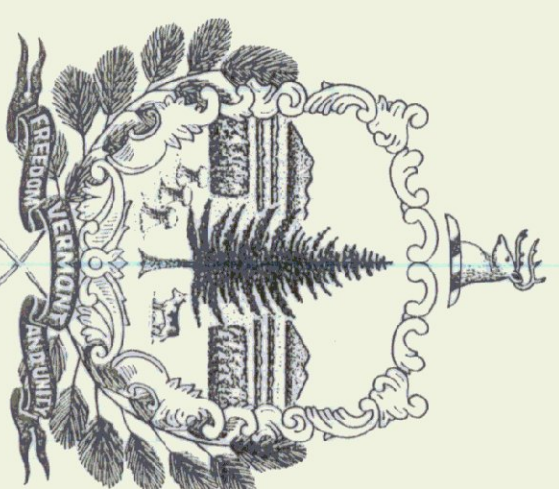


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STATE OF VERMONT
CONCRETE TEST LABORATORY
BARRE - MONTPELIER ROAD
BERLIN, VERMONT**

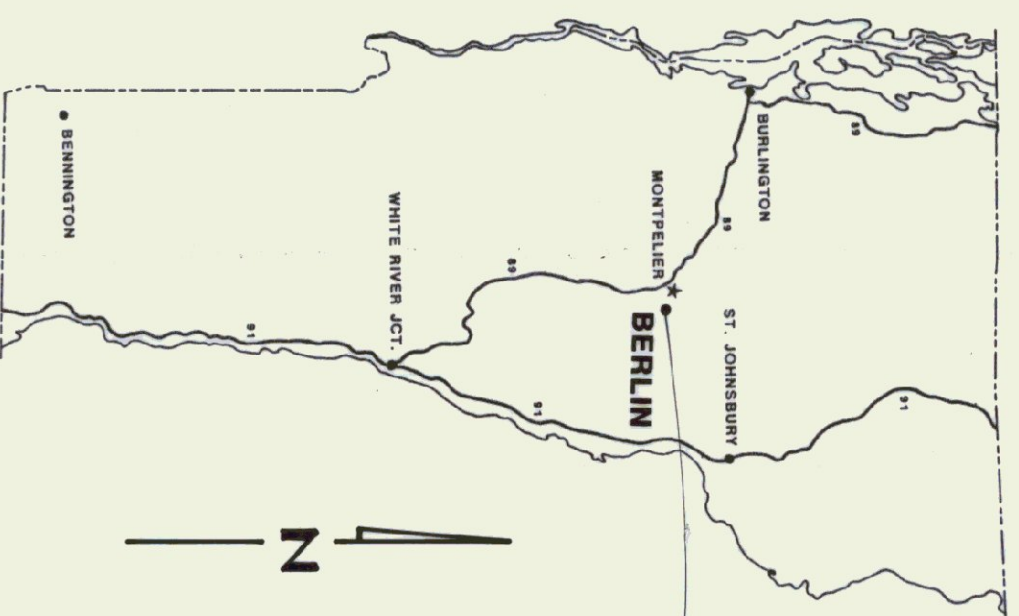
APRIL 1993

**AGENCY OF ADMINISTRATION
DEPARTMENT OF STATE BUILDINGS
2 GOVERNOR AIKEN AVENUE
MONTPELIER, VERMONT 05602
JOHN J. ZAMPIERI, COMMISSIONER**



GOVERNOR HOWARD DEAN

**AGENCY OF TRANSPORTATION
133 STATE STREET
MONTPELIER, VERMONT 05602
PATRICK J. GARAHAN, SECRETARY**



INDEX OF DRAWINGS

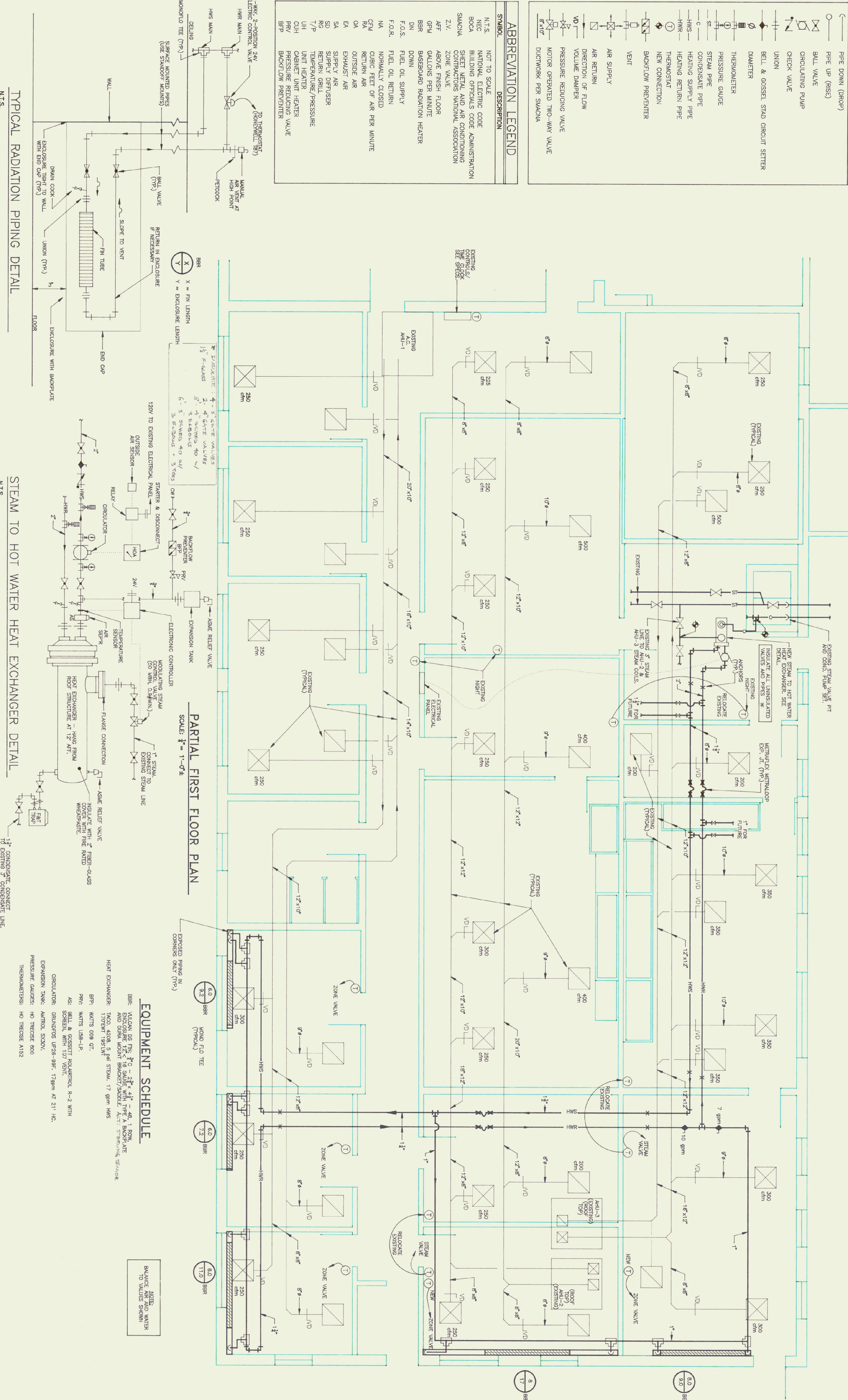
- A-1 ARCHITECTURAL**
- P-1 PLUMBING**
- ME-1 ELECTRICAL & MECHANICAL**

SYMBOLS LEGEND

SYMBOL	DESCRIPTION
	PIPE DOWN (DROP)
	PIPE UP (RISE)
	BALL VALVE
	CIRCULATING PUMP
	CHECK VALVE
	UNION
	BELL & GOSSET STAD CIRCUIT SETTER
	DIAMETER
	THERMOMETER
	PRESSURE GAUGE
	STEAM PIPE
	CONDENSATE PIPE
	HEATING SUPPLY PIPE
	HEATING RETURN PIPE
	THERMOSTAT
	NEW CONNECTION
	BACKFLOW PREVENTER
	VENT
	AIR SUPPLY
	AIR RETURN
	DIRECTION OF FLOW
	VOLUME DAMPER
	PRESSURE REDUCING VALVE
	MOTOR OPERATED TWO-WAY VALVE
	DUCTWORK PER SIACMA

ABBREVIATION LEGEND

SYMBOL	DESCRIPTION
N.T.S.	NOT TO SCALE
NEC	NATIONAL ELECTRIC CODE
BOCA	BUILDING OFFICIALS CODE ADMINISTRATION
SIACMA	SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION
Z.V.	ZONE VALVE
AFF	ABOVE FINISH FLOOR
GP/M	GALLONS PER MINUTE
BBR	BASEBOARD RADIATION HEATER
DN	DOWN
F.O.S.	FUEL OIL SUPPLY
F.O.R.	FUEL OIL RETURN
N.A.	NORMALLY CLOSED
CFM	CUBIC FEET OF AIR PER MINUTE
OA	OUTSIDE AIR
EA	EXHAUST AIR
SA	SUPPLY AIR
SD	SUPPLY DIFFUSER
RG	RETURN GRILL
T/P	TEMPERATURE/PRESSURE
UH	UNIT HEATER
CUH	CABINET UNIT HEATER
PRV	PRESSURE REDUCING VALVE
BFP	BACKFLOW PREVENTER



TYPICAL RADIATION PIPING DETAIL
N.T.S.

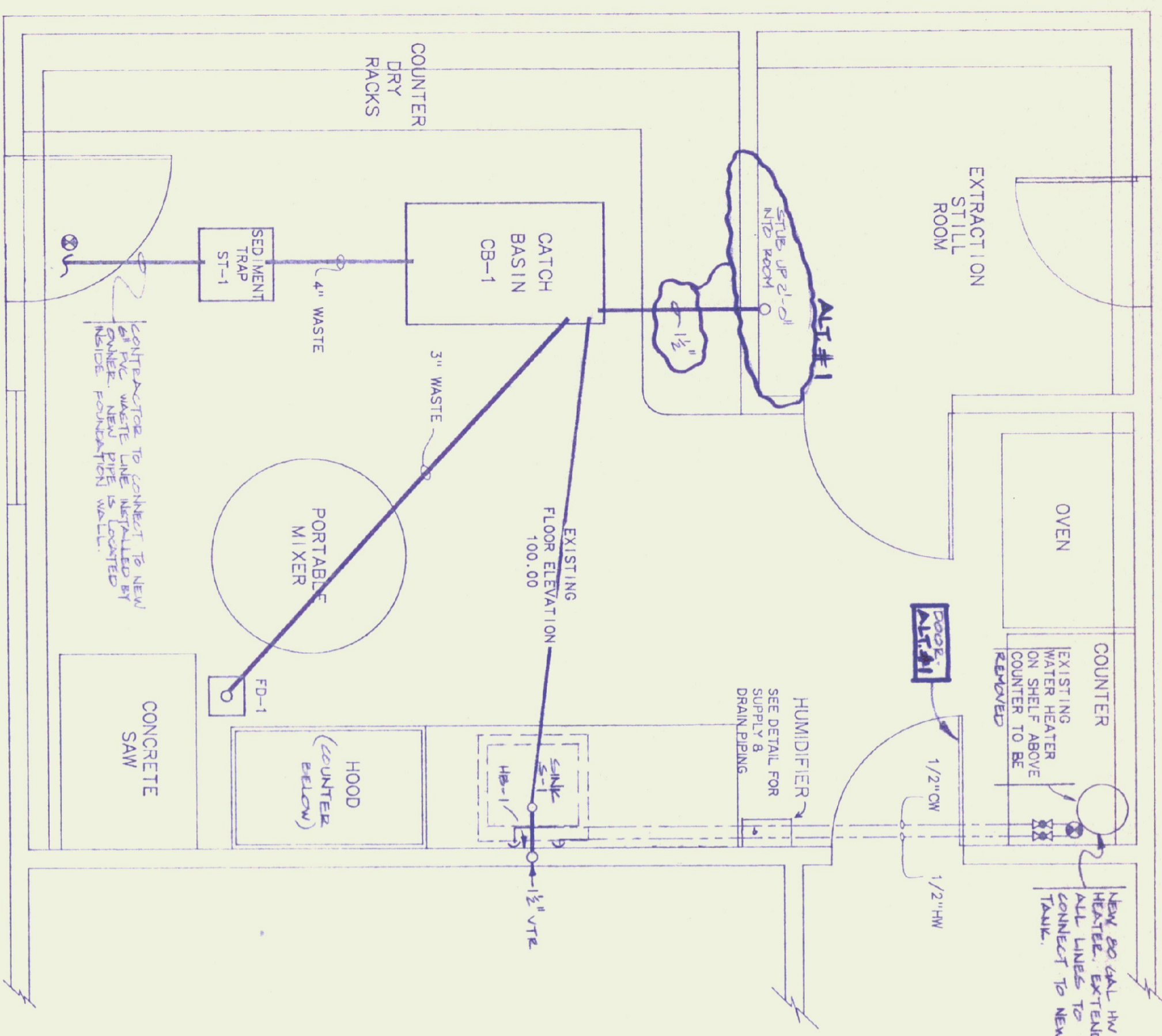
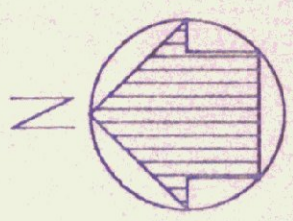
STEAM TO HOT WATER HEAT EXCHANGER DETAIL
N.T.S.

PARTIAL FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"

EQUIPMENT SCHEDULE

- BBR: VULCAN DS FIBER GLASS 4" x 4" - 48" L. ROOM AND DUCT MOUNT BRACKET/SIDING. SEE SPEC.
- HEAT EXCHANGER: 1400, 4208, 5 PSI STEAM, 17 GPM HWS
- BFP: WATTS 009 07'
- PRV: WATTS USB-1P
- AS: BELL & GOSSET RADIATOR R-2 WITH SCREEN, WITH 107 VENT
- CIRCULATOR: GRUNDOS UP26-99F, 17 GPM AT 21' HC.
- EXPANSION TANK: AMROL SX20V, PRESSURE GAUGE: HO TRESCO 600
- THERMOMETERS: HO TRESCO A152

NOTE: BALANCE AIR AND WATER TO VALVES SHOWN



PLUMBING PLAN

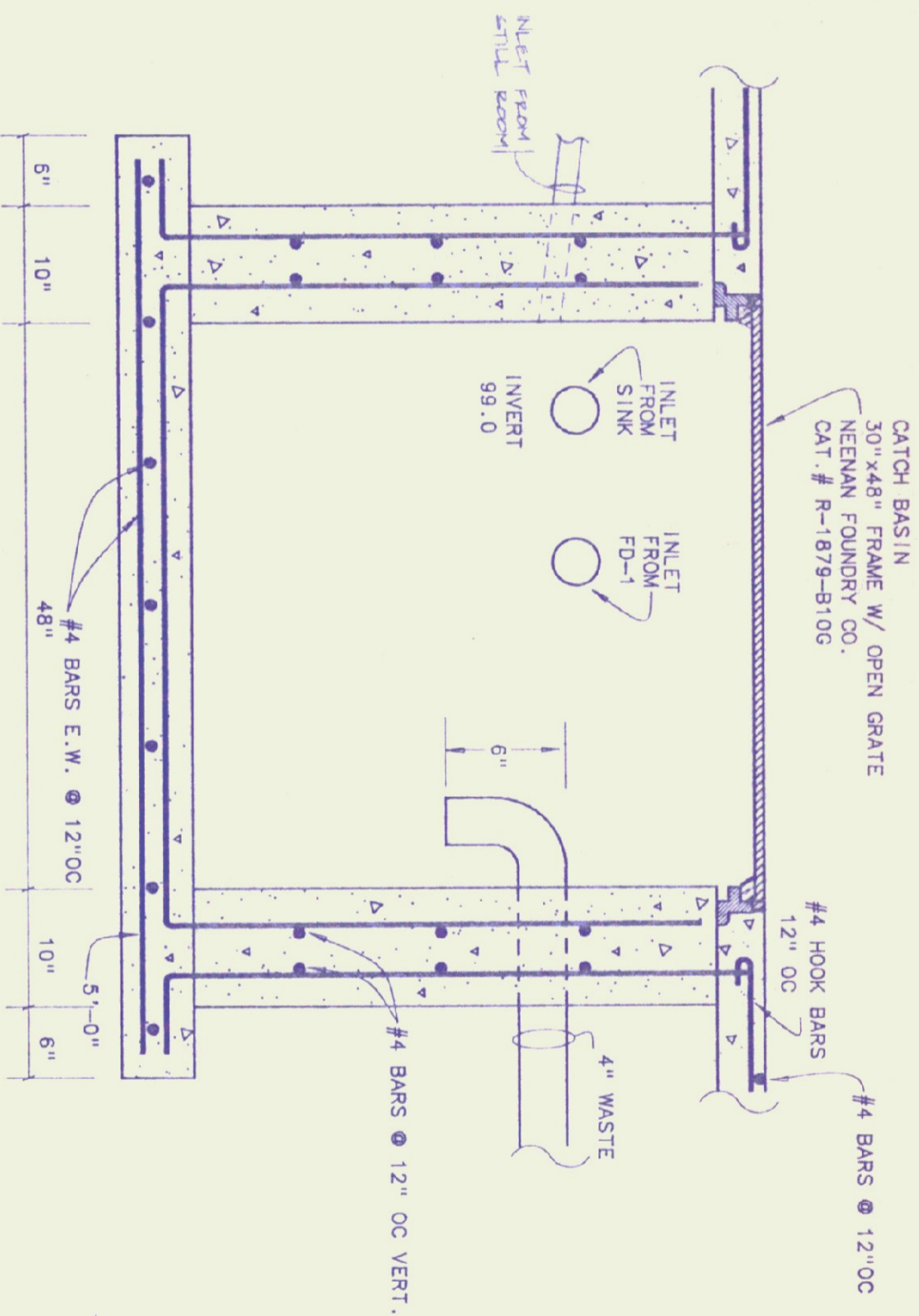
SCALE - 1/2"=1'-0"

PLUMBING SCHEDULE

- ⊗ BALL VALVE
- ⊕ CONNECT TO EXISTING
- PIPE DOWN
- PIPE UP
- COLD WATER
- HOT WATER
- WASTE
- - - VENT

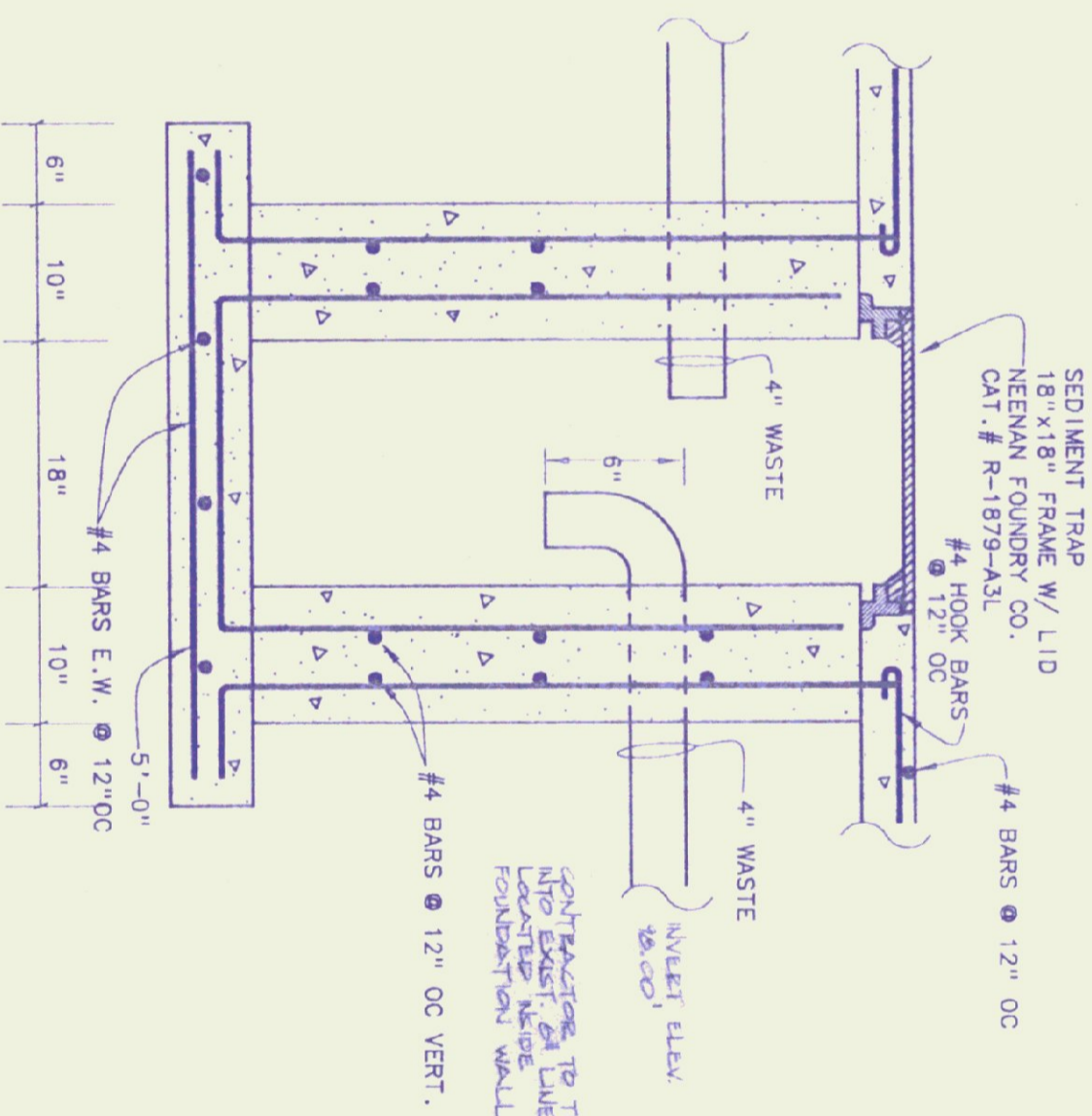
ALTERNATE #1

1) PROVIDE 1 1/2" WASTE PIPE TO EXTRACTION STILL ROOM.



CATCH BASIN

SCALE - 1"=1'-0"

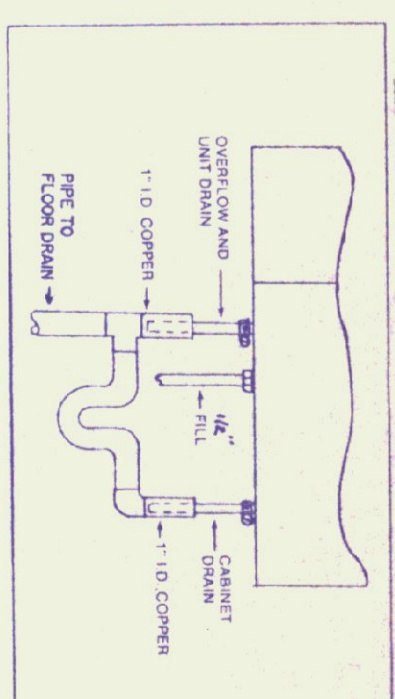


SEDIMENT TRAP

SCALE - 1"=1'-0"

MECHANICAL EQUIPMENT SCHEDULE

ITEM	DESCRIPTION
AC	AIR CONDITIONING CONDENSING UNIT, MCGILLY MODEL A0038H, 208 VOLT, 3-PHASE, R-22 REFRIG., 3700 NOM. COOLING WATTS, @ 95 DEGREES F O.A., 80 DEGREES F D.B., 67 DEGREES F W.B.
FC	FAN COIL, MCGILLY MODEL SC9 121 B, BELT DRIVE, 1/2 HP @ 120 VAC, 1200 CFM, HO-CAPACITY DX COIL, 40,000 BTU TOTAL @ 80 DEGREES F W.B., 45 DEGREES F SUCTON TEMP., 1 ROW HEATING COIL, 56,000 BTU TOTAL HEATING @ 2 PSIG STEAM, 80 DEGREES F EAT.
HUMIDIFIER	ELECTRONIC STEAM HUMIDIFIER, 30 LBS/HR., HERRMIDJER MODEL MHST-30, 208 VOLT, 3 PHASE EST. 11/1/18 DUCT DISTRIBUTION MANIFOLD, STEAM SUPPLY HOSE, HUMIDISTAT, DUCT HI LIMIT, DUCT AIR PROVING SWITCH.
HRU	HEAT RECOVERY EXHAUST AND MAKE-UP AIR UNIT, EXHAUST 1,000 CFM @ 25 ESP, SUPPLY 1,200 CFM @ 2 ESP, (2) 1/2 HP, 115 VAC, HEAT EX SERIES 200 B-1, WEATHER-PROOF CASING FOR OUTDOOR INSTALLATION (INCLUDES INTAKE AND EXHAUST HOODS WITH BIRD SCREENS AND WEATHER-PROOF ROOF PANELS WITH RAIN GUTTERS), BOTTOM SUPPLY AND/OR RETURN DUCT CONNECTIONS, 12" INSULATED ROOF CURBS WITH INTEGRAL CANT, FACE AND BYPASS FROST CONTROL SYSTEM, ALUMINUM INTERIOR WALLS.
HOOD	EXHAUST HOOD, 304 STAINLESS STEEL, 48" WIDE X 30" DEEP X 18" HIGH, 18" X 18" OUTLET, UNITE MOGIL OR EQUAL, FIELD MEASURE OUTLET LOCATION AND TRANSITION TO AVOID INTERFERENCE WITH EXISTING DUCT.
SR-1	SUPPLY REGISTER, METAL AIRE SERIES 5,000, MODEL M-1, S4, 12" X 12" W/BOB, ALUMINUM W/WHITE FINISH, EXPOSED INSTALLATION 10'-0" ABOVE FLOOR TO FACE.



HUMIDIFIER WATER SUPPLY & DRAIN
NO SCALE

PLUMBING FIXTURE SCHEDULE

ITEM	DESCRIPTION
S-1	AMERICAN STANDARD ENAMELED CAST IRON SERVICE SINK, CAT# 7692149 WITH 47076-07 RIM GUARD AND WALL HANGER, CAT# 8340, 242 CN FXTURE, TRAP CAT# 798, 178 WITH STRAINER.
HB-1	RELOCATE EXISTING HOSE BIB CONTROL ASSEMBLY TO ABOVE SINK.
FD-1	FLOOR DRAIN, NEEMA FOUNDRY, 9" X 9", R-4931-B.



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STATE OF VERMONT
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AGENCY OF ADMINISTRATION
MONTPELLIER
VERMONT

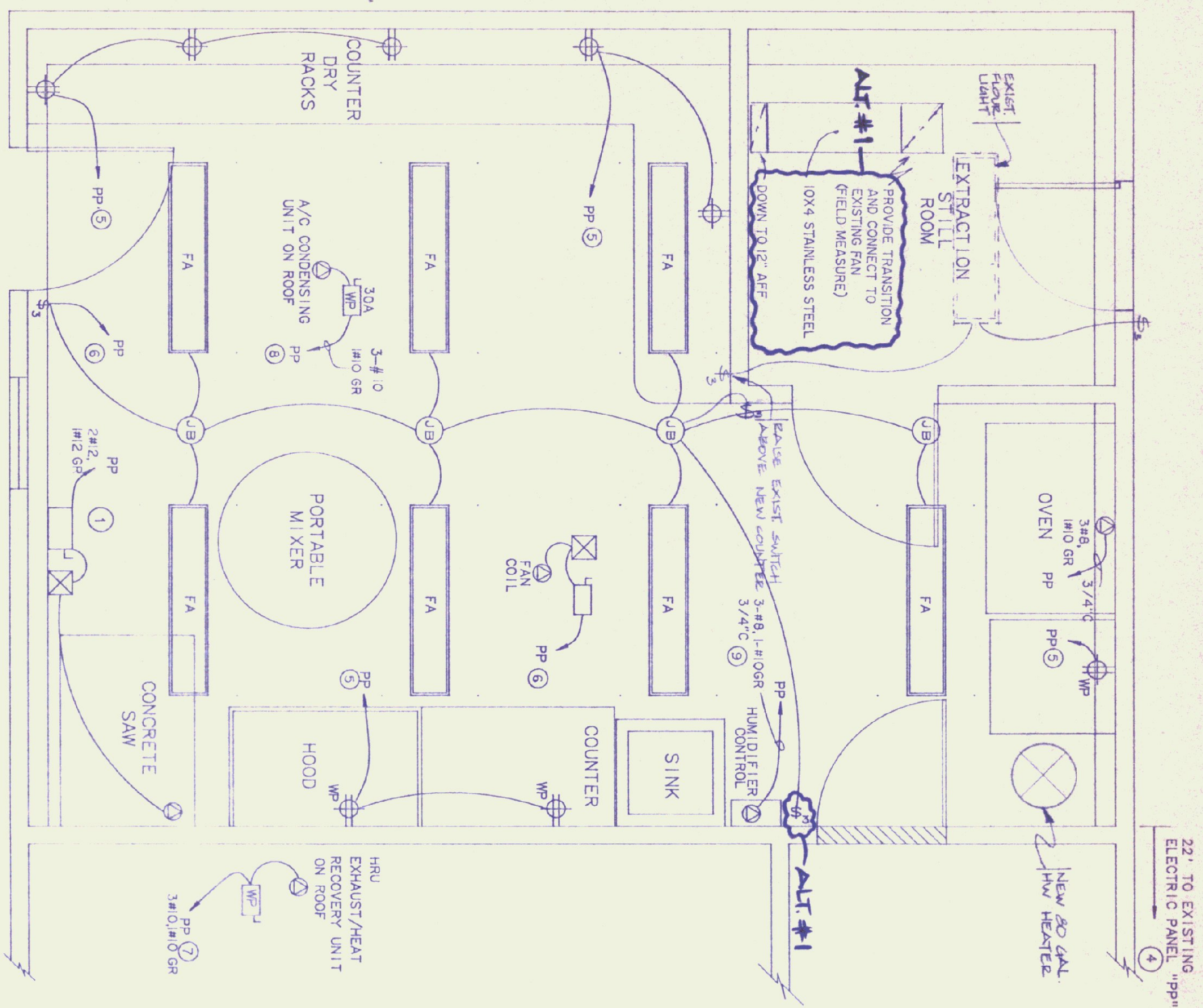
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CONCRETE TEST LABORATORY
BARRE-MONTPELLIER ROAD
BERLIN, VERMONT

PLUMBING PLAN & SCHEDULES

DATE: 06/09/92
SCALE: 1/2"=1'-0"
DRAWN BY: B.W.M.
APPROVED BY: [Signature]

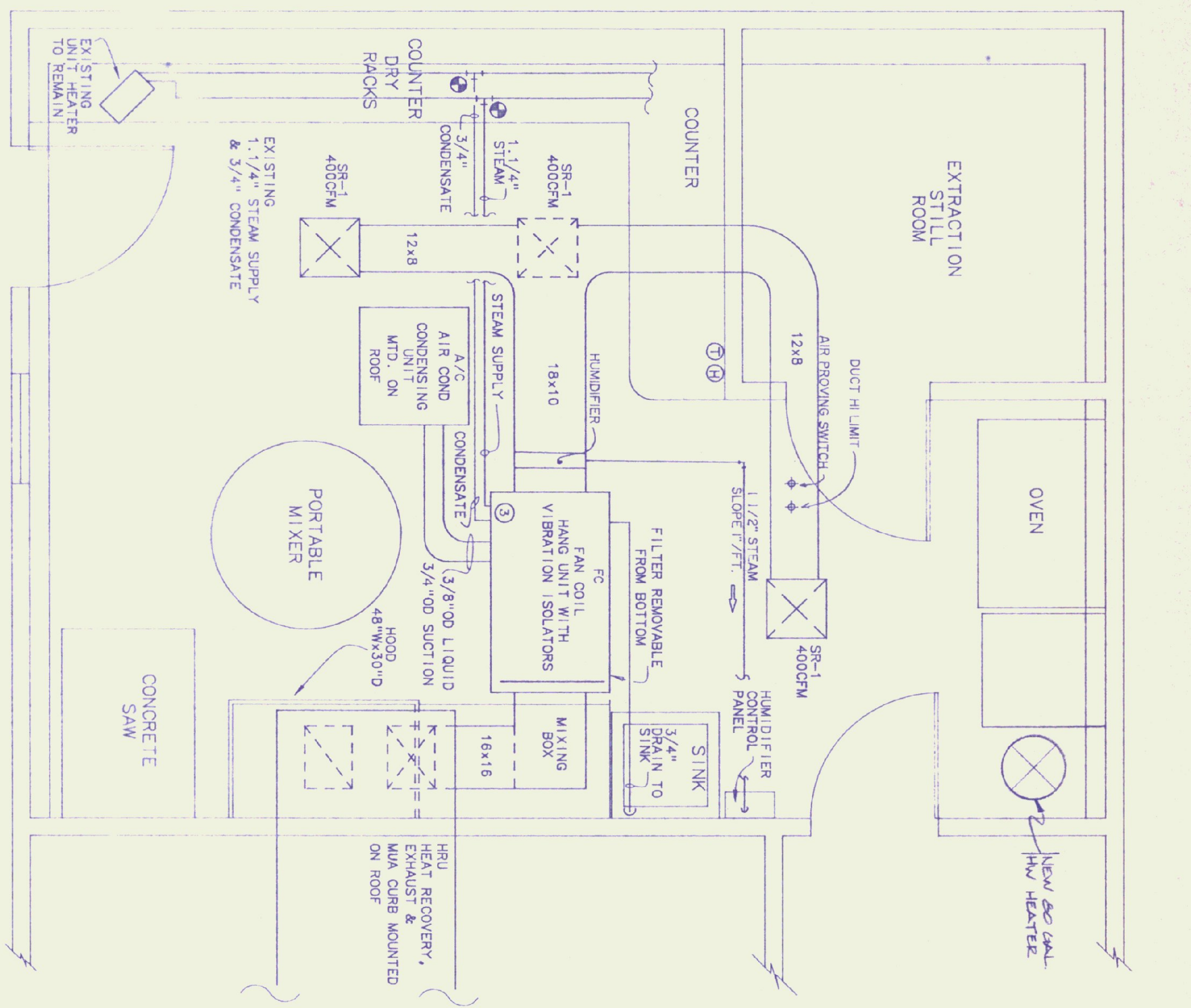
REVISIONS: CAD FILE: P-CTL-02
SHEET: 2 OF 2

DWG NO. P-1



ELECTRICAL PLAN
SCALE - 1/2"=1'-0"

- ELECTRICAL LEGEND**
- ⊕ 3-WAY SWITCH
 - ⊕ SPECIAL PURPOSE OUTLET
 - ⊕ DUPLEX RECEPTACLE - 48" AFF
 - ⊕ SAFETY SWITCH
 - ⊕ STARTER
 - ⊕ FLUORESCENT LIGHT
 - ⊕ ABOVE FINISH FLOOR
 - ⊕ WATER PROOF



MECHANICAL PLAN
SCALE - 1/2"=1'-0"

- MECHANICAL LEGEND**
- ⊕ HUMIDISTAT
 - ⊕ THERMOSTAT
 - ⊕ CONNECT TO EXISTING
 - ⊕ PIPE DOWN
 - ⊕ PIPE UP
 - ⊕ SUPPLY AIR
 - ⊕ RETURN AIR

- ALTERATIONS #1**
- 1) PROVIDE CULOT WORK IN EXTRACTION STILL ROOM AS SHOWN
 - 2) DELETE ALL ELECTRICAL WORK IN STRUCTURAL TESTING LAB AND NEW 2-WAY SWITCH FOR EXISTING CIRCUIT IN EXTRACTION STILL ROOM AND 3-WAY SWITCH TO NEW CULOT LOCATION

ELECTRICAL GENERAL NOTES

1. REMOVE 3 LIGHT FIXTURES, CONDUIT, WIRE, SWITCH BOXES, ETC. LIGHT FIXTURE TO REMAIN PROPERTY OF OWNER. REMOVE/REPLACE ALL EXISTING CONDUIT FITTINGS AND BOXES NOT OF WATER TIGHT CONSTRUCTION.
2. ALL ELECTRIC TO BE MINIMUM 18" AFF. ALL ELECTRIC TO BE OF WATER TIGHT CONSTRUCTION.
3. NOTE THAT EXISTING EXTRACTION STILL ROOM IS A CLASS 1 DIVISION 1 LOCATION. REFER TO ARTICLE 500.

MECHANICAL GENERAL NOTES

1. EXISTING STANDING SEAM ROOF IS STILL IN WARRANTY PERIOD. ALL ROOF PENETRATIONS AND WEATHERPROOFING OF ROOF TO BE CO-ORDINATED WITH BURBELL CO. INC.

KEYED NOTES

- ① EXISTING CONCRETE SAW WITH SAFETY SWITCH AND STARTER PRESENTLY LOCATED IN ADJOINING ROOM TO BE REMOVED AND RELOCATED. EXTEND EXISTING BRANCH CIRCUIT.
- ② REMOVE EXISTING WATER HEATER & PROVIDE BACKWARD WHITE MODEL M-II-20-25-25 OR EQUAL.
- ③ REFER TO STEAM COIL PIPING DIAGRAM.
- ④ EXISTING POWER PANEL - SIEMENS 208/120 VOLT, 3-PHASE, 225 AMP TYPE COP-7. PROVIDE TYPE BL CIRCUIT BREAKERS.
- ⑤ PROVIDE 20 AMP, 1 POLE, 60T CIRCUIT BREAKER
- ⑥ CONNECT TO EXISTING, SPARE, 20 AMP, 1 POLE CIRCUIT BREAKER
- ⑦ PROVIDE 1 POLE, 30 AMP CIRCUIT BREAKER.
- ⑧ PROVIDE 3 POLE, 25 AMP HACR CIRCUIT BREAKER.
- ⑨ PROVIDE 3 POLE, 40 AMP CIRCUIT BREAKER.
- ⑩ ELECTRICAL CONTRACTOR TO PROVIDE 50 AMP, 2 POLE SAFETY SWITCH & 3" CONDUIT, 2-#10 AWG 1-1/2" DIA. GROUND TO PANEL PER PROVIDE 50 AMP & 2 POLE CIRCUIT BREAKER IN PANEL PER SEE WATER HEATER.

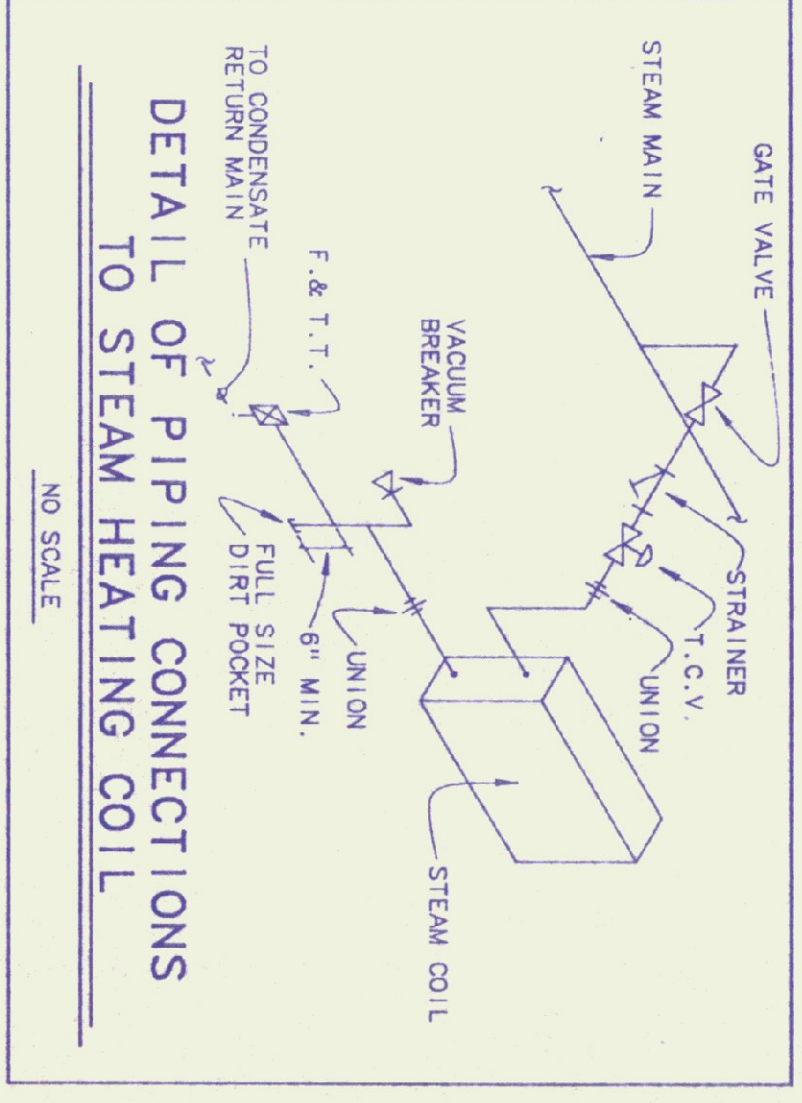
LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION
FA	KEystone LU240-DNR, DUST AND MOISTURE RESISTANT, 120 VAC, ELECTRONIC BALLAST, 2 LAMP, 32 WATT, T8, 3,500 K, MOUNT 9' AFF.

SPECIAL PURPOSE OUTLET

ITEM	VOLTS	PHASE	AMPACTY	CIRCUIT BREAKER	REMARKS
OVEN	208	1	50	2P/50	RECEPTACLE, CORD AND CAP BY EC
HUMIDIFIER	208	3	28	3P/40	
A/C	208	1	20.2	3P/25 HACR	25 AMP, FRN FUSES
HRU	120	1	22	1P/30	EXISTING
SAW	208	1	20	EXISTING	
FAN COIL	120	1	12	1P/20	

NOTE:
VERIFY ALL EQUIPMENT NAME PLATE RATINGS BEFORE INSTALLATION.



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ELECTRICAL & MECHANICAL PLANS

DATE: 06/09/92
SCALE: 1/2"=1'-0"
DRAWN BY: B.W.M.
APPROVED BY:

REVISIONS: CAD FILE: P-CTL-01
DATE: 04/14/93
SHEET: 5 of 5

DWG NO. ME-1