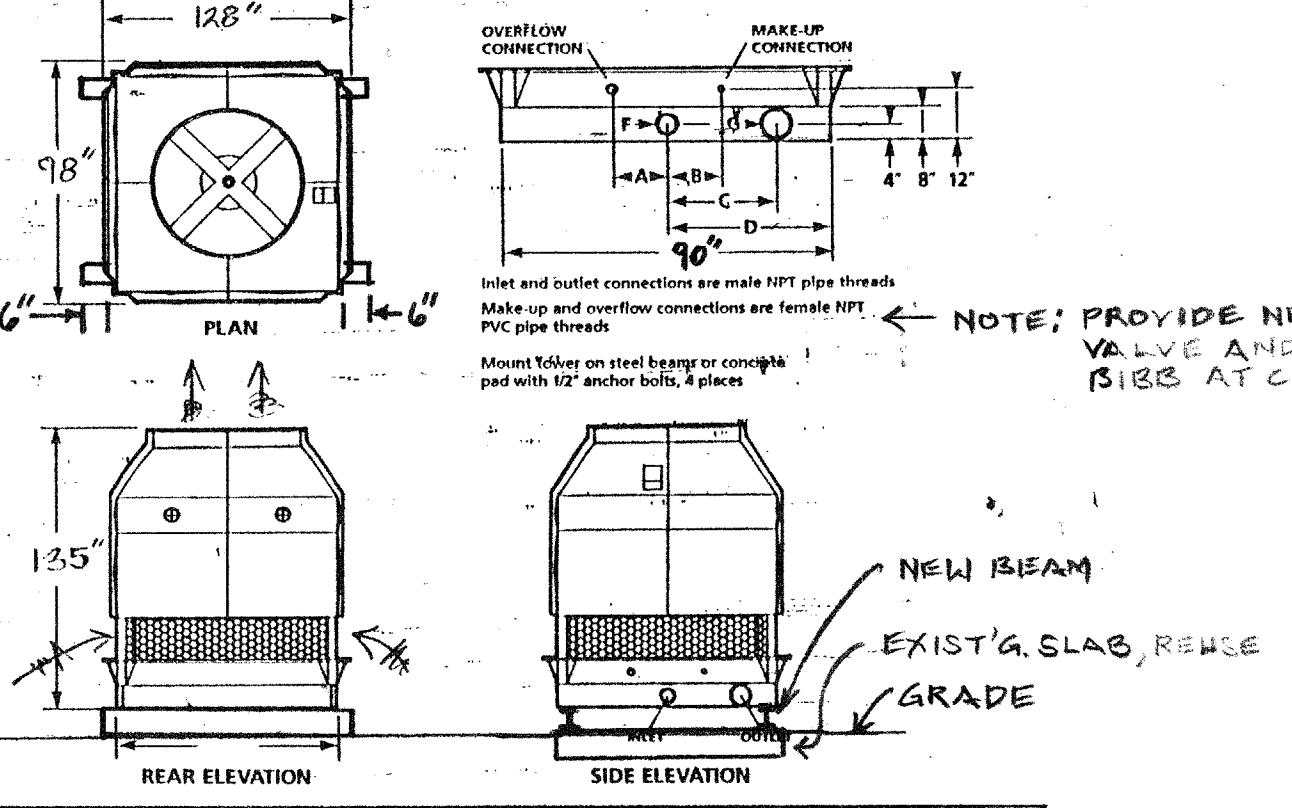
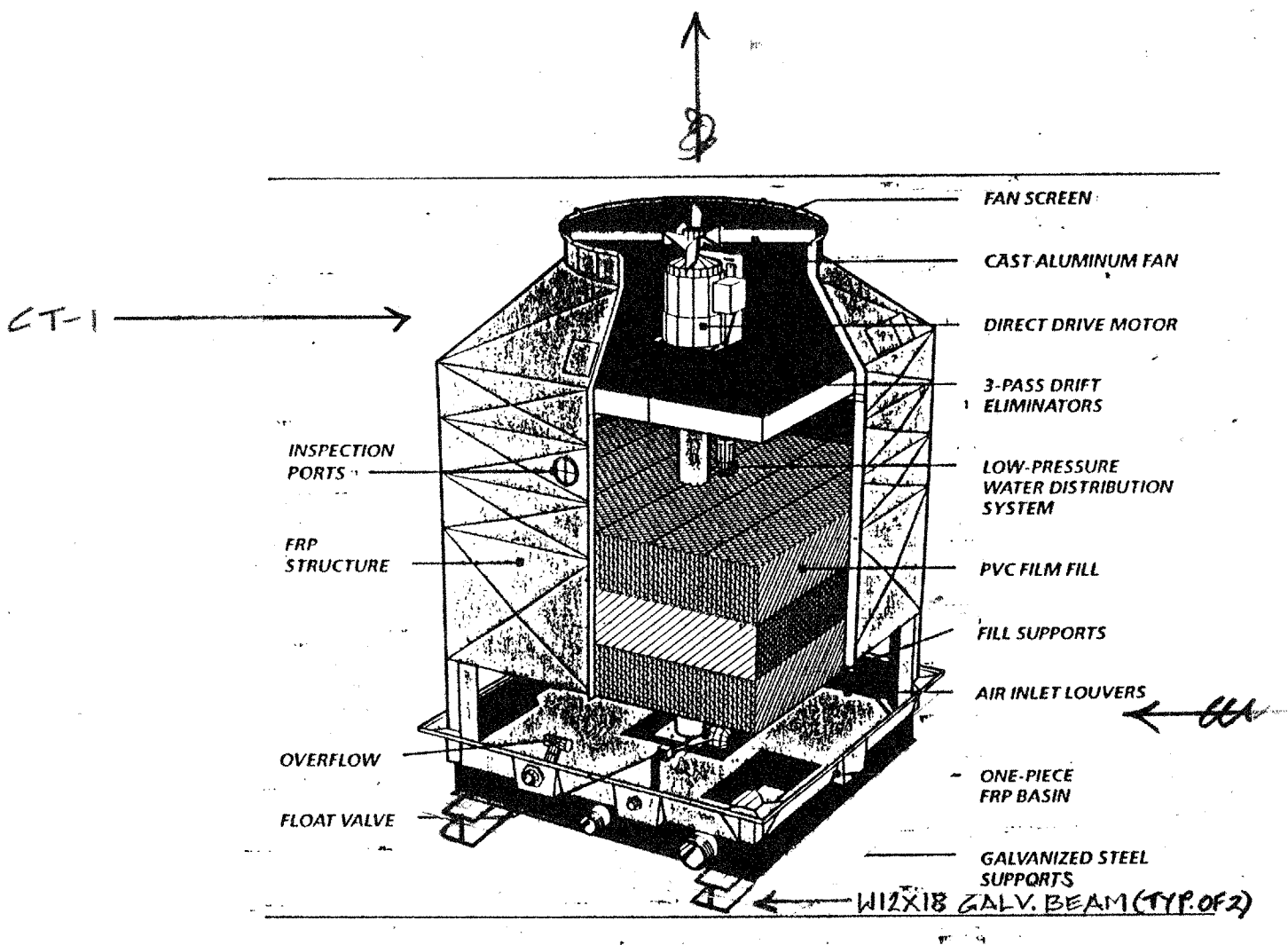


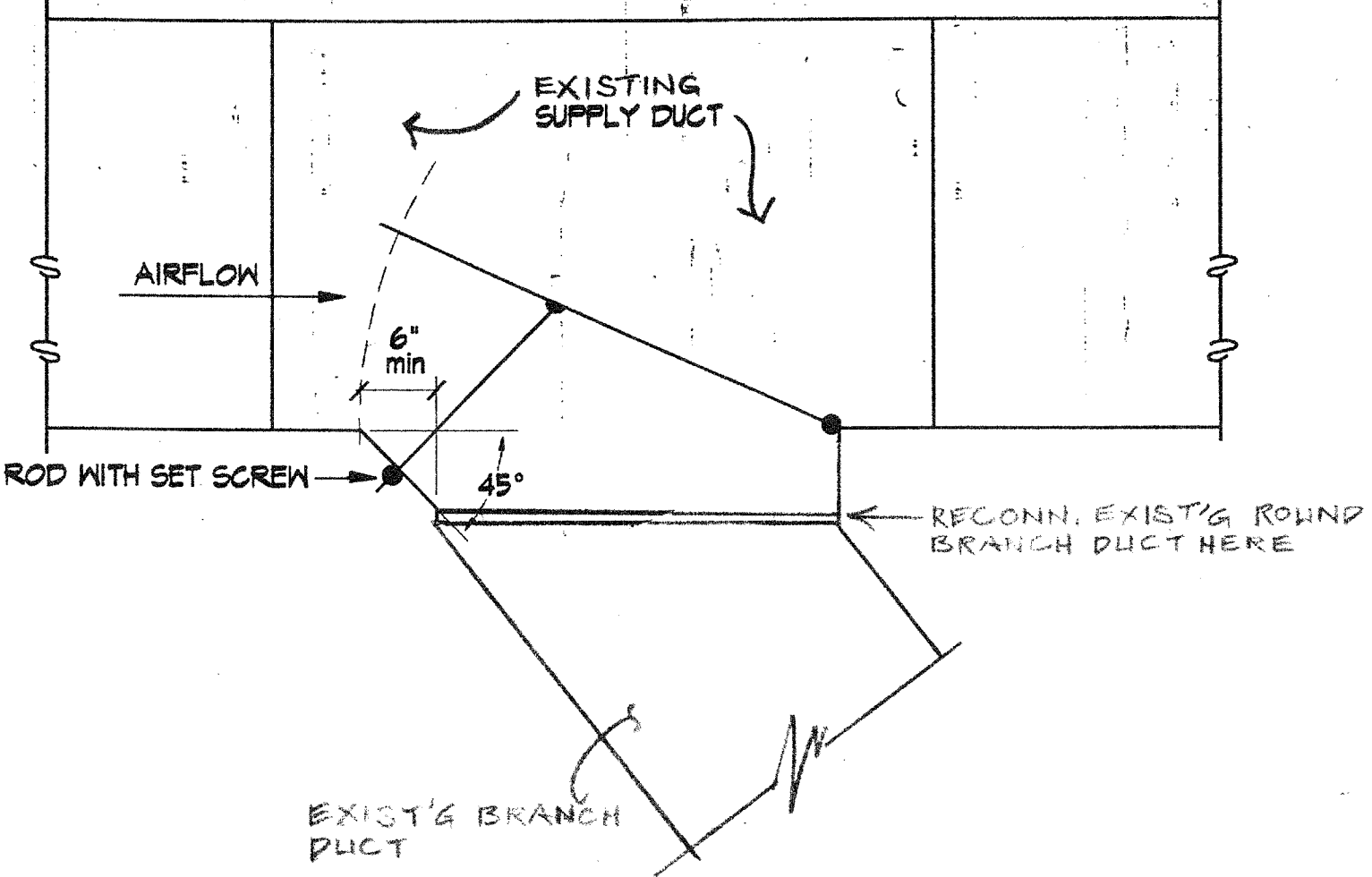
VALVE & FITTING LEGEND	
NOTE: ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS	
1	TEST PLUG (TEMP. & PRESSURE)
2	BALL VALVE
3	CHECK VALVE 1/2" BRASS
4	SLUICED VALVE
5	CHECK VALVE
6	GAS COCK
7	COKE VALVE
8	BUTTERFLY VALVE
9	MULTIPLIER BUTTERFLY VALVE
10	TISSIMAN VALVE
11	HOSE END
12	WELL HYDRANT
13	YARD HYDRANT
14	SHOWER DRAIN
15	FLOOR DRAIN
16	AREA DRAIN
17	ROOF DRAIN
18	OVERFLOW ROOF DRAIN
19	AIR DRAIN
20	VENT THRU ROOF
21	FCO CLEAROUT IN FLOOR
22	FCO CLEAROUT IN LINE
23	FCO CLEAROUT AT GRADE
24	FCO CLEAROUT IN WALL
25	WYE SUBMERGIBLE WALL VALVE BLOW DOWN
26	UNION
27	FLANGE CONNECTION
28	PRESSURE GAUGE 1/2" BALL VALVE
29	DIRECTION OF SLUICED VALVE/DRIP
30	BACKFLOW PREVENTER
31	TELESCOPE CONNECTION
32	AUTOMATIC AIR VENT W/BALL VALVE STOP
33	FIELD FABRICATED SHOCK ARRESTOR, 24" HIGH, LINE SIZE

PIPING LEGEND	
NOTE: ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS	
S	SANITARY SYMBOL
CS	CROSS WALK
PL	PLUMBING VENT
SD	STORM DRAIN
OSD	OVERFLOW STORM DRAIN
DL	DOMESTIC COLD WATER MAIN
DHW	DOMESTIC HOT WATER (HW)
DHR	DOMESTIC HOT WATER RECIRCULATION
WSP	WATER SERVICE LINE
A	AIR LINE
F	FUEL LINE
G	CONDENSATE RETURN
HL	REFRIGERANT LIQUID LINE
HS	REFRIGERANT SUCTION LINE
CHS	CHILLED WATER SUPPLY
CHRS	CHILLED WATER RETURN
HWS	HEATING WATER SUPPLY
HWSR	HEATING WATER RETURN
CWS	COOLING WATER SUPPLY
CWSR	COOLING WATER RETURN
EL	EQUIPMENT OR FIXTURE DRAIN LINE
SDR	SUBSOIL DRAIN
V	VACUUM
N	NITROGEN
C	CORROSION
U	UNDER FLOOR
HPS	HIGH PRESSURE STEAM
HPSR	HIGH PRESSURE CONDENSATE RETURN
LPS	LOW PRESSURE STEAM
LPSR	LOW PRESSURE CONDENSATE RETURN
P	PUMPED WASTE OR STORM FLOW
F	FURNACE GAS CONDENSATE DRAIN
AW	ACID WASTE
AV	ACID VENT
PE	PT. OF CONN. NEW TO EXISTING
WM	WALL METER
CM	CASE METER
RGR	LB'S/OZ'S GAS REGULATOR
250	250 CFH FLOW VENTED TO OUTDOORS
DOM	DOM. WTR. SUPPLY WITH CHROMIUM STOP BIT AND CONN. TO FUTURE
PT	PIPE TURN, DOWN
PTU	PIPE TURN, UP
PT90	PIPE TURN, 90° ELLS
PTT	PIPE TURN, TEE FROM TEE
PTD	PIPE RUN, TEE DOWN
PTU	PIPE RUN, TEE UP
PTC	CHANGE IN PIPE SIZE

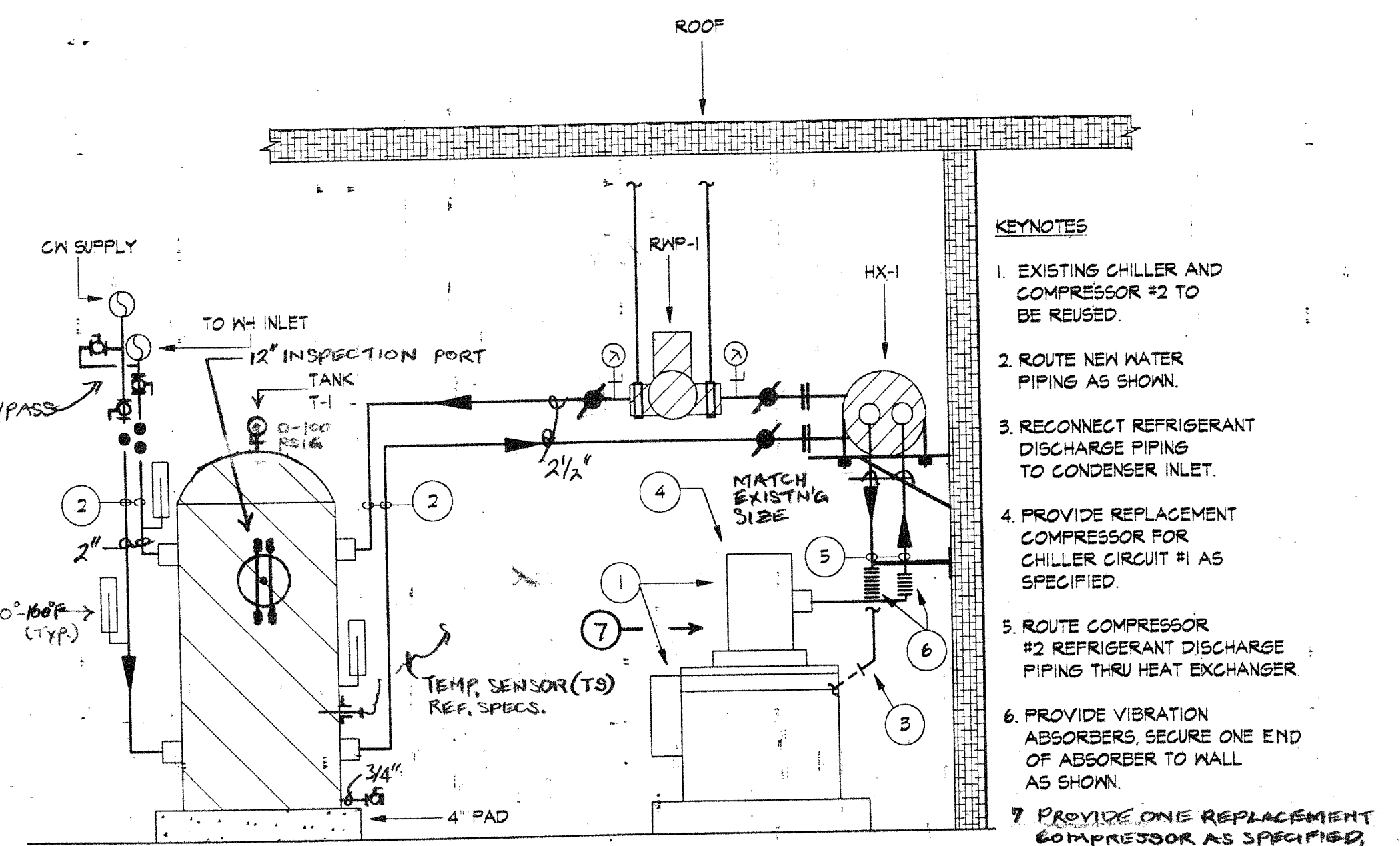
ELECTRICAL SYMBOL LEGEND	
NOTE: ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS	
FL	FLOURESCENT LIGHT FIXTURE
FLC	FLOURESCENT CHIMP LIGHT FIXTURE
EL	EXIT LIGHT FIXTURE
ELC	EXIT LIGHT FIXTURE WITH DOWNLIGHT
ELM	EMERGENCY BATTERY PACK FIXTURE (100 LUMENS MIN. RATED)
ELM	EMERGENCY BATTERY PACK FIXTURE FOR FLOURESCENT FIXTURE
ELD	EXIT LIGHT FIXTURE, DENOTES DIRECTION
1	SINGLE POLE SWITCH
2	DOUBLE POLE SWITCH
3	THREE-WAY SWITCH WITH TRAVELLERS
4	FOUR-WAY SWITCH
5	SWITCH WITH PULL LIGHT
6	MOTOR RATED SWITCH
7	KEYED SWITCH
8	TRANSFORMER
9	TRANSFORMER
10	SMOKE DETECTOR
11	FIRE ALARM
12	TELEVISION OUTLET
13	TELEVISION OUTLET
14	TELEVISION OUTLET
15	CLOCK OUTLET
16	CONDUIT CONNECTION (HOT & GND)
17	CONDUIT CONNECTION (HOT & GND)
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99	CONDUIT CONNECTION (HOT & GND)
100	CONDUIT CONNECTION (HOT & GND)



3 COOLING TOWER DETAIL NO SCALE



6 DIVERTER DETAIL NO SCALE



2 DESUPERHEATER PIPING SCHEMATIC NO SCALE

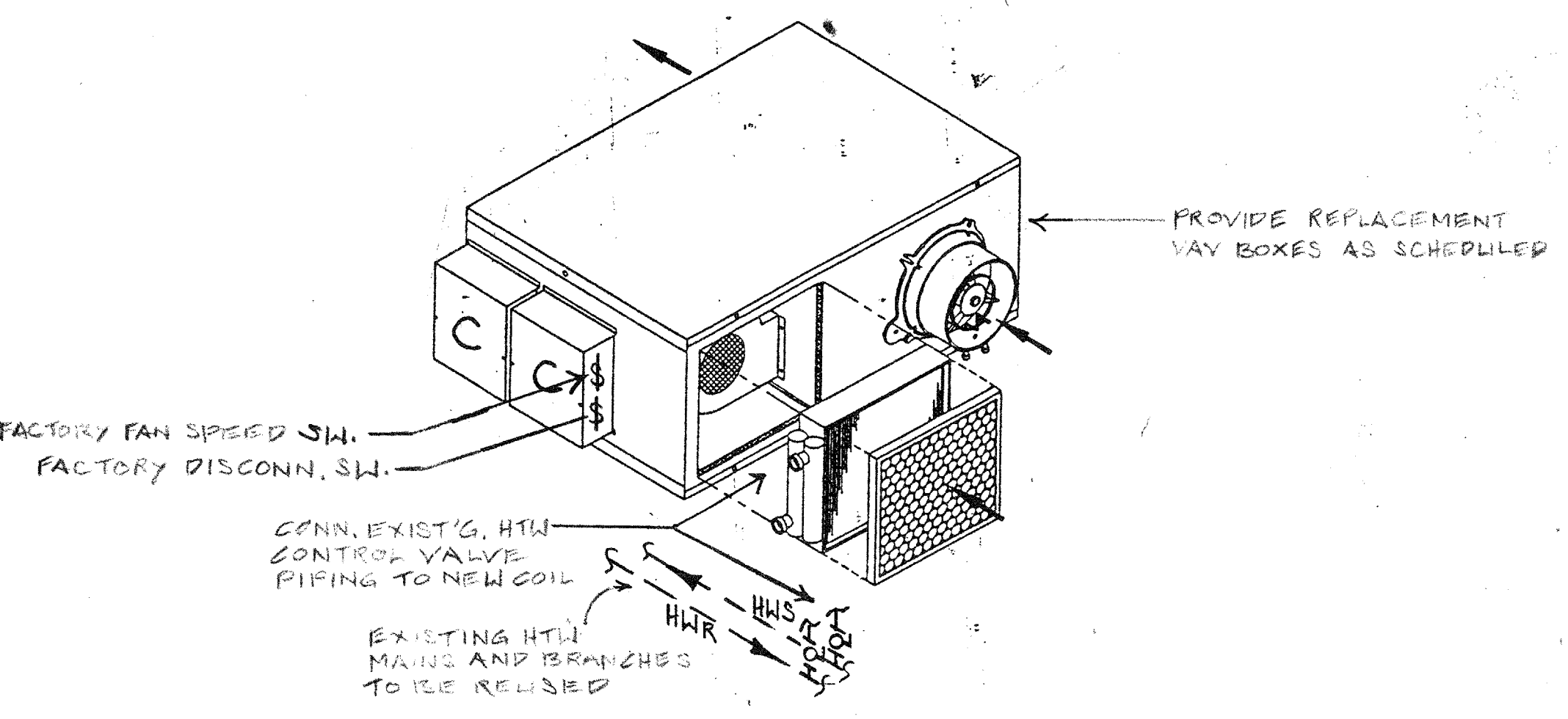
COOLING TOWER SCHEDULE											
DESIGNATION	HEAT REJECTION BTUH	AMB WB	WATER		FAN		MOTOR		MANUFACTURER & MODEL NO.	GROSS WT.	REMARKS
			GPM	EWT	LWT	NO.	DIA.	HP	ELECTRICAL		
									VOLT PHASE		
CT-1	3275,000	78	459	95	85	1	60	1	7.5 480 3	CERAMIC XL75FP3	7,800 REF. SPEC.

PUMP SCHEDULE										
DESIGNATION	SERVES	LOCATION	GPM	TOTAL HEAD, FT.	PUMP EFF.	MOTOR		WEIGHT	MANUFACTURER & MODEL NO.	REMARKS
						HP	RPM	ELECTRICAL		
								VOLT PHASE		
RWP-1	HX-1	MECH. RM	104	36	63%	2	1750	480 3	240	BFG SERIES 902A REF. SPECS

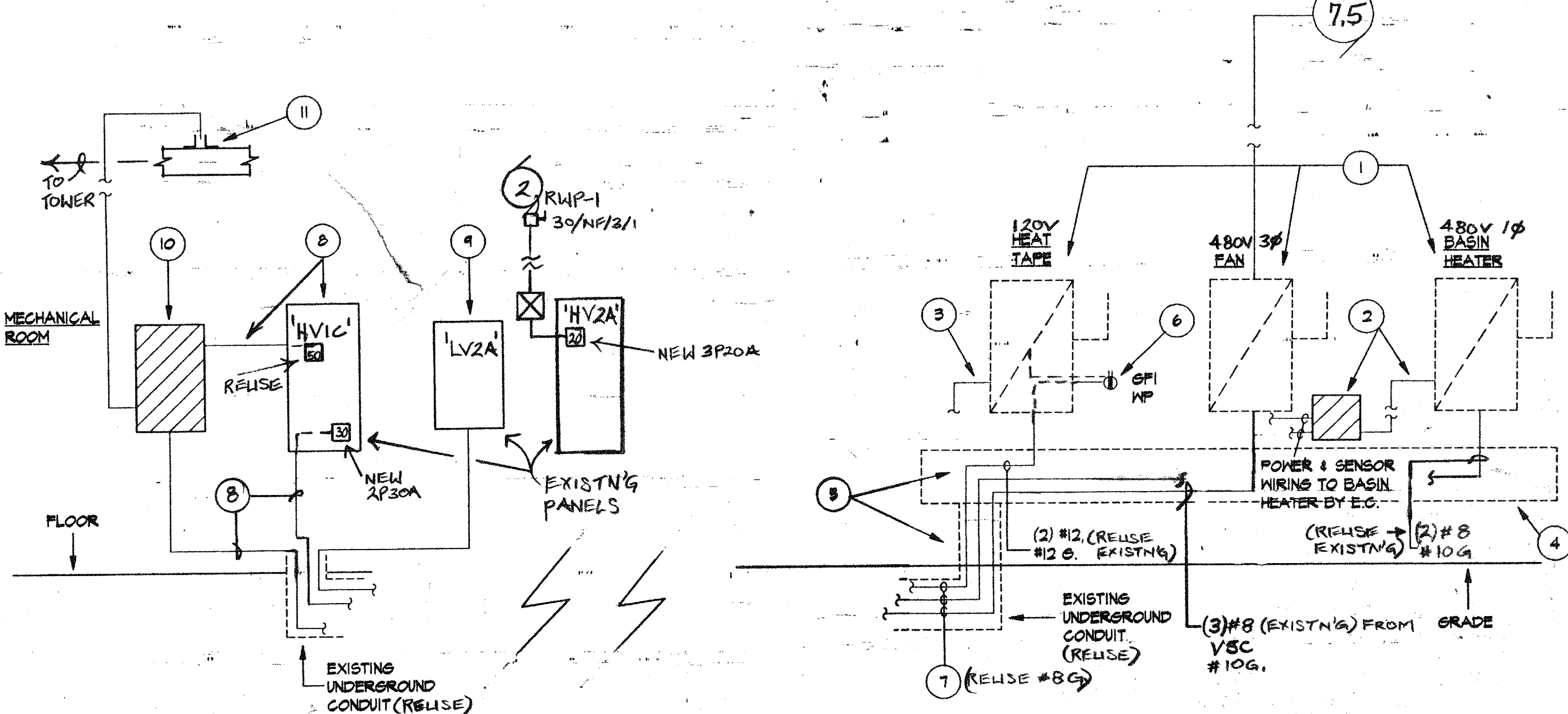
HEAT-X SCHEDULE												
DESIGNATION	TYPE	HOT SIDE (R-22)				COLD SIDE (H ₂ O)				MANUFACTURER & MODEL NUMBER	REMARKS	
		LG	IN	OUT	PSI	FOULING FACTOR	GPM	EWT	LWT	FOULING FACTOR		
HX-1	PLATE	180	116	1.1	0.00	104	65	85	18.5	0.0000	BFG BPR422-42	REF. SPECS.

POWERED INDUCTION BOX SCHEDULE										
DESIGNATION	NOMINAL COOLING, CFM @ 0.5 C.S.P.	INLET SIZE	FAN SIZE	FAN VOLT/PHASE	HEATER	MANUFACTURER & MODEL NO.	REMARKS			
		CLG. INCH	INCH		GF/HP					
1-7	1700	400	10 3/8	277/1	2 1/1	TRANE PAR171273SPD 0203	REF. SPECS.			
5-9, 11, 12	600	60	6 3/8	277/1	1 1/2	TRANE PAR060277 532 0203				
9, 10, 13	1100	250	8 3/8	277/1	1 1/2	TRANE PAR111277 3312 0203				

O/A SCHEDULE	
AHL	O/A CFM
2	250
3	300
1/6	500
7	500
8	150
9	160



1 PIB DETAIL NO SCALE

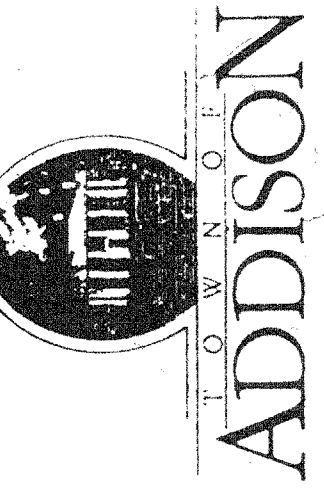


4 ELECTRICAL RISER AT MECH. ROOM NO SCALE

5 ELECTRICAL RISER AT COOLING TOWER NO SCALE

SHEET NO.	
BASE	COMPOSITE
1	
2	
3	
4	
5	

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Consulting Engineers
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GROUND FLOOR HVAC PLAN

drawn: [signature]
chk'd: [signature]
date: 1/18/97
revisions:

no. date

ME-1