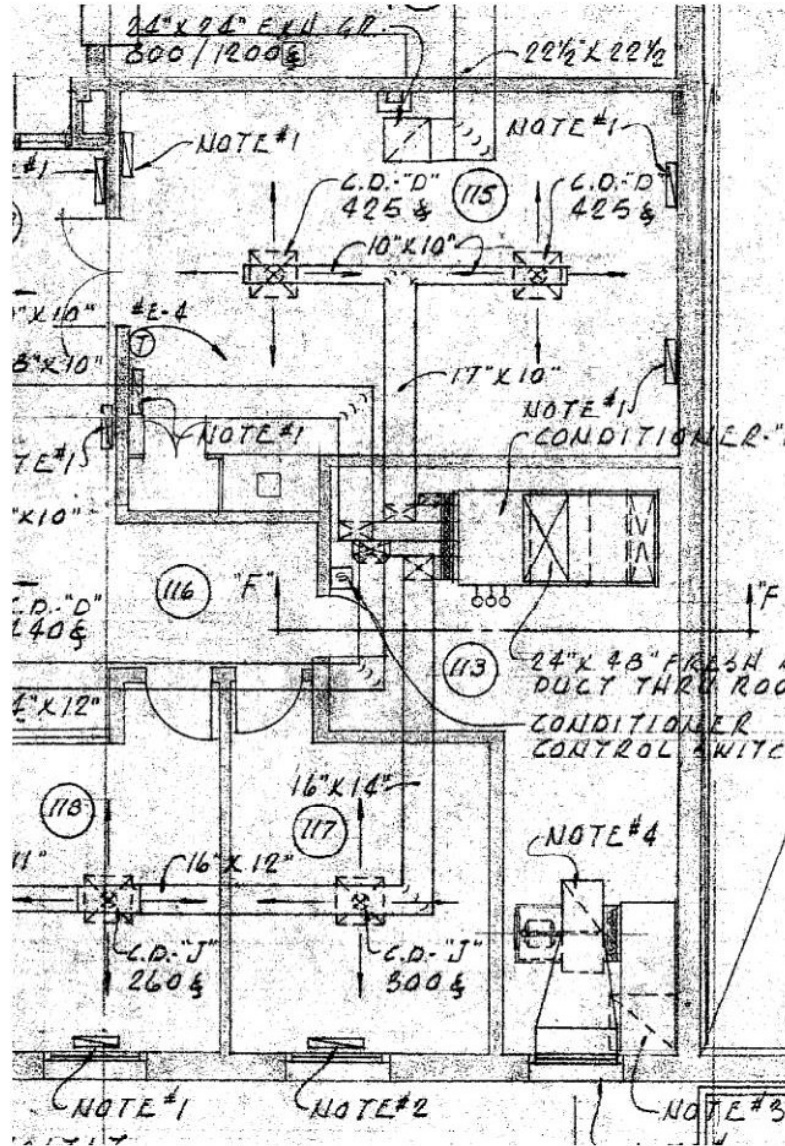
Return air connection



Mechanical room access

C. AHU-E (Hyper Office):

Replace existing associated condensing unit and refrigerant piping







Supply air connection



Return air connection



Unit mounting



Mechanical room access