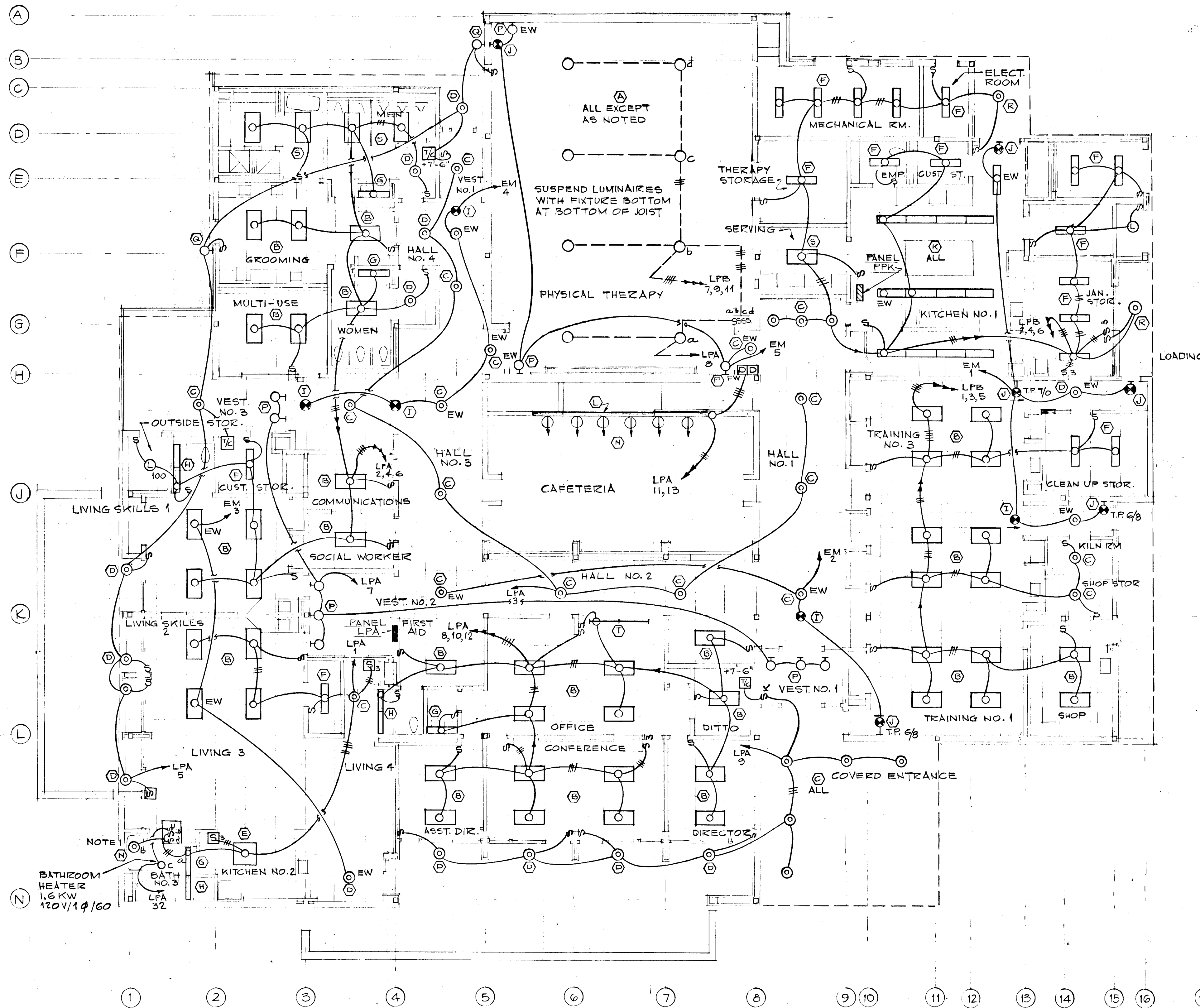


NOTES

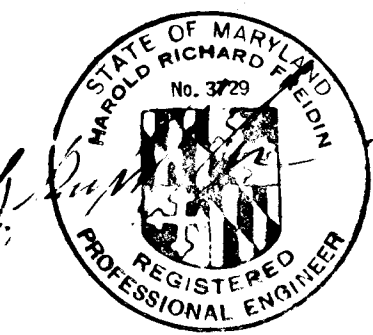
1. TYPE (N) LUMINAIRE IS ENCLOSED GASKETED SHOWER LIGHT.
2. SWITCHES SHOWN THUS [S] ARE ROCKER SWITCHES SIMILAR TO CIRCLE F 3491-I
3. T.P. 6/8 = TOP OF FIXTURES 6'-8" AFF



REVISIONS		
FPB 2, 1978 95% SUBMISSION		
DRAWN	DATE	SCALE
RM		1/8" = 1'-0"
COOPER • LECKY PARTNERSHIP ARCHITECTS 3203 GRACE ST. N.W. WASHINGTON D.C.		
HOWARD COUNTY ADULT ACTIVITY CENTER		
FLOOR PLAN - LIGHTING		
DRAWING NO.		

E-1

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WASHINGTON, D. C. 20015

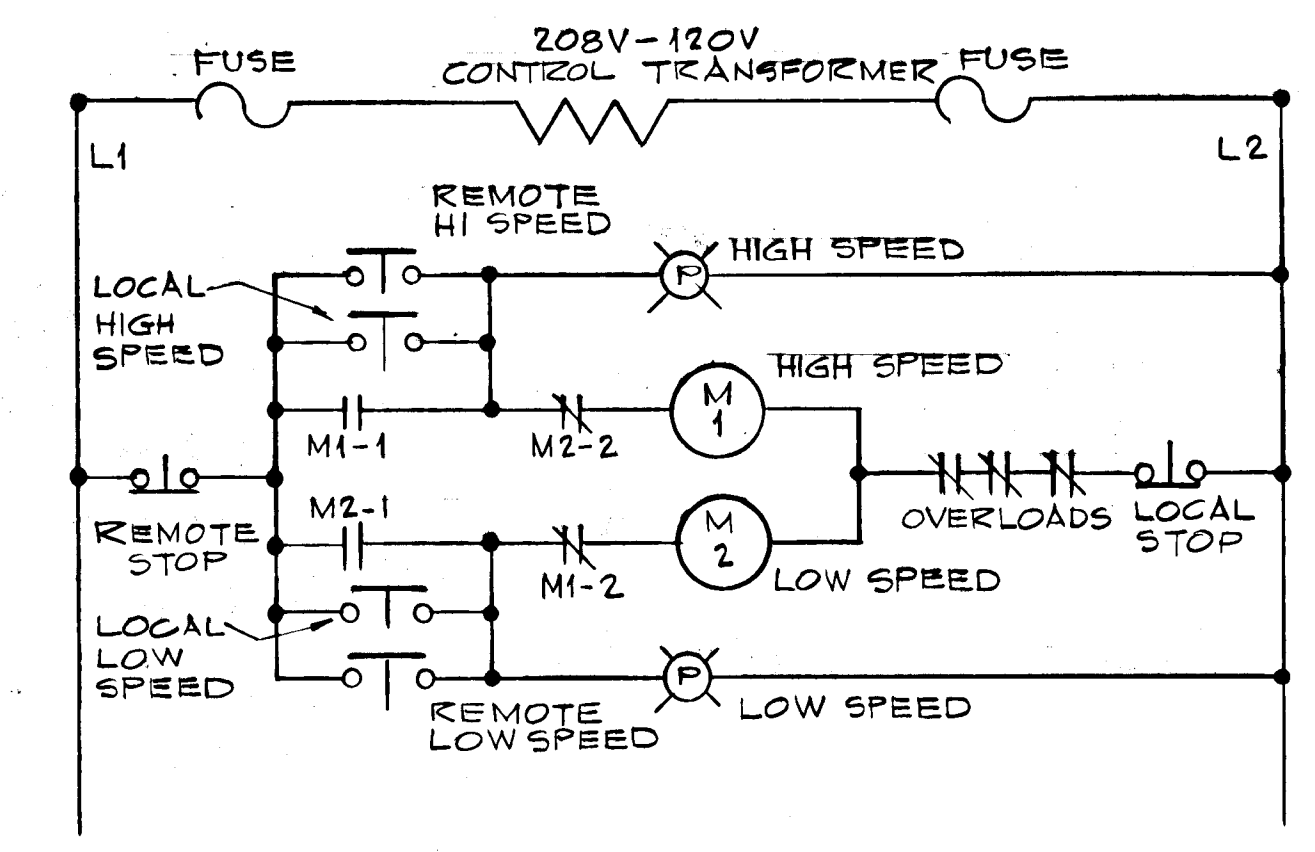
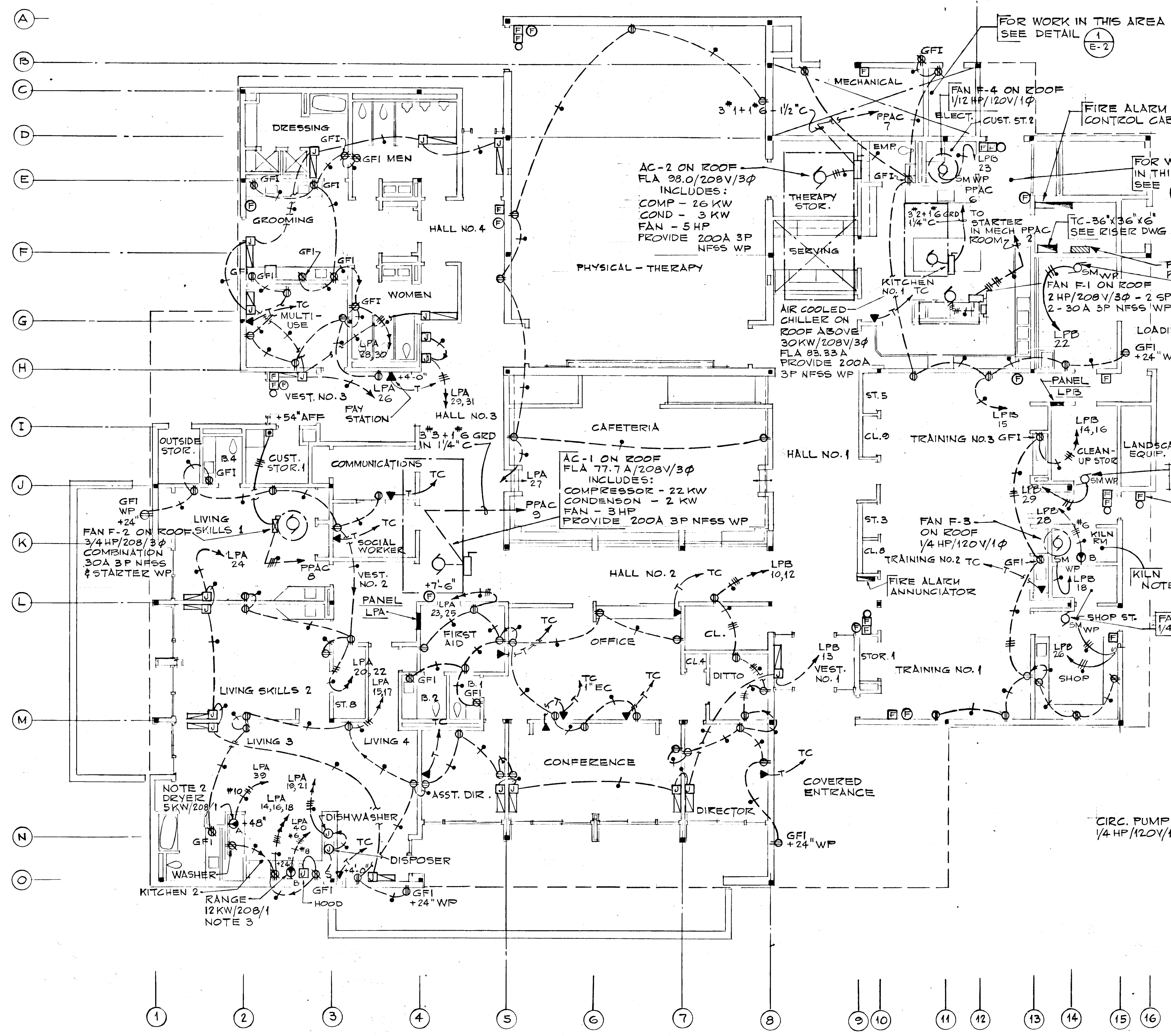


845

XXAD-77-E001

NOTES

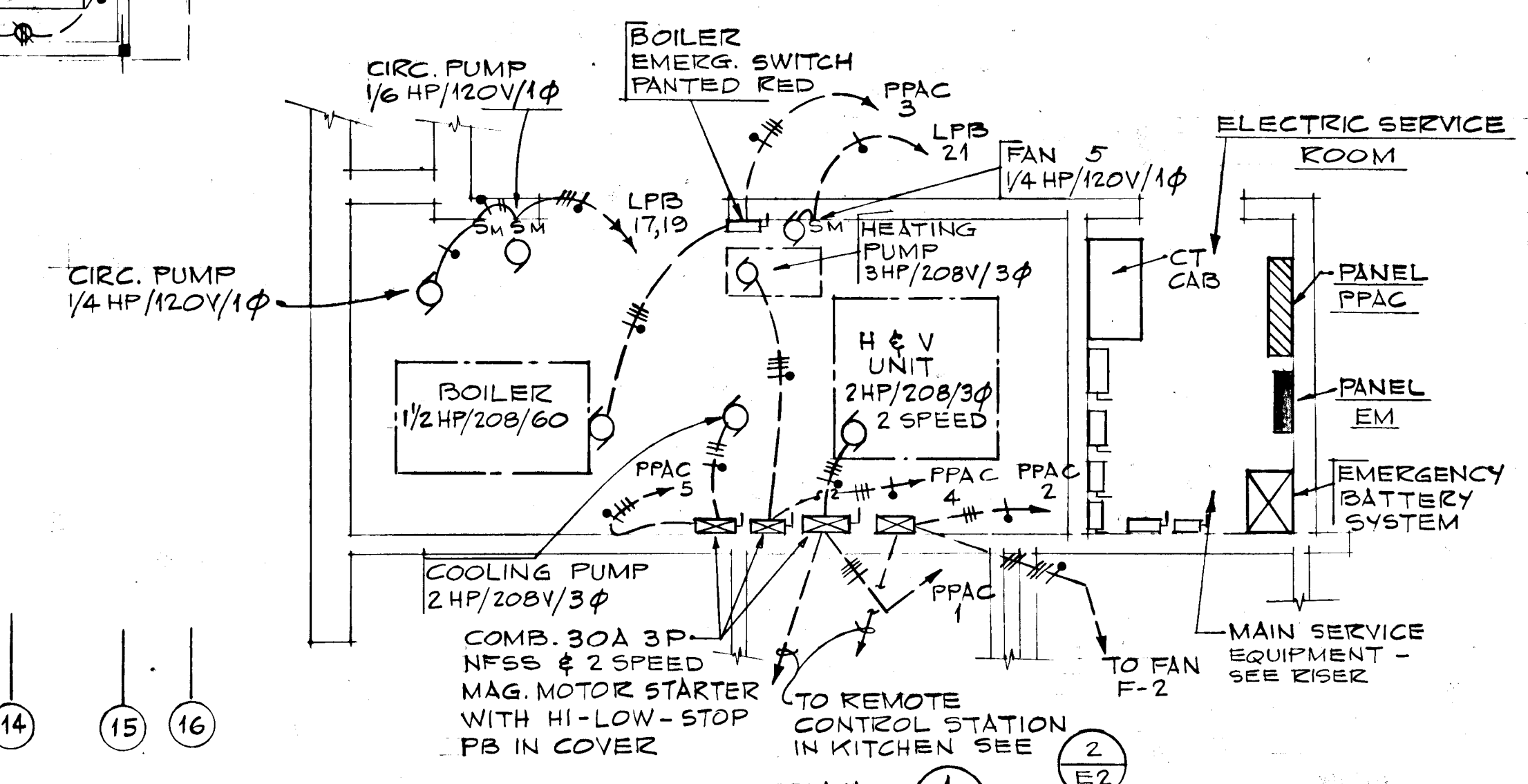
1. IN THE KILN ROOM PROVIDE RECEPTACLE FOR 1-10800 W 208 V 1ϕ KILN AS INDICATED.
PROVIDE MATCHING CORD GRIP TYPE ARMORED ATTACHMENT CAP FOR RECEPTACLE.
2. PROVIDE 6'-0" LONG 3/4" * 10 + 1/4" * 10 GROUND TYPE SJ INSULATED CORD SET FOR CLOTHS DRYER. CORD SET SHALL TERMINATE WITH 4 SPARE LUGS AT ONE END AND NEMA 14-30P ATTACHMENT CAP AT OTHER END.
3. PROVIDE CORD SET FOR RANGE SIMILAR TO ABOVE EXCEPT 3/4" * 8 + 1/4" * 10 GROUND AND NEMA 14-50P ATTACHMENT CAP.



TYPICAL CONTROL OF TWO SPEED FANS
FAN F1 & KITCHEN H & V UNIT

DETAIL 2 E-2
NO SCALE

SEE DWG E-3 FOR CONTROL STATION LOCATION



DETAIL 1 E-2
SCALE: 1/4" = 1'-0"

REVISIONS		
FEB. 2, 1978	95% SUBMISSION	
DRAWN	DATE	SCALE
RJM		1/8" = 1'-0"
COOPER-LECKY PARTNERSHIP ARCHITECTS 3203 GRACE ST. N.W. WASHINGTON D.C.		
HOWARD COUNTY ADULT ACTIVITY CENTER		
FLOOR PLAN - POWER		
DRAWING NO.		

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8401 CONNECTICUT AVENUE
WASHINGTON, D. C. 20015



E-2

KITCHEN EQUIPMENT SCHEDULE

ITEM	EQUIPMENT	CHARACTERISTICS					BRANCH CKT.		MTG. HT AFF	TERMI-NATION	NOTE	FINAL CONNECTION				
		KW	HP	AMPS	VOLTS	φ	NO.	WIRE SIZE NO.				C	WIRE SIZE NO.	TYPE		
2	CASE LGTS - COLD FAN	0.05	1/5	5.2	120	1	1	#12	2	6"	A & B	1	3/8"	#12	2	THHN
6	WASTE DISPOSER	-	3/4	3	208	3	7	#12	3	NFSS+6" JB+6"	C & A	2	3/8"	#12	3	
7	BOOSTER HEATER	15	-	41.7			8	#6	3	NFSS+6" JB+12"	D	3	3/4"	#6	3	
8	DISHWASHER	5	1	18.0			9	#10	3	NFSS+6" JB+12"	C	3	1/2"	#6	3	
11	REFRIGERATOR	-	1/3	7.2	120	1	3	#12	2	+48"	E	4	CORD & PLUG			
12	FRYER	12.5	-	34.7	208	3	10	#8	3	+48"	F	5	FUTURE			
13	HOT PLATE - RANGE OVEN BASE	17.4	-	48.3			14	#6	3	+48"	G	5	FUTURE			
14	GRIDDLE TOP OVEN BASE	22.5	-	62.5			12	#4	3	+12"	H	6	FUTURE			
26	FREEZER	1.2	3/4	23.8	120	1	16	#10	2	+48"	F	5	CORD & PLUG			
21	FREEZER	1.4	1	8.0	208/120	3	11	#12	4	+48"	J	4	CORD & PLUG			
22	ICE MACHINE	-	1/3	7.2	120		6	#12	2	+48"	E	4	CORD & PLUG			
24	REFRIGERATOR	0.75	1/4	12.5	120		5	#12	2	+48"	E	4	CORD & PLUG			
3	HOT FOOD WELLS	3.6	-	10.0	208	3	13	#12	3	NFSS+2" JB+6"	A & C	2	3/8"	#12	2	THHN

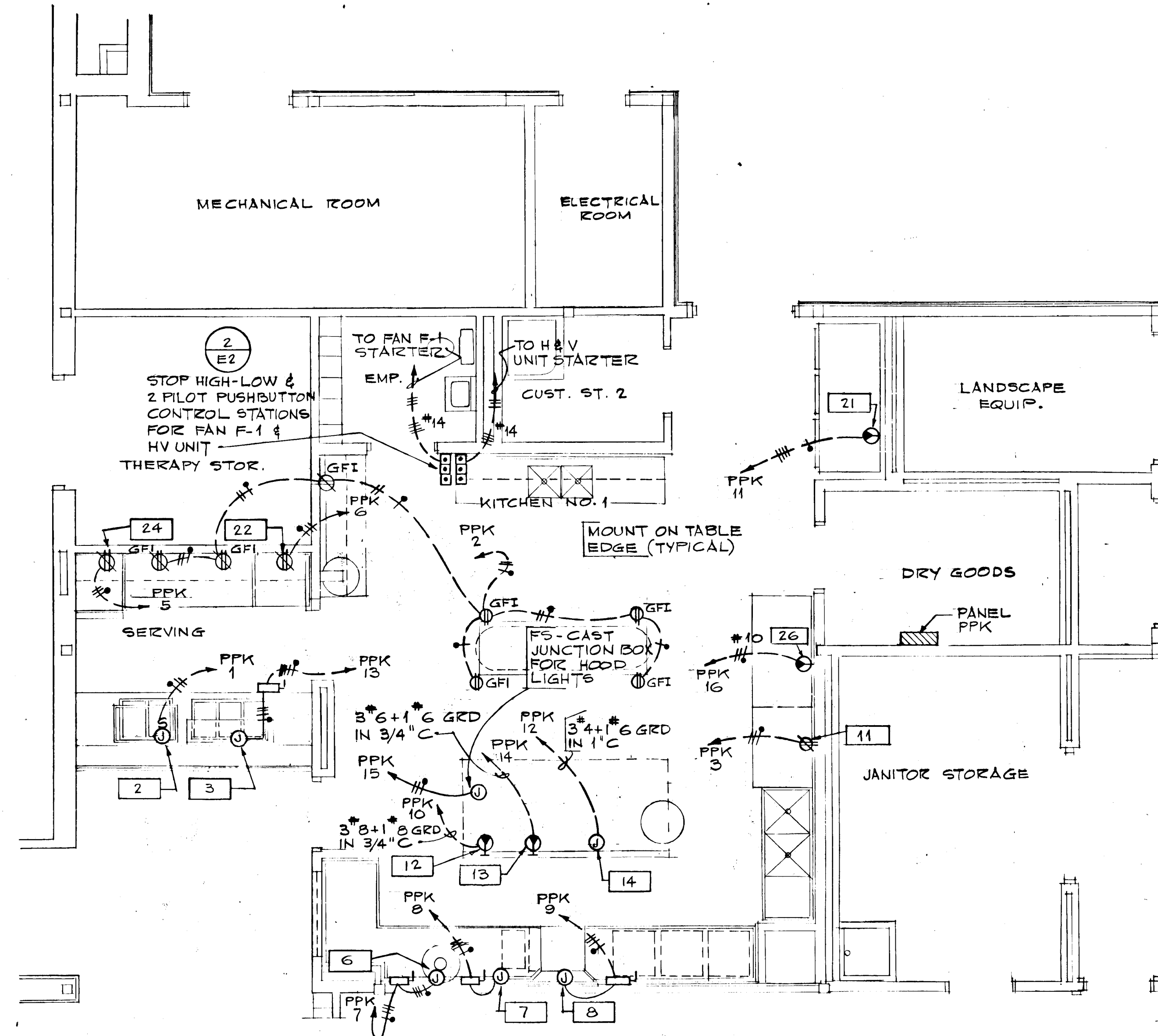
NOTE: SCHEDULE ITEM NUMBERS REFER TO KITCHEN EQUIPMENT SCHEDULE ON ARCHITECTURAL DRAWING 12

KITCHEN NOTES

- EXTEND #12 THHN IN MINIMUM 3/8-INCH GREENFIELD FROM BRANCH CIRCUIT TERMINAL JUNCTION BOX TO DEVICE. CONCEAL GREENFIELD BEHIND EQUIPMENT SUPPORTS. SPLICE EXTENSIONS IN JUNCTION BOX AND WIRE SEPARATELY TO EACH DEVICE.
- EXTEND #12 THHN IN MINIMUM 1/2-INCH CONDUIT FROM NFSS TO JUNCTION BOX. EXTEND CIRCUIT TO MOTOR FROM JUNCTION BOX IN MINIMUM 3/8-INCH VAPORTIGHT GREENFIELD WITH EXTERNAL GROUND CONNECTION.
- WIRE FROM SAFETY SWITCH TO EQUIPMENT IN VAPORTIGHT GREENFIELD WITH FULL SIZE EXTERNAL GROUND.
- EQUIPMENT SUPPLIED WITH CORD AND PLUG.
- PROVIDE 6-FOOT FULLY RATED 3/C AND GROUND TYPE SO CORD SET COMPLETE WITH PLUG TO MATCH RECEPTACLE AND COMPRESSION TYPE SPADE LUGS FOR CONNECTION TO EQUIPMENT TERMINALS.
- COIL 5-FEET ZERO-INCHES OF CABLE AT JUNCTION BOX - SEAL ENDS. FOR CONNECTION TO FUTURE EQUIPMENT.

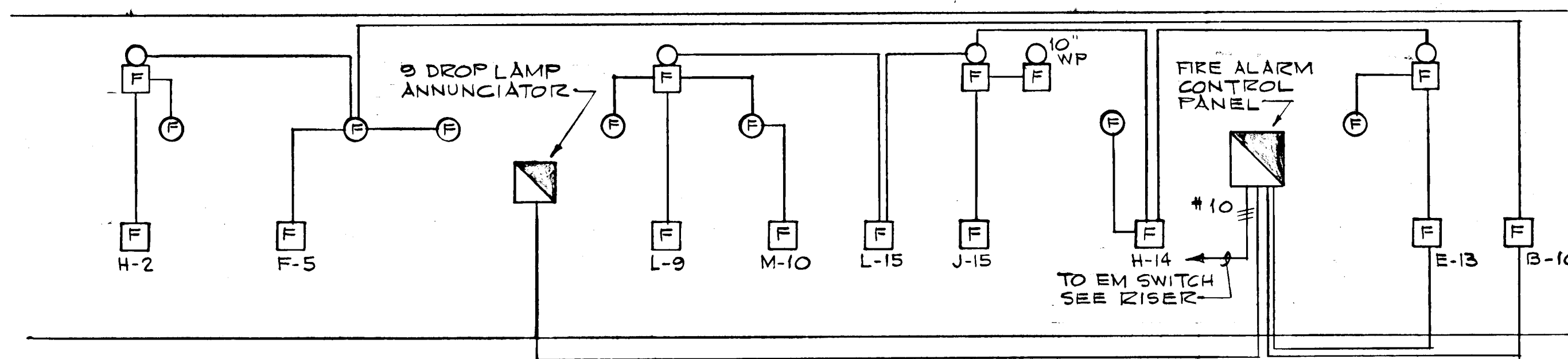
TERMINATIONS

- A - 4-INCH SQUARE x 1 1/2-INCH D JB W/BLANK COVER.
- B - PROVIDE 20A 1P TOGGLE SWITCH AS DISCONNECT FOR MOTOR.
- C - PROVIDE 30A 3P NFSS AS DISCONNECT
- D - PROVIDE 60A 3P NFSS AS DISCONNECT
- E - DUPLEX RECEPTACLE - NEMA 5-20R.
- F - SINGLE 50A 3P 250V GROUNDING RECEPTACLE NEMA 15-50R CONFIGURATION.
- G - SINGLE 60A 3P 250V GROUNDING RECEPTACLE NEMA 15-60R CONFIGURATION.
- H - 4 1 1/16-INCH SQUARE x 2 3/4-INCH D BLANK COVER JUNCTION BOX.
- I - SINGLE 20A 1P 250V GROUNDING RECEPTACLE NEMA 6-20R CONFIGURATION.
- J - SINGLE 20A 208/120V RECEPTACLE NEMA 18-20R CONFIGURATION



KITCHEN PLAN

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



FIRE ALARM RISER DIAGRAM

NO SCALE

REVISIONS

FEB 2, 1978 95% SUBMISSION

DRAWN DATE SCALE

RJM

COOPER-LECKY PARTNERSHIP ARCHITECTS
3203 GRACE ST. N.W. WASHINGTON D.C.

HOWARD COUNTY ADULT ACTIVITY CENTER

KITCHEN PLAN ELECTRICAL

DRAWING NO.

E-3

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WASHINGTON, D.C. 20015

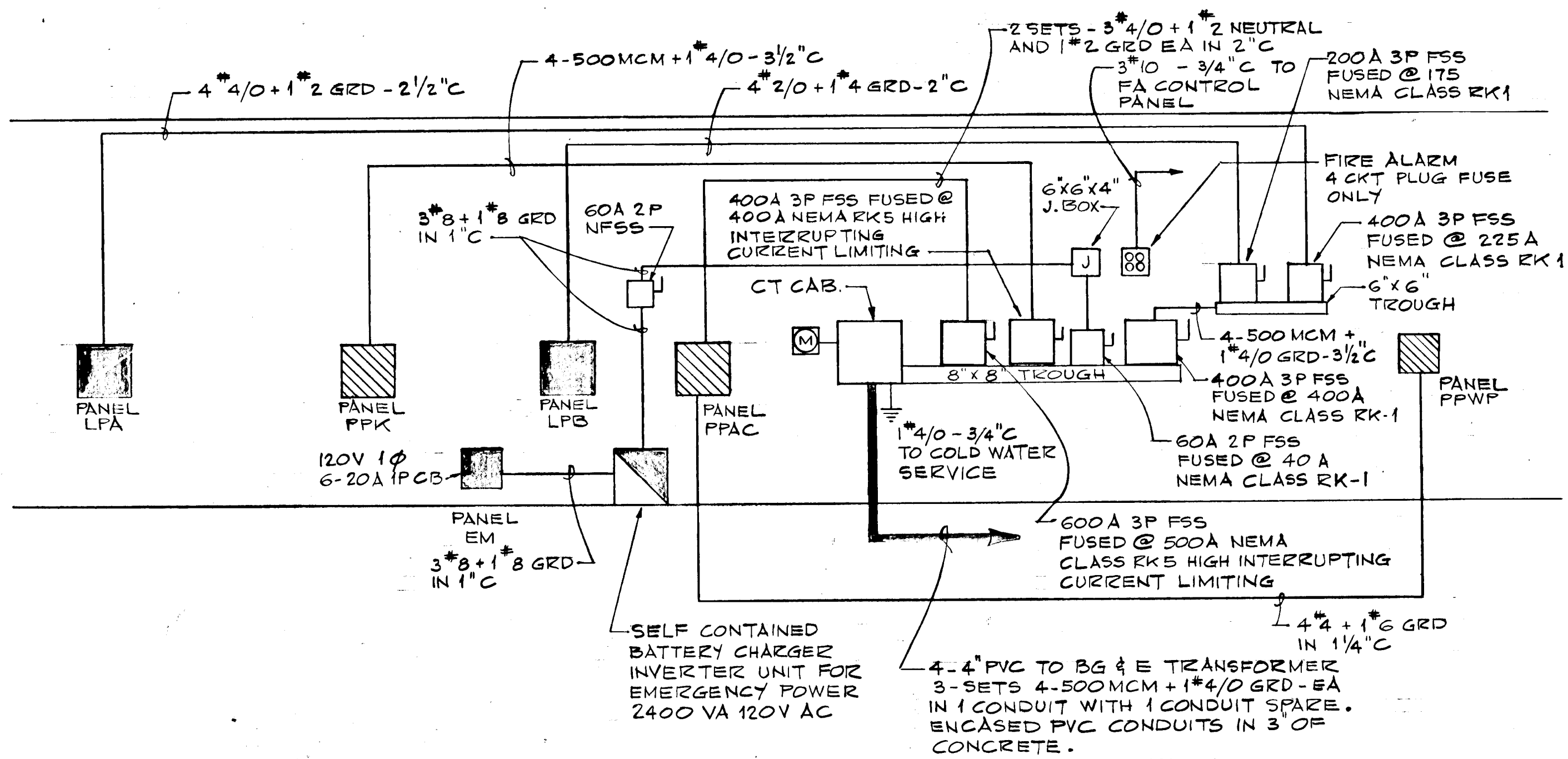


LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER	CATALOG NO.	MOUNTING	LAMPS
(A)	LITHONIA	TH 400M ALS	PENDANT	(1) 400W METAL HALIDE
(B)	LITHONIA	2GS 440 A12	RECESSED	(4) 40W T12 RS CW
(C)	LIGHTOLIER	7780		(1) 150W PAR 38 FL
(D)	LIGHTOLIER	7778		(1) 75W R-30
(E)	LIGHTOLIER	13160	CEILING	(6) 30W T12 RS CW
(F)	LITHONIA	C240A	CEILING	(2) 40W T12 RS CW
(G)	ALKCO	2142	BRACKET ABOVE MIRROR	(1) 40W T12 RS CW
(H)	ALKCO	2132	BRACKET ABOVE MIRROR	(1) 30W T12 RS CW
(I)	PERFECTLITE	U103	AS NOTED	BY MFC
(J)	PERFECTLITE	U143	BRACKET	BY MFC
(K)	LITHONIA	DV 240A	CEILING	(2) 40W T12 RS CW
(L)	LIGHTOLIER	7505 SERIES	CEILING	2 CKT. TRACK
(M)	LIGHTOLIER	7540	TRACK	(1) 150W PAR 38 FL
(N)	SOLO	S-20	RECESSED	(1) 100W A19 IF
(P)	LIGHTOLIER	6606	BKT ON SOFFIT	(1) 150W PAR 38 FL
(Q)	PRESCOLITE	4022	BRACKET ABOVE DOOR	(1) 100W A19 IF
(R)	LIGHTOLIER	7790	RECESSED	(1) 150W A23 IF
(S)	LITHONIA	2F 440 A12	RECESSED	(4) 40W T12 RS CW
(T)	LITHONIA	UN 140	CEILING	(1) 40W T12 RS CW
(U)	SPAULDING	TL 250-70-120	BRACKET	(1) 250W BT28 DW MV
(V)	HUBBELL	WB 152	BRACKET	(1) 100W A19 IF

SYMBOLS

- ⊙ SPECIAL PURPOSE SINGLE RECEPTACLE TYPE AND NEMA CONFIGURATION AS NOTED BY SUBSCRIPT AS FOLLOWS:
A - 30A 250V 3W 4P GROUNDING TYPE NEMA 14-30R CONFIGURATION
B - 50A 250V 3W 4P GROUNDING TYPE NEMA 14-50R CONFIGURATION
- ⊙ INCANDESCENT RECESSED DOWNLIGHT - TYPE AS NOTED
- ⊙ SINGLE LAMP FLUORESCENT LUMINAIRE - TYPE AS NOTED - CEILING MOUNTED
- ⊙ FLUORESCENT LUMINAIRE - TYPE AS NOTED
- ⊙ CEILING MOUNTED OR PENDENT TYPE INCANDESCENT LUMINAIRE - TYPE AND MOUNTING AS NOTED
- ⊙ INCANDESCENT RECESSED WALL WASHER TYPE AS NOTED
- ⊙ INCANDESCENT LUMINAIRE - BRACKET MOUNTED AT HEIGHT NOTED - TYPE AS INDICATED
- ⊙ JUNCTION BOX - FLUSH MOUNTED PRESSED STEEL, GALVANIZED OUTLET BOX - 4" SQUARE X 1 1/2" DEEP WITH 2 GANG COVER AND SATIN FINISH STAINLESS STEEL DEVICE PLATE - UNLESS OTHERWISE NOTED OR UNLESS CODE REQUIRES GREATER VOLUME
- ⊙ HIGH INTENSITY DISCHARGE TYPE LUMINAIRE TYPE AND MOUNTING AS NOTED
- ⊙ TRACK MOUNTED ADJUSTABLE LUMINAIRE TYPE AS NOTED
- ⊙ 2 CIRCUIT CEILING MOUNTED LIGHTING TRACK - LIGHTOLIER
- ⊙ 100 KEYLESS PORCELAIN LAMP RECEPTACLE WITH INSIDE FROSTED INCANDESCENT LAMP OF WATTAGE
- ⊙ WALL MOUNTED DIMMER - LUTRON N-1000 1000W 120V
- ⊙ CIRCUIT BREAKER TYPE BRANCH CIRCUIT PANELBOARD
- ⊙ POWER OR DISTRIBUTION PANELBOARD - TYPE AS NOTED
- ⊙ ELECTRICAL SERVICE EQUIPMENT - SEE RISER
- ⊙ SPECIAL PURPOSE EQUIPMENT - TYPE AS NOTED
- ⊙ SINGLE POLE FLUSH TUMBLER SWITCH 20A 120/277V AC ONLY - 4'-0" AFF
- ⊙ 3WAY SWITCH - SAME CHARACTERISTICS AS 1P SWITCH - 4'-0" AFF
- ⊙ 20A GROUNDING TYPE DUPLEX RECEPTACLE NEMA 5-20R CONFIGURATION - 12" AFF UNLESS NOTED
- ⊙ DUPLEX RECEPTACLE MOUNTED - 4'-0" AFF NEMA 5-20R CONFIGURATION
- ⊙ FLUSH MOUNTED JUNCTION BOX FOR EQUIPMENT CONNECTION - PROVIDE COVER TO SUIT EQUIPMENT - SIZE AS NOTED, IF NOT NOTED 4" SQUARE X 1 1/2" DEEP
- ⊙ ILLUMINATED EXIT SIGN
- ⊙ LUMINAIRE TYPE - SEE SCHEDULE
- GFI GROUND FAULT INTERRUPTER
- WP WEATHER PROOF
- EW EMERGENCY WHITE LIGHT - LUMINAIRE CONNECTED TO EMERGENCY BATTERY SYSTEM
- AFF ABOVE FINISHED FLOOR - ALSO INDICATED AS +12" WITHOUT ABBREVIATION FOLLOWING
- E4-1 DRAWING NUMBER DETAIL
- ⊙ TIME CLOCK - 1P 1T 7DAY ASTRONOMIC DIAL TORQ OR EQUAL
- ⊙ BUILDING MOUNTED SECURITY LIGHTS
- ⊙ MANU. FIRE ALARM STATION - SEMI FLUSH BREAK ROD TYPE + 4'-0" AFF
- ⊙ FIRE ALARM SYSTEM HORN + 8'-0" AFF
- ⊙ FAN COIL UNIT - WITH INTEGRAL SWITCH - 200W 120V
- SK KEY OPERATED SWITCH
- SM THERMAL MOTOR SWITCH
- ⊙ TELEPHONE OUTLET + 12" AFF UNLESS OTHERWISE NOTED
- ⊙ RED FLASHING LIGHT - FIRE ALARM SYSTEM - SIMILAR TO NURSES CALL CORRIDOR DOME STATION - RED GLASS MARKED FIRE + 8'-0" AFF
- ⊙ BRANCH CIRCUIT CONDUIT AND WIRE RUN CONCEALED IN CEILING OR WALLS
/// SLASH MARKS INDICATE NUMBER OF WIRES - NO SLASH MARKS = 2 CIRCUIT WIRES
/ GROUND WIRE RUN WITH CIRCUIT WIRES - GROUND SYMBOL ONLY = 2 CIRCUIT WIRES + 1 GROUND WIRE
→ HOMERUN TO PANEL - NUMBER OF ARROWS = NUMBER OF CIRCUITS
LPA 2,4,6 PANELBOARD AND CIRCUIT NUMBERS FOR CONNECTION
#10 WIRE SIZE IN AWG CU NO NUMBER = #12 AWG
- ⊙ BRANCH CIRCUIT CONDUIT AND WIRE RUN CONCEALED IN FLOOR BELOW - ALL OTHER CIRCUIT INDICATIONS ARE SIMILAR TO ABOVE
- ⊙ BRANCH CIRCUIT CONDUIT AND WIRE RUN EXPOSED
- ⊙ ENCLOSED SAFETY SWITCH IN NEMA 1 ENCLOSURE UNLESS NOTED WP - THEN NEMA 3R
60A - 3P FSS @ 60A K-5 60A = SWITCH SIZE, 3P = NO. OF POLES
FSS = FUSED SAFETY SWITCH
NFSS = NON FUSED SAFETY SWITCH
60A = FUSE SIZE
K-5 = NEMA FUSE CLASS
- ⊙ EMPTY CONDUIT FOR TELEPHONE SYSTEM 3/4" UNLESS NOTED. TC = TELEPHONE SERVICE CABINET. PROVIDE #9AWG GALVANIZED DRAG WIRE - LEAVE 12" SLACK AT EACH OUTLET AND PULL POINT
- ⊙ SIGNAL OR TELEPHONE SYSTEM CONTROL OR TERMINAL CABINET TYPE AND DIMENSIONS AS NOTED
- ⊙ COMBINATION NFSS OF SIZE NOTED AND MAGNETIC MOTOR STARTER.
- ⊙ START-STOP PUSHBUTTON STATION WITH RUN PILOT



POWER RISER DIAGRAM

NO SCALE



REVISIONS		
FEB. 2, 1978	95% SUBMISSION	
DRAWN	DATE	SCALE
RJM		NONE
COOPER-LECKY PARTNERSHIP ARCHITECTS 3203 GRACE ST. N.W. WASHINGTON D.C.		
HOWARD COUNTY ADULT ACTIVITY CENTER		
SCHEDULES - ELECTRICAL		
DRAWING NO.		
E-4		

PANELBOARD SCHEDULES

CIRCUIT NO.	SWITCH			FEEDS
	SIZE	POLES	FUSE	
PANEL PFAC 208/120V 3φ 4W SWITCH & FUSE TYPE				
600 A MLO				
1	30A	3P	20A	H & V UNIT 2 HP
2				FAN F-1 2 HP
3				BOILER 1 1/2 HP
4				HEATING PUMP 3 HP
5				COOLING PUMP 2 HP
6	200A		125A	PACKAGE CHILLER 30 KW
7			175A	AC-2 FLA 98.0 A
8	30A		20A	FAN F-2 3/4 HP
9	100A		100A	AC-1 FLA 77.7 A
10	60A		60A	WELL HOUSE PANEL PPWP

NOTE:
ALL FUSES NEMA CLASS RK5 HIGH INTERRUPTING CAPACITY
CURRENT LIMITING DUAL ELEMENT TYPE

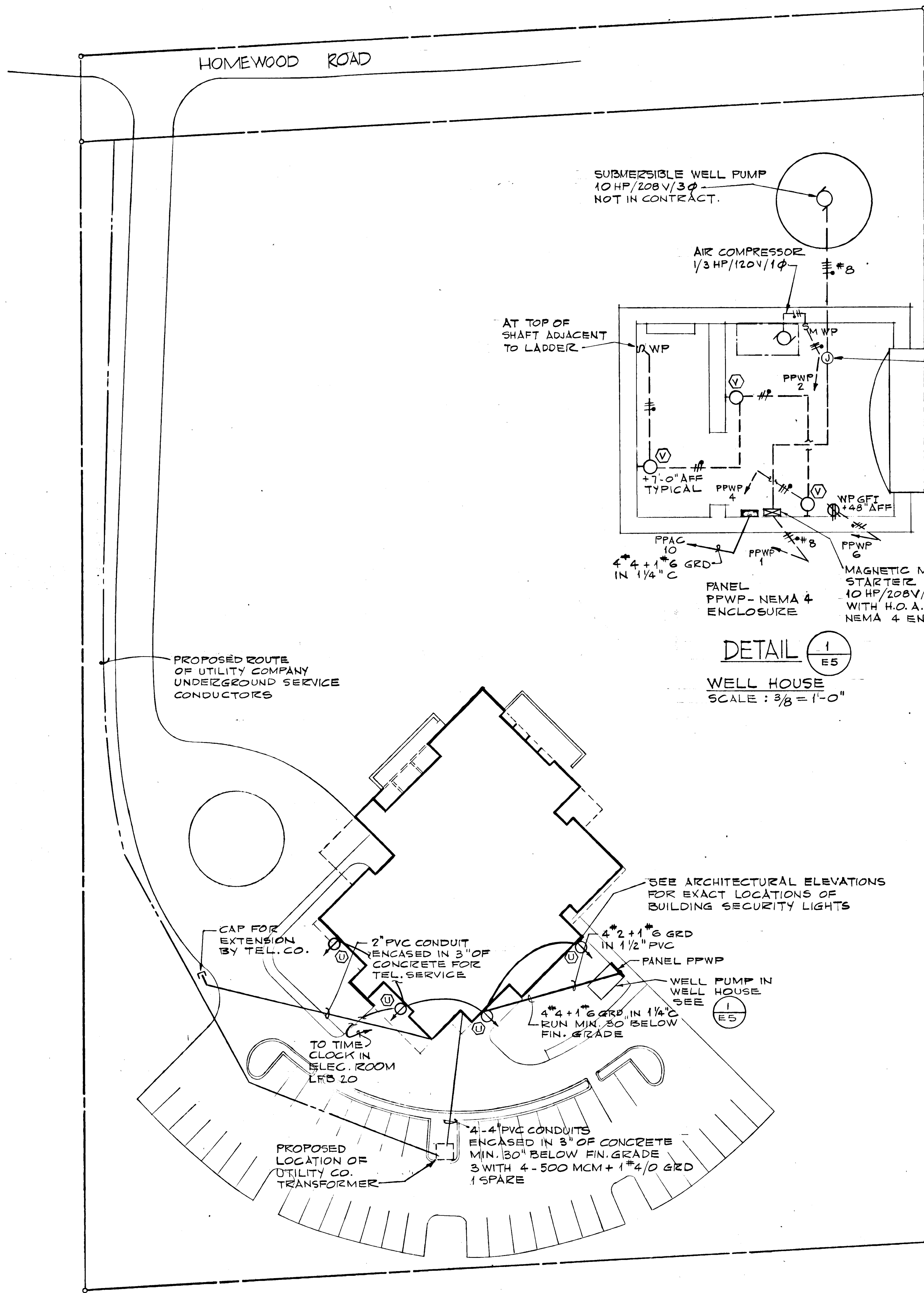
CIRCUIT NO.	CIRCUIT BREAKER			FEEDS
	FRAME	POLES	TRIP	
PANEL PPK 208/120V 3φ 4W CIRCUIT BREAKER TYPE				
400A MLO				
1	100A	1P	20A	CASE LIGHTS & COLD FAN
2				RECEPTACLES
3				REFRIGERATOR 1/3 HP
4				SPARE
5				REFRIGERATOR 1/4 HP
6				ICE MACHINE 1/3 HP
7		3P		WASTE DISPOSER 3/4 HP
8			60A	BOOSTER HEATER 15 KW
9			30A	DISHWASHER
10			50A	FUTURE FRYER
11			20A	FREEZER
12			80A	FUTURE GRIDDLE
13			20A	HOT FOOD WELLS
14			70A	RANGE - FUTURE
15		1P	20A	HOOD LIGHTS
16				FREEZER 3/4 HP
17				SPARES
18				
19				
20				

NO. OF CKTS.	PANEL LPA 208/120V 3φ 4W			CLASS 142	GENERAL LIGHTING
	PANEL LPA	CIRCUIT BREAKER TYPE	CIRCUIT BREAKER TYPE		
225A MLO					
13	100A	1P	20A		WASHER
1					RECEPTACLES
1					DISHWASHER
1					DISPOSER
2					ELECTRIC WATER COOLER
2					FAN COILS
6					SPARES
1		2P	30A	14b	CLOTHES DRYER
1		2P	50A	14b	RANGE
1		1P	20A	14b	BATHROOM HEATER 1.6 KW

CIRCUIT NO.	PANEL LPB 208/120V 3φ 4W			CLASS 142	GENERAL LIGHTING
	PANEL LPB	CIRCUIT BREAKER TYPE	CIRCUIT BREAKER TYPE		
225A MLO					
6	100A	1P	20A		GYMNASIUM LIGHTING
4					RECEPTACLES
5					FAN COILS
1					CIRC. PUMP 1/6 HP
1					CIRC. PUMP 1/4 HP
4					FAN 1/4 HP
2					FAN 1/2 HP
3					SPARE
1		2P	70A	14b	KILN 10.8 KW
1		1P	20A	14b	EXTERIOR LIGHTS

CIRCUIT NO.	PANEL PPWP 208/120V 3φ 4W - NEMA 4 ENCLOSURE			CLASS 142	FEEDS
	PANEL PPWP	CIRCUIT BREAKER TYPE	CIRCUIT BREAKER TYPE		
225A MLO					
M	100A	3P	100A		MAIN CIRCUIT BREAKER
1		3P	80A	14b	WELL PUMP 10 HP
2		1P	20A	142	AIR COMPRESSOR 1/3 HP
4					LIGHTING
6					RECEPTACLE

845



DETAIL 1/ES
WELL HOUSE
SCALE: 3/8" = 1'-0"

SITE PLAN
SCALE: 1" = 30'-0"

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CONSULTING ENGINEERS, INC.
8401 CONNECTICUT AVENUE
WASHINGTON, D.C. 20015



FEB 2, 1978 95% SUBMISSION

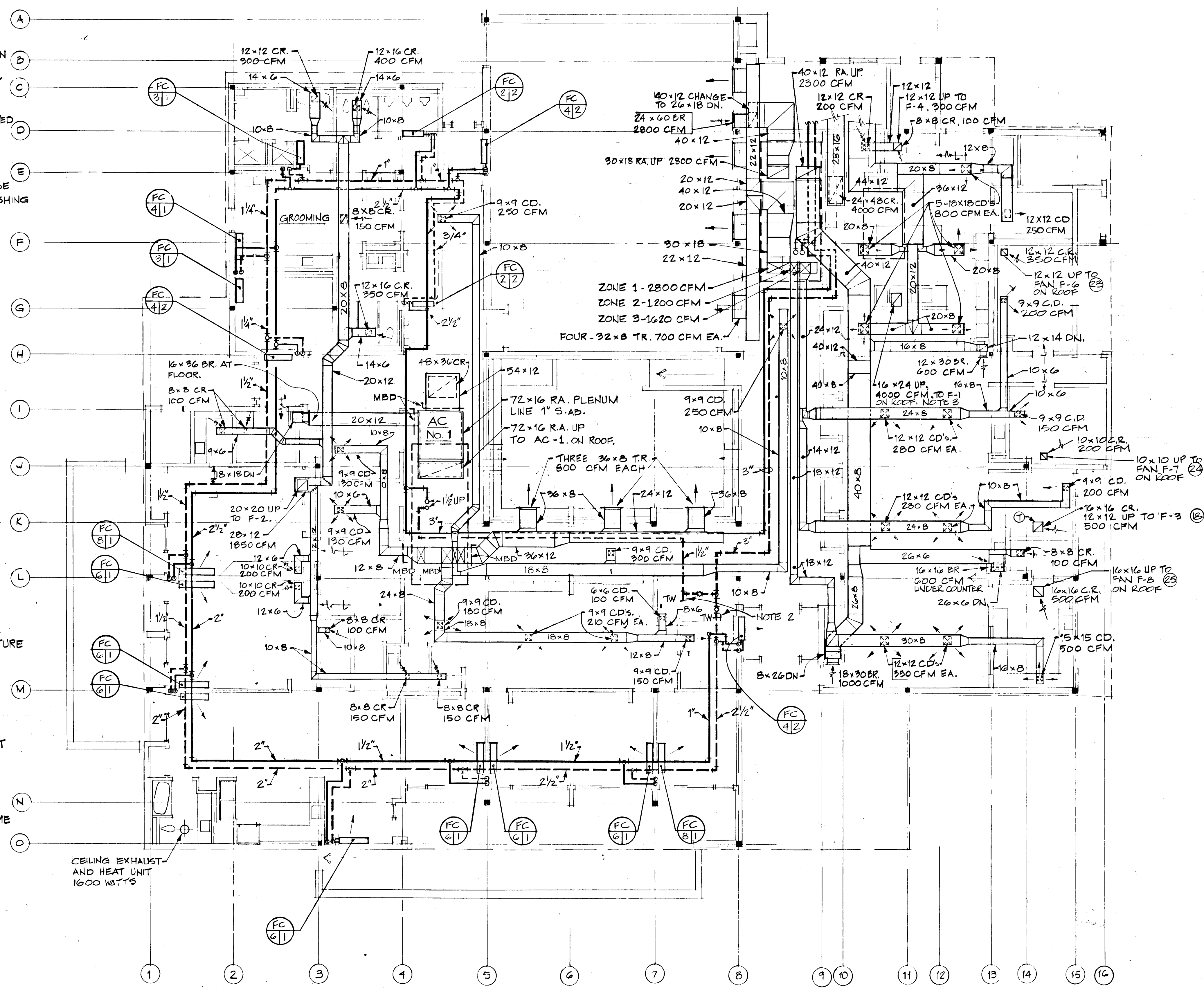
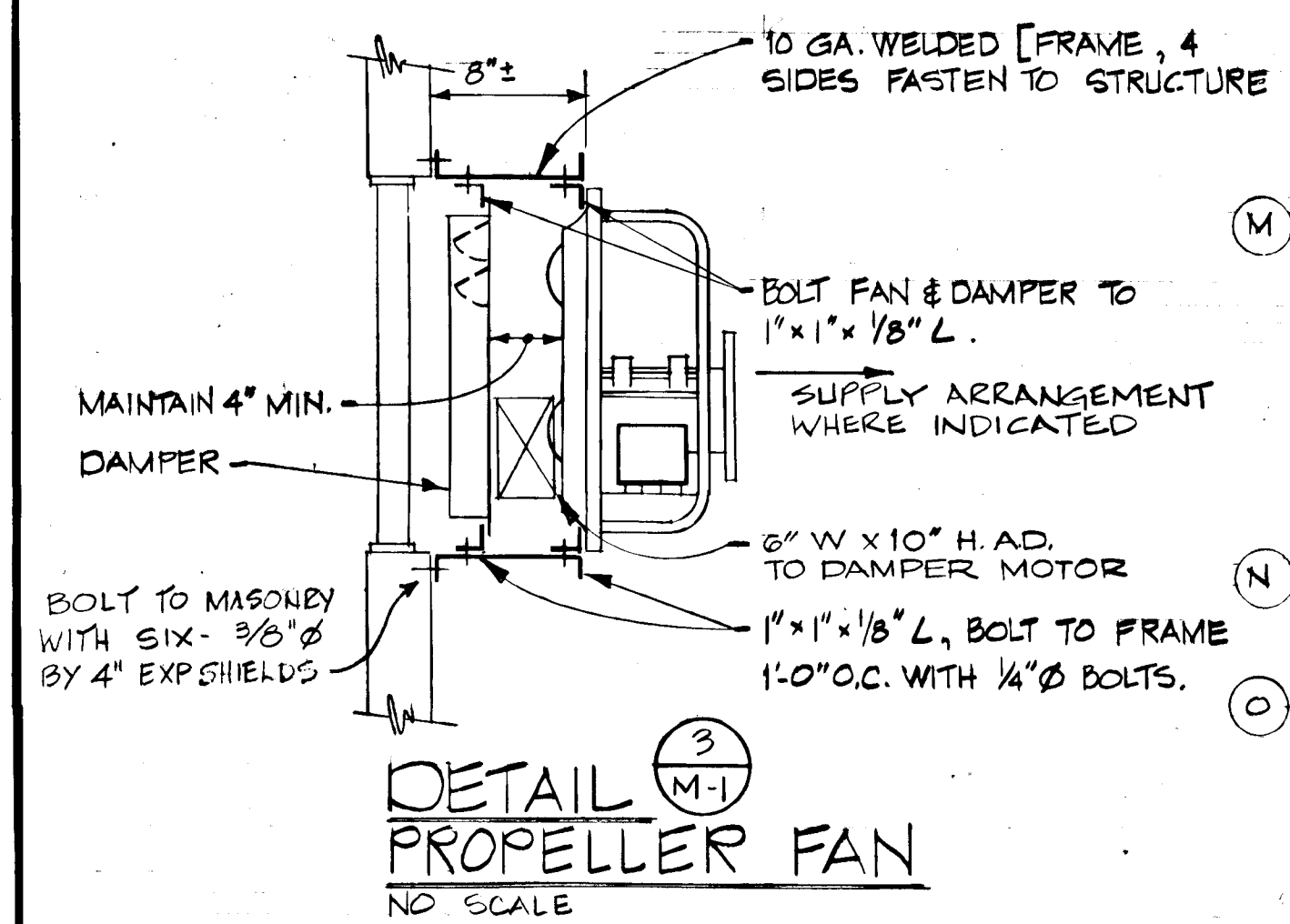
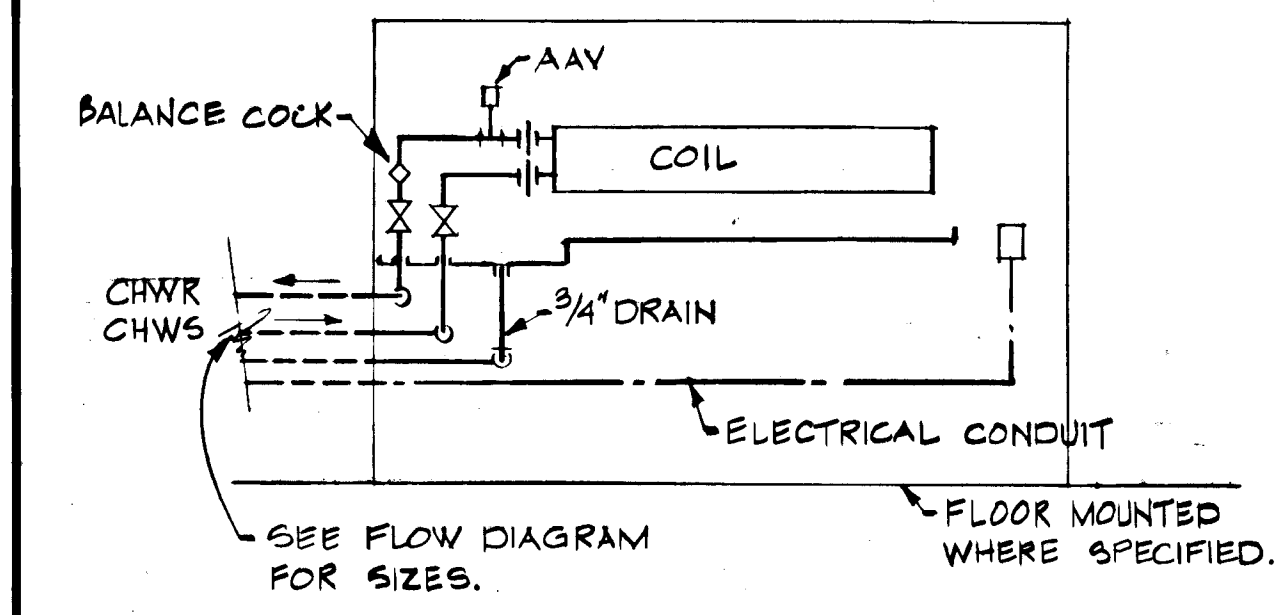
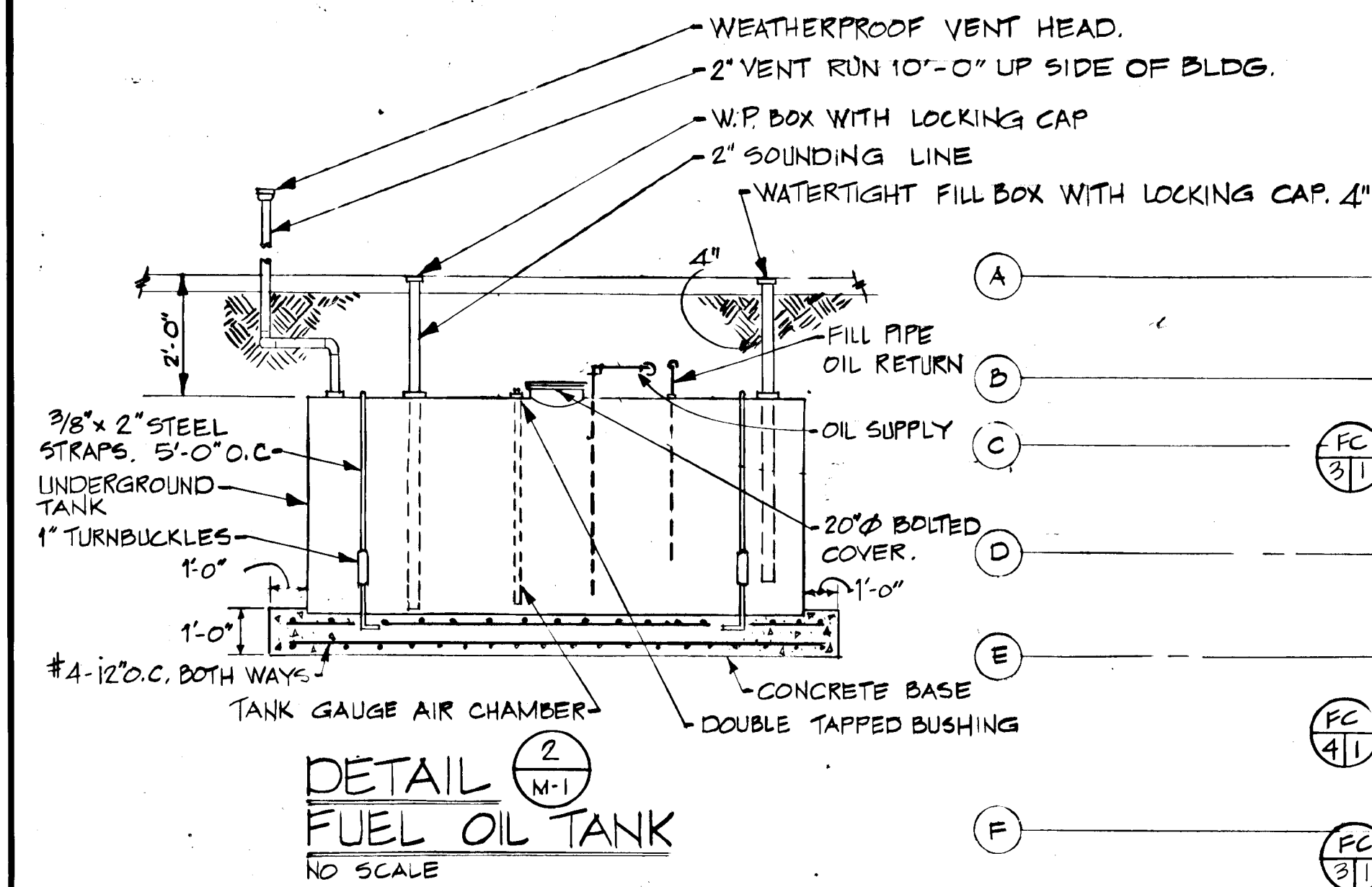
REVISIONS		
DRAWN	DATE	SCALE
RM		1" = 30'-0"
COOPER • LECKY PARTNERSHIP ARCHITECTS 3203 GRACE ST. N.W. WASHINGTON D.C.		
HOWARD COUNTY ADULT ACTIVITY CENTER		
SITE PLAN - ELECTRICAL		
DRAWING NO.		

E-5

XXAD-77-E005

NOTES

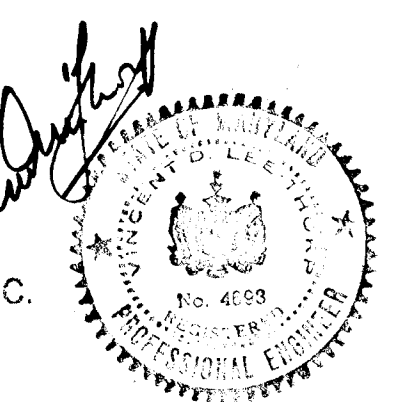
- HOLD DUCTS TIGHT TO THE UNDERSIDE OF STRUCTURAL STEEL. PIPING UNDER DUCTWORK. SEE PLUMBING DRAWINGS FOR ADDITIONAL PIPE RUNNING PARALLEL TO CHWS & CHWR.
- PROVIDE BALANCING VALVE IN EACH CHWR-AND ACCESS DOOR IN CEILING. PROVIDE THERMOMETER WELLS IN EACH CHWR FOR BALANCING.
- CONNECT 16" x 24" DUCT TO KITCHEN EXHAUST HOOD. HOOD PROVIDED UNDER KITCHEN EQUIPMENT ALLOWANCE.



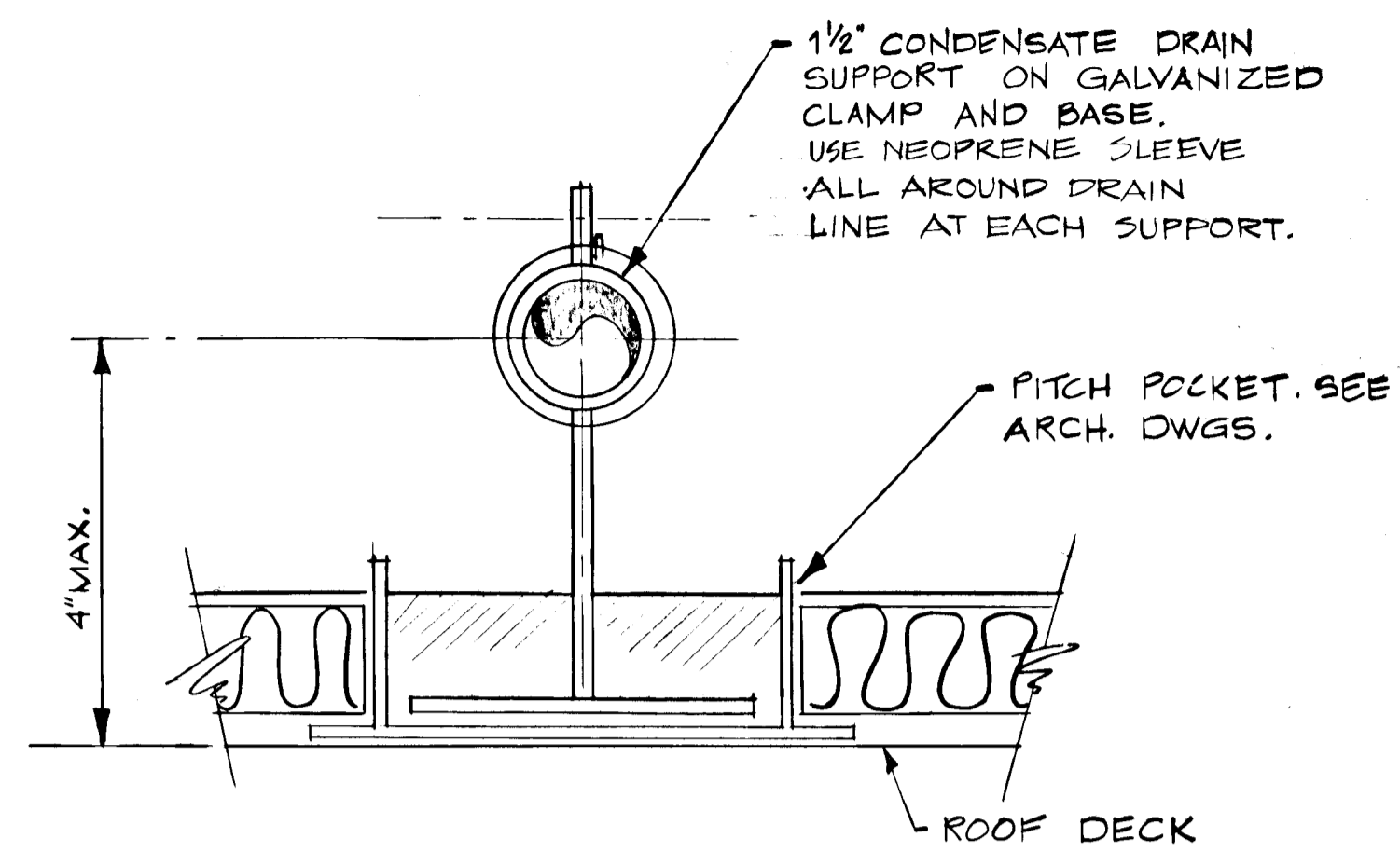
REVISIONS		
DRAWN	DATE	SCALE
K.L.E./VLT		AS NOTED
COOPER • LECKY PARTNERSHIP ARCHITECTS 3203 GRACE ST. N.W. WASHINGTON D.C.		
HOWARD COUNTY ADULT ACTIVITY CENTER		
FLOOR PLAN MECHANICAL		
DRAWING NO.		

M-1

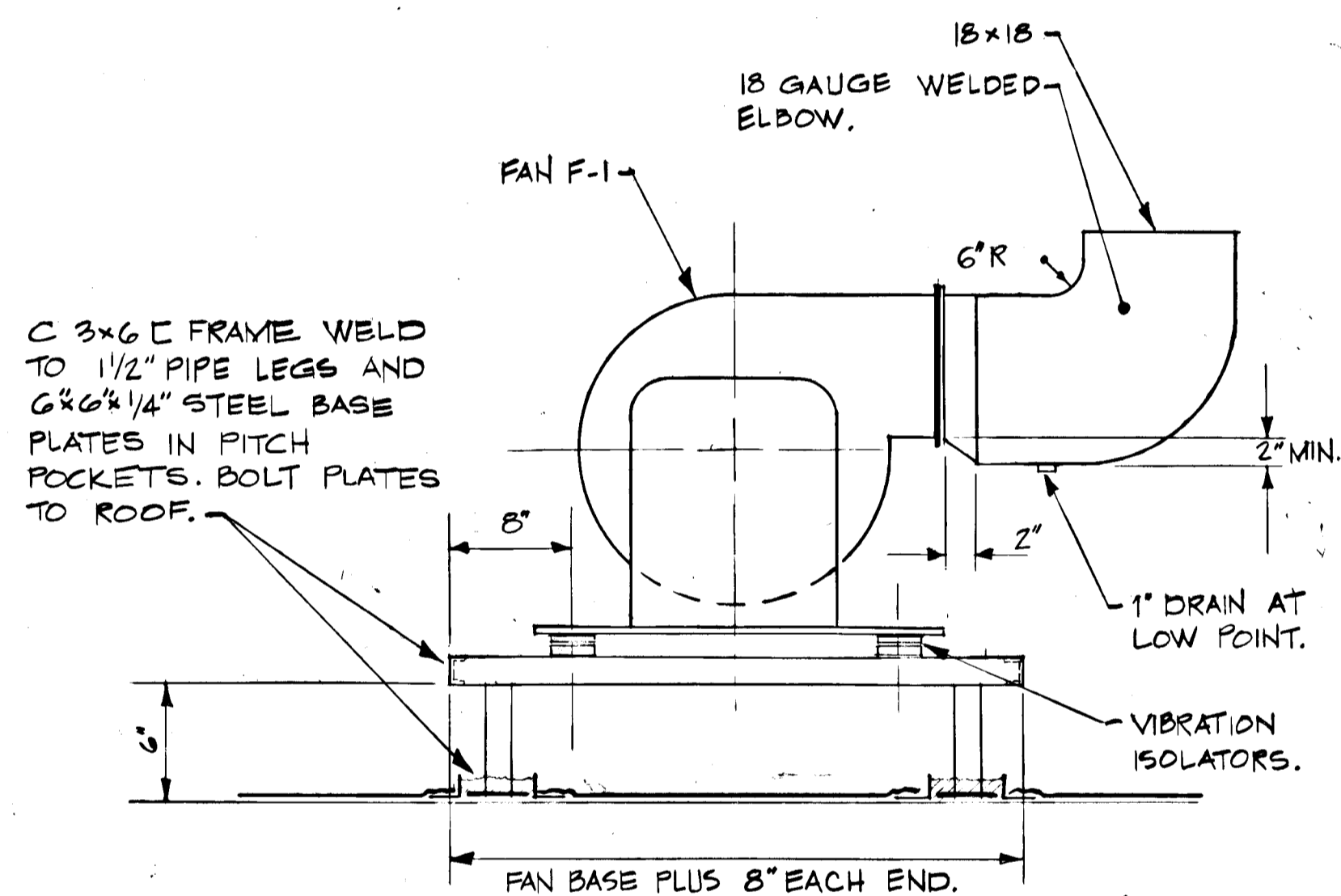
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CONSULTING ENGINEERS, INC.
8401 CONNECTICUT AVENUE
WASHINGTON, D.C. 20015



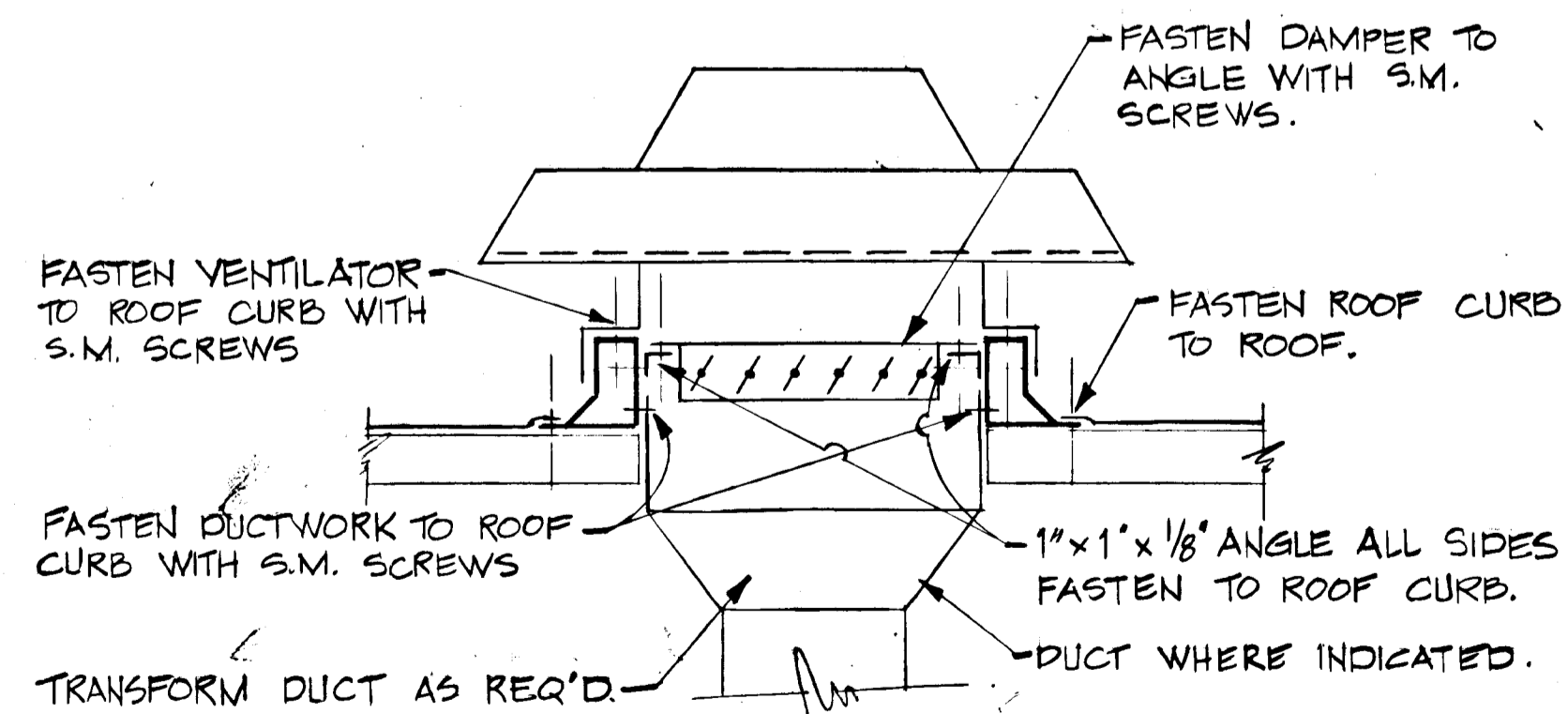
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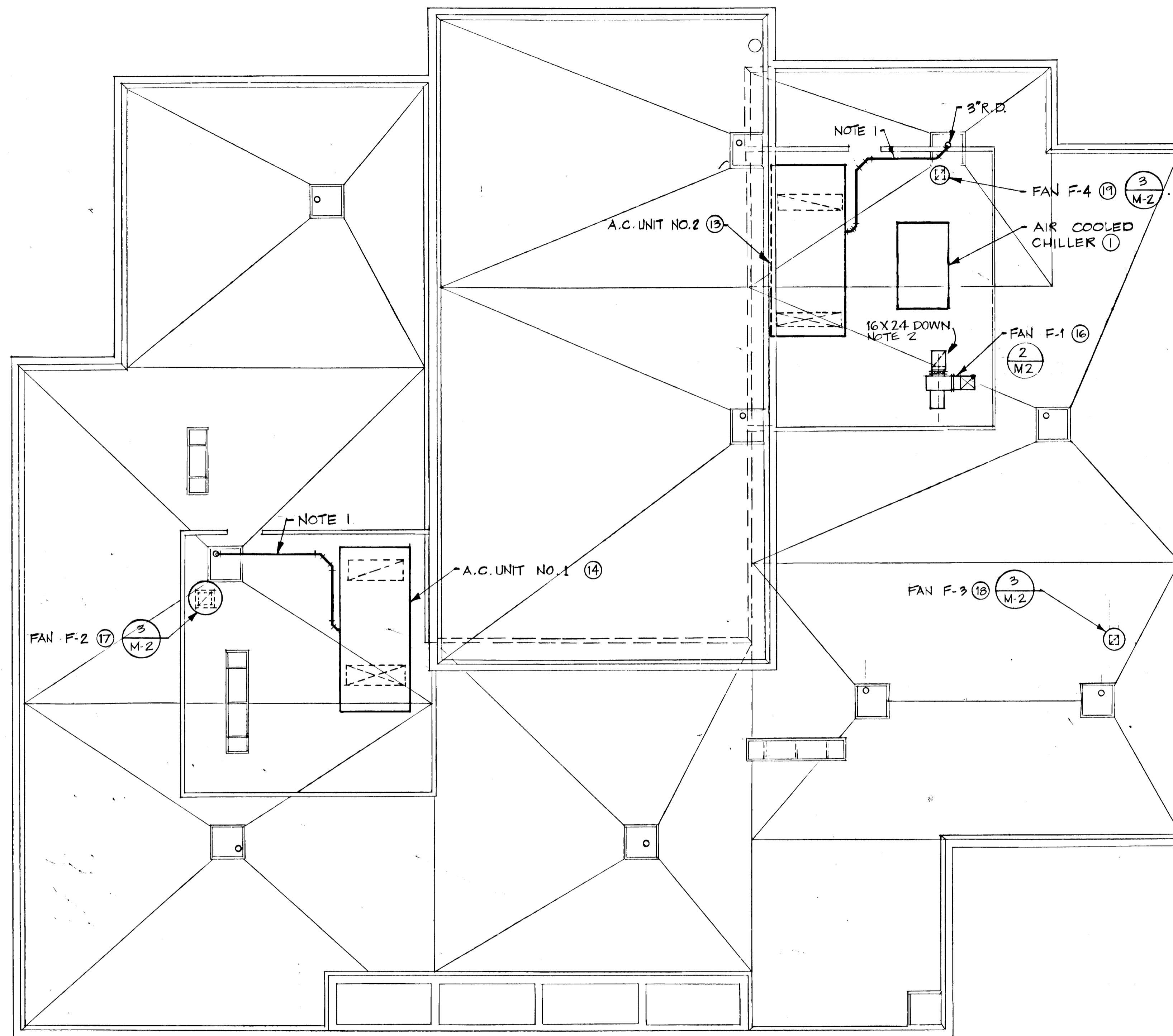
DETAIL 1
CONDENSATE DRAIN
NO SCALE



DETAIL 2
KITCHEN EXHAUST FAN
NO SCALE



DETAIL 3
ROOF VENTILATOR MOUNTING
NO SCALE



ROOF PLAN: MECHANICAL
SCALE: 1/8" = 1'-0"

NOTES

1. PROVIDE 1/2" COPPER CONDENSATE DRAIN FROM EACH A.C. UNIT. SPILL OVER ROOF DRAIN SUPPORT ON CLAMP AND PITCH POCKET. SEE: (1) M-2
2. PROVIDE ROOF CURB AT ROOF PENETRATION, FLASH & COUNTER-FLASH DUCT WEATHERTIGHT.

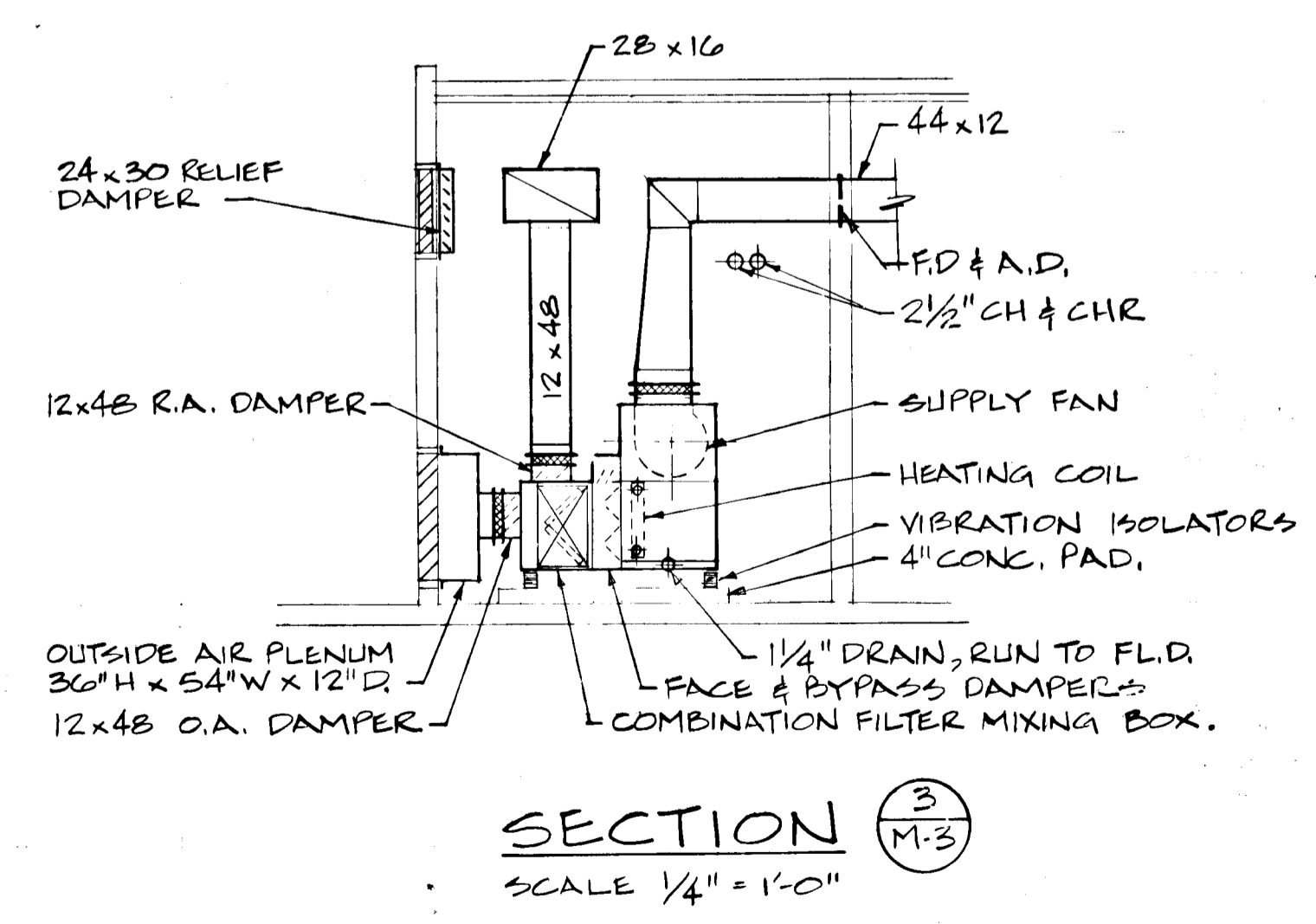
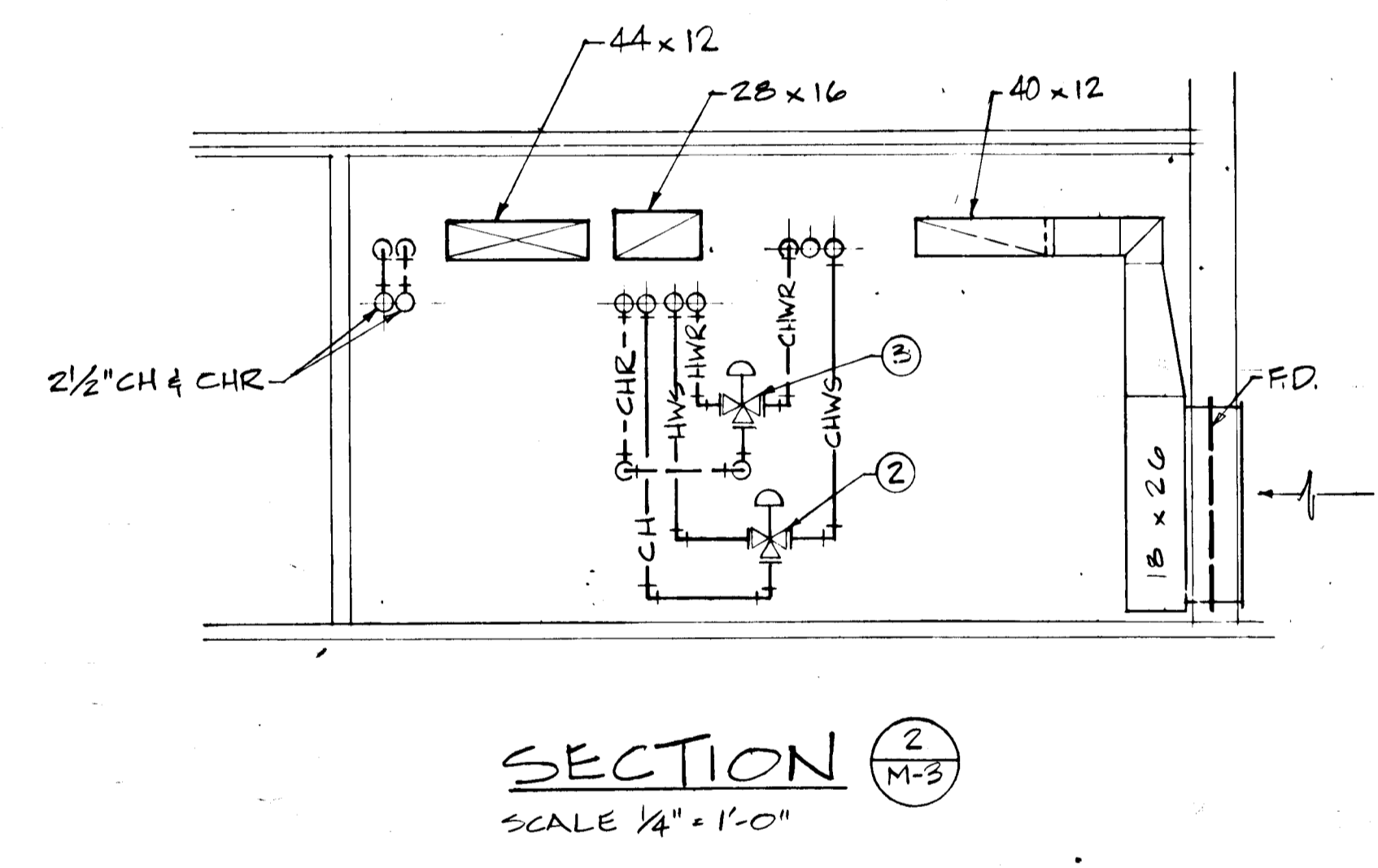
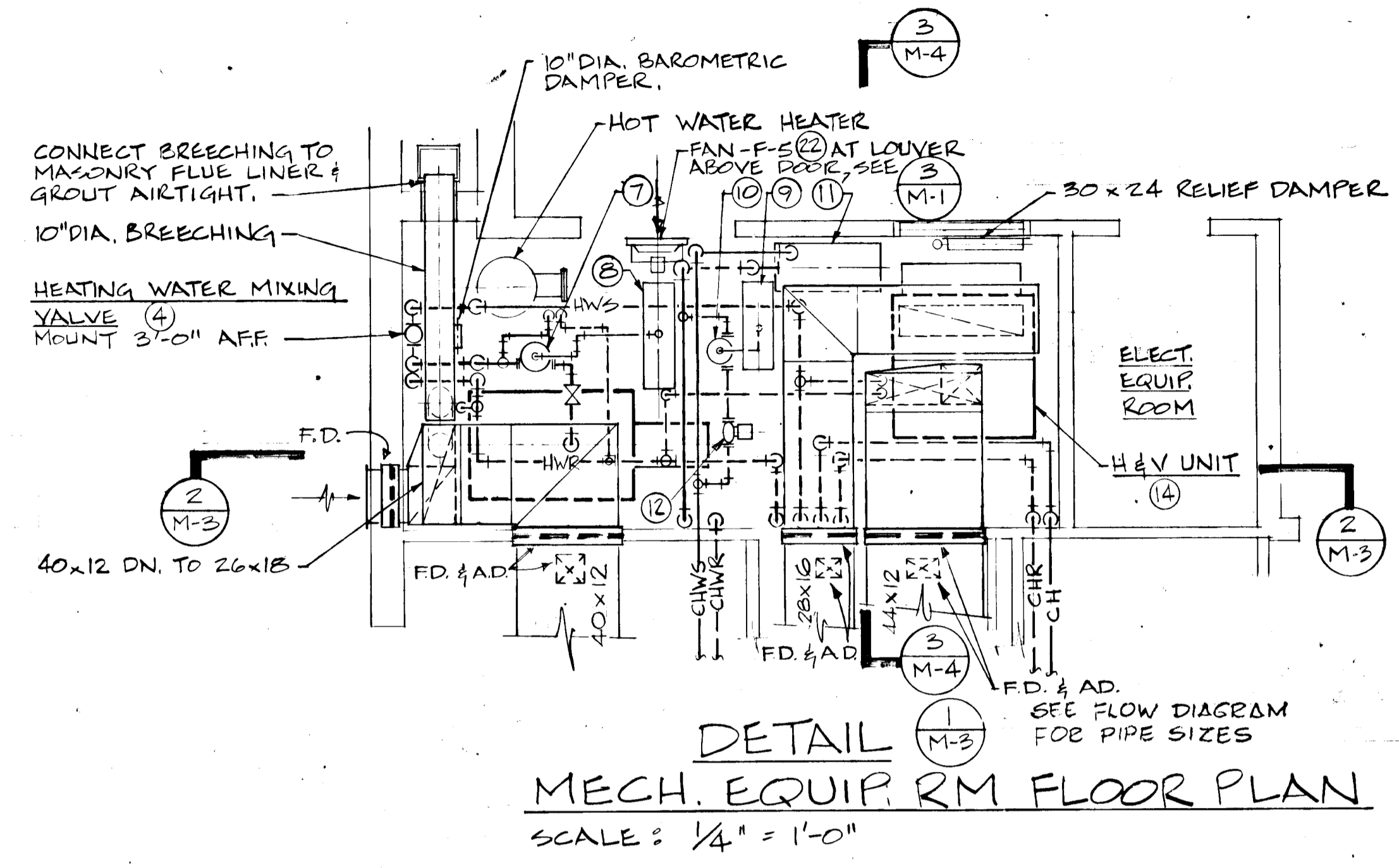
REVISIONS		
DRAWN	DATE	SCALE
K.L.E.		AS NOTED
COOPER • LECKY PARTNERSHIP ARCHITECTS 3203 GRACE ST. N.W. WASHINGTON D.C.		
HOWARD COUNTY ADULT ACTIVITY CENTER		
ROOF PLAN - MECHANICAL		
DRAWING NO.		
M-2		

LEE-THORP
CONSULTING ENGINEERS, INC.
8401 CONNECTICUT AVENUE
WASHINGTON, D. C. 20015



FAN COIL UNIT SCHEDULE					
SIZE	CFM AT MEDIUM SPEED NOTE 'C'	TOTAL CAPACITY MED SPEED COOLING NOTE 'A'	TOTAL CAPACITY MED SPEED HEAT NOTE 'B'	GPM	P.D. FT.
2	180	-	10.0 MBH	1.3	2.0
3	270	8.1 MBH	15.0 "	2.0	6.0
4	360	10.0 "	15.0 "	2.5	6.0
6	550	13.5 "	22.0 "	3.5	13.0
8	700	20.0 "	30.0 "	5.0	13.0

A - BASE ON 44°F E.W.T 10°F ΔT, 80°DB 50% EAT
 B " " 180°F EWT 70°F EAT
 C MAX 130 WATTS ON HIGH SPEED

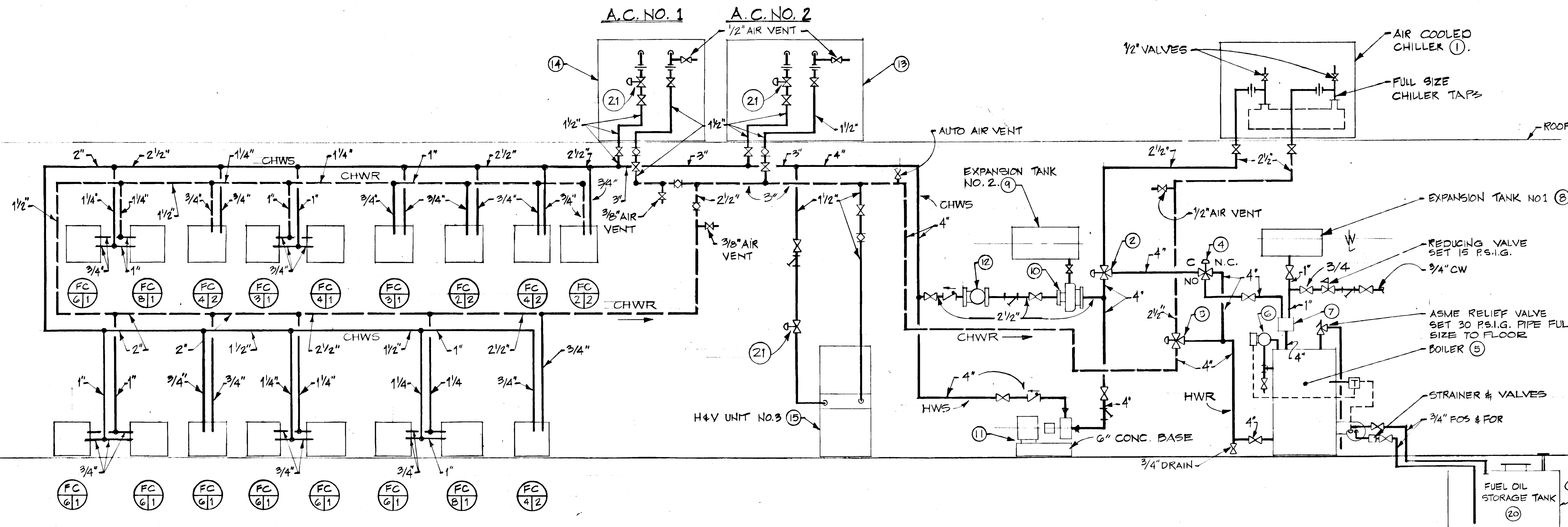


REVISIONS		
DRAWN	DATE	SCALE
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HOWARD COUNTY ADULT ACTIVITY CENTER		
DETAILS - MECHANICAL		
DRAWING NO.		

LEE-THORP
 CONSULTING ENGINEERS, INC.
 8401 CONNECTICUT AVENUE
 WASHINGTON, D. C. 20015



M-3



KEY:

INDICATE UNIT SIZE AND CAPACITY.

2 = 200 CFM
3 = 300 CFM
4 = 400 CFM
6 = 600 CFM
8 = 800 CFM

FC = FAN COIL

INDICATES TYPE 1 OR 2.

TYPE 1 = HEATING AND COOLING WITH S/W CHANGE OVER SWITCH.

TYPE 2 = HEATING ONLY. FAN STARTS ON TEMPERATURE FALL; STOPS ON TEMPERATURE RISE.

SEE SHEET M-3 FOR SCHEDULE OF F.C. UNITS

DETAIL 1 M-4 PIPING FLOW DIAGRAM

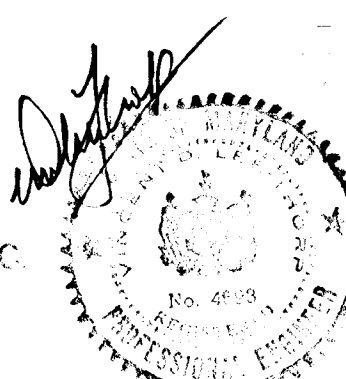
SYMBOLS

- CHWS DUAL TEMPERATURE WATER SUPPLY
- CHWR DUAL TEMPERATURE WATER RETURN
- HWS HEATING WATER SUPPLY
- HWR HEATING WATER RETURN
- CH CHILLED WATER
- CHR CHILLED WATER RETURN
- MAV MANUAL AIR VENT
- Thermometer with well
- UNION
- GATE VALVE
- BALANCING COCK
- AUTO CONTROL VALVE 2-WAY
- AUTO CONTROL VALVE 3-WAY
- STRAINER
- CHECK VALVE
- GLOBE VALVE
- PRESSURE GAUGE WITH STOP COCK
- FLEXIBLE PIPE CONNECTION
- SAB SOUND ABSORBER LINING IN DUCT
- PRV POWER ROOF VENTILATOR WITH BACK DRAFT DAMPER
- RECTANGULAR DUCTWORK
- 90° ELBOW WITH DOUBLE THICKNESS TURNING VANES
- FIRE DAMPER UL RATED PROVIDE ACCESS DOOR
- MANUAL BALANCING DAMPER
- M.B.D.
- FOS FUEL OIL SUPPLY
- FOR FUEL OIL RETURN
- A.D. ACCESS DOOR - 24" x 24" UNLESS OTHERWISE NOTED
- TOP REGISTER
- T.R.
- THERMOSTAT MOUNT 5'0" A.F.F.
- A.F.F. ABOVE FINISHED FLOOR
- F.O.B. FLAT ON BOTTOM
- B.R. BOTTOM REGISTER
- CR CEILING REGISTER
- FLEXIBLE CONNECTION
- N.I.C. NOT PROVIDED UNDER THIS CONTRACT
- T.G. TOP GRILLE
- O.A. OUTSIDE AIR
- MOTORIZED DAMPER
- AAV AUTOMATIC AIR VENT
- WP WATER PROOF
- A.E. AIR EXTRACTOR IN BRANCH DUCT TAKE OFF
- CEILING DIFFUSER

EQUIPMENT SCHEDULE

ITEM NO.	DESIGNATION	NOTES	ITEM NO.	DESIGNATION	NOTES	ITEM NO.	DESIGNATION	NOTES
1	AIR COOLED CHILLER	10 COOL - 50 GPM 54° TO 44° 20 TONS, 95°F AMBIENT 30 KW - 208/3/60. 15 FT. MAX. PD.	13	A.C. UNIT NO. 2 ROOF TOP MULTI-ZONE AIR COOLED WITH HW HEATING COIL. MODIFIED AS SPECIFIED.	6,000 CFM AT 1.0" E.S.P. 5 H.P. 208/3/60 FAN. 10 COOL - 6,000 CFM FROM 83.0° DB, 70°F WB, TO 59.0° DB, 57°F WB. 20 TONS, MAX. 26 KW. COMP. 3 KW. COND. 208/3/60 95°F AMBIENT. TO HEAT - 6,000 CFM FROM 56° TO 90° ON 23 GPM. 180° TO 160° MAX. 3 FT. PD. 2" THICK THROWAWAY FILTERS MAX. 0.10" CLEAN.	16	FAN F-1 KITCHEN EXHAUST. CENTRIFUGAL BELT DRIVE WEATHER HOOD	4,000 CFM AT 1.0" S.P. 1.8 B.H.P. 208/3/60 MOTOR. 18" WHEEL. 2.0 HP. TWO SPEED MOTOR
2	4" TWO POSITION CHANGE OVER DIVERTING VALVE.	115 GPM AT 3 FT. PD.	14	A.C. UNIT NO. 1 ROOF TOP MULTI-ZONE AIR COOLED WITH HW COIL. MODIFIED AS SPECIFIED.	4500 CFM AT 1.25" E.S.P. 3 H.P. 208/3/60 FAN. 10 COOL - 4500 CFM 83.0° DB, 70.0° WB TO 59° DB, 57° WB 15 TONS, 22 KW. COMP. 2 KW COND. 208/3/60 AT 95°F AMBIENT. TO HEAT - 4500 CFM FROM 56°F TO 90°F ON 17 GPM. 180° TO 160°F MAX. 3 FT. PD. 2" THROWAWAY FILTERS MAX. 0.10" WG. CLEAN.	17	FAN F-2 POWER ROOF VENT CENTRIFUGAL BELT DRIVE.	1850 CFM AT 5/8" S.P. 650 rpm. 3/4 H.P. 208/3/60 MOTOR.
3	3" MIXING VALVE MODULATING	115 GPM AT 5 FT. PD.				18	FAN F-3 PRV CENTRIFUGAL BELT DRIVE.	550 CFM AT 3/8" S.P. 830 rpm. 1/4 H.P. 120/1/60 GRAVITY DAMPER.
4	3" MIXING VALVE MODULATING	115 GPM AT 5 FT. PD.	15	HEAT AND VENT UNIT 100% O.A. WITH HW COIL FACE AND BYPASS VERTICAL DRAW THRU.	FAN 4000 CFM AT 1/4" T.S.P. 2 H.P. 208/3/60 TWO SPEED MOTOR 15" DIA FAN TO HEAT - 4,000 CFM. FROM 0°F TO 70°F ON 20 GPM. 180° TO 150°F, 600 FPM. FACE VEL. FACE AND BYPASS ON COIL. FILTER MAX. 0.10" W.G. CLEAN.	19	FAN F-4 PRV DIRECT DRIVE	300 CFM AT 1/4" S.P. 860 rpm. 1/2 H.P. 120/1/60.
5	HOT WATER BOILER	TO HEAT - 205 GPM 180° TO 200°F. 2050 MBH NET. OUTPUT: 18 GPH NO. 2 OIL, 1 1/2 HP 208/3/60 F.D. FAN. 33 CU.FT. MIN. FURNACE VOLUME.				20	OIL STORAGE TANK	3,000 GAL. 5'-0" DIA. x 18'-0" LONG.
6	LOW WATER CUT-OFF	SET 4" ABOVE TOP OF BOILER	12	COOLING PUMP IN LINE TYPE.	55 GPM AT 50 FT. HEAD 2 H.P. 1750 rpm 208/3/60.	21	TWO POSITION AUTO VALVES	SIZE INDICATED SEE CONTROL SPECIFICATION.
7	AIR SEPARATOR	205 GPM AT 1 FT. PD.				22	FAN F-5 PROP-ELLER, SUPPLY, WITH MOTORIZED DAMPER.	16" Ø WHEEL, 900 CFM AT 1/4" S.P. 1/2 H.P. 1140 RPM WITH SUPPLY AREG'T. & GUARD, & THERMOSTAT.
8	EXPANSION TANK	18" DIA. x 6'-0" LONG 80 GAL.	11	HEATING PUMP BASEMOUNTED COUPLING TYPE.	1750 rpm. 3 H.P. 208/3/60 6 3/4" Ø IMPELLER 200°F WATER.	23	FAN F-6 PRV DIRECT DRIVE	350 CFM AT 1/4" S.P. 860 RPM 1/8 HP 120/1/60
9	EXPANSION TANK	18" DIA. x 3'-0" LONG 40 GAL.				24	FAN F-7 PRV DIRECT DRIVE	200 CFM AT 1/4" S.P. 860 RPM 1/2 HP 120/1/60.
10	AIR SEPARATOR	60 GPM AT 1 FT. PD.	25	HEATING PUMP BASEMOUNTED COUPLING TYPE.	1750 rpm. 3 H.P. 208/3/60 6 3/4" Ø IMPELLER 200°F WATER.	25	FAN F-8 PRV DIRECT DRIVE	500 CFM AT 1/4" S.P. 830 RPM 1/4 HP 120/1/60.

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REVISIONS		
DATE	SCALE	

DRAWN K.L.E. DATE SCALE

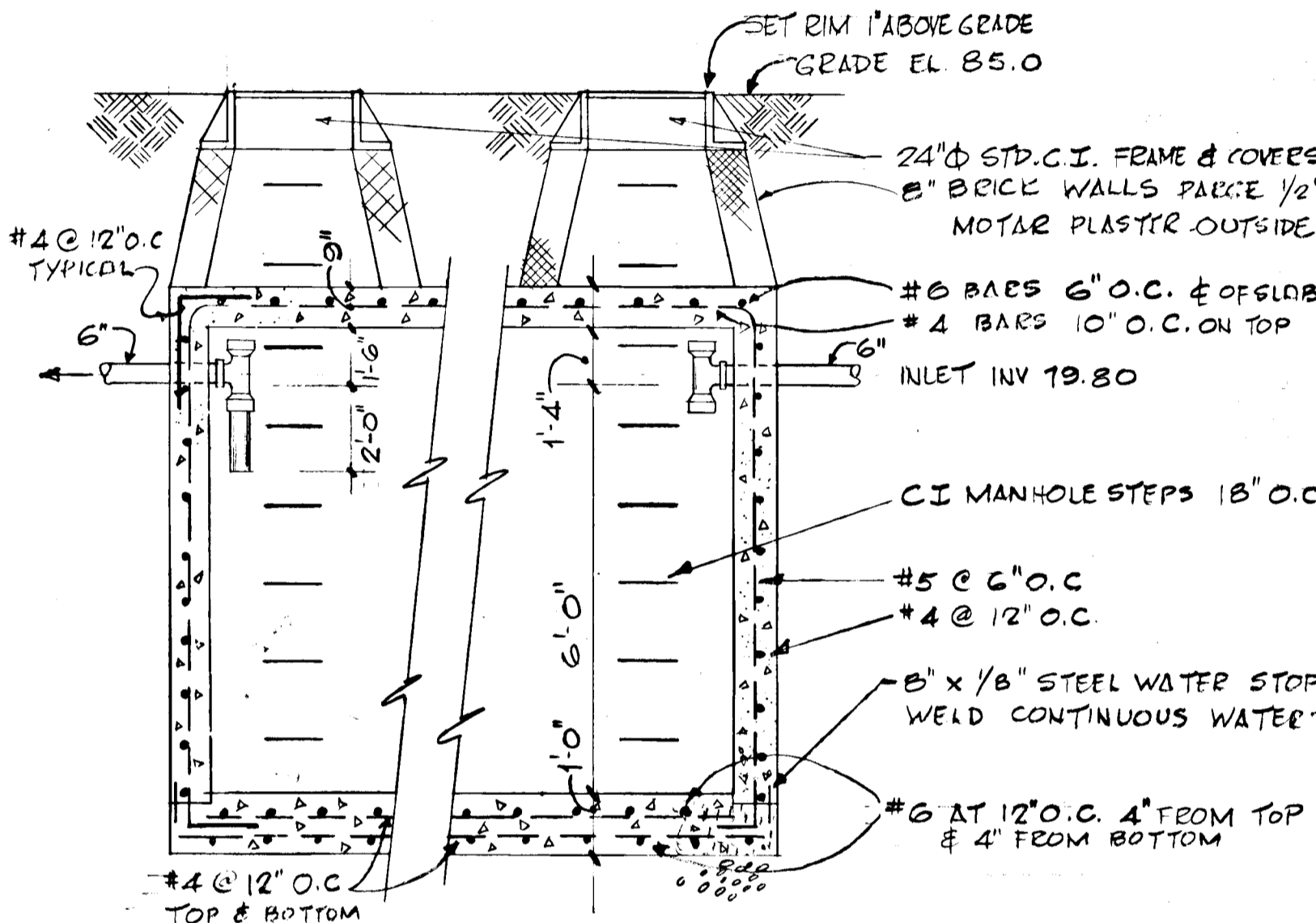
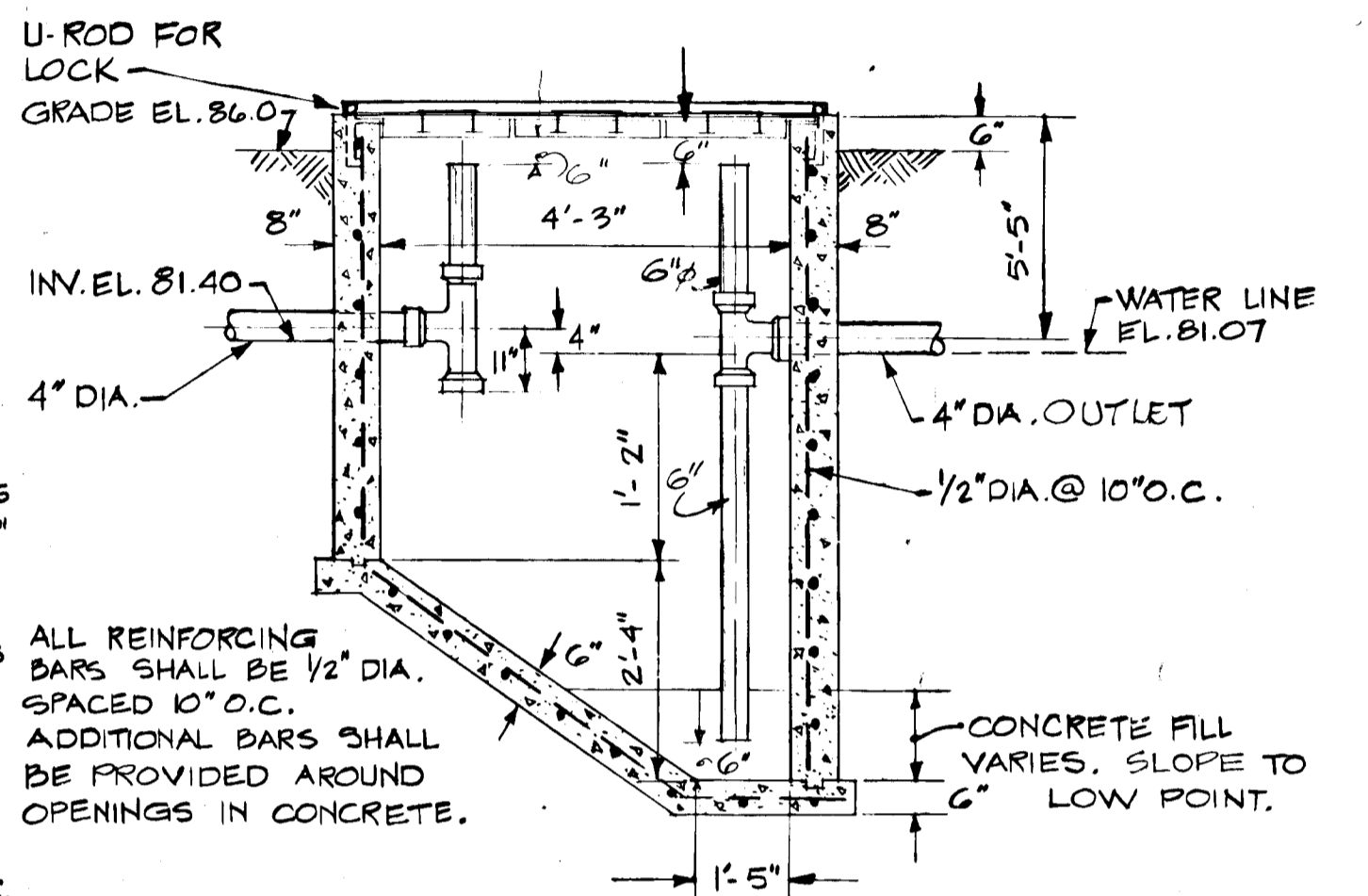
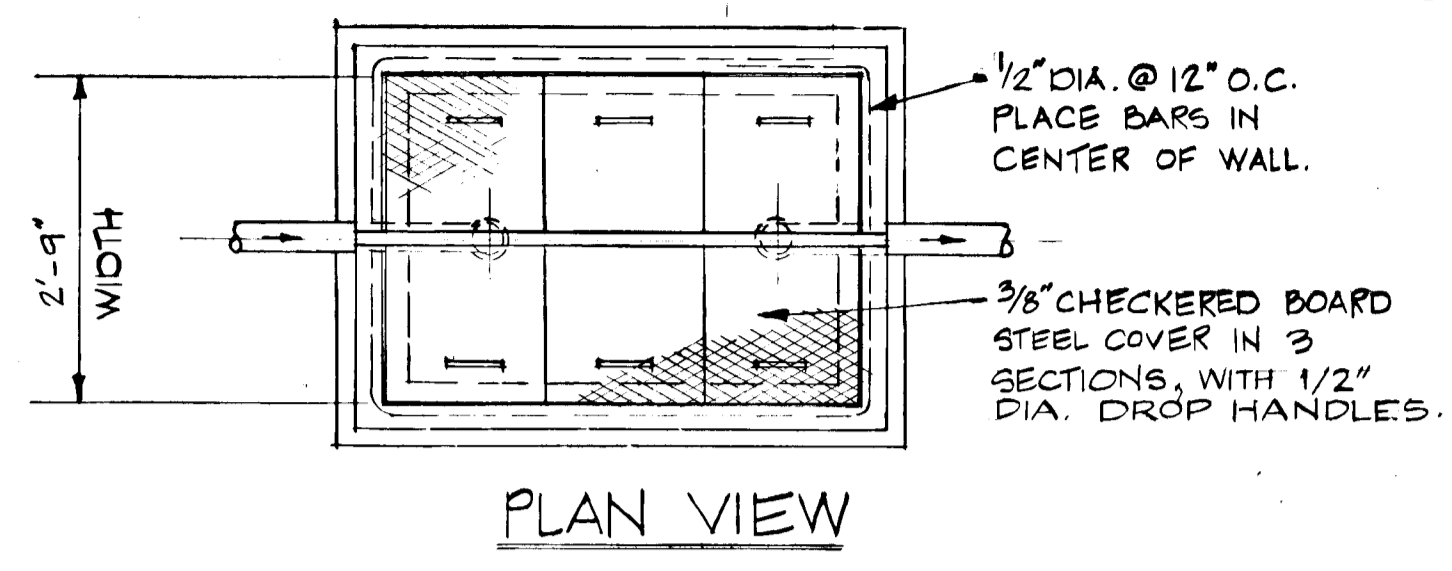
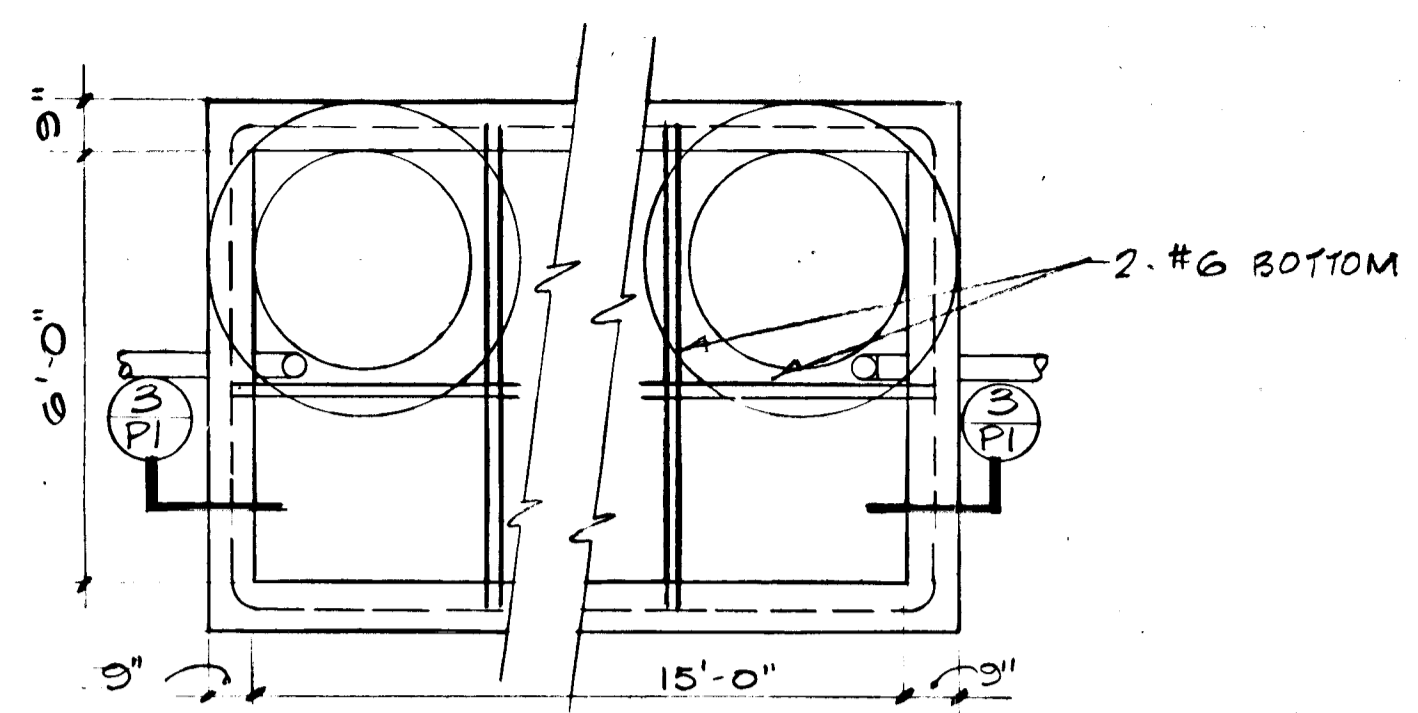
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HOWARD COUNTY ADULT ACTIVITY CENTER

EQUIPMENT SCHEDULE MECHANICAL

DRAWING NO.

M-4

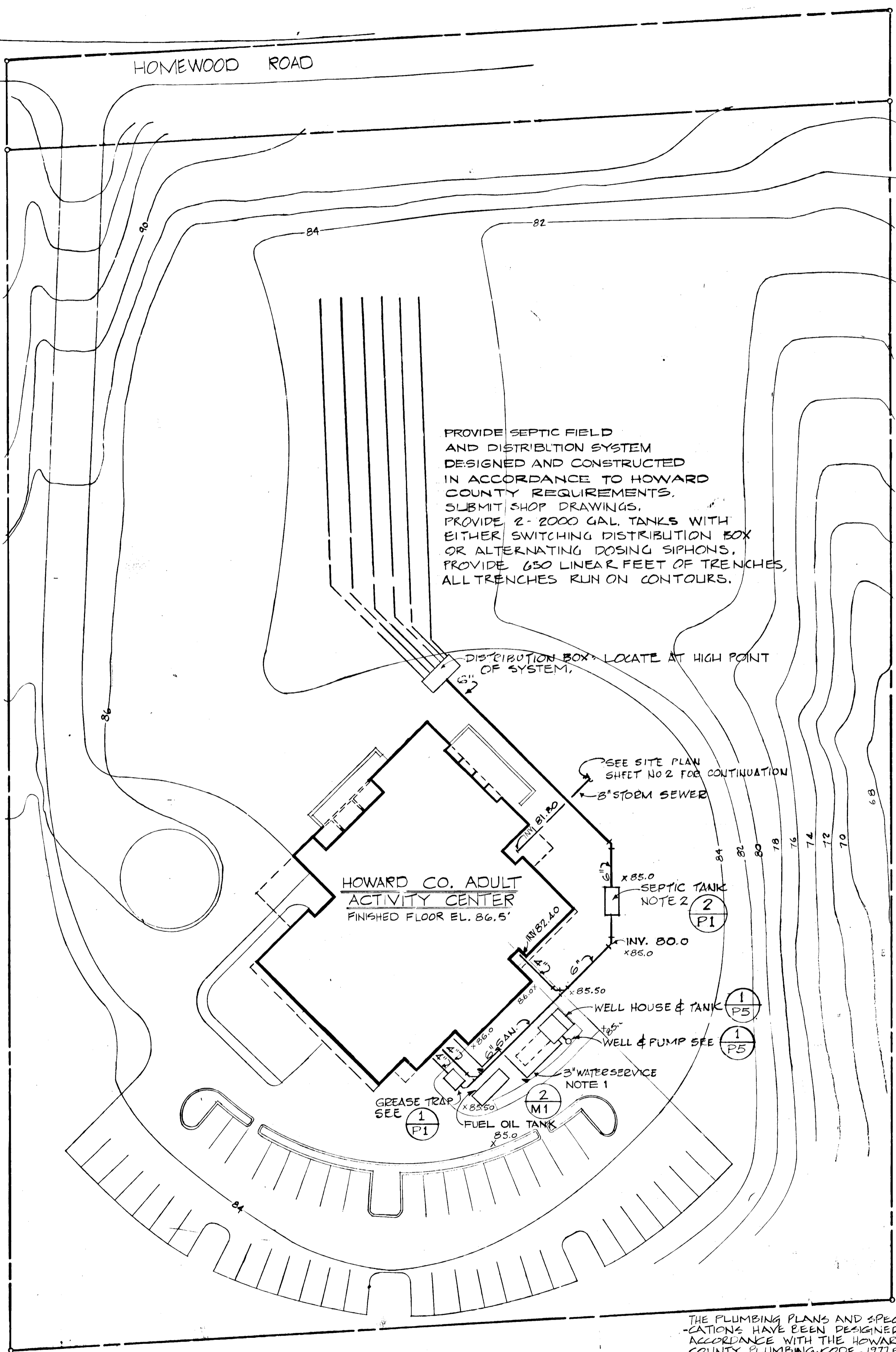


ALL REINFORCING BARS SHALL BE 1/2" DIA. SPACED 10" O.C. ADDITIONAL BARS SHALL BE PROVIDED AROUND OPENINGS IN CONCRETE.

DETAIL 1 GREASE TRAP NO SCALE

NOTES

1. PROVIDE CONCRETE REACTION BLOCKING AT ALL ELLS AND OFFSETS IN THE WATER LINE.
2. SEPTIC TANK SHALL BE 1,125 GAL LIQUID CAPACITY, 15'-0" L x 6'-0" W x 7'-4" H. CONCRETE - 3000 PSI AT 28 DAYS. STEEL - DEFORMED A.S.T.M. A-615 GRADE 40



PROVIDE SEPTIC FIELD AND DISTRIBUTION SYSTEM DESIGNED AND CONSTRUCTED IN ACCORDANCE TO HOWARD COUNTY REQUIREMENTS. SUBMIT SHOP DRAWINGS. PROVIDE 2 - 2000 GAL. TANKS WITH EITHER SWITCHING DISTRIBUTION BOX OR ALTERNATING DOSING SIPHONS. PROVIDE 650 LINEAR FEET OF TRENCHES. ALL TRENCHES RUN ON CONTOURS.

DISTRIBUTION BOX LOCATE AT HIGH POINT OF SYSTEM.

SEE SITE PLAN SHEET NO. 2 FOR CONTINUATION

WELL HOUSE & TANK (P5)
WELL & PUMP SEE (P5)

3" WATER SERVICE NOTE 1

GREASE TRAP SEE (P1)

FUEL OIL TANK (M1)

THE PLUMBING PLANS AND SPECIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE HOWARD COUNTY PLUMBING CODE - 1977 EDITION

PLUMBING SYMBOLS

- CW DOMESTIC COLD WATER
- HW DOMESTIC HOT WATER
- HWC HOT WATER CIRCULATING
- ⊠ FLD FLOOR DRAIN
- RD. ROOF DRAIN
- SAN. SANITARY SEWER
- ST. STORM SEWER
- V VENT
- W WASTE LINE
- VTR VENT THRU ROOF
- ⊗ GATE VALVE
- OSD OPEN SITE DRAIN
- ⊗ SWING CHECK VALVE
- ⊗ LIFT CHECK VALVE
- ⊗ UNION
- SA-B SHOCK ABSORBER "B" DENOTES SIZE
- AD ACCESS DOOR
- C.P. CHROME PLATED
- HR HEAT RESISTANT HAND WHEEL
- ⊕ CENTER LINE
- INV. INVERT ELEVATION
- DN DOWN
- CI CAST IRON
- BZ BRONZE
- T.D.H TOTAL DISCHARGE HEAD
- FCO FLOOR CLEANOUT
- ⊗ BALANCING COCK

REVISIONS

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COOPER-LECKY PARTNERSHIP ARCHITECTS
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HOWARD COUNTY ADULT ACTIVITY CENTER

SITE WORK PLUMBING

DRAWING NO.

P-1

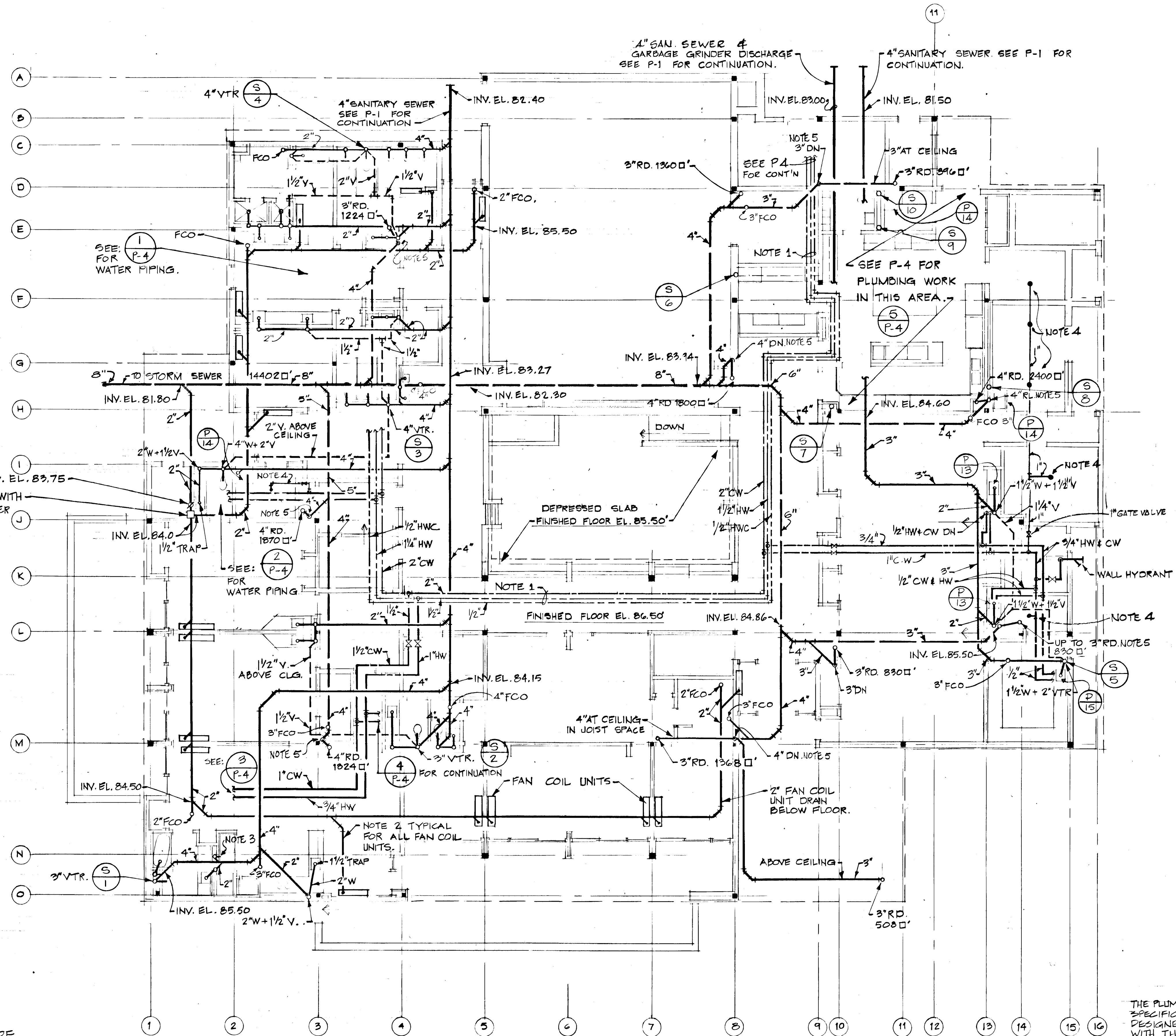
SITE WORK & PLUMBING
SCALE 1" = 30.0'

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WASHINGTON, D. C. 20015



NOTES

1. RUN PIPE, CW, HW, & HWC UNDER DUCT WORK IN THIS AREA. SEE MECHANICAL DRAWINGS FOR DUCTS AND HEATING PIPE, RUN PARALLEL TO CHWS PIPE.
2. PROVIDE 1" CONDENSATE DRAIN RUNOUTS TO ALL FAN COIL UNITS.
3. PROVIDE STAND PIPE CONCEALED BOX, 1/2" CW 1/2" HW & C.P. STOPS VAC BREAKERS & HOSE COUPLERS TO CLOTHES WASHER.
4. PROVIDE PENDENT FLUSH MOUNTED U.L. APPROVED SPRINKLER HEAD 16.5" P, WITH C.P. ESCUTCHEON ON CLG WHERE INDICATED. CONNECT TO C.W. 1"
5. PROVIDE 3" CLEANOUT AT BASE OF RAIN LEADER, ABOVE FLOOR. PROVIDE WALL ACCESS PANELS AS SPECIFIED.



2" BACKWATER VALVE, INV. EL. 83.75
 1'-6" x 1'-6" x 2'-9" DEEP PIT WITH
 1/4" THICK STEEL CHECKER
 PLATE COVER AND 1" L
 FRAME.

FIXTURE SCHEDULE				
DESIG	TYPE	WASTE	CW	HW
P-1	WATER CLOS	4"	1/2"	-
P-2	LAV	1 1/2"	1/2"	1/2"
P-3	LAV	1 1/2"	1/2"	1/2"
P-4	URINAL	2"	3/4"	-
P-5	SHOWER	2"	1/2"	1/2"
P-6	SHOWER	2"	1/2"	1/2"
P-7	BATH	1 1/2"	1/2"	1/2"
P-8	SHAMPOO	1 1/2"	1/2"	1/2"
P-9	HYDRANT	-	3/4"	-
P-10	SINK	1 1/2"	1/2"	1/2"
P-11				
P-12	EWC	1 1/4"	1/2"	-
P-13	SINK	1 1/2"	1/2"	1/2"
P-14	SECV SINK	3"	1/2"	1/2"
P-15	SHOP SINK	1 1/2"	1/2"	1/2"
P-16	LAV	1 1/2"	1/2"	1/2"

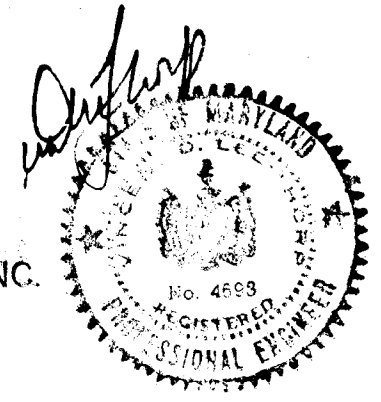
PROVIDE EACH FIXTURE WITH WATER SAVING DEVICES TO REGULATE THE MAX. FLOW RATES AT FIXTURE OUTLETS, IN ACCORDANCE WITH TABLE 10.14.3 OF THE HOWARD COUNTY PLUMBING CODE - 1977 EDITION.

FLOOR PLAN: PLUMBING
 SCALE: 1/8" = 1'-0"

THE PLUMBING PLANS AND SPECIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE HOWARD COUNTY PLUMBING CODE - 1977 EDITION.

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K.L.E.		1/8" = 1'-0"
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HOWARD COUNTY ADULT ACTIVITY CENTER		
DRAWING NO.		
P-2		

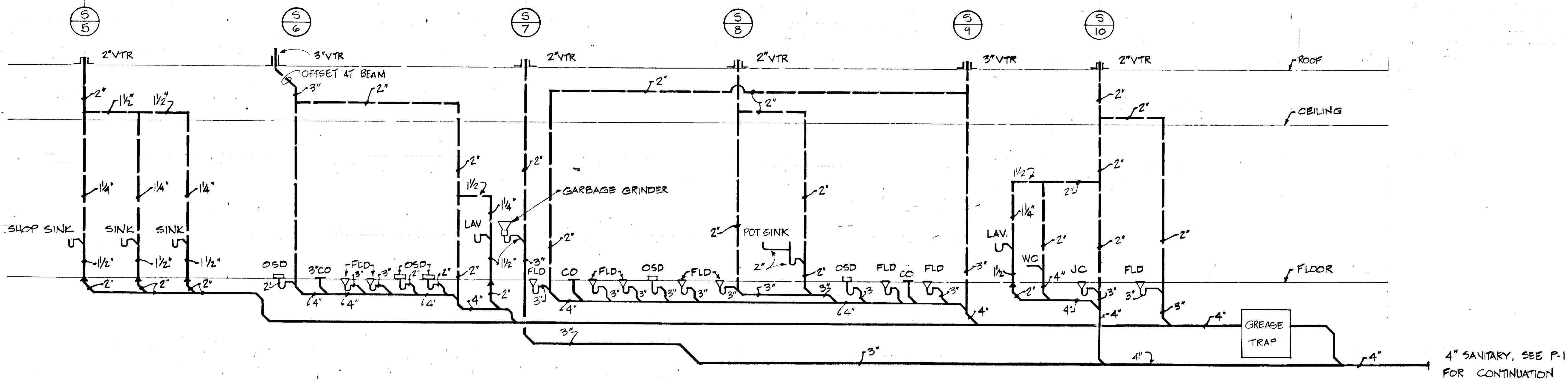
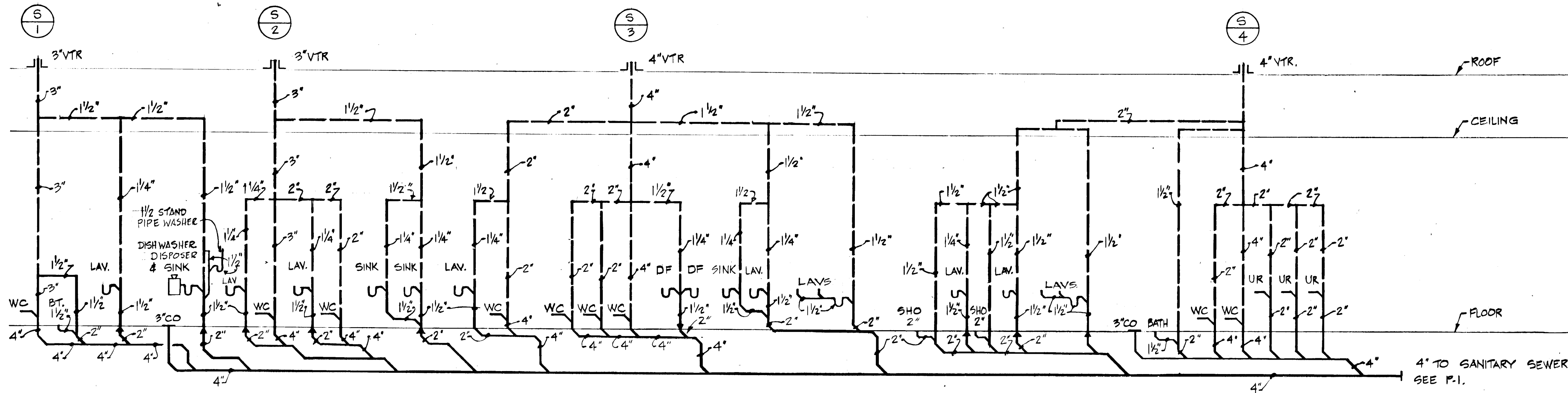
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845

EQUIPMENT SCHEDULE

1. DOMESTIC WATER HEATER
ANTICIPATOR SEMI-INSTANTANEOUS TYPE TO HEAT 800GPH FROM 50° TO 140° F. ON 90 GPM BOILER WATER ENTER 200°, LEAVING 180° F. 1 FT. PD. CIRCULATING PUMP 90 GPM. AT 6 FT. HEAD 1/4 H.P. 120/1/60 1750 RPM. CAST IRON, BRONZE FITTED.
2. DOMESTIC HOT WATER CIRCULATOR
10 GPM AT 6 FT. HEAD, 1/6 H.P. 120/1/60 1750 RPM. ALL BRONZE PUMP.
3. WEN PUMP
SUBMERSIBLE MULTI-STAGE TYPE TO DELIVER GPM AGAINST T.O.H. (T.O.H. INCLUDES 5 FT. DRAWDOWN, 20 FT. PIPE LOSS; 16.2 FT. SYSTEM PRESSURE).
4. HYDROPNEUMATIC TANK
3200 GALLONS CAPACITY. 6'-0" DIA. x 17'-6" LONG - ASME D.O.P.S.I.G. WATER PRESSURE TESTED AWWA STANDARDS; 24" DIA. BOLTED M.H. & CONNECTIONS INDICATED.
5. AIR COMPRESSOR
2 CFM AT 175 P.S.I.G. DISCHARGE PRESSURE; 25 CFM FREE AIR AT 14.7 P.S.I.G. 1/3 H.P. 120/1/60.



WASTE AND VENT RISER DIAGRAM
NO SCALE

REVISIONS

DRAWN	DATE	SCALE
KLE.		NONE

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HOWARD COUNTY
ADULT ACTIVITY CENTER

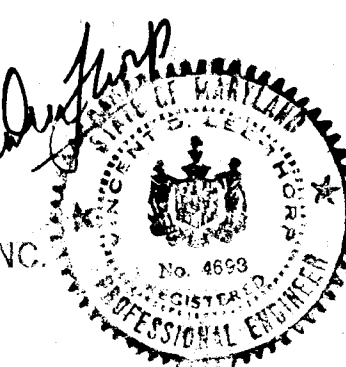
RISER DIAGRAM
PLUMBING

DRAWING NO.

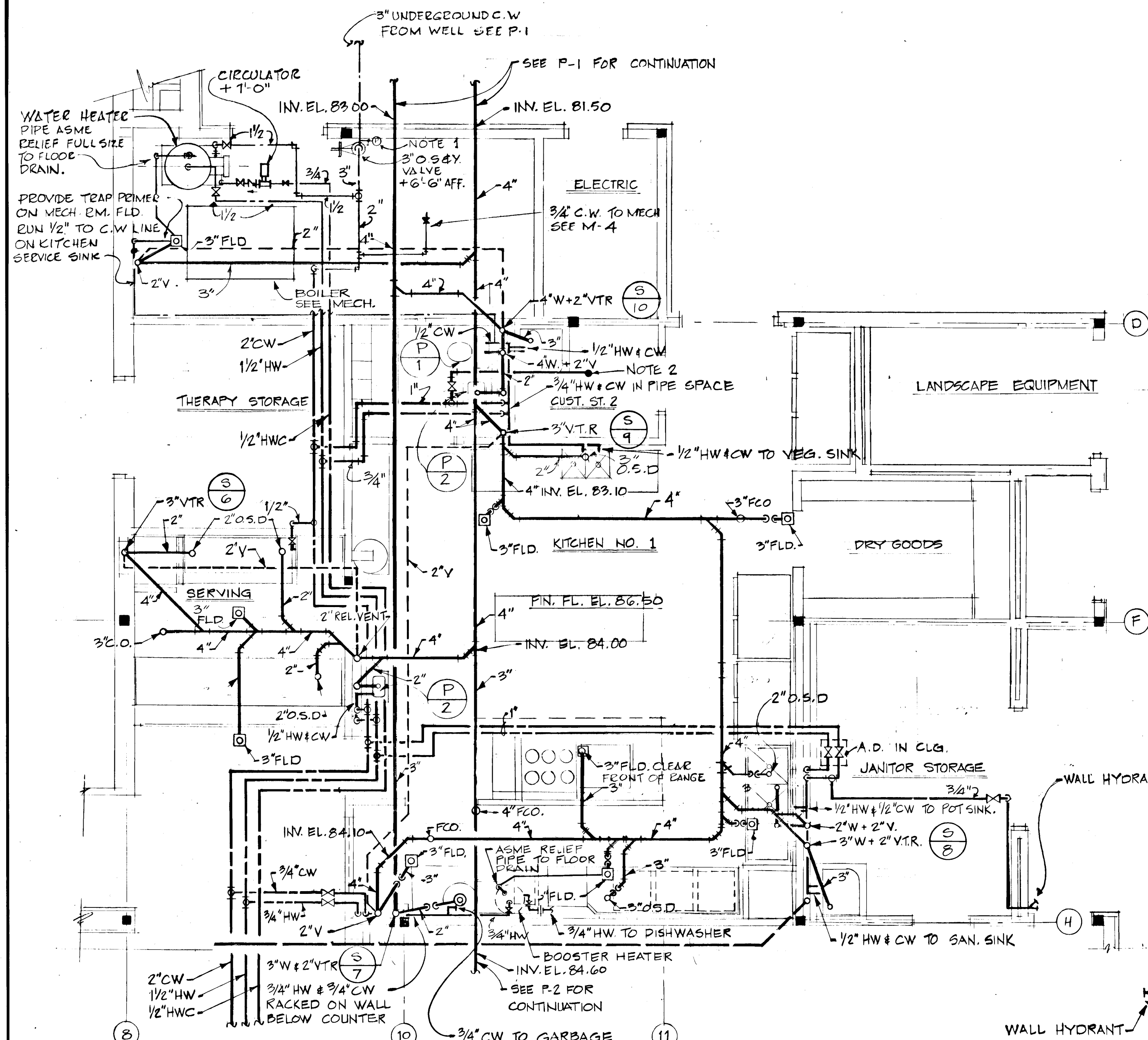
P-3

THE PLUMBING PLANS AND SPECIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE HOWARD COUNTY PLUMBING CODE - 1977 EDITION.

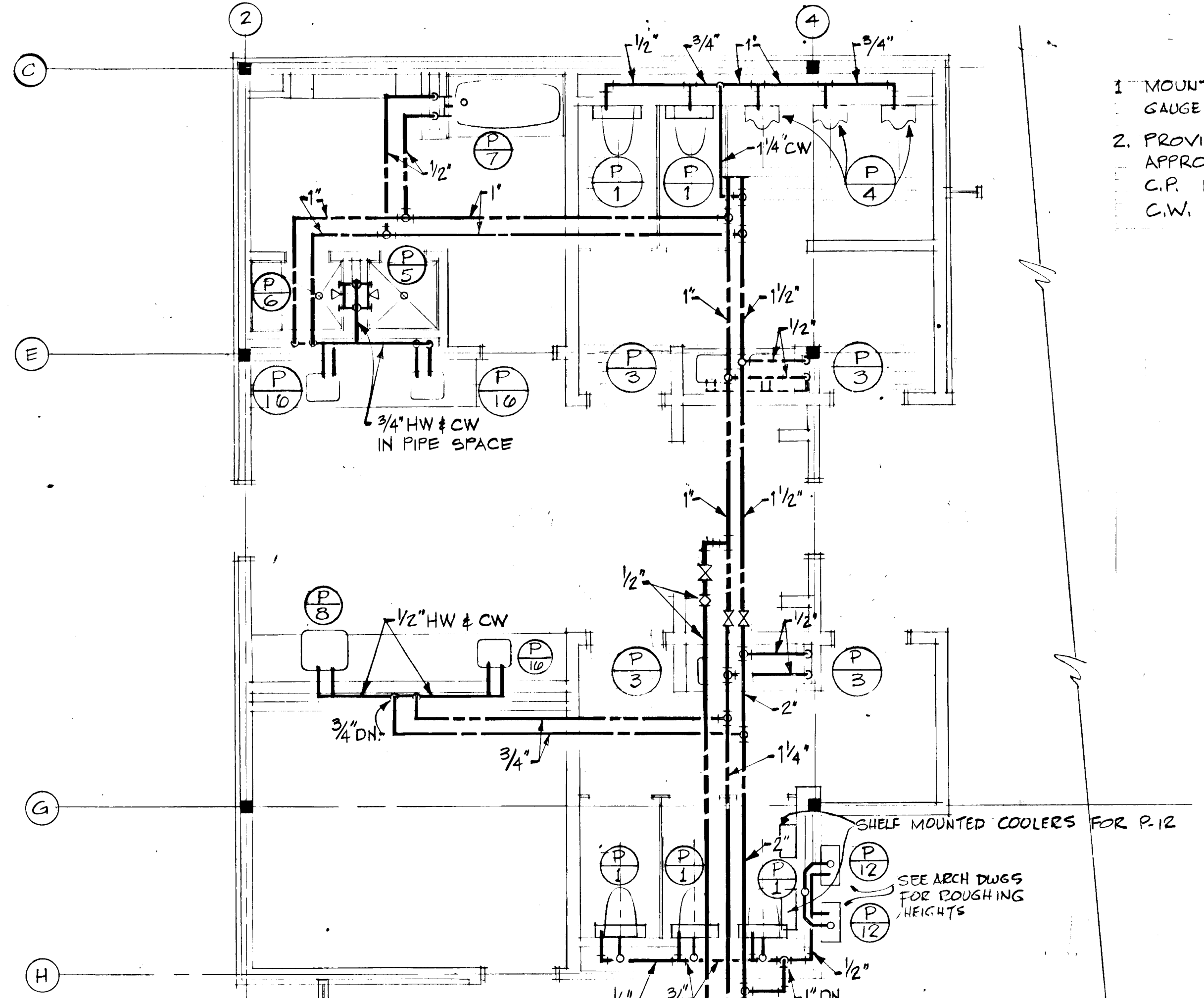
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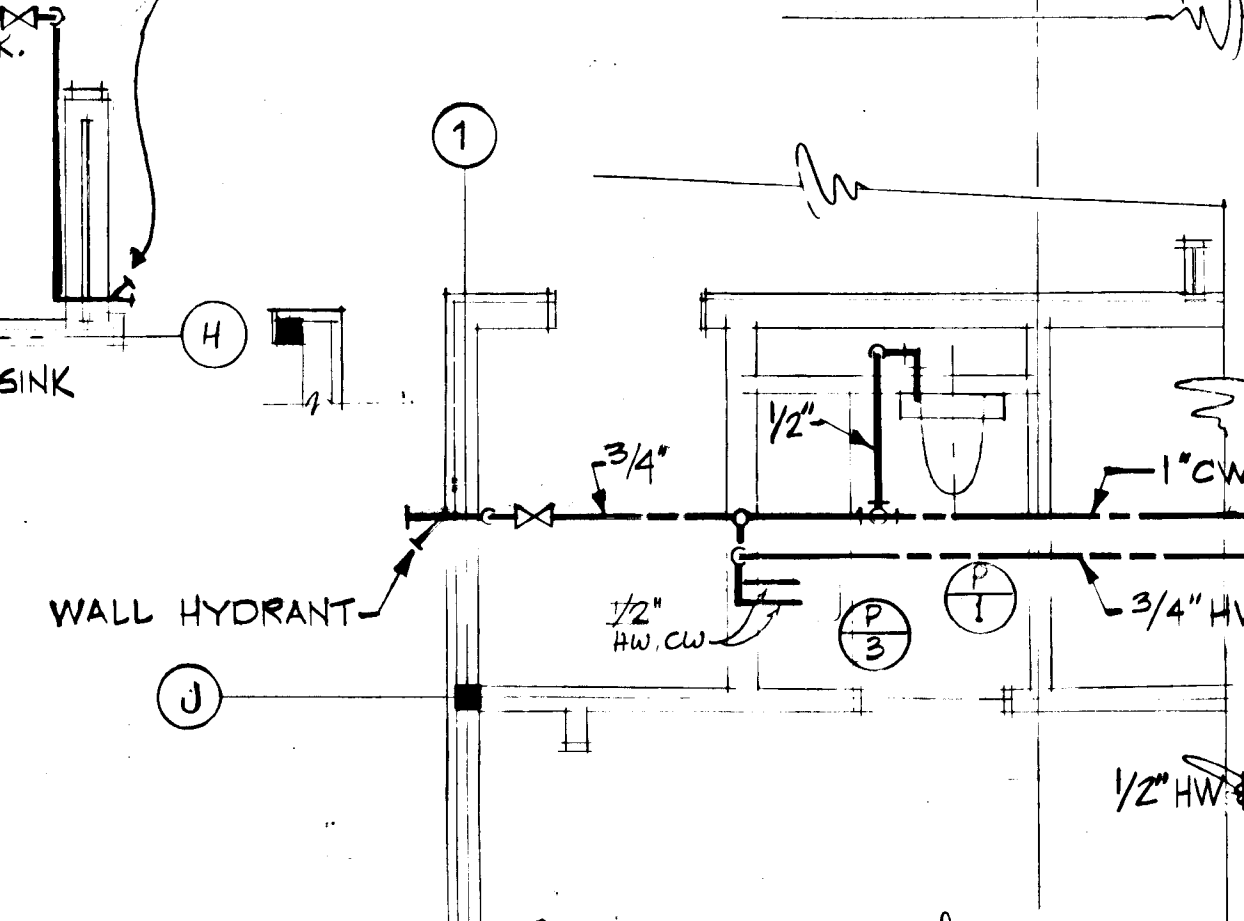
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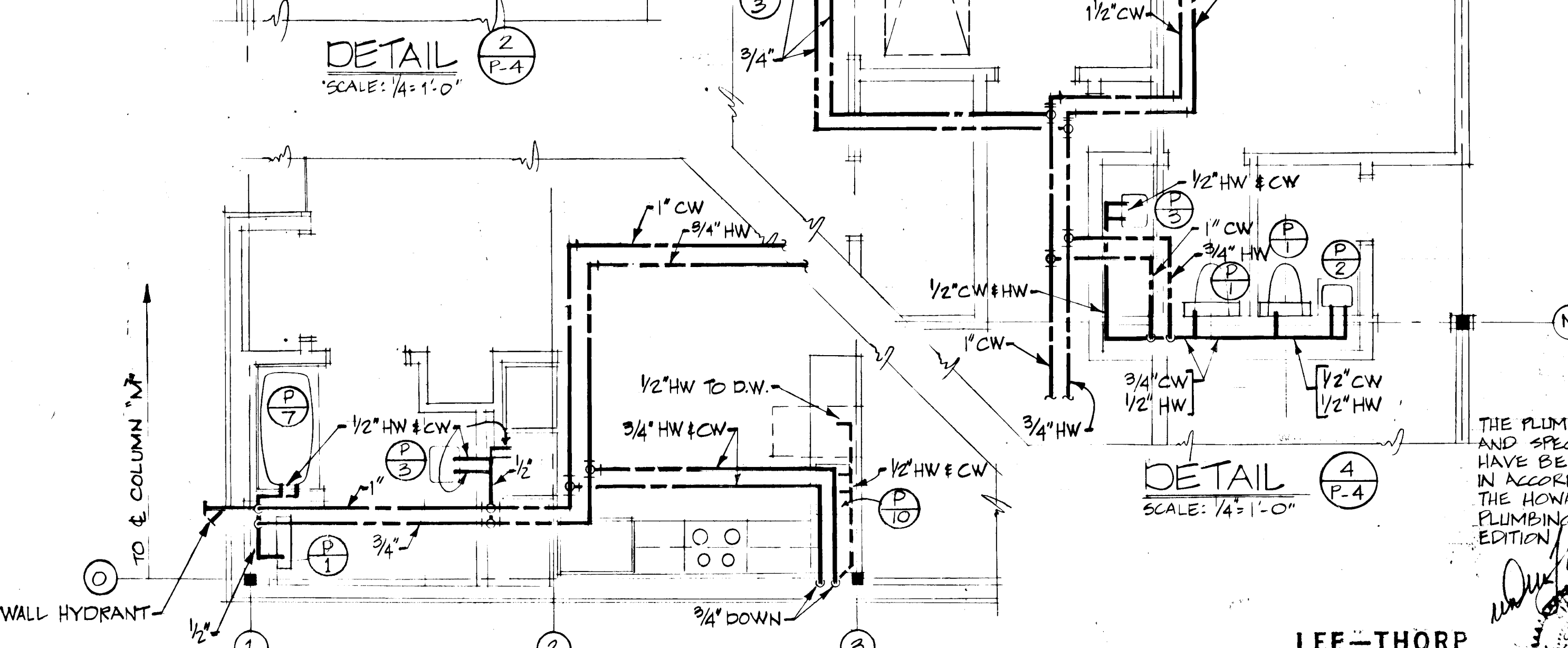
DETAIL 5
SCALE: 1/4" = 1'-0"
KITCHEN & BOILER ROOM



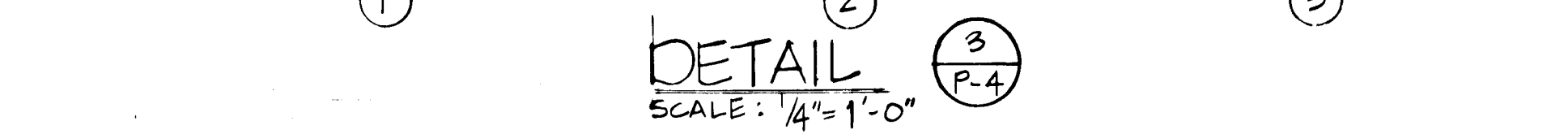
DETAIL 1
SCALE: 1/4" = 1'-0"
COND ON P-2



DETAIL 2
SCALE: 1/4" = 1'-0"



DETAIL 4
SCALE: 1/4" = 1'-0"



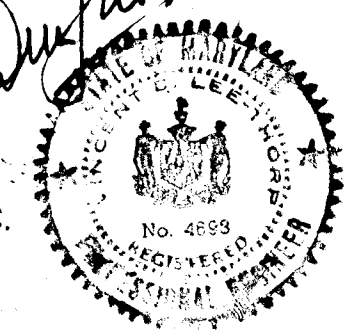
DETAIL 3
SCALE: 1/4" = 1'-0"

NOTES

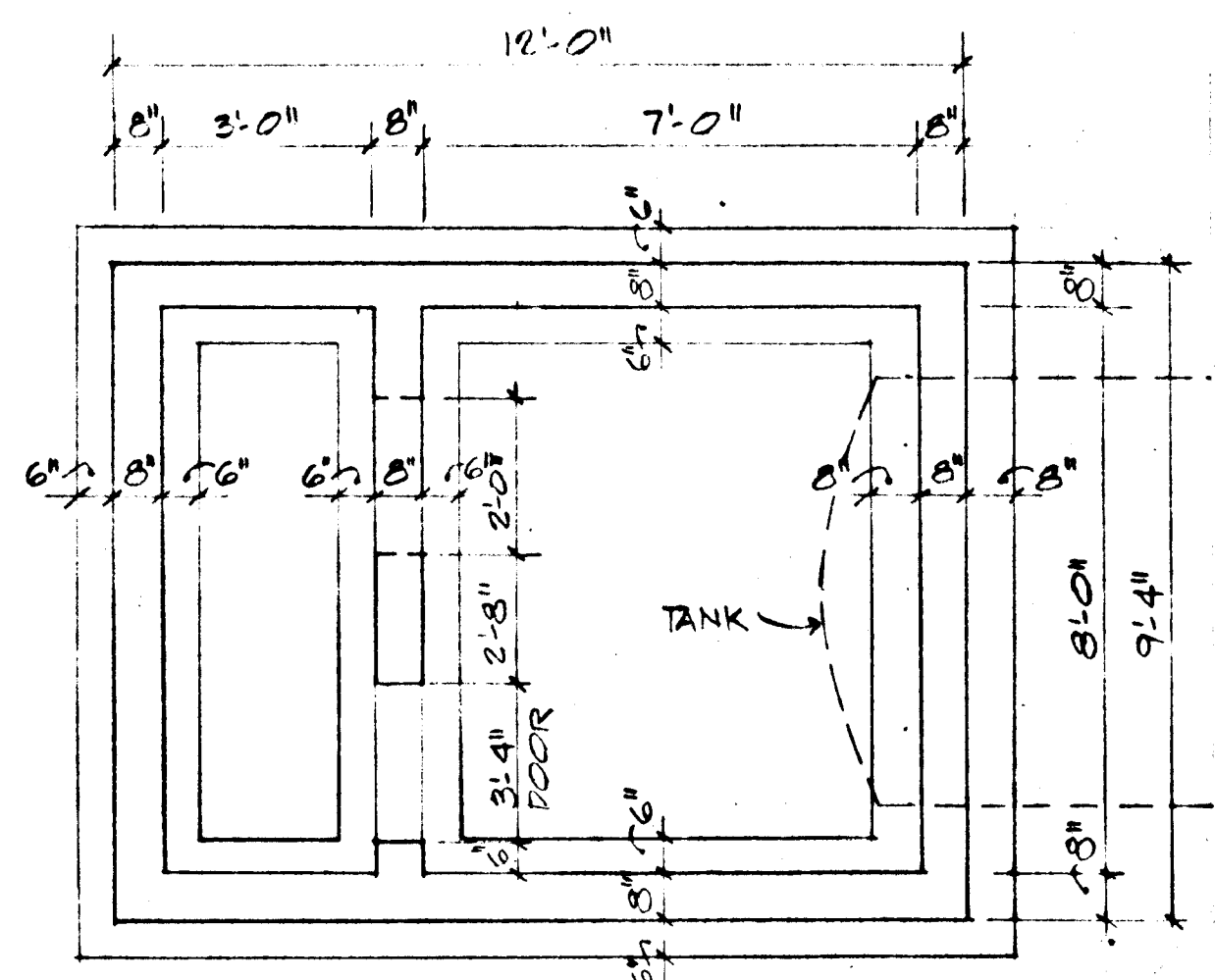
1. MOUNT 3/2" φ PRESSURE GAUGE + 5'-0" ON HARDWOOD GAUGE BOARD.
2. PROVIDE PENDENT FLUSH MOUNTED, U.L. APPROVED SPRINKLER HEAD, 165 °F, WITH C.P. ESCUTCHEON ON CLG. CONNECT TO C.W. 1".

REVISIONS		
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K.L.E./VLT		1/4" = 1'-0"
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DETAILS - PLUMBING		
DRAWING NO.		

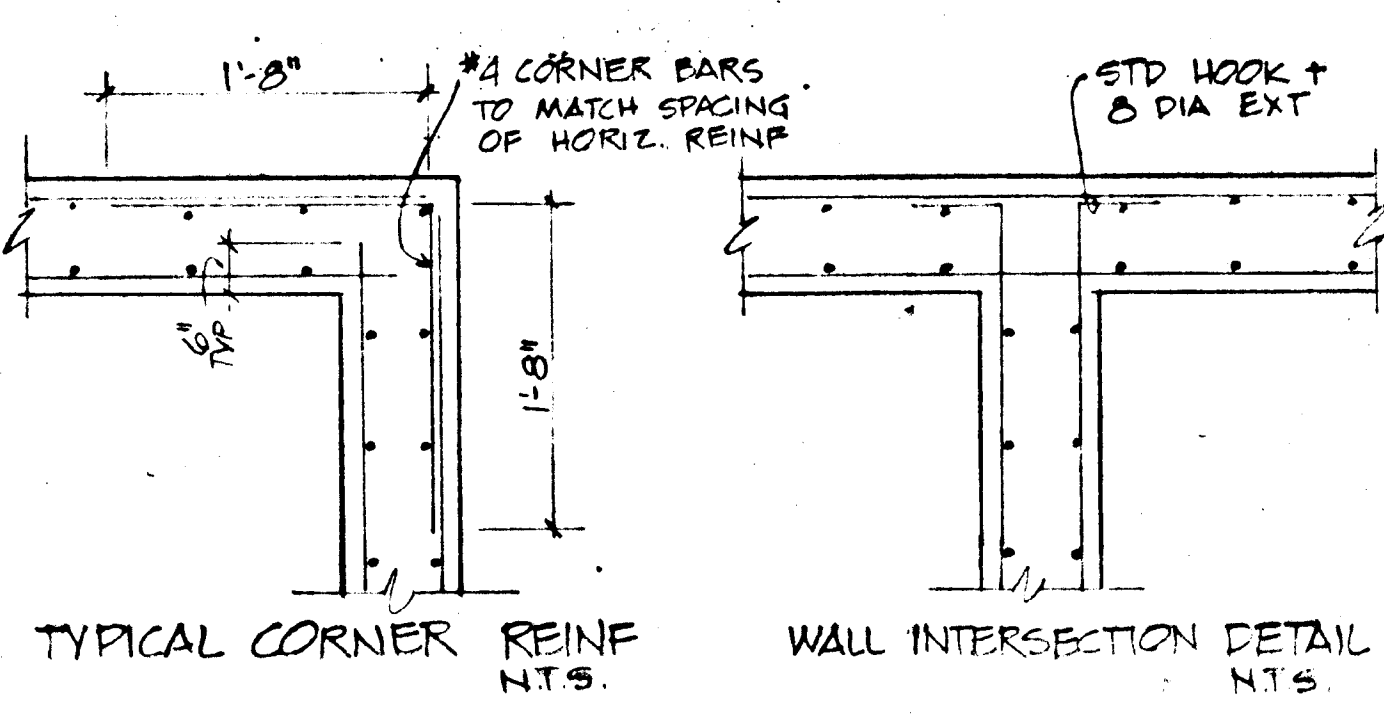
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WASHINGTON, D.C. 20015



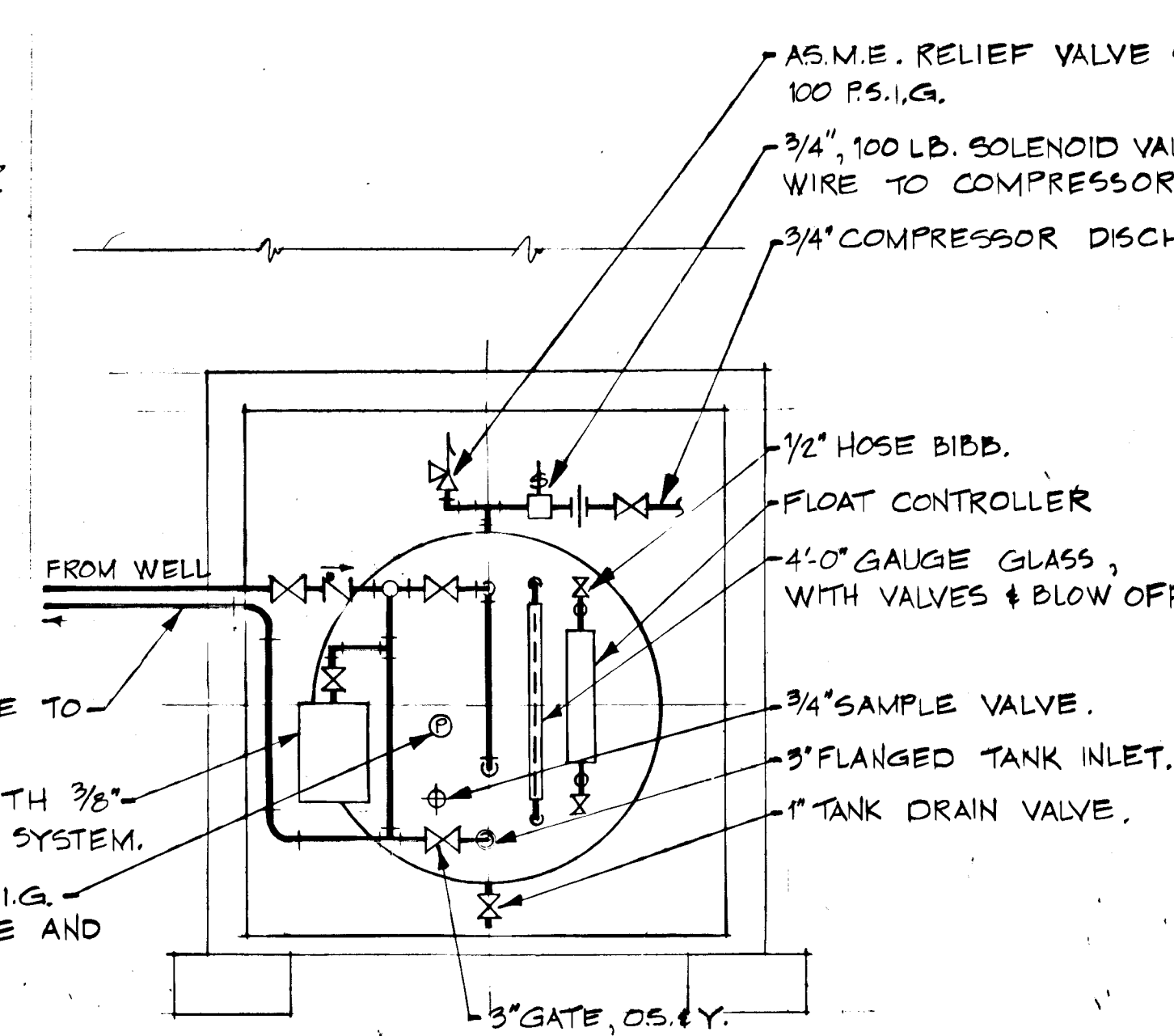
P-4



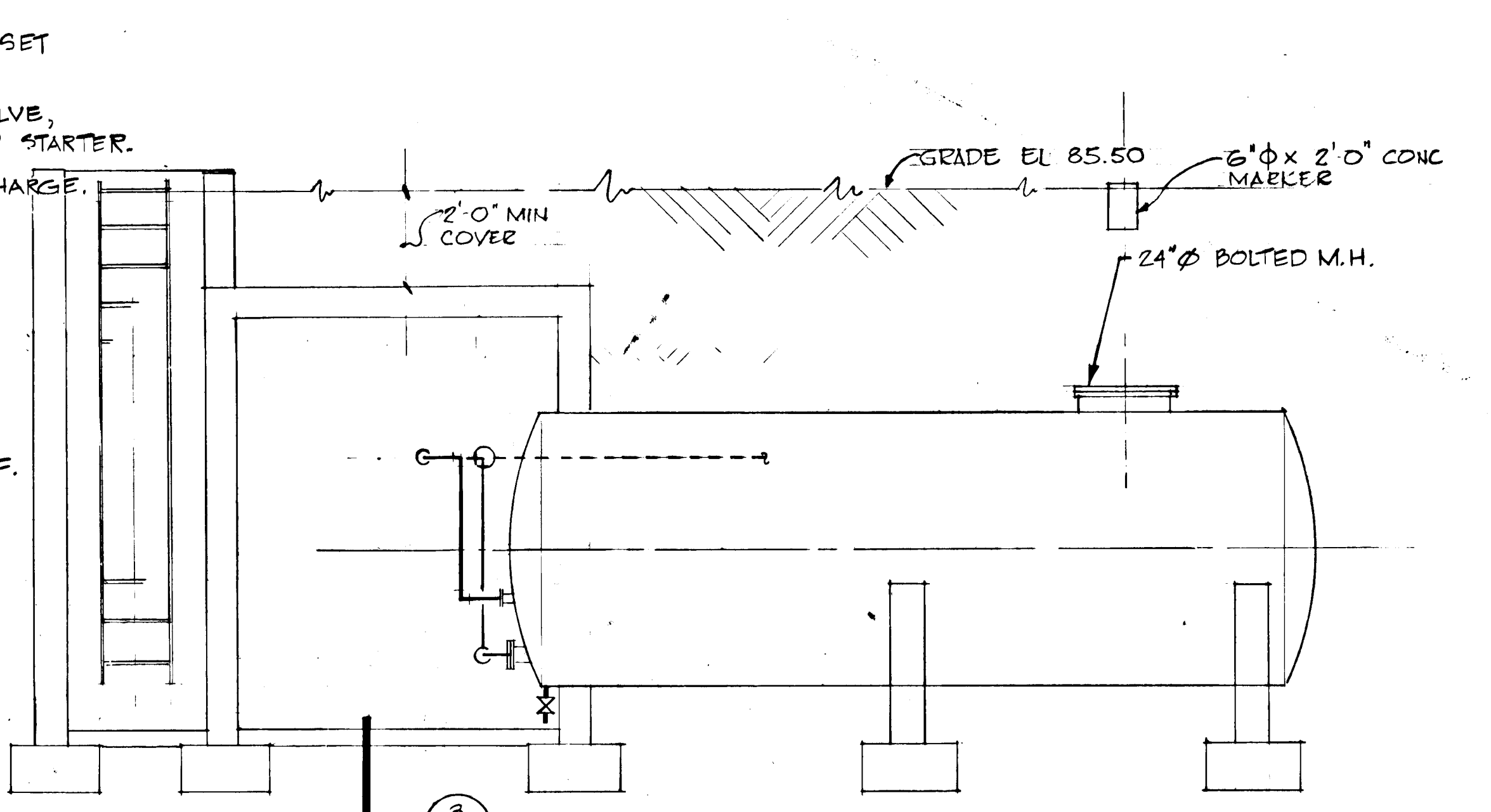
FOUNDATION PLAN
3/8"=1'-0"



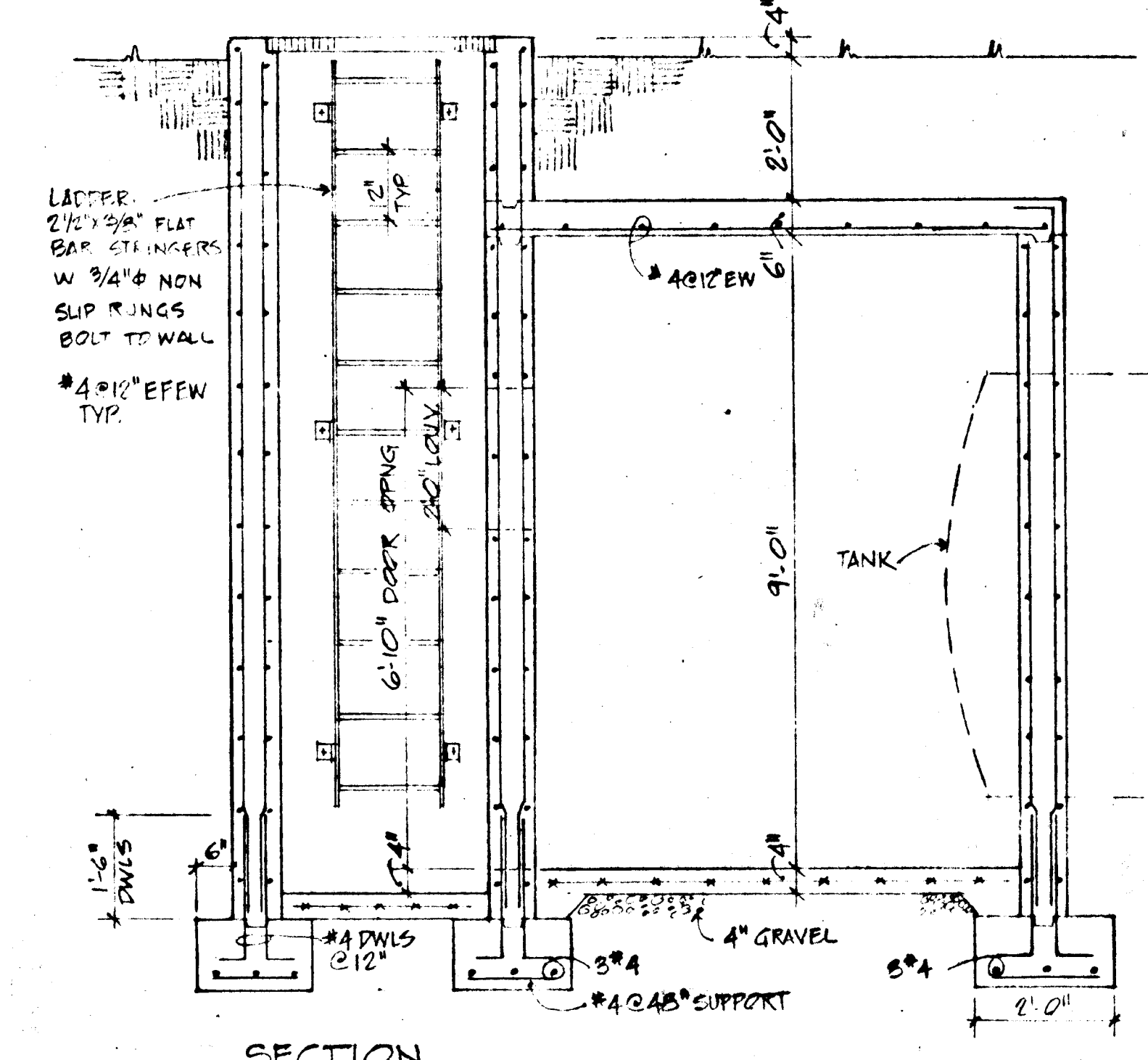
TYPICAL CORNER REINF. N.T.S.
WALL INTERSECTION DETAIL N.T.S.



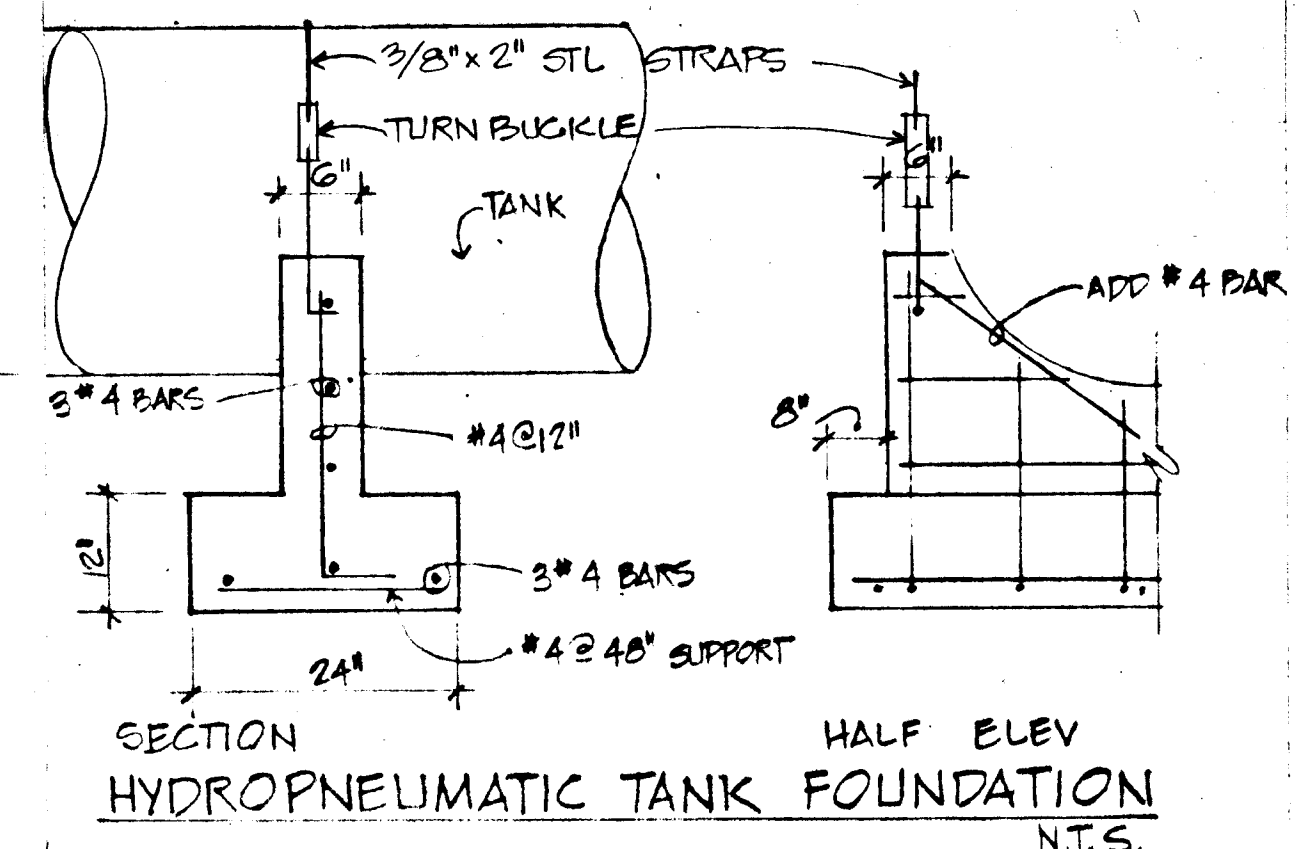
DETAIL (3)
HYDROPNEUMATIC TANK PIPING
SCALE: 3/8"=1'-0"



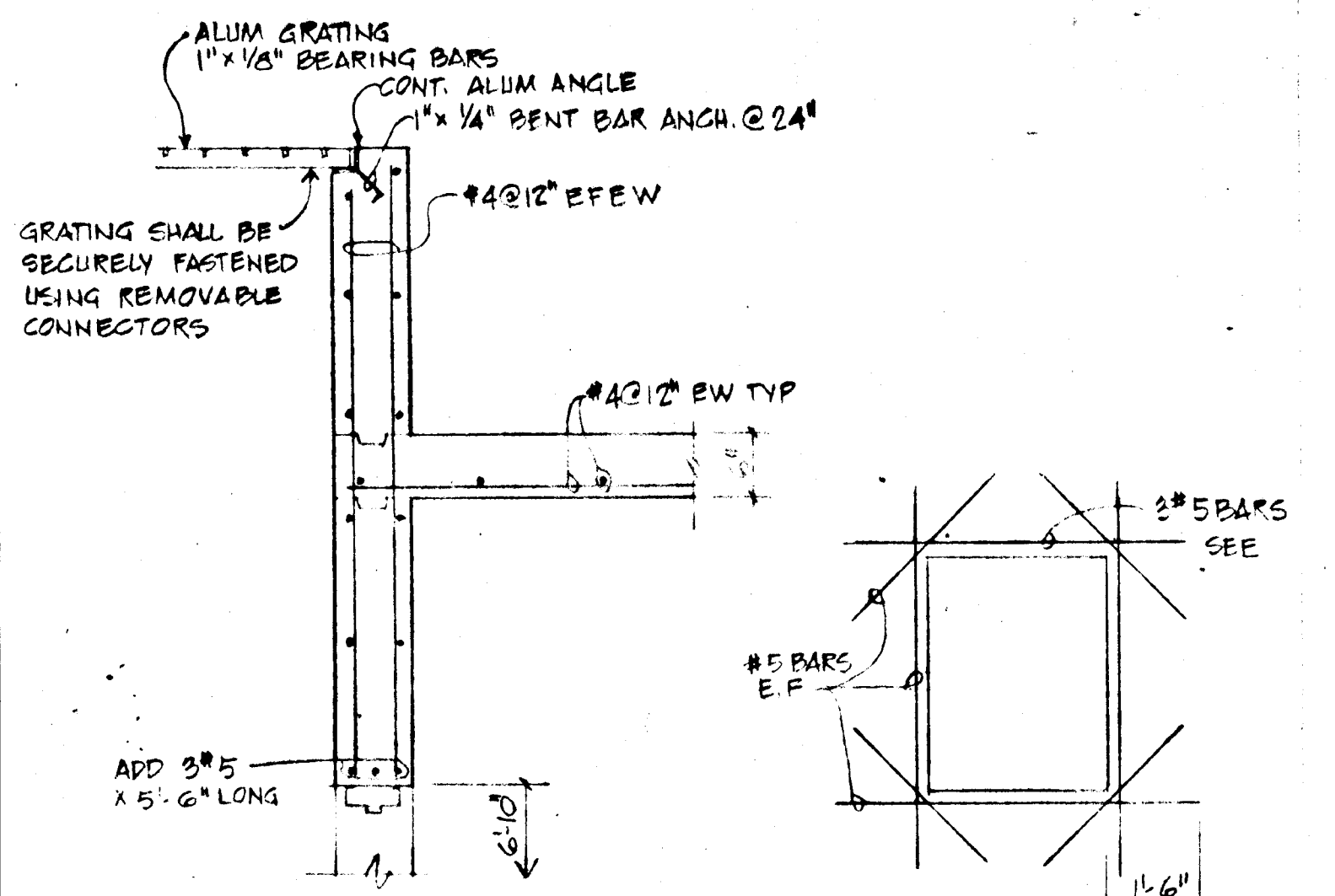
SECTION (2)
SCALE: 3/8"=1'-0"



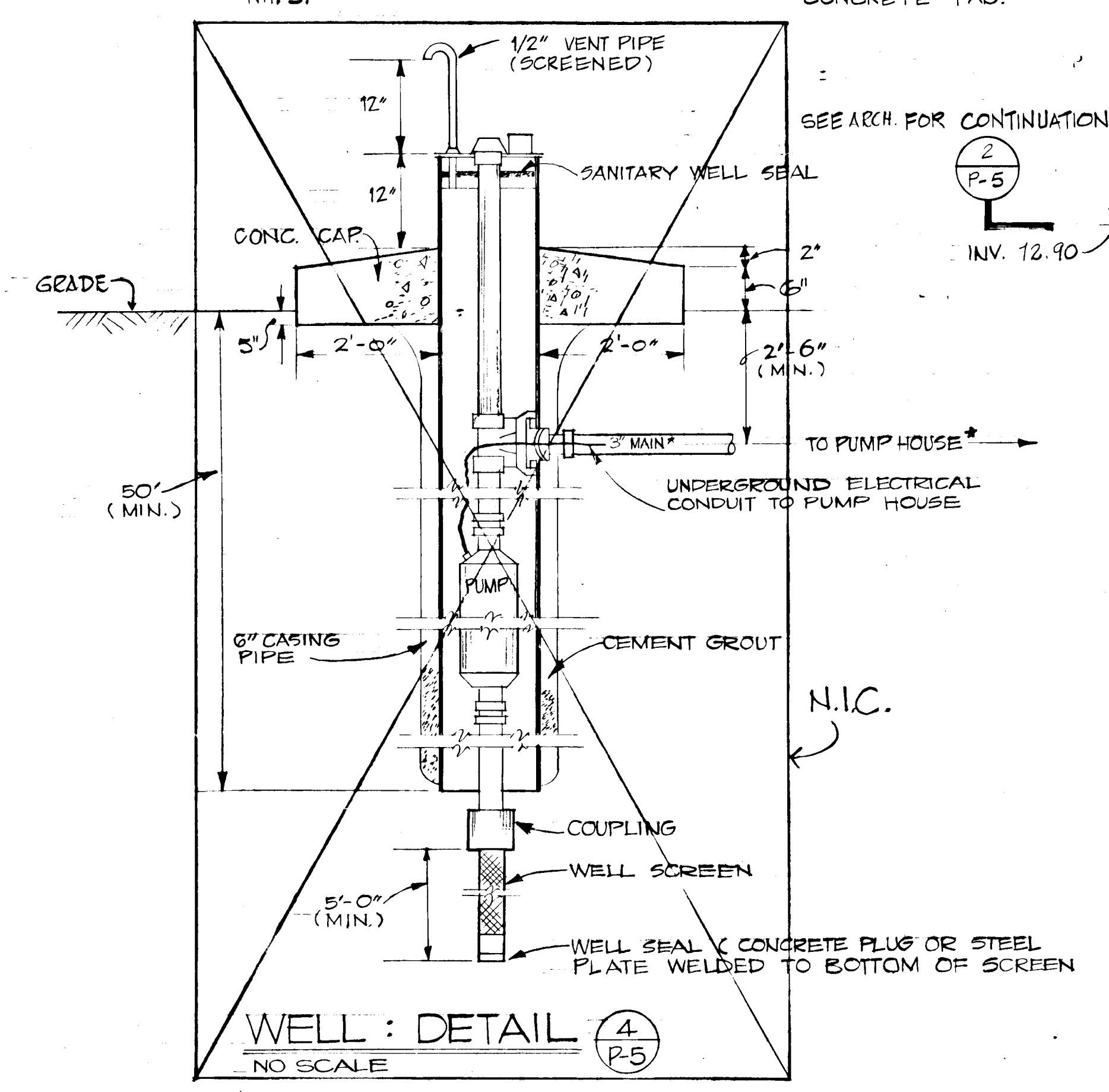
SECTION (1)
1/2"=1'-0"



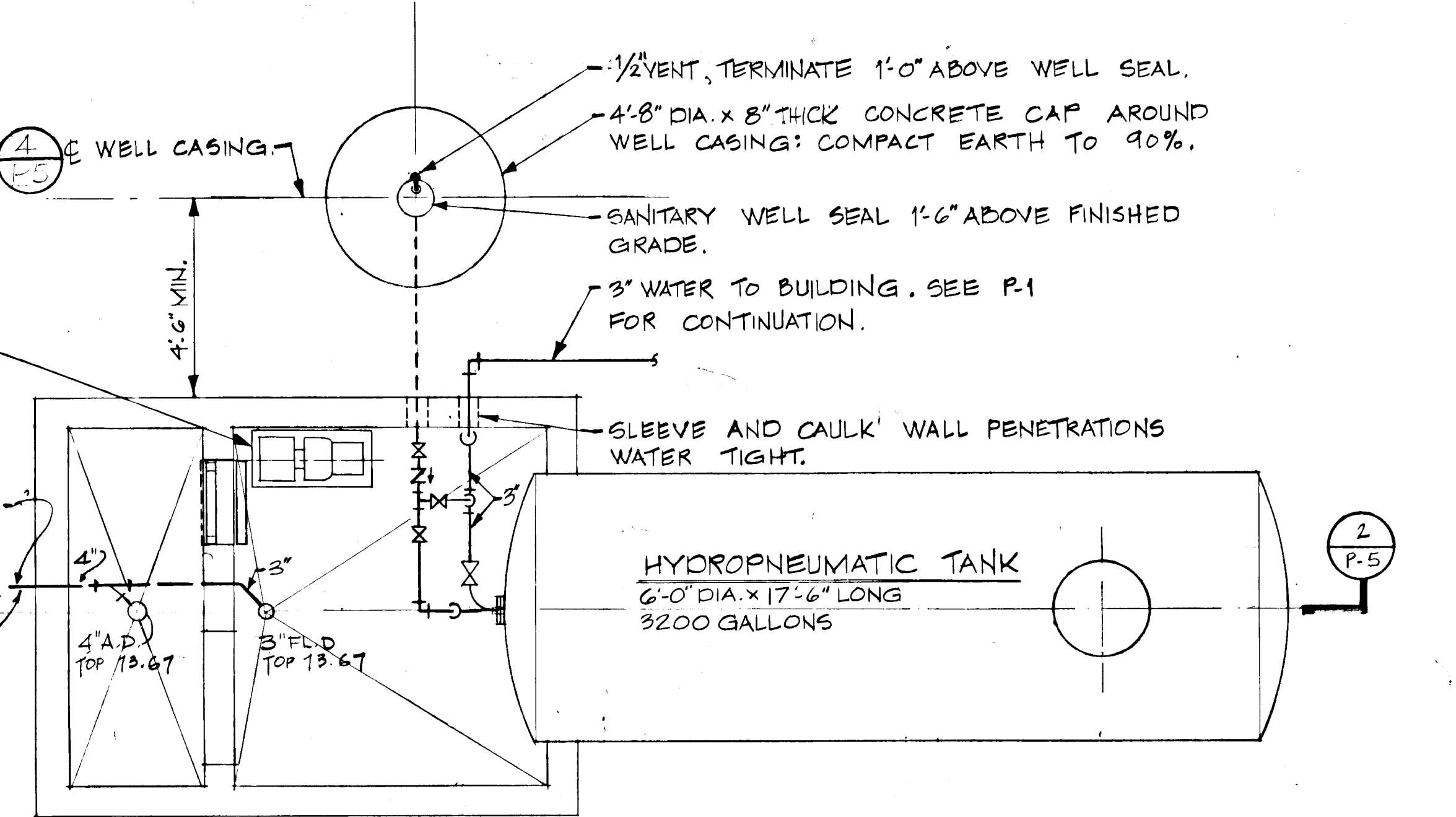
SECTION (3) HALF ELEV
HYDROPNEUMATIC TANK FOUNDATION
N.T.S.



SECTION @ DOOR HEAD
SECT. @ LOUVER SIM 3/4"=1'-0"
ELEV. WALL OPENINGS
N.T.S.



WELL: DETAIL (4)
NO SCALE



DETAIL (1)
WELL HOUSE AND TANK: PLAN
SCALE: 3/8"=1'-0"

REVISIONS		
DRAWN	DATE	SCALE
K.L.E.		3/8"=1'-0"
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HOWARD COUNTY ADULT ACTIVITY CENTER		
WELL SYSTEM DETAILS PLUMBING		
DRAWING NO.		

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LEE-THORP
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THE PLUMBING PLANS & SPECIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE HOWARD COUNTY PLUMBING CODE - 1977 EDITION.