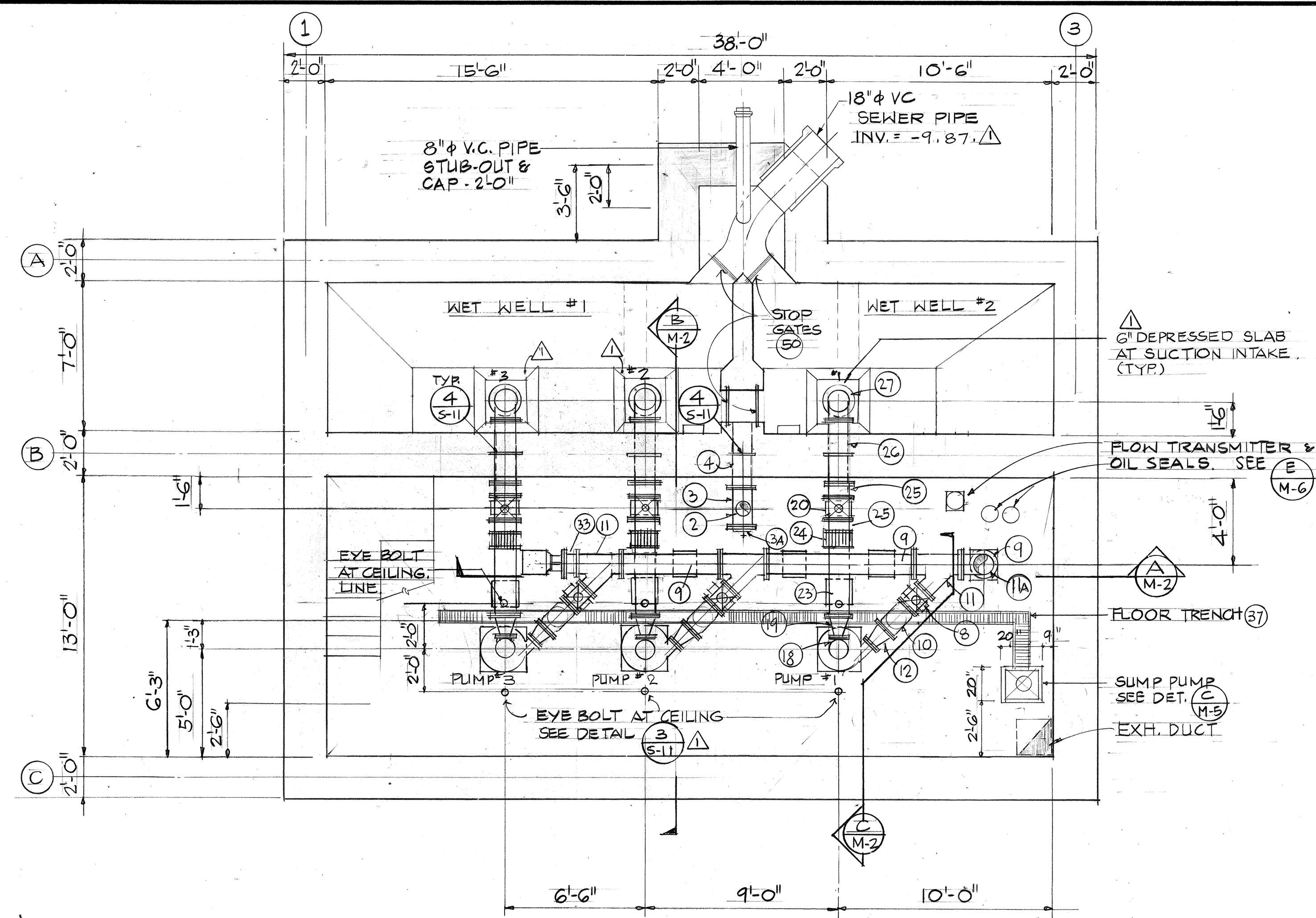
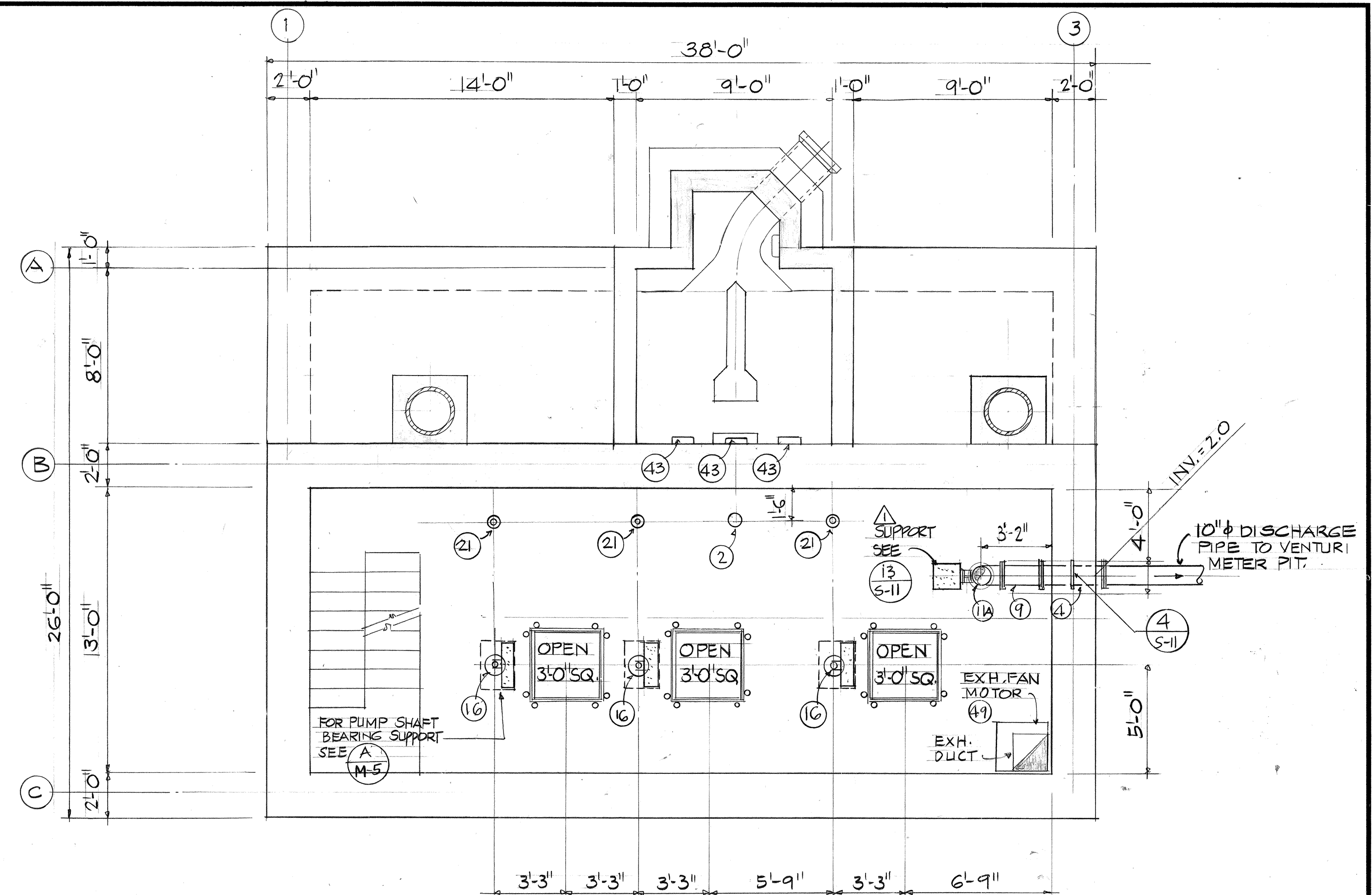




PUMPROOM FLOOR LAYOUT PLAN

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

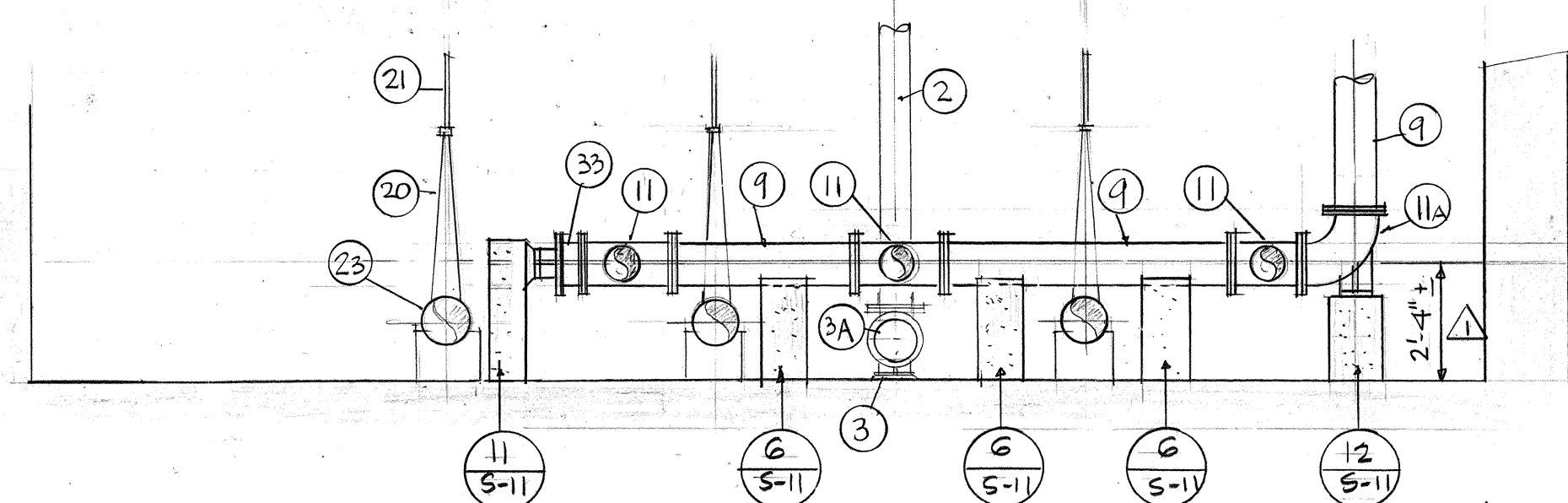


INTERMEDIATE FLOOR LAYOUT PLAN

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

NOTES:

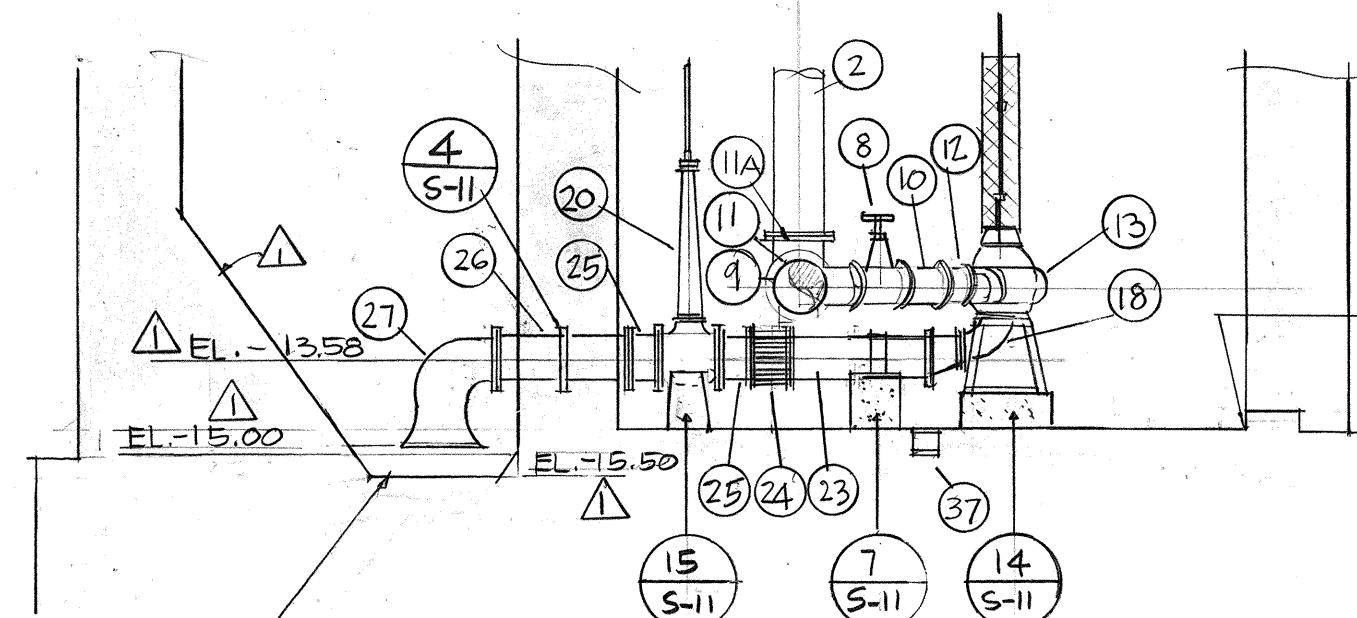
- CONTRACTOR SHALL SUBMIT SEVEN COPIES OF SHOP DRAWINGS OF PUMP ROOM EQUIPMENT AND PIPING PLAN INCLUDING PIPING SUPPORTS, CONNECTIONS, ETC. PIPING AND EQUIPMENT SHALL NOT BE DELIVERED TO THE SITE BEFORE SHOP DRAWINGS HAVE BEEN APPROVED BY THE ENGINEER.
- STEEL PIPE CONNECTIONS SHALL BE FLANGE OR BUTT WELDED CONNECTIONS AND SHALL BE APPROVED BY THE ENGINEER.
- CONTRACTOR SHALL SUPPORT ALL PIPING ON WALLS AND CEILING WITH APPROPRIATE HANGERS OR CLAMPS @ 5'-0" MAXIMUM.



SECTION A-M-2

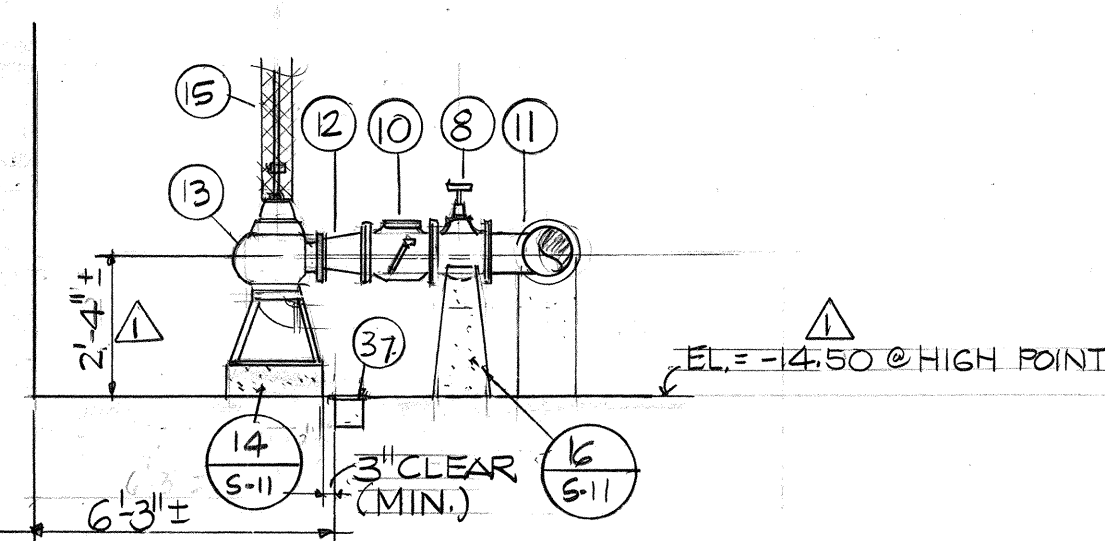
SCALE: 1/4" = 1'-0"

6" DEPRESSED SLAB
@ SUCTION INTAKE
(TYP.)



SECTION B-M-2

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

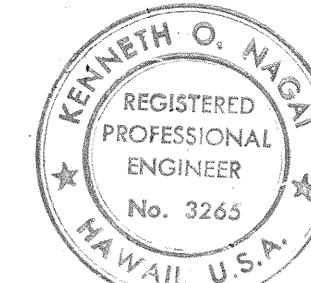


SECTION C-M-2

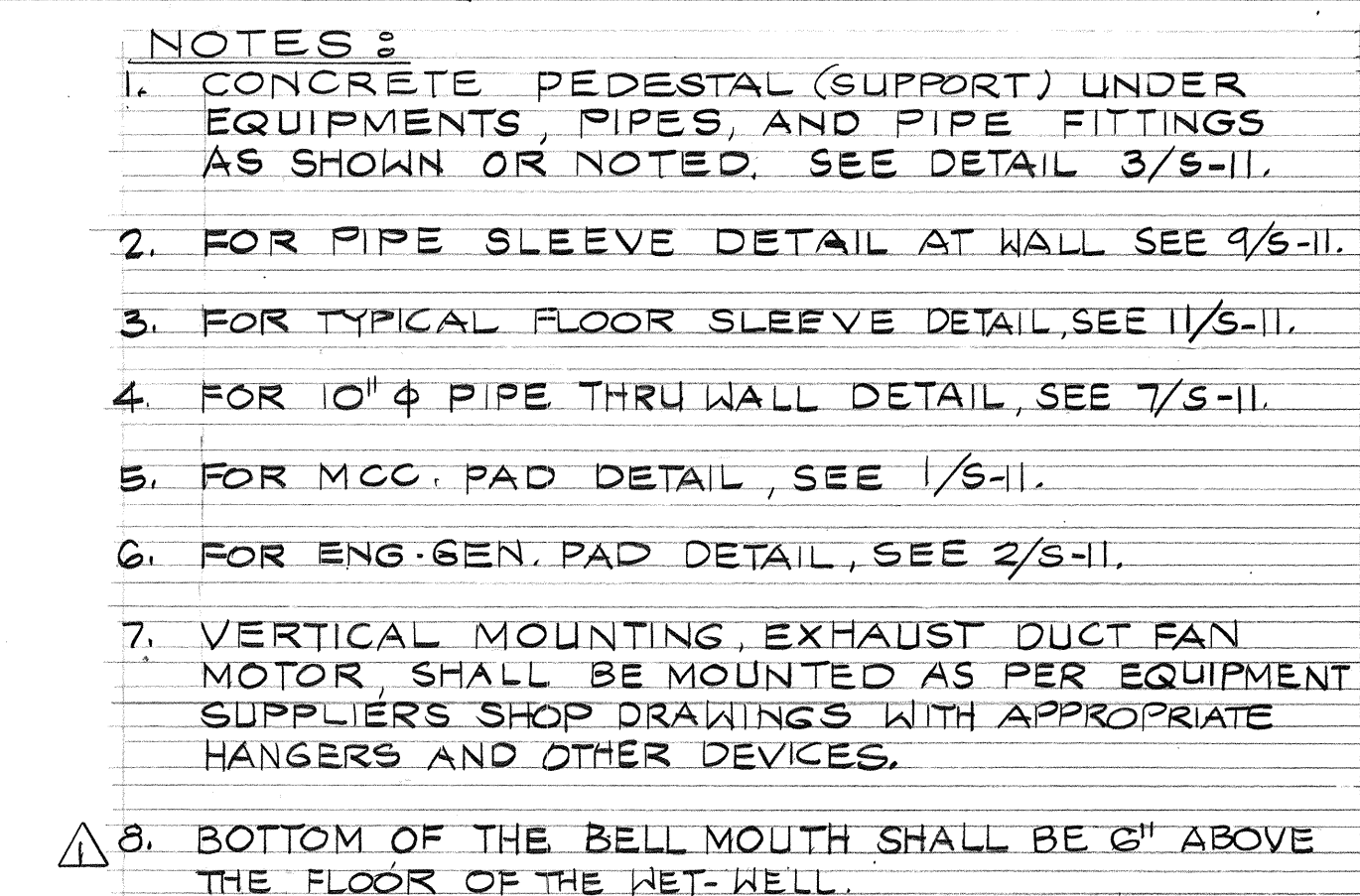
SCALE: 1/4" = 1'-0"

APPROVED:

G. Kuyama
CHIEF, DIV. OF WASTEWATER
MANAGEMENT

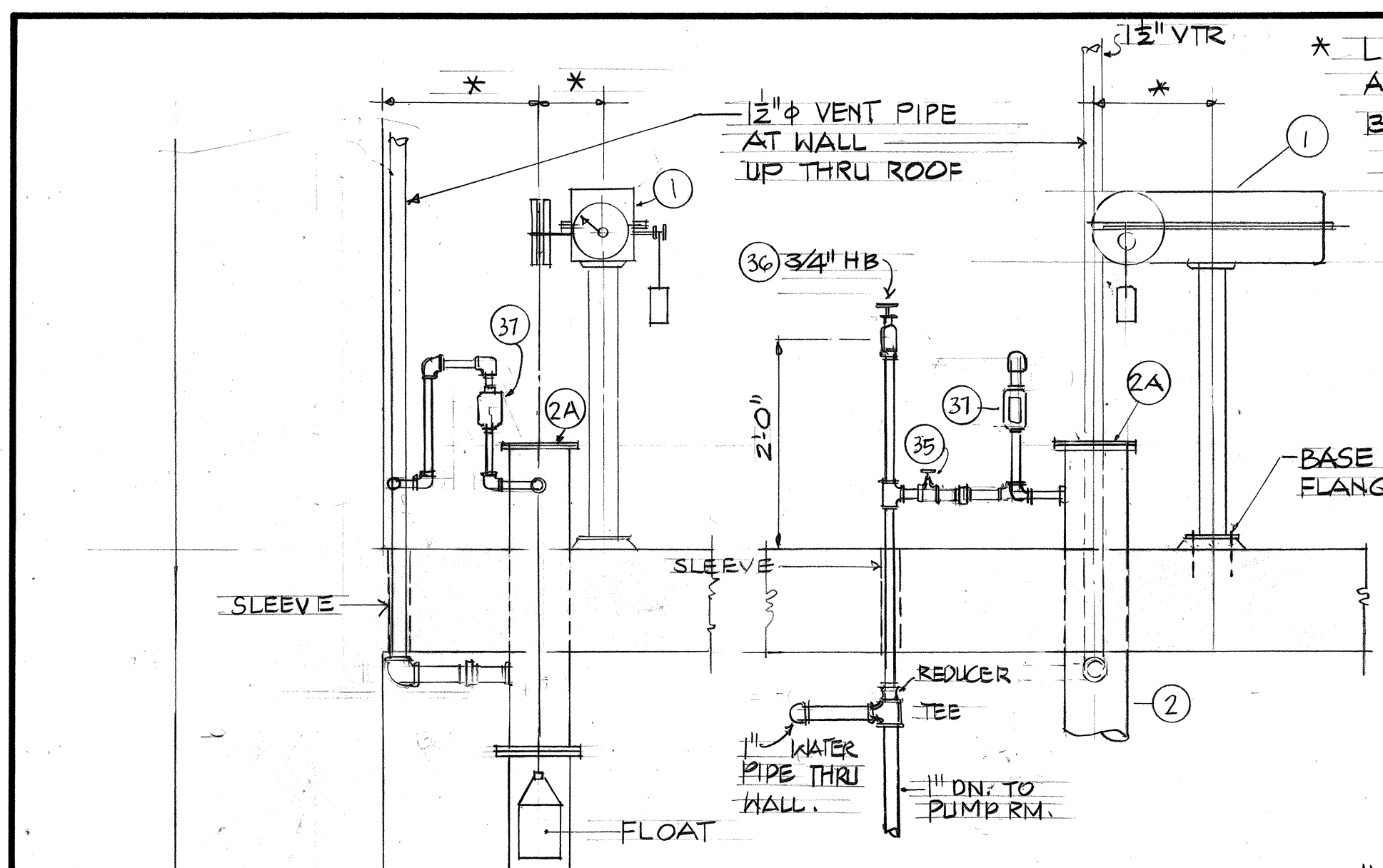


WILSON OKAMOTO & ASSOC. ENGINEERS-ARCHITECTS-PLANNERS HONOLULU HAWAII						
SYMBOL	DESCRIPTION	ADDED DEPRESSIONED SLAB AT PIET-WELL, REVERSED SLOPING WALLS AND CHANGES IN ELEVATIONS AND DIMENSIONS.		8-26-80	<i>W. Okamoto</i>	
		REVISIONS				
		STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF WATER AND LAND DEVELOPMENT				
		SAND ISLAND PARKWAY INCREMENT II, PHASE I & SEWAGE PUMP STATION				
		PUMPROOM & INTERMEDIATE FLR. LAYOUT PLAN				
		DESIGNED: HS	SUBMITTED: <i>Wilson Okamoto</i>			
		DRAWN: K.W.	DATE: <i>5/2/80</i>			
		CHECKED: HS, KON	DATE: <i>5/2/80</i>			
		APPROVED: <i>Robert J. Chumley</i>	DATE: <i>5/2/80</i>			
		MANAGER-CHIEF ENGINEER			FILE NO.	
		THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. <i>Thompson Shagmurd</i> Signature				

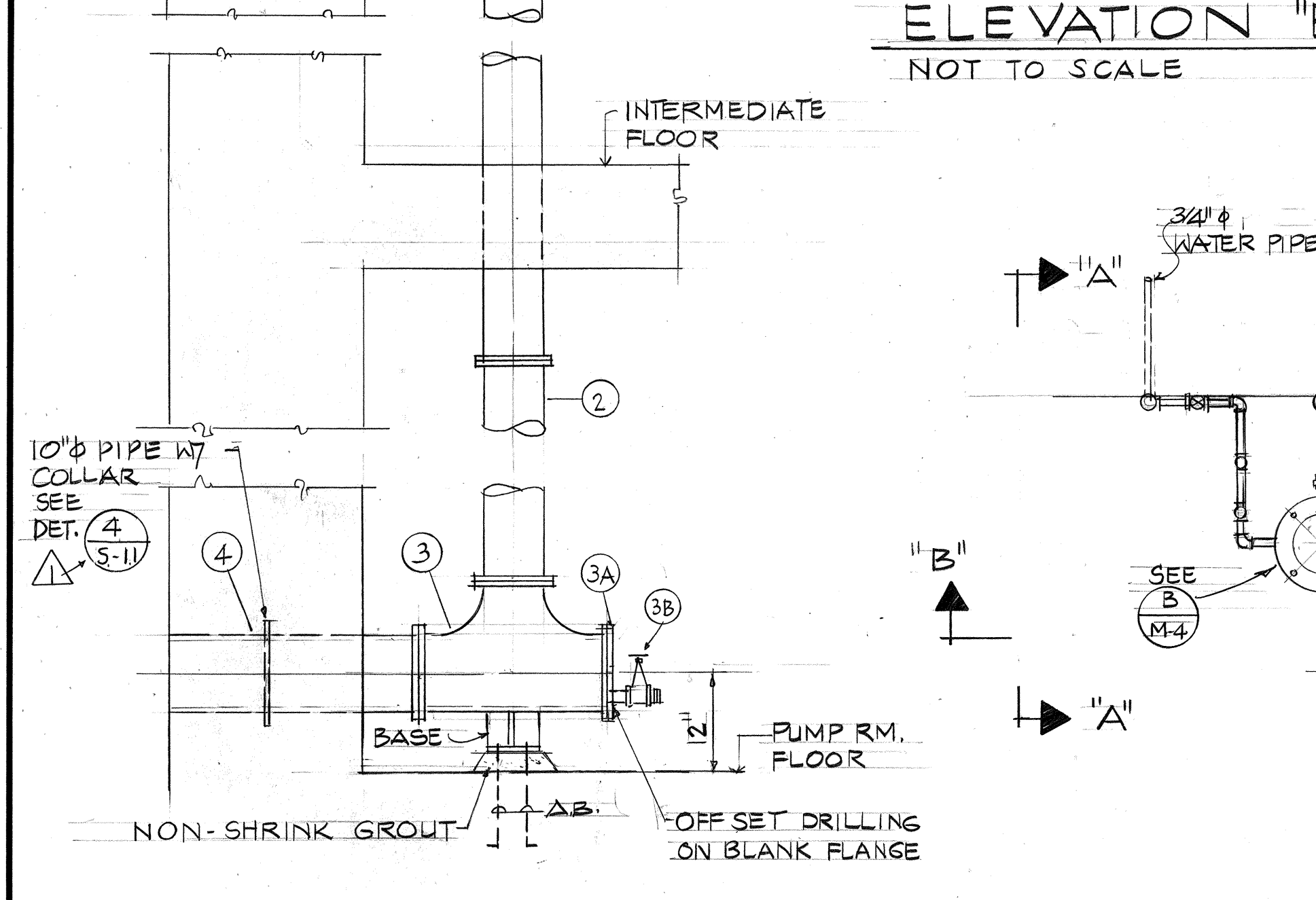


B SECTION
M-3 SCALE: 1/4" = 1'-0"





ELEVATION "B-B"
NOT TO SCALE

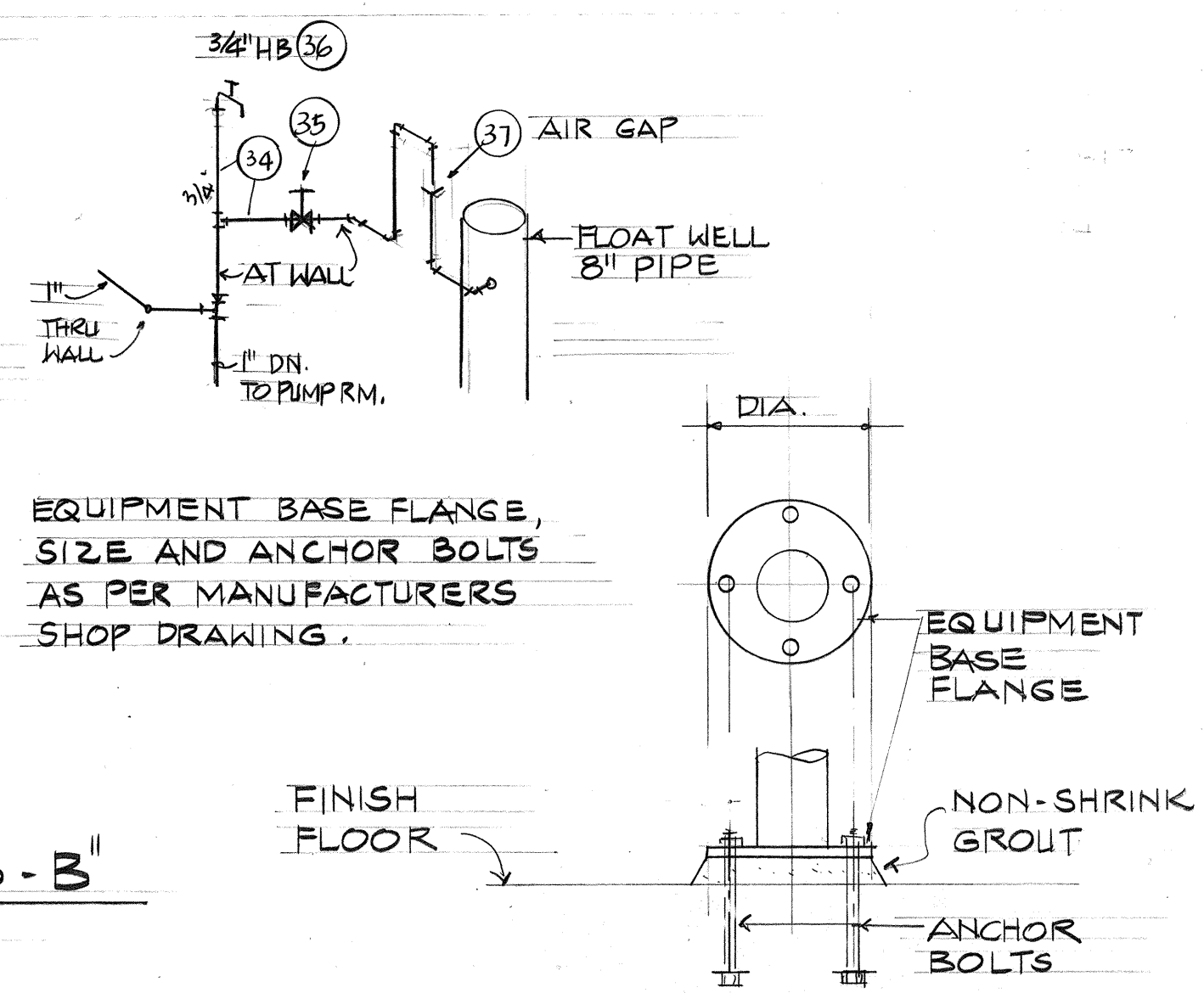


ELEVATION "A-A"
NOT TO SCALE

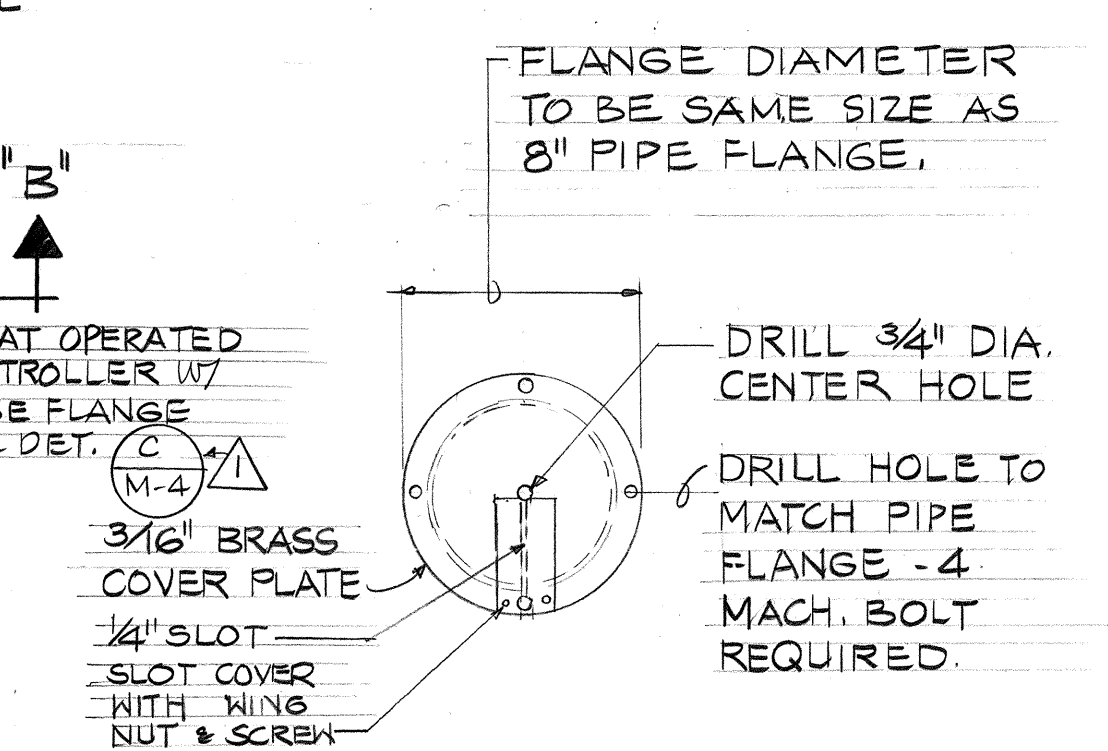
PLAN
NOT TO SCALE

(A) FLOAT TUBE & CONTROLLER DETAIL
M-4

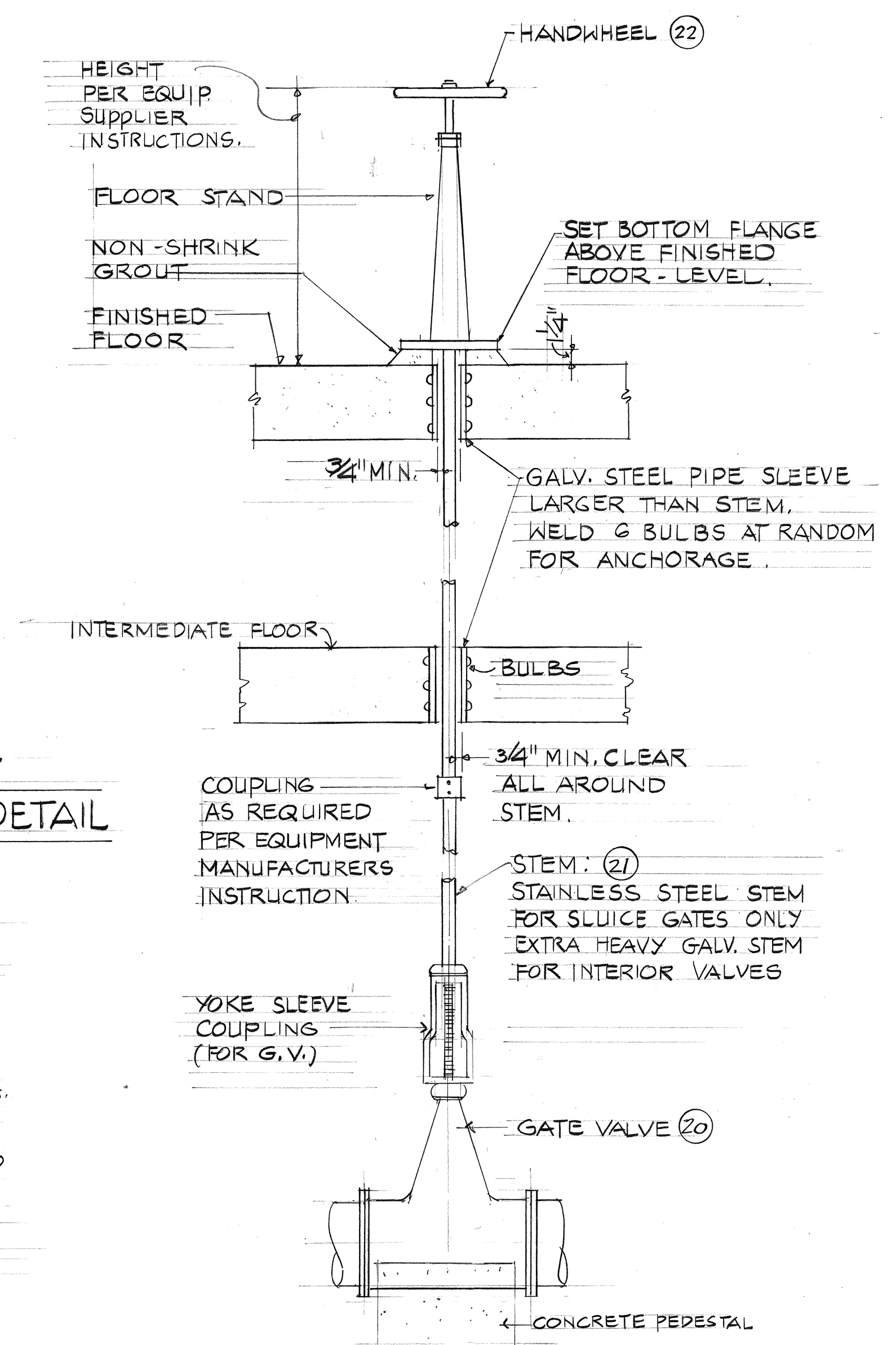
* LOCATION OF FLOAT OPERATED CONTROLLER AND FLOAT WELL PIPE SHALL BE AS SPECIFIED BY SUPPLIER OF EQUIPMENT.



(C) TYPICAL EQUIPMENT FLANGE MOUNTING DETAIL
NOT TO SCALE



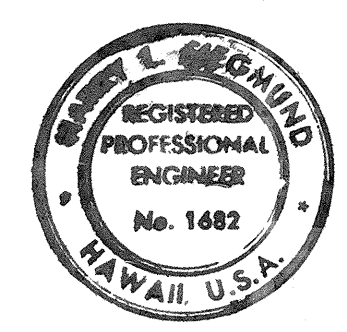
(B) COVER PLATE DETAIL
M-4 NOT TO SCALE



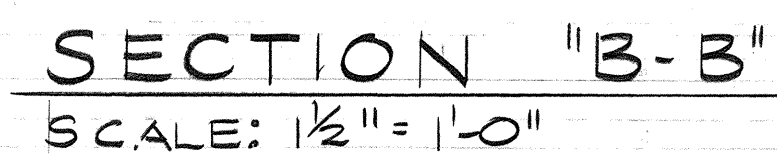
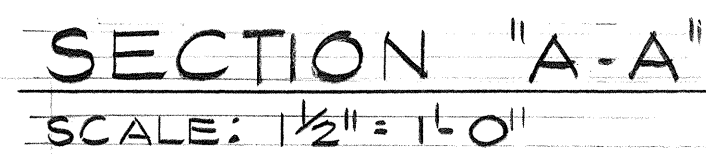
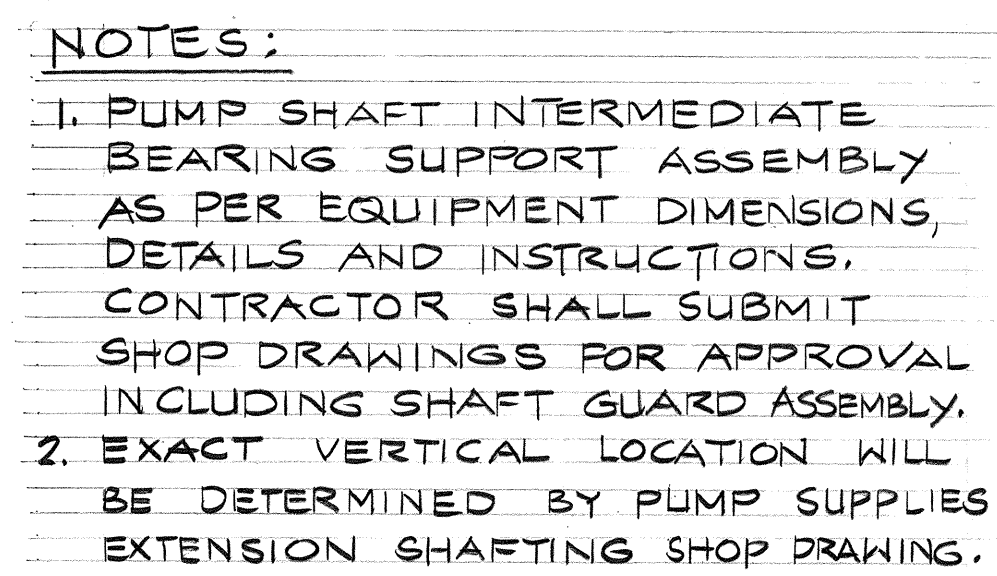
(D) FLOOR STAND & EXTENSION STEM DETAIL
M-4

ITEM	DESCRIPTION OF ITEMS
1	FLOAT OPERATED CONTROLLER
2	8" D.I. FLOAT WELL PIPE
2A	BRASS COVER PLATE FOR FLOAT WELL, SEE DETAIL B/M-4.
3	10"x8" D.I. TEE WITH BASE
3A	10" BLIND FLANGE DRILL & TAP FOR 3/4" I.P.T.
3B	3/4" GATE VALVE WITH DISCONNECTOR DEVICE NIPPLE
4	10" DI. WALL PIPE W/ COLLAR
4A	3/4" COLD WATER BRASS PIPE
4B	1/4" BRONZE NEEDLE VALVE
4C	3/4" BRONZE HOSE BIBB
4D	AIR GAP FITTING

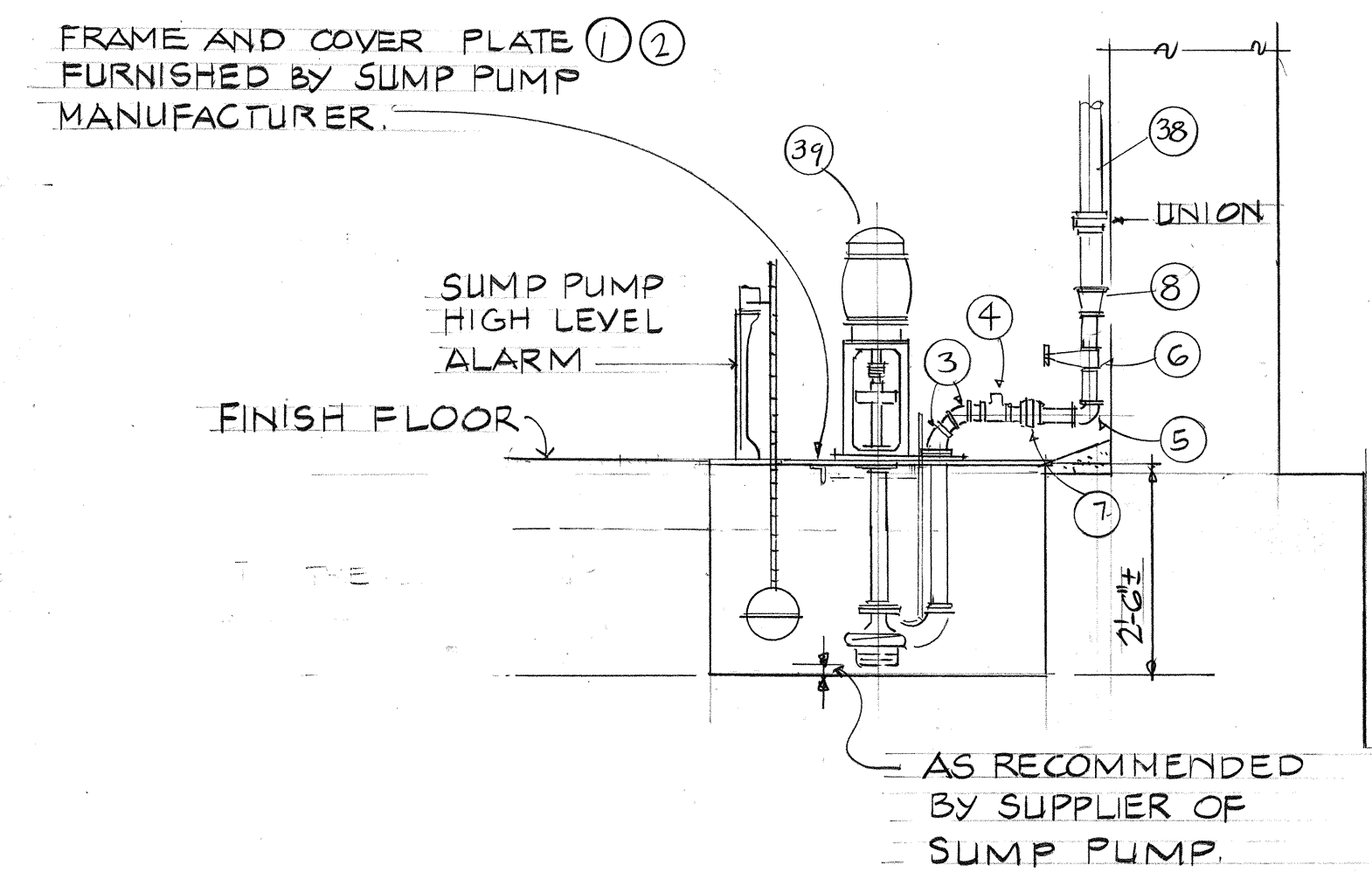
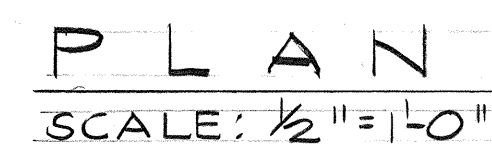
WILSON OKAMOTO & ASSOC. ENGINEERS - ARCHITECTS - PLANNERS HONOLULU HAWAII		CORRECTED DETAILS ON A/M-4.		8-27-80	WLO
SYM		DESCRIPTION		DATE	APP'D
REVISIONS					
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF WATER AND LAND DEVELOPMENT SAND ISLAND PARKWAY INCREMENT II, PHASE I & SEWAGE PUMP STATION FLOAT TUBE AND CONTROLLER DETAILS					
DESIGNED: HS		SUBMITTED: [Signature]		FILE NO.	
DRAWN: K.N.		CHECKED: HS, KON		DATE: 5/2/80	
APPROVED: [Signature]		DATE: 5/2/80		MANAGER - CHIEF ENGINEER	



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[Signature]
Signature



(A) PUMP SHAFT INTERMEDIATE FLOOR
(M-5) BEARING SUPPORT ASSEMBLY



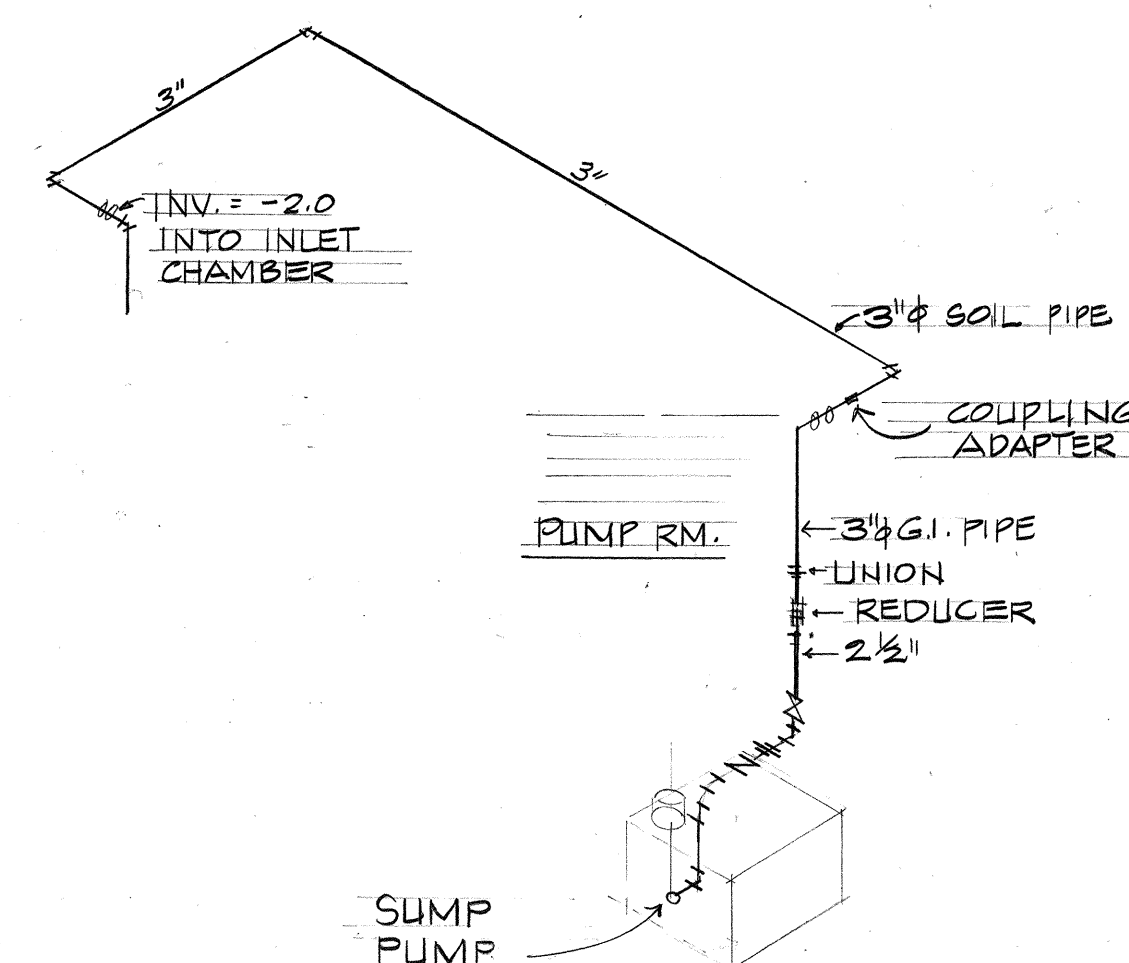
ELEVATION "A-A"

NOT TO SCALE:

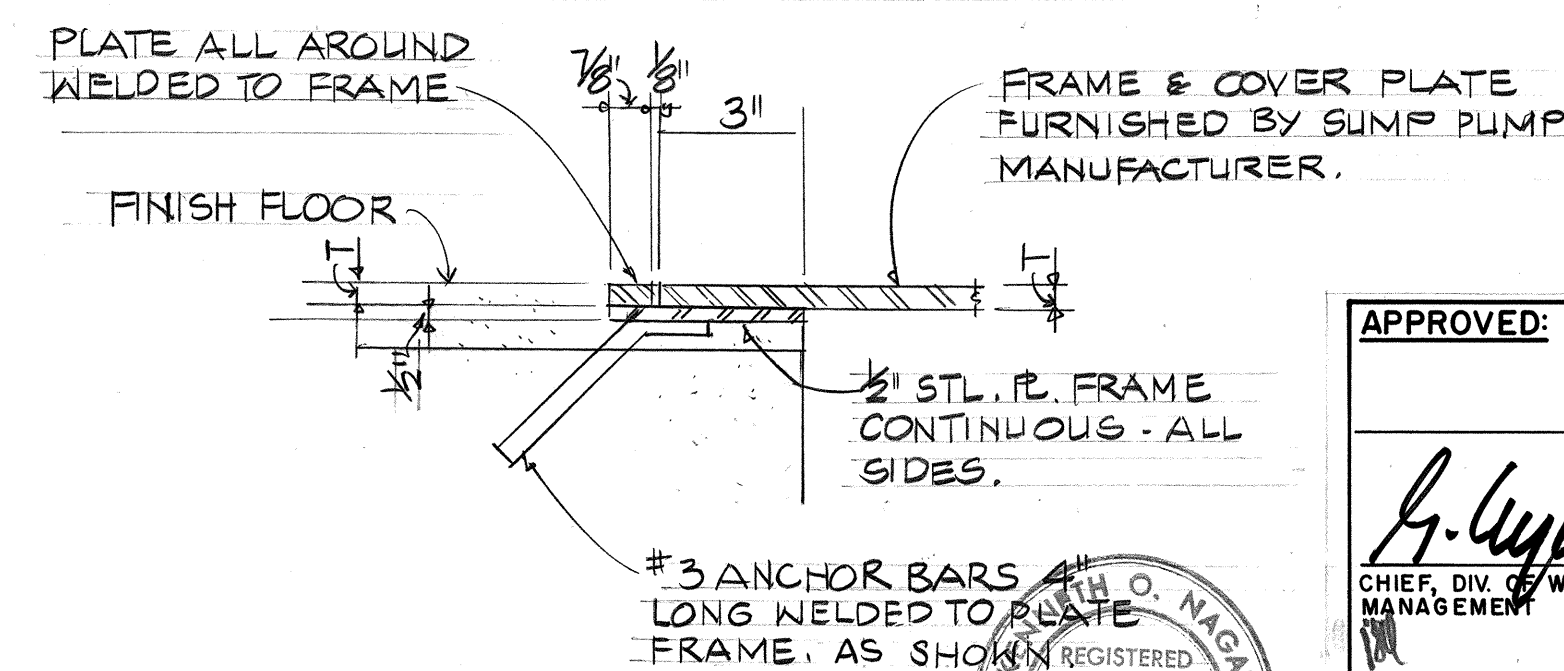
⑥ SUMP PUMP PIT DETAIL

NOTES

1. CONTRACTOR SHALL INSTALL SUMP PUMP ASSEMBLY WITH APPROPRIATE PIPING FITTINGS AND SUMP PUMP PIT COVER WITH SWITCHES AND LEVEL ALARM AS PER EQUIPMENT SUPPLIER. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS.

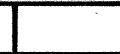
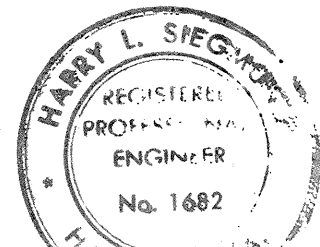
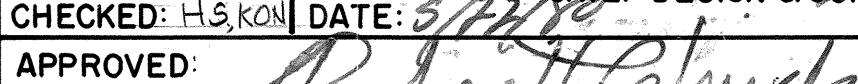


(B) SUMP PUMP DISCHARGE
(M-5) PIPING - SCHEMATIC

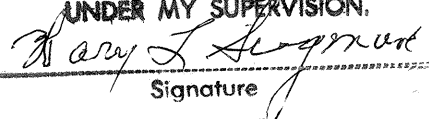


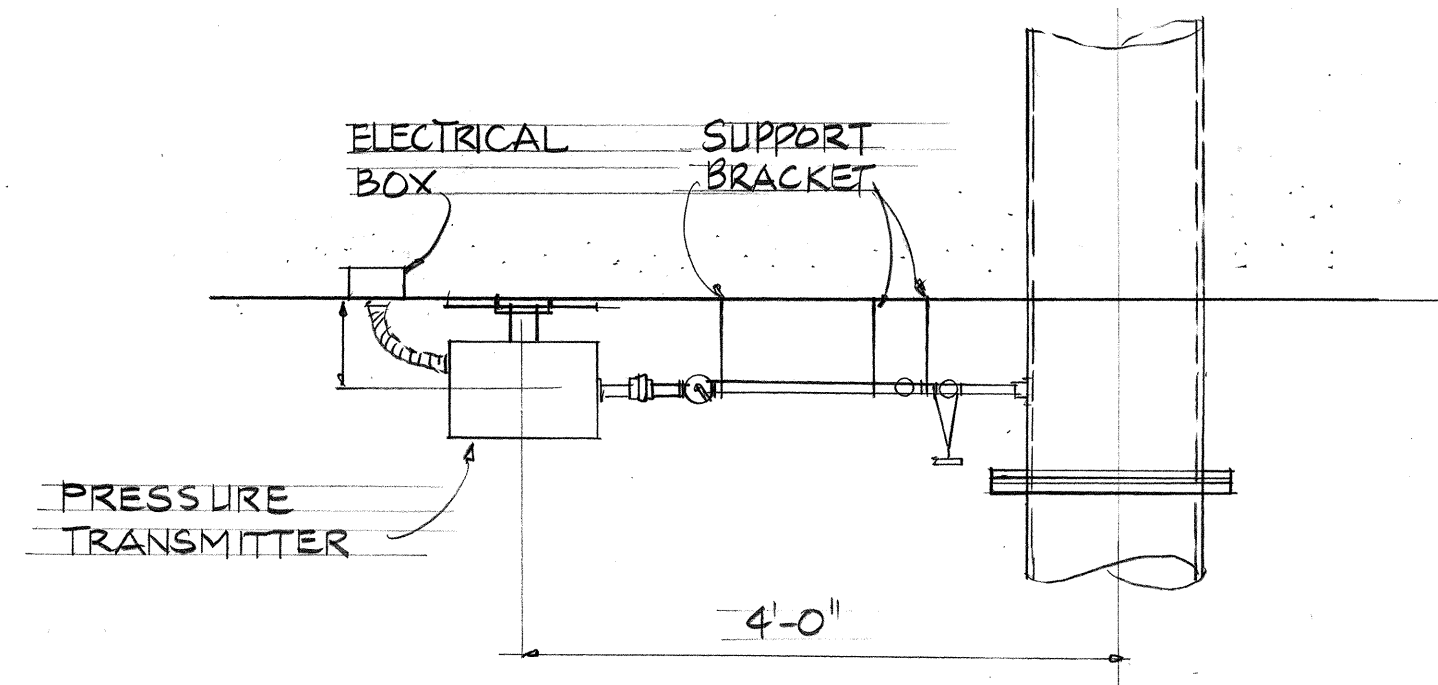
DETAIL "B"
NOT TO SCALE:

	DESCRIPTION OF ITEMS
○	
(38)	3" G.I. SUMP PUMP DISCHARGE LINE TO WET WELL INLET CHAMBER
(39)	SUMP PUMP, 50 GPM @ 25 TDH.
(1)	SUMP PUMP PIT COVER PLATE - FURNISHED BY EQUIP. SUPPLIER.
(2)	SUSPENSION PLATE " " " "
(3)	2 1/2" 45° ELBOW
(4)	2 1/2" CHECK VALVE
(5)	2 1/2" 90° ELBOW
(6)	2 1/2" GATE VALVE
(7)	2 1/2" GROUND JOINT UNION.
(8)	2 1/2" x 3" REDUCER

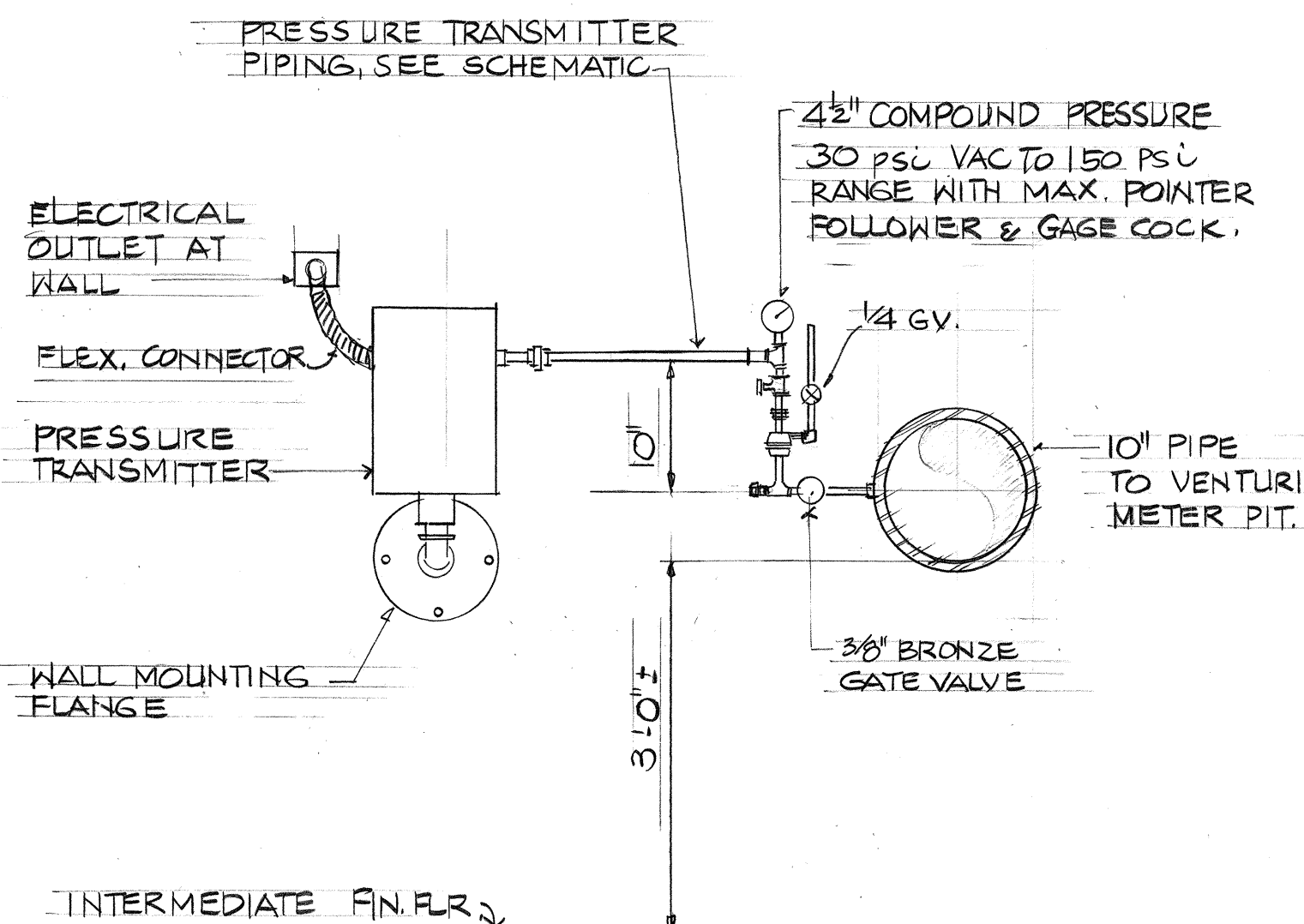
WILSON OKAMOTO & ASSOC. ARCHITECTS - PLANNERS HONOLULU HAWAII		ADDED ① & ② ITEMS ON SUMP PUMP PIT DETAIL.	8-27-80	
	SYM	DESCRIPTION	DATE	APP'D
		REVISIONS		
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF WATER AND LAND DEVELOPMENT				
SAND ISLAND PARKWAY INCREMENT II, PHASE I & SEWAGE PUMP STATION PUMP SHAFT AND PIT DETAILS AND SECTIONS				
	DESIGNED: H.S.	SUBMITTED: 		
	DRAWN: K.N.	CHIEF DESIGN & CONSTR. ENGINEER		
	CHECKED: H.S. KON	DATE: 5/2/81		
	APPROVED: 	MANAGER-CHIEF ENGINEER		
DATE: 5/2/81		FILE NO.		

THIS WORK WAS PREPARED BY ME OR
UNDER MY SUPERVISION.

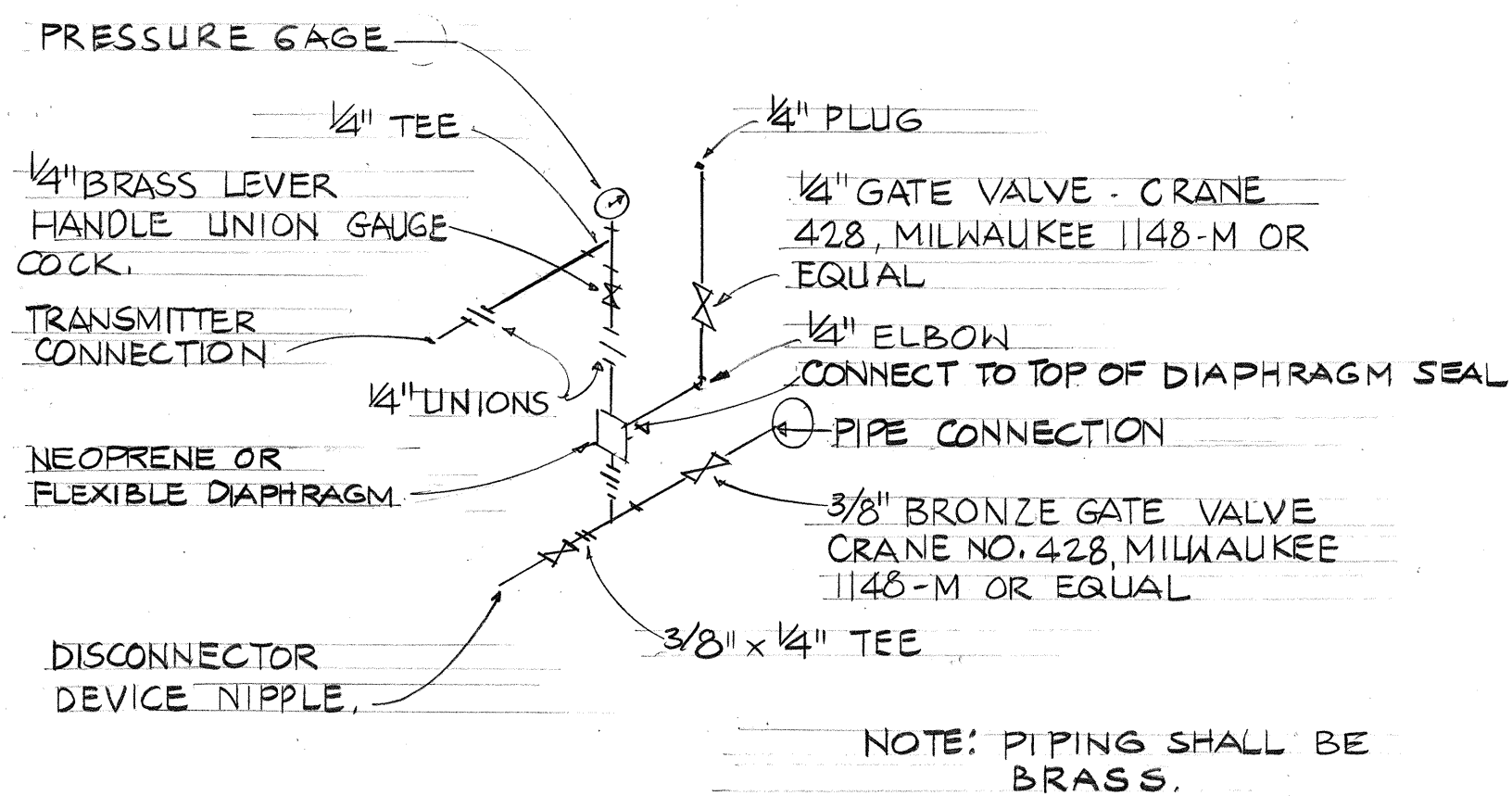

Signature



PLAN



A FRONT ELEVATION
M-6 NOT TO SCALE



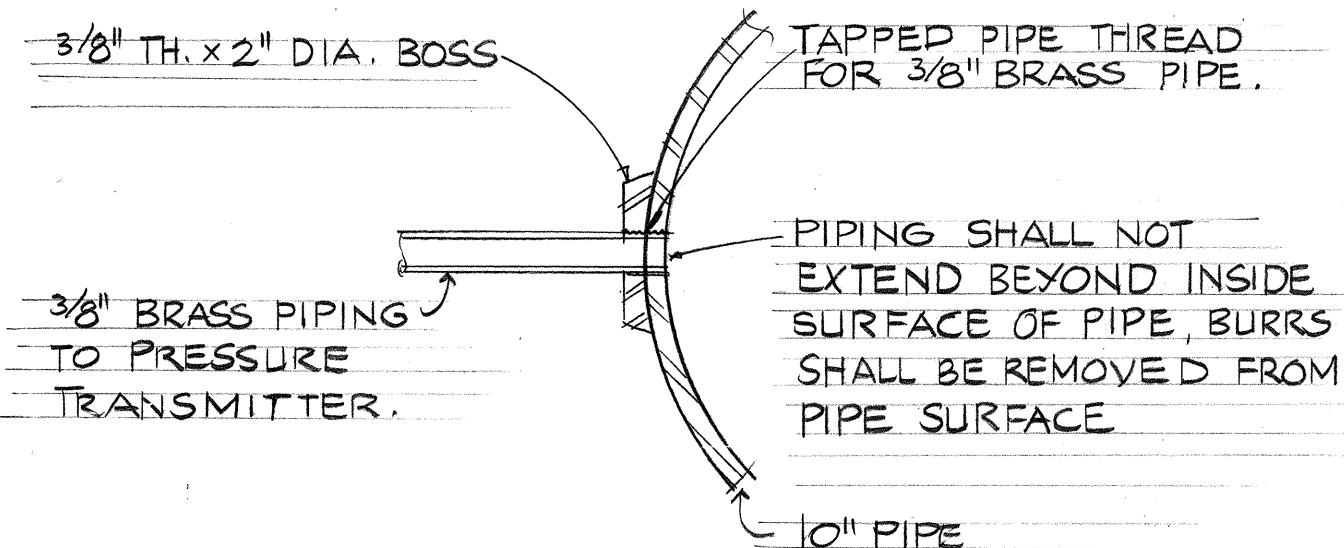
SCHEMATIC

B PRESSURE TRANSMITTER
M-6 NO SCALE

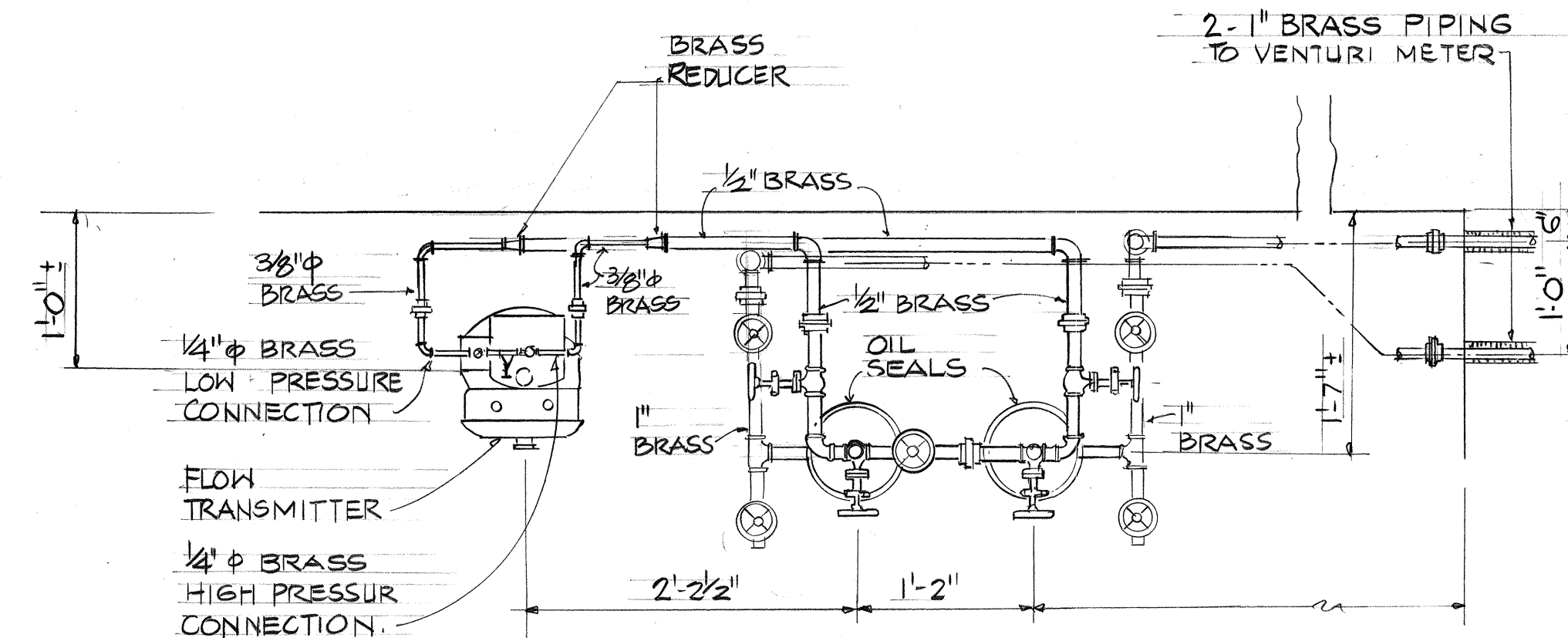
DESCRIPTION OF ITEMS	
1 3/4" GALVANIZED STEEL PLATE 8"x22"	
2 FLOOR FLANGE, BRASS 1" φ	
3 PIPE, 8 1/2" LONG, BRASS 1" φ (PLUGGED)	
4 CROSS, BRASS 1" φ	
5 NIPPLE, BRASS 1" φ	
6 TEE, BRASS 1" φ	
7 1" GATE VALVE, O.I.C., BRONZE WITH 3/4" HOSE NIPPLE.	
8 EL BOW, BRASS 1" φ	
9 GATE VALVE, SCREWED ENDS, BRASS 1" φ	
10 UNION, BRASS 1" φ	
11 PIPE CAP, GALVANIZED MALLEABLE IRON 6" φ	
12 PIPE, 19" LONG, WROUGHT IRON 6" φ	
13 BRONZE 3" RODS WITH 3/8" PIPE THREADS AND 1/2" x 12" LONG GLASS.	
14 ELBOW, 90° 1 1/4" BRASS WITH 1" NIPPLE.	
15 PIPE, BRASS 1" φ	
16 CAP, BRASS 1" φ	
17 AIRCOCK, TEE HANDLE, BRASS 1/4" w/ MALE END HOSE BIBB OR 90° EL.	
18 PIPE, 12" LONG, BRASS 1" φ	
19 FLOW TRANSMITTER	
20 DISCONNECTOR DEVICE NIPPLE	
21 OIL SEAL	

NOTES:

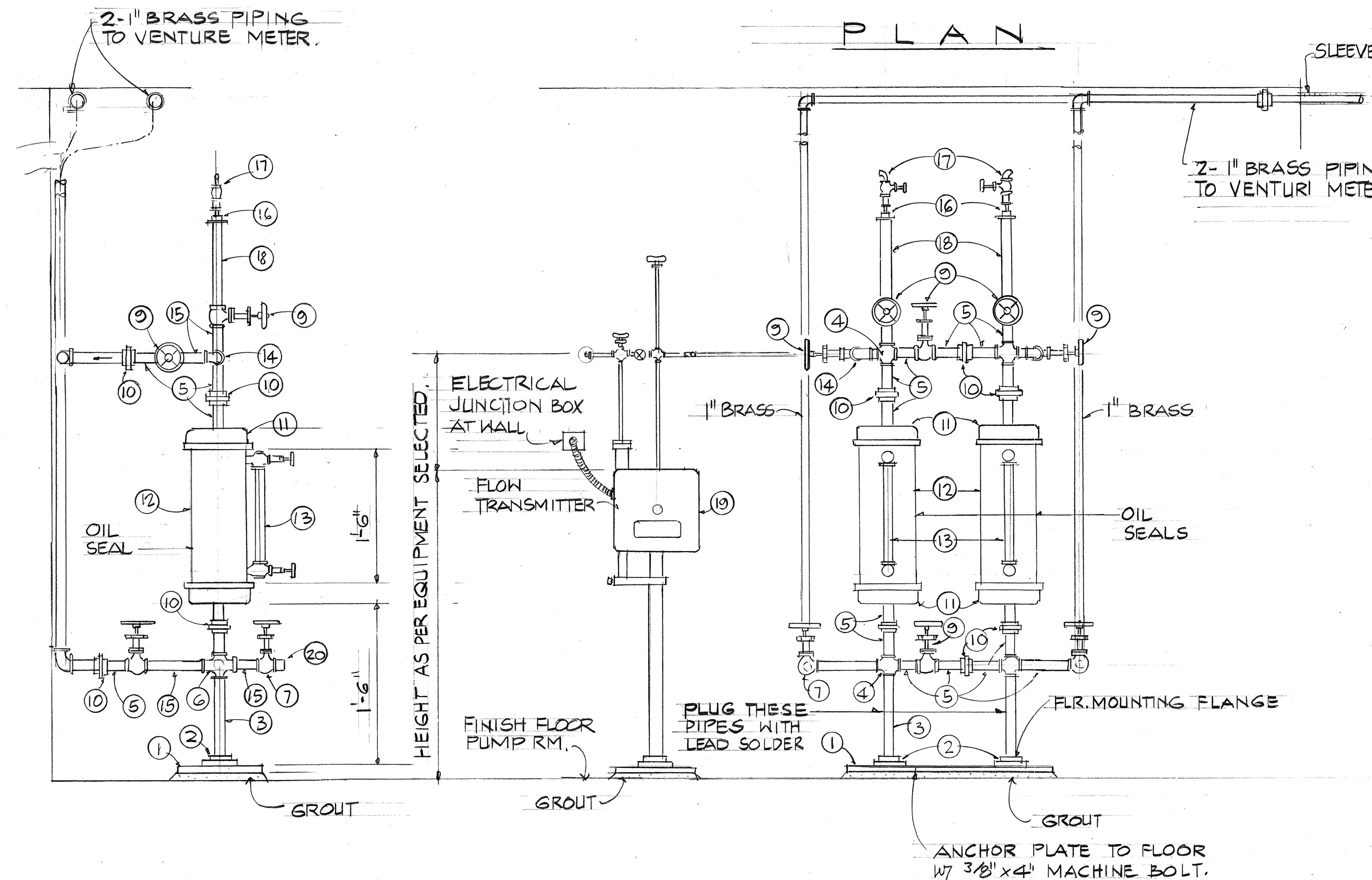
1. TYPICAL LAYOUT OF OIL SEAL AND FLOW TRANSMITTER SHOWN. ACTUAL LAYOUT & DETAILS AS PER EQUIPMENT SELECTED. CONTRACTOR TO SUBMIT SHOP DWG. FOR APPROVAL BEFORE LAYING OUT ACTUAL WORK.
2. SUPPORT PIPING AND FITTINGS FOR OIL SEALS AND FLOW TRANSMITTER SHALL BE GALV. STEEL AND MALLEABLE IRON. ALL OTHER PIPING, FITTINGS, VALVES & APPURTENANCES SHOWN SHALL BE BRASS.
3. PIPING FOR FLOW TRANSMITTER & OIL SEALS SHALL BE SUPPORTED WITH GALV. MALLEABLE IRON DIAMOND CLAMPS SPACED MAXIMUM OF 3'-0" O.C. PIPING FOR PRESSURE TRANSMITTER SHALL BE SUPPORTED AT POINTS SHOWN WITH G.I. BRACKETS.
4. UNLESS OTHERWISE INDICATED, ALL PIPING AND FITTINGS SHALL BE 1" BRASS.
5. ALL PIPING AT THE OIL SEALS SHALL BE TESTED FOR LEAKS BEFORE THE SEALING UNITS ARE INSTALLED AND FILL WITH OIL.



C PRESSURE TAP DETAIL
M-6 NOT TO SCALE



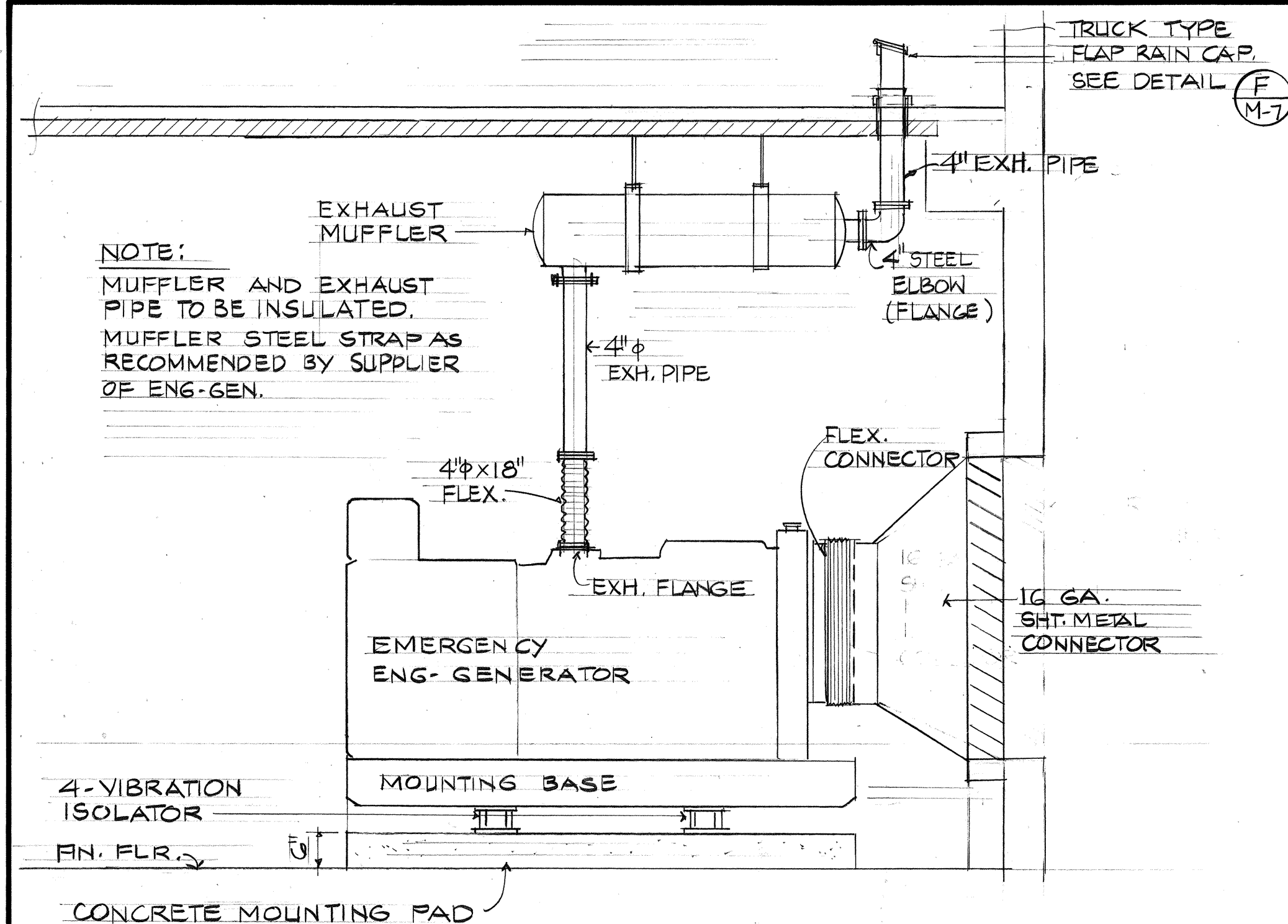
PLAN



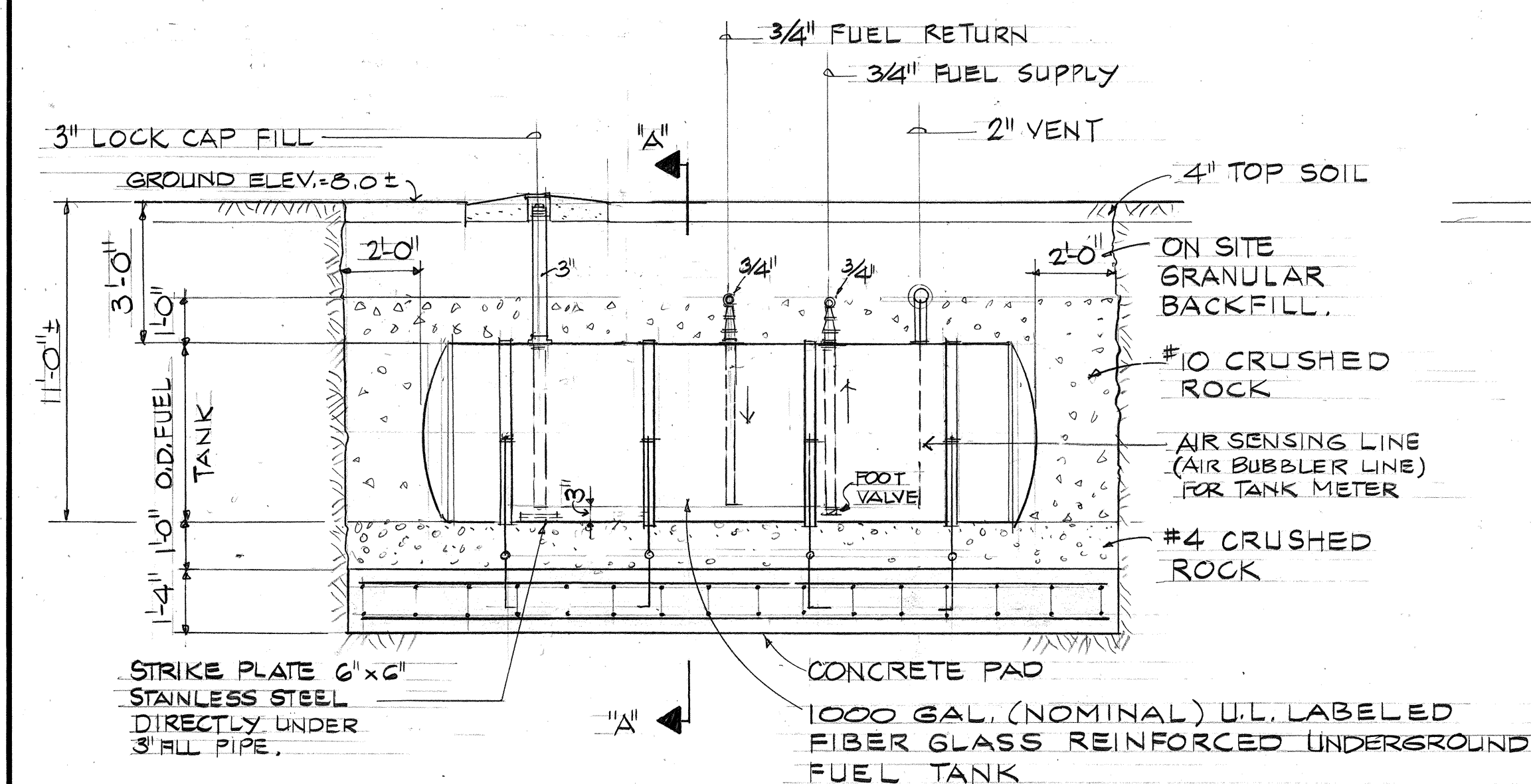
SIDE ELEVATION FRONT ELEVATION

D OIL SEALS & FLOW TRANSMITTER
M-6 NOT TO SCALE

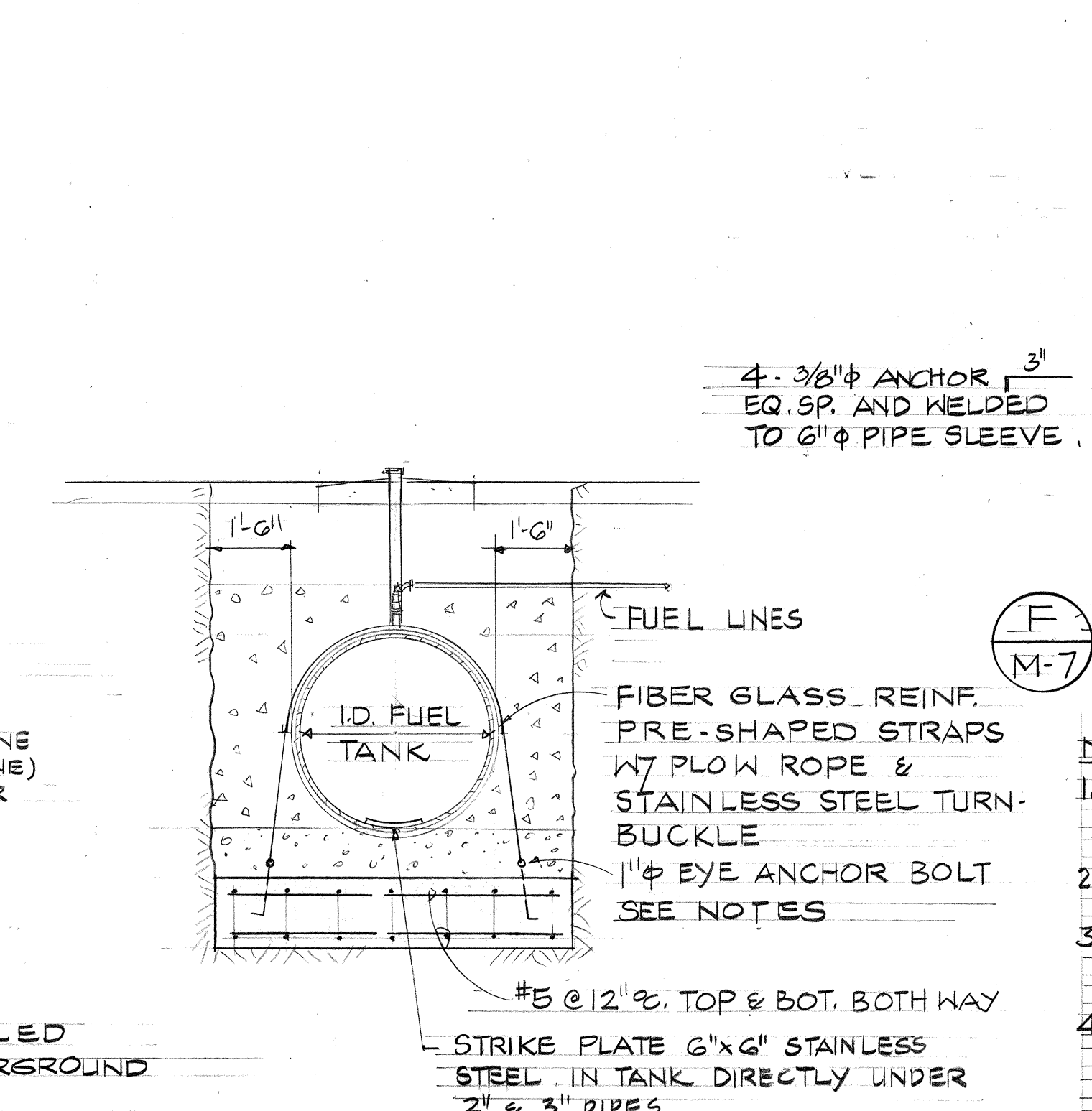
WILSON OKAMOTO & ASSOC. ENGINEERS - ARCHITECTS - PLANNERS HONOLULU HAWAII		SYM		DESCRIPTION		DATE		APP'D	
APPROVED: G. L. SEGUNDO REGISTERED PROFESSIONAL ENGINEER No. 1682 HAWAII U.S.A.		STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF WATER AND LAND DEVELOPMENT SAND ISLAND PARKWAY INCREMENT II, PHASE I & SEWAGE PUMP STATION TRANSMITTERS PLANS AND DETAILS							
		DESIGNED: H.S. DRAWN: K.N. CHECKED: H.S. APPROVED: Robert H. Shinde DATE: 5/2/80				SUBMITTED: John F. Fain DATE: 5/2/80 CHIEF DESIGN & CONSTR. ENGINEER MANAGER / CHIEF ENGINEER			
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. Signature		FILE NO.							



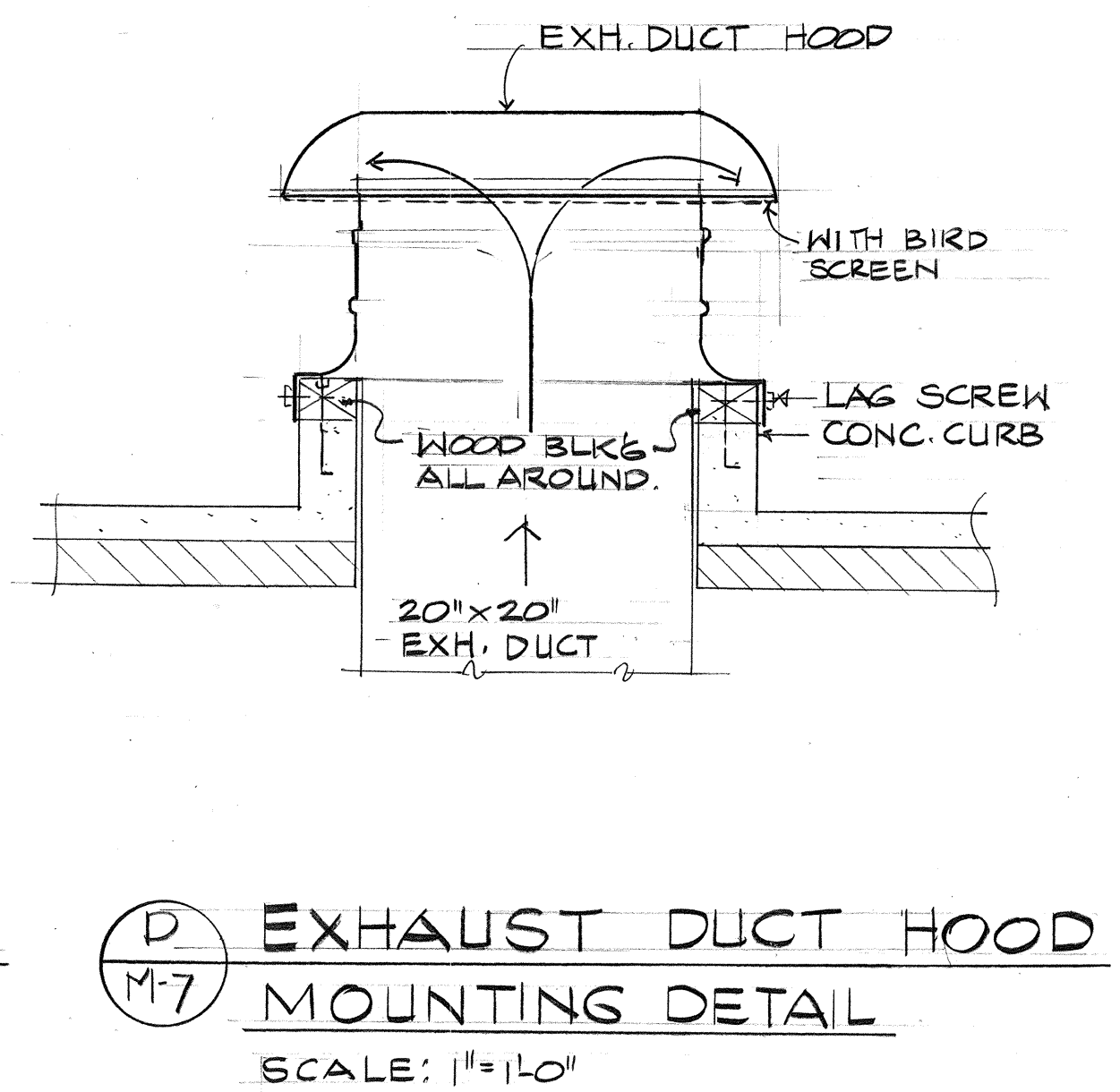
A EMERGENCY ENG-GENERATOR
M-7 SCALE: 1/2" = 1'-0"



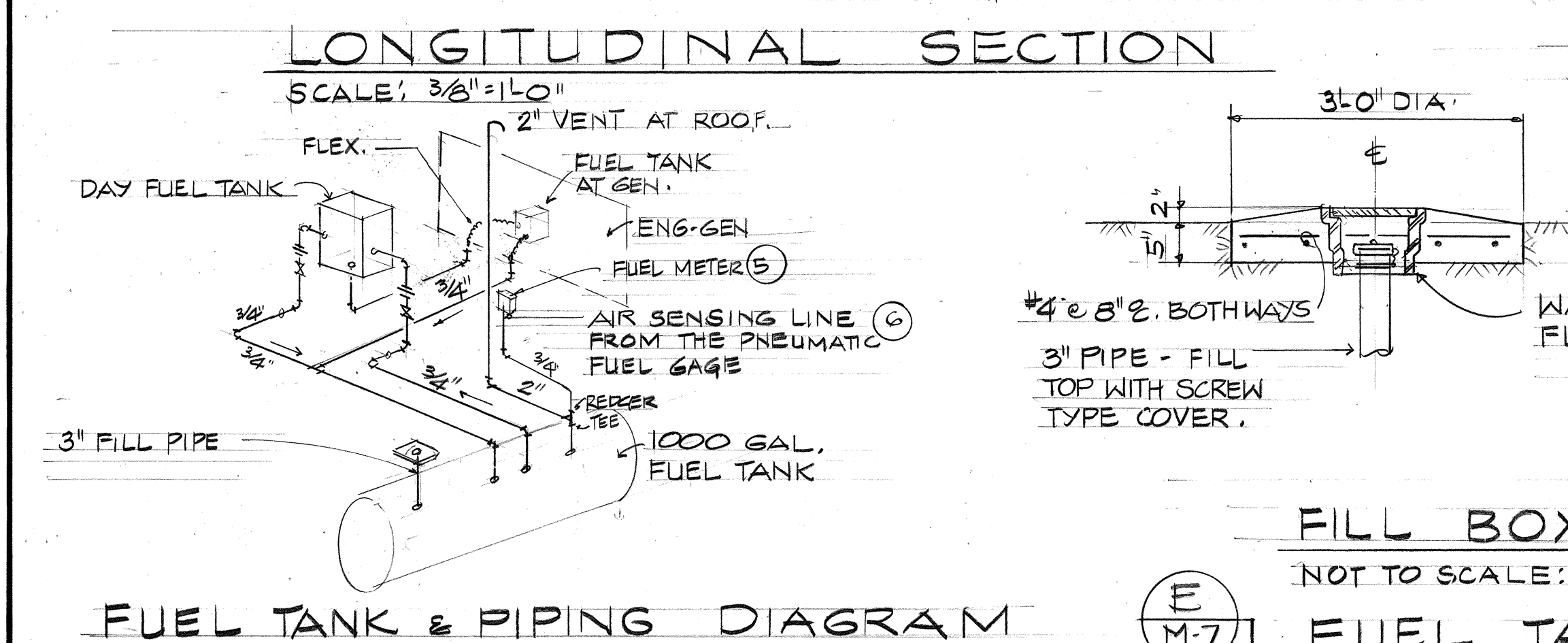
B TYPICAL MUFFLER HANGER DETAIL
M-7 NOT TO SCALE



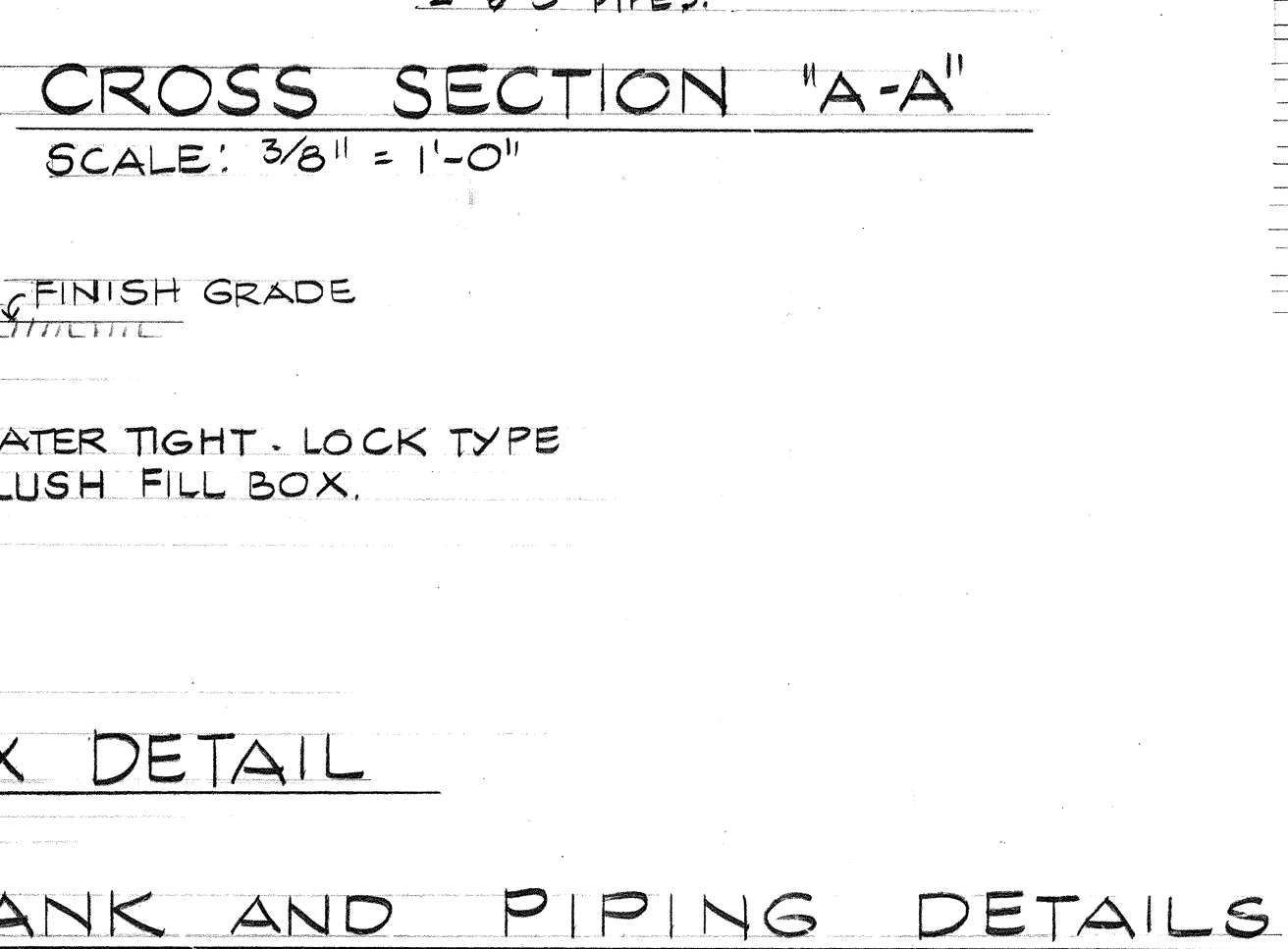
C VIBRATION ISOLATOR
M-7 NOT TO SCALE



D EXHAUST DUCT HOOD MOUNTING DETAIL
SCALE: 1" = 1'-0"

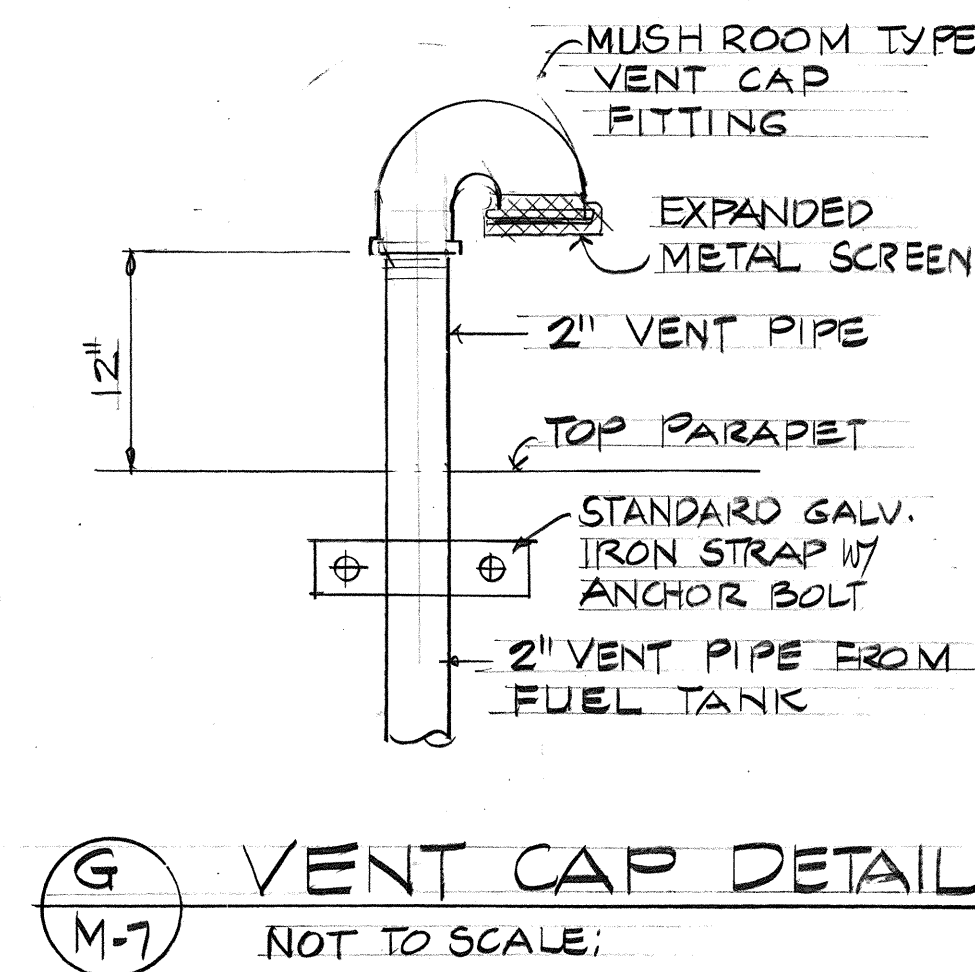


E FUEL TANK AND PIPING DETAILS
M-7 NOT TO SCALE



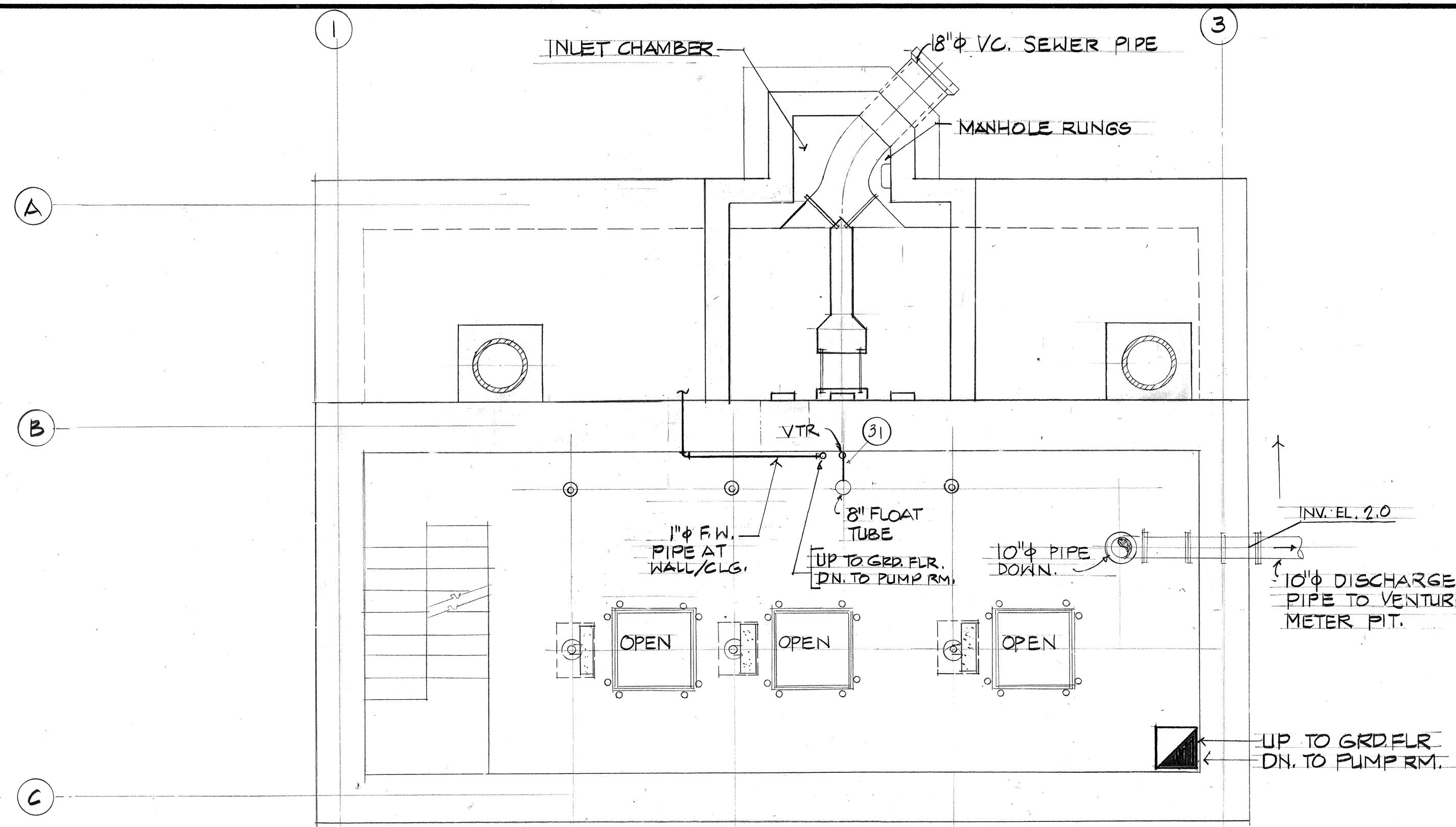
F EXHAUST PIPE AT ROOF
M-7 NOT TO SCALE

- NOTES:
1. FUEL TANK, PIPING, AND OTHER ACCESSORIES AS PER EQUIPMENT SUPPLIER SHOP DRAWINGS.
 2. CONTRACTOR SHALL OBTAIN FIRE MARSHALL PERMIT TO INSTALL FUEL TANK.
 3. ALL FUEL LINE PIPING EQUIPMENT, FITTINGS AND OTHER ACCESSORIES SHALL BE VAPOR PROOF TYPE.
 4. CONTRACTOR SHALL INSTALL THE TANK IN SUCH MANNER AS TO NOT CAUSE EXCESSIVE STRESSES AT THE STRAPS DUE TO BOUYANCY. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SUCH DAMAGES.



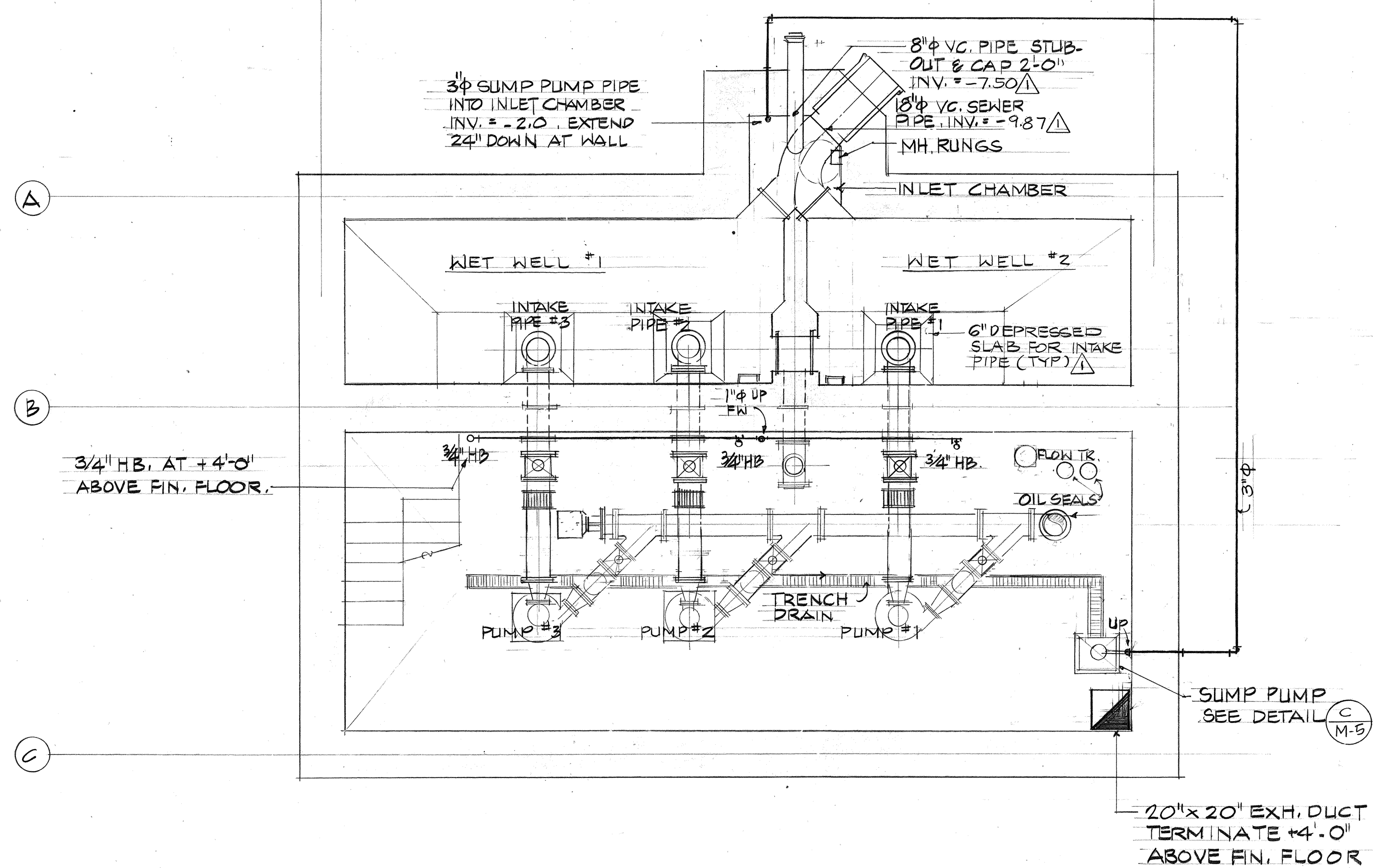
G VENT CAP DETAIL
M-7 NOT TO SCALE

WILSON OKAMOTO & ASSOC. ENGINEERS-ARCHITECTS-PLANNERS HONOLULU HAWAII		SYM	DESCRIPTION	DATE	APP'D
REVISIONS					
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF WATER AND LAND DEVELOPMENT SAND ISLAND PARKWAY INCREMENT II, PHASE I & SEWAGE PUMP STATION EMERGENCY GENERATOR AND FUEL TANK DETAILS AND SECTIONS					
DESIGNED: H.S.	SUBMITTED:	CHIEF DESIGN & CONSTR. ENGINEER			
DRAWN: K.N.	DATE: 5/2/80	MANAGER-CHIEF ENGINEER			
CHECKED: H.S.	DATE: 5/2/80	FILE NO.			
APPROVED:	DATE: 5/2/80				



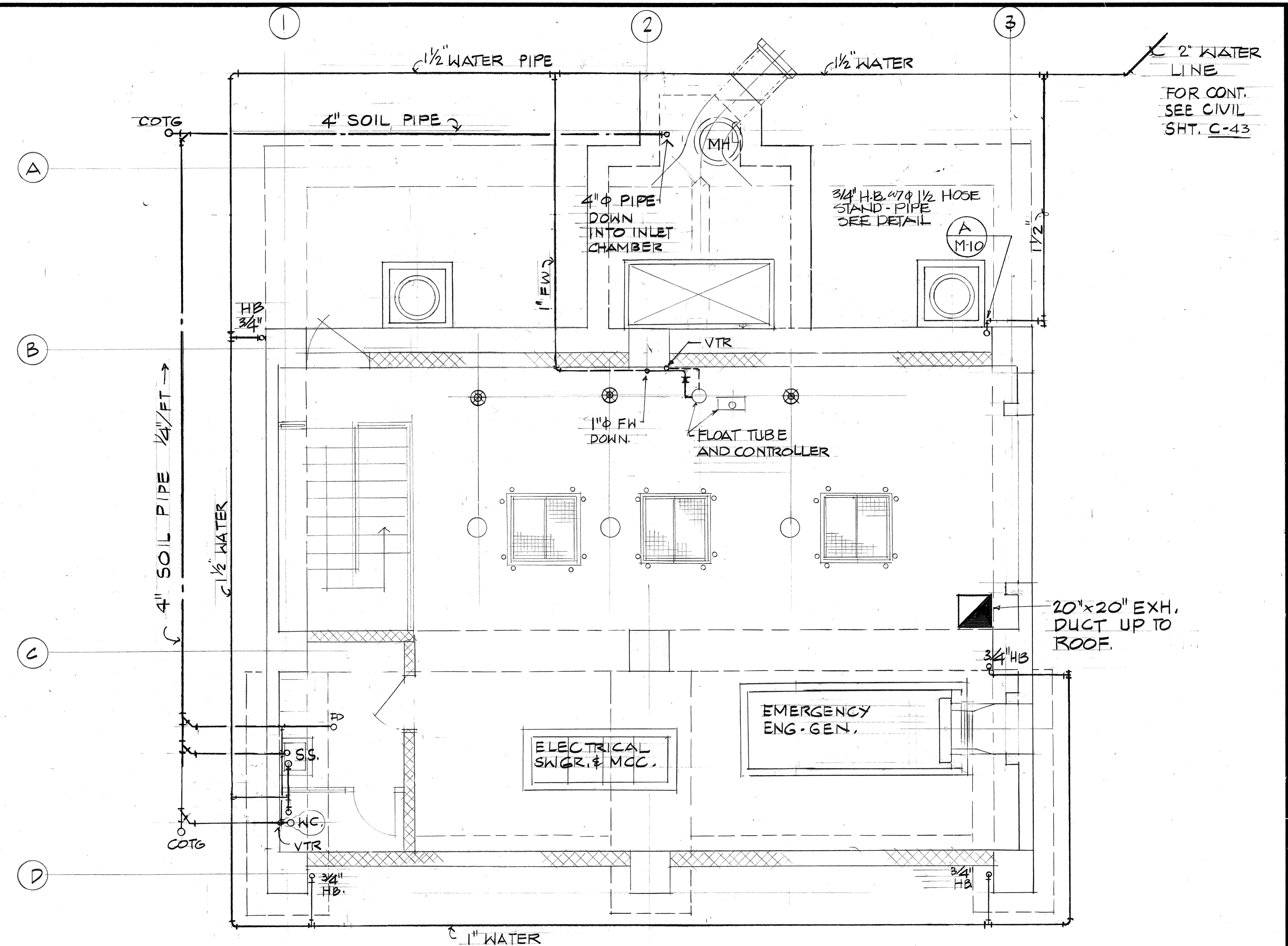
INTERMEDIATE FLOOR PLAN

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



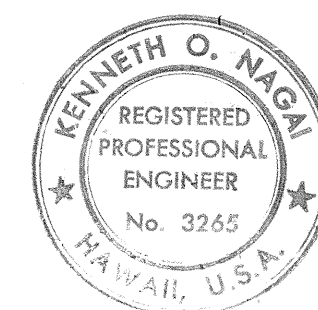
PUMP RM. FLOOR PLAN

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



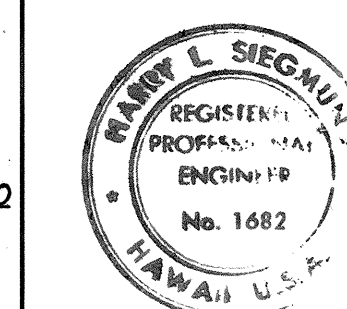
GROUND FLOOR PLAN

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



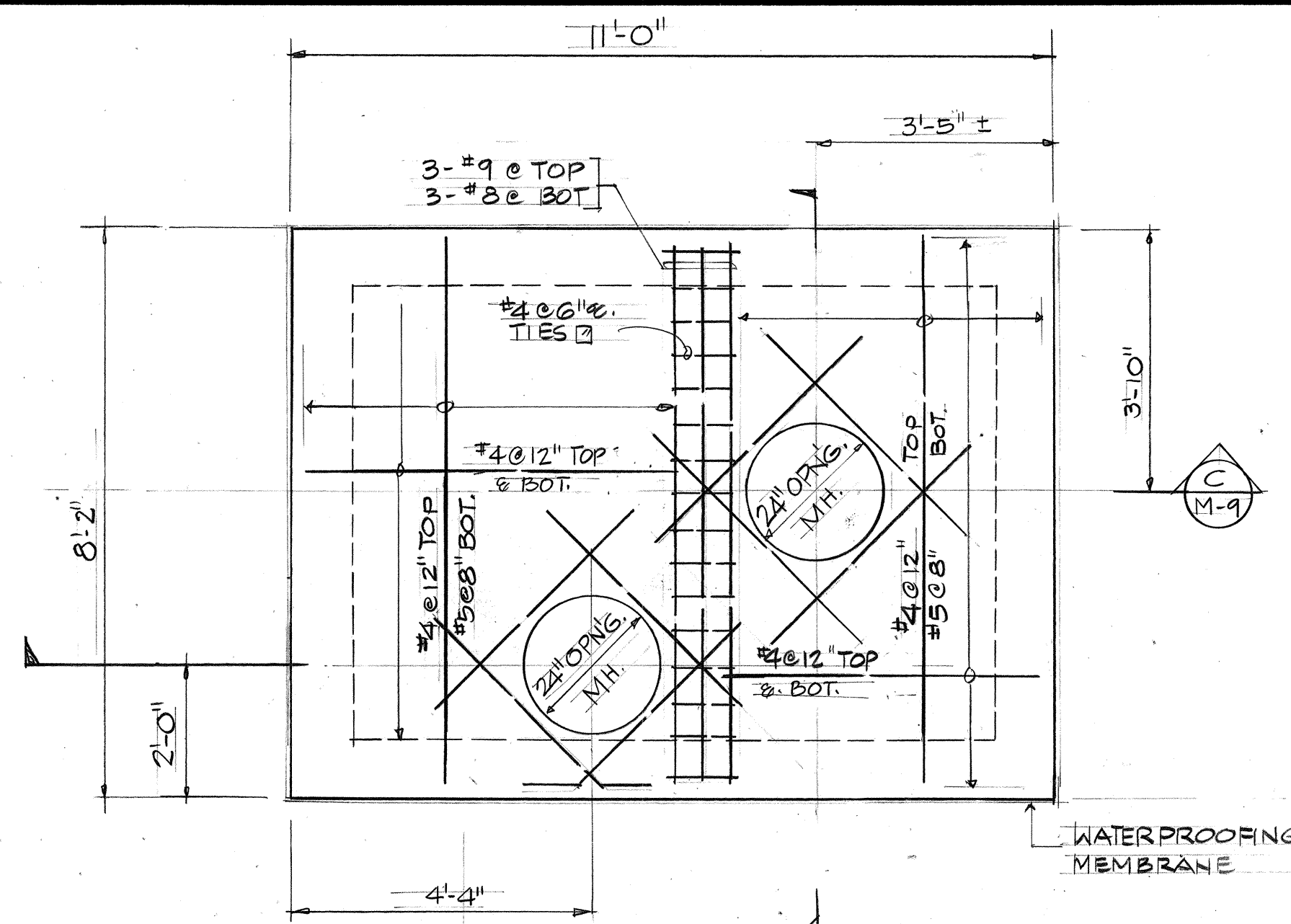
APPROVED:

[Signature]
CHIEF, DIV. OF WASTEWATER
MANAGEMENT



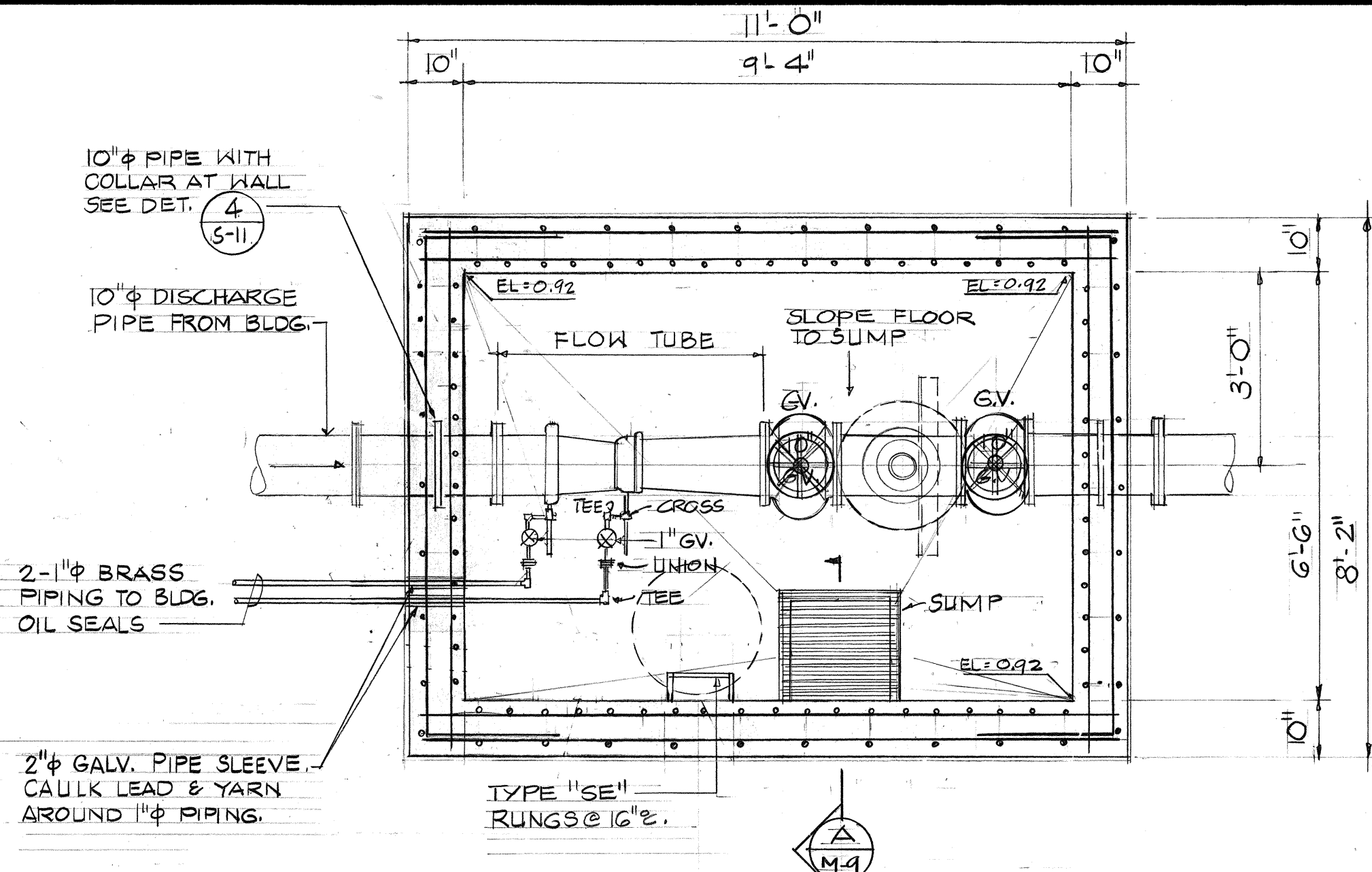
THIS WORK WAS PREPARED BY ME OR
UNDER MY SUPERVISION
[Signature]
Signature

WILSON OKAMOTO & ASSOC. ENGINEERS - ARCHITECTS - PLANNERS HONOLULU HAWAII		ADDED DEPRESSED SLAB AT INTAKE PIPE. CHANGE INVERTS AT 18" & 8" PIPES.	8-26-80	APP'D
SYMBOL		DESCRIPTION	DATE	APP'D
REVISIONS				
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF WATER AND LAND DEVELOPMENT				
SAND ISLAND PARKWAY INCREMENT II, PHASE I & SEWAGE PUMP STATION PUMP ROOM INTERMEDIATE AND GROUND FLOOR PLANS				
DESIGNED: H.S.	SUBMITTED: <i>[Signature]</i>			
DRAWN: K.N.	CHIEF DESIGN & CONSTR. ENGINEER			
CHECKED: H.S./KON	DATE: 5/2/80			
APPROVED: <i>[Signature]</i>	MANAGER - CHIEF ENGINEER			
DATE: 5/2/80	FILE NO.			



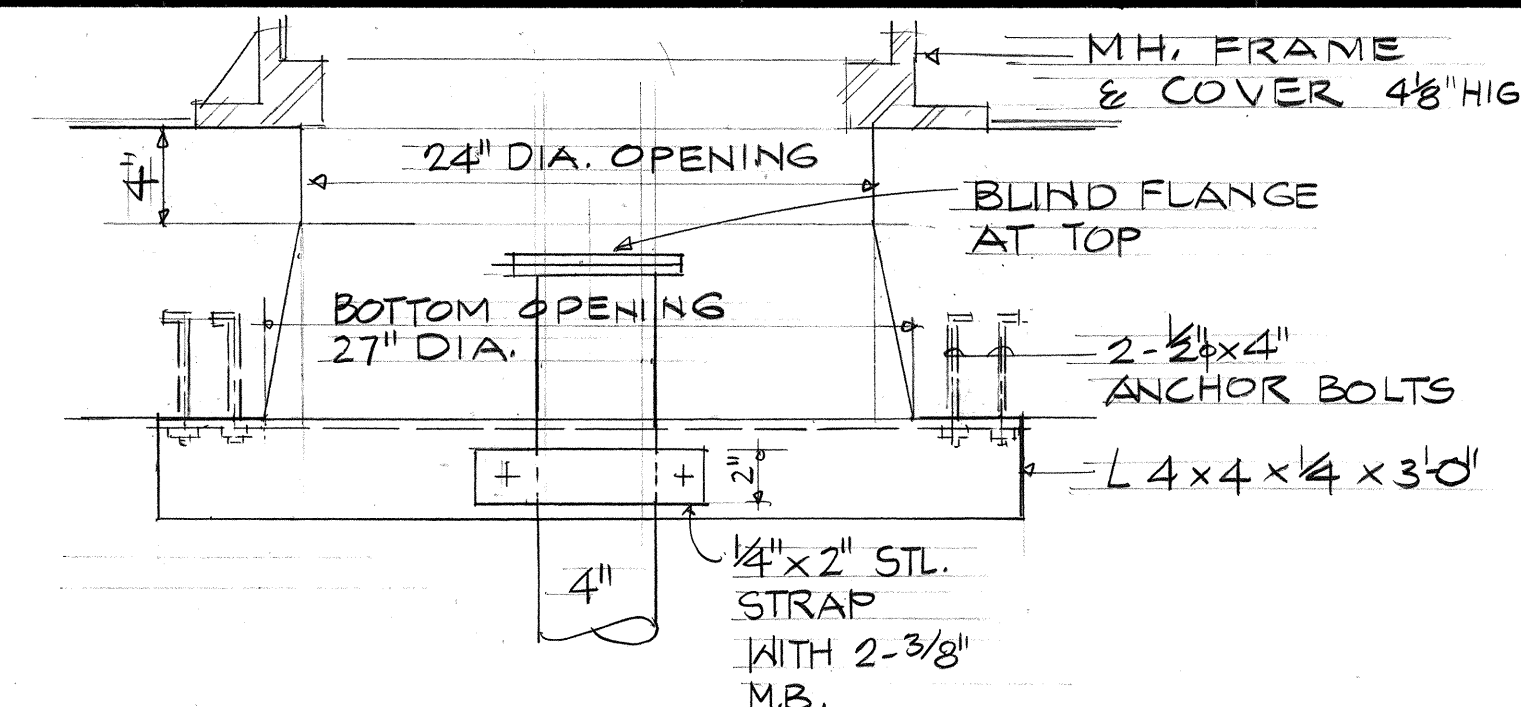
TOP SLAB PLAN

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



PLAN

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

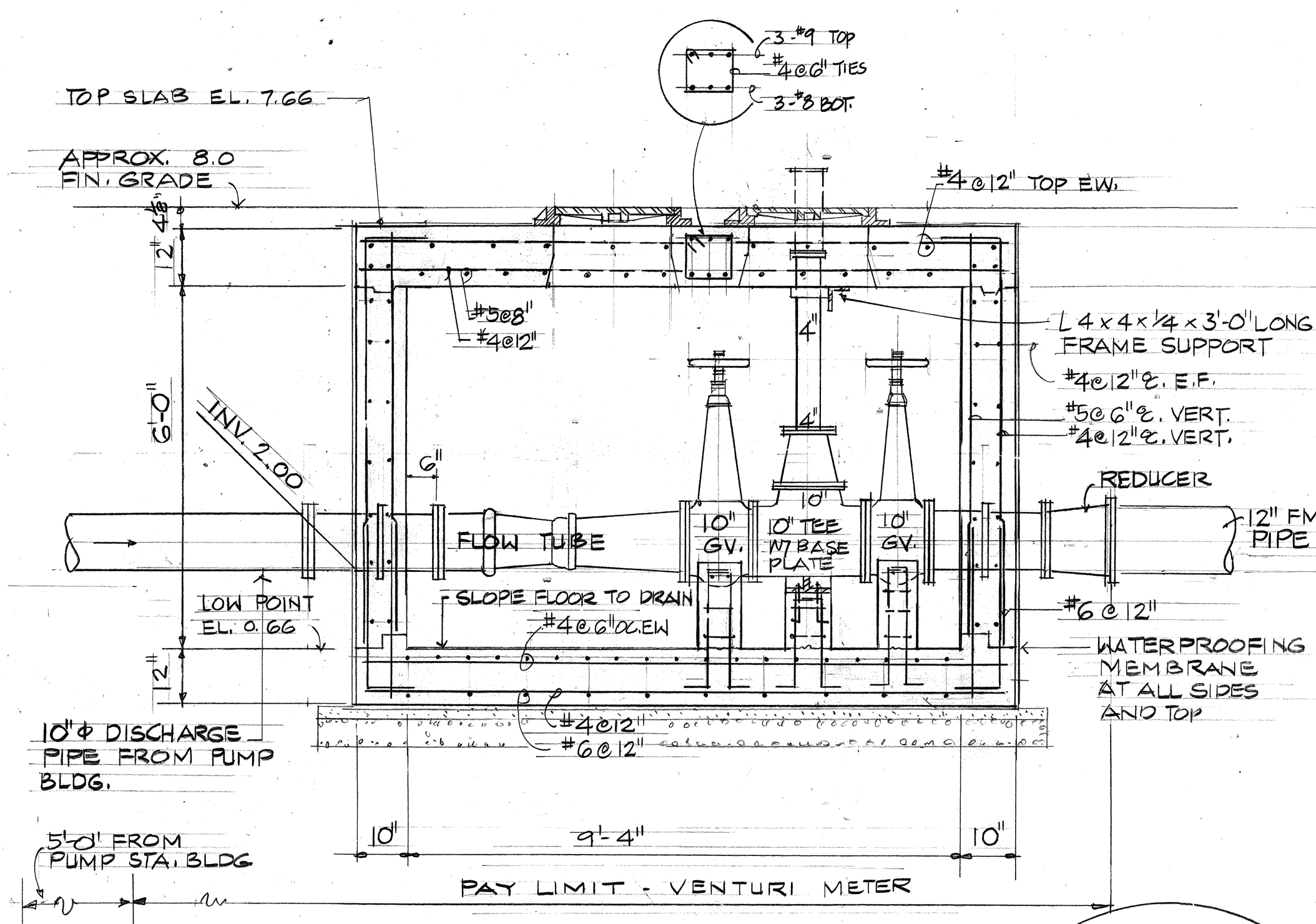


DETAIL

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

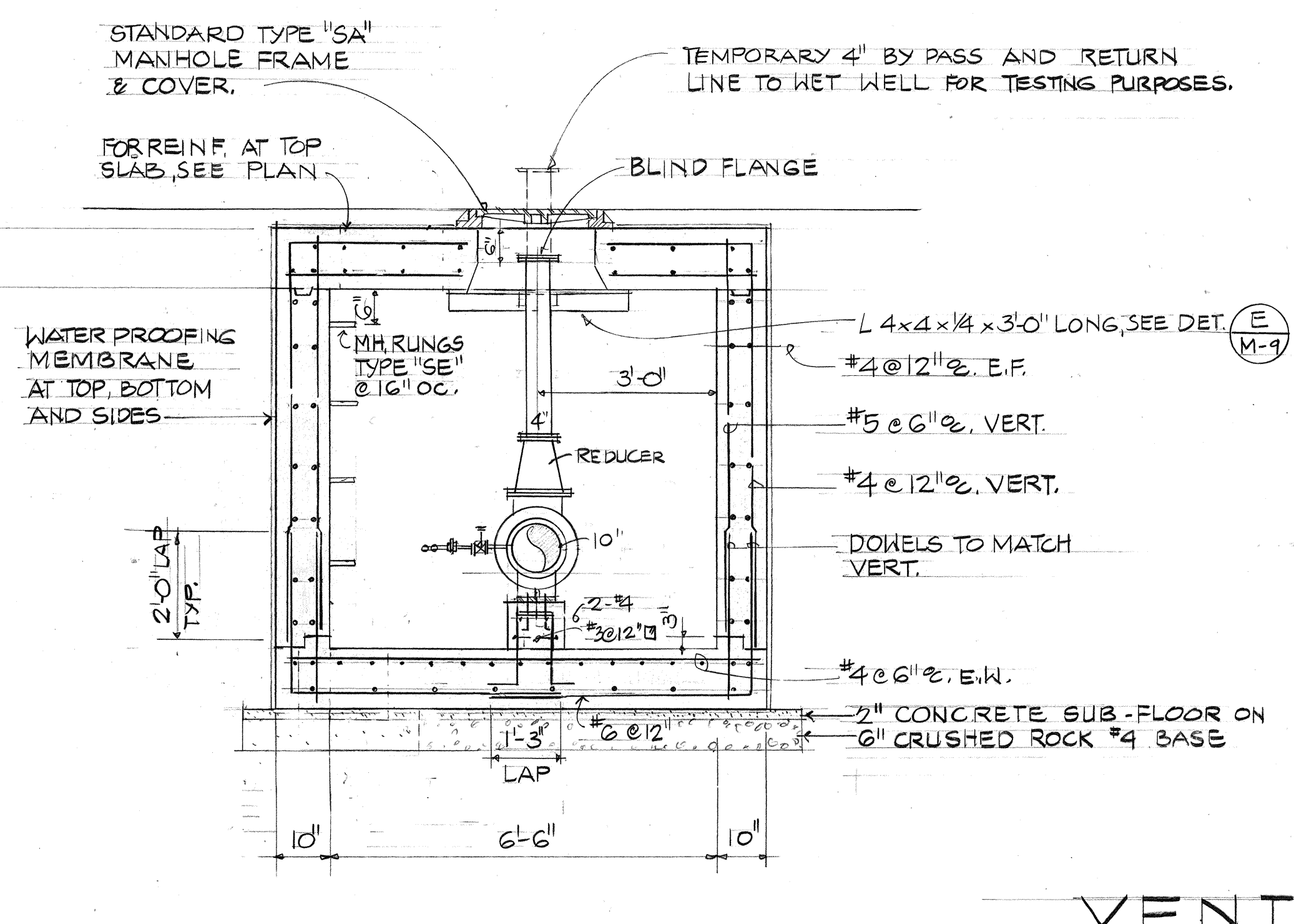
NOTES

1. PIPING AND EQUIPMENT OF VENTURI METER PIT SHOWN IS TO BE DETERMINE BY SUPPLIER OF PIPING AND EQUIPMENT AND CONTRACTOR SHALL SUBMIT SHOP DRAWING FOR APPROVAL.
2. DIMENSION OF VENTURI METER PIT IS TO BE DETERMINE BY EQUIPMENT PURCHASED AND CONTRACTOR SHALL SUBMIT SHOP DRAWING FOR APPROVAL.
3. 4" STAND PIPE STRAP AND ATTACHMENT ANGLE TO BE HOT DIPPED GALVANIZED AFTER FABRICATION.
4. MANHOLE FRAME AND COVER SHALL BE TYPE "SA" ON SHEET S-30 AND S-31. MANHOLE RUNGS SHALL BE TYPE "SE" ON SHEET S-44. DEPT. OF PUBLIC WORKS COUNTY OF HONOLULU STATE OF HAWAII, STANDARD DETAILS.
5. FOR VENTURI METER PIT LOCATION SEE CIVIL SHEET C-43.



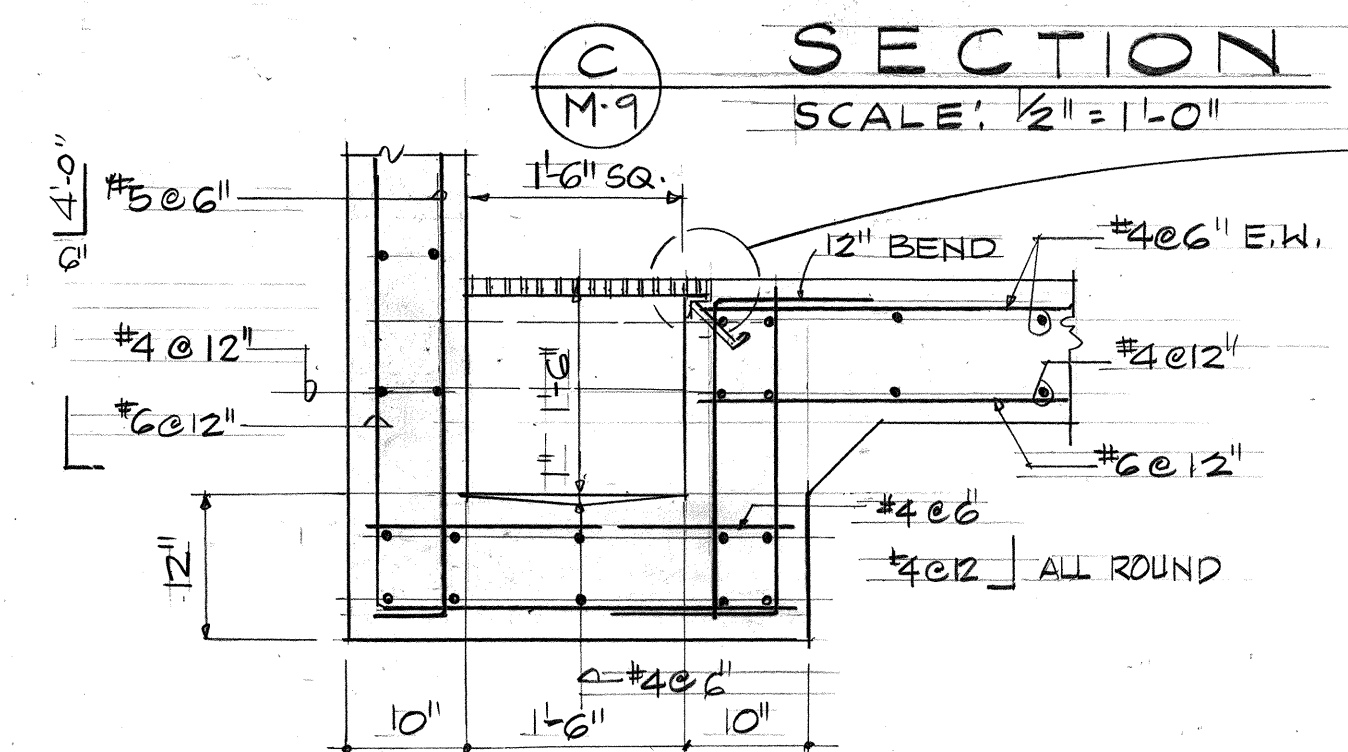
SECTION

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



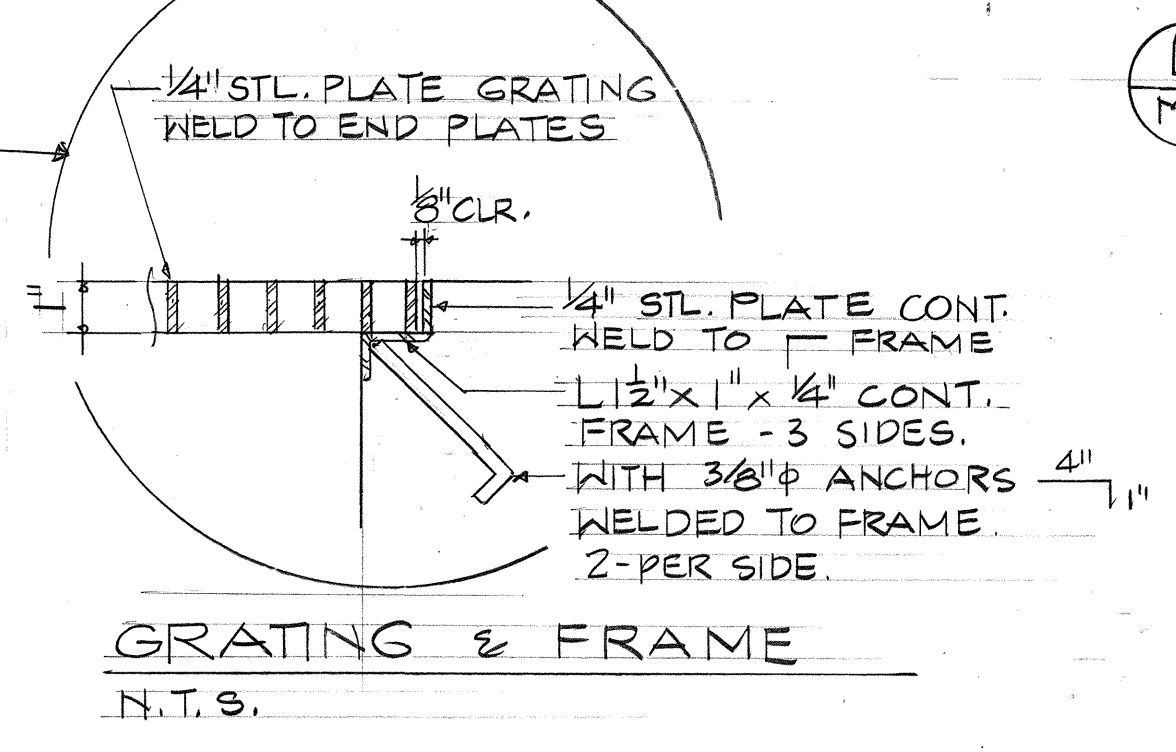
SECTION

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



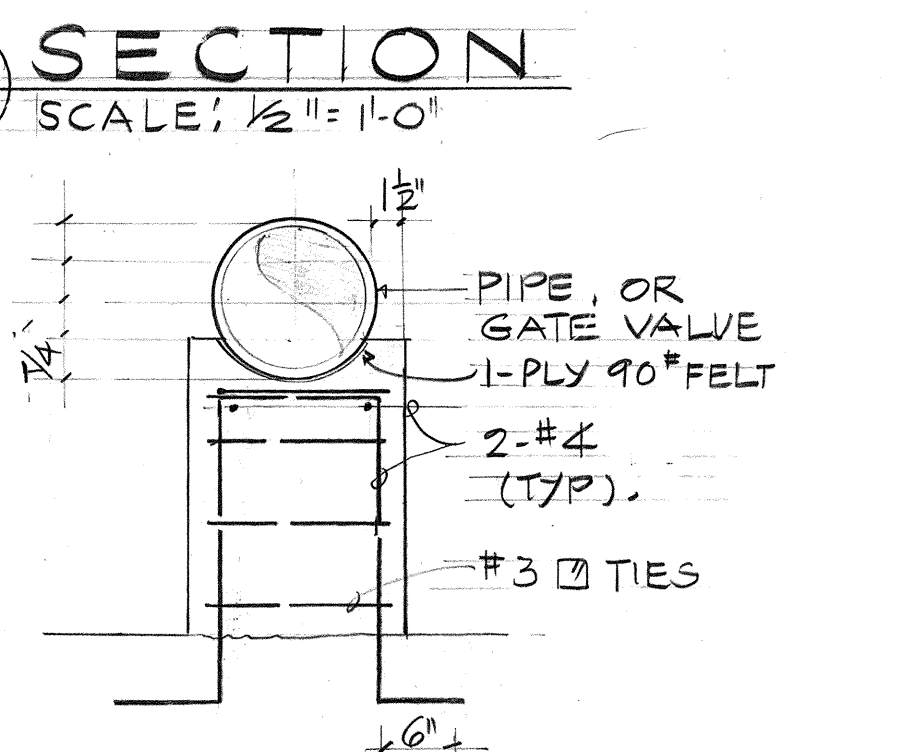
SUMP DETAIL

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



GRATING & FRAME

N.T.S.



CONCRETE PEDESTAL

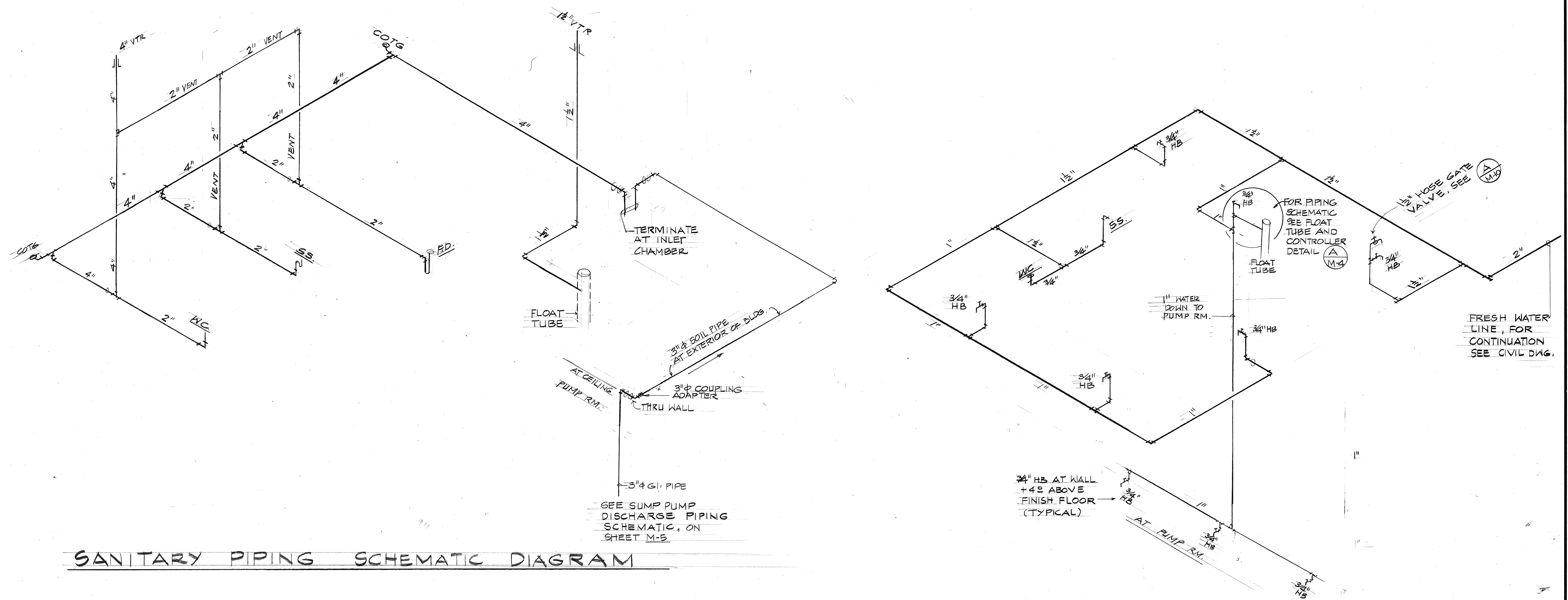
NOT TO SCALE

VENTURI METER PIT DETAILS



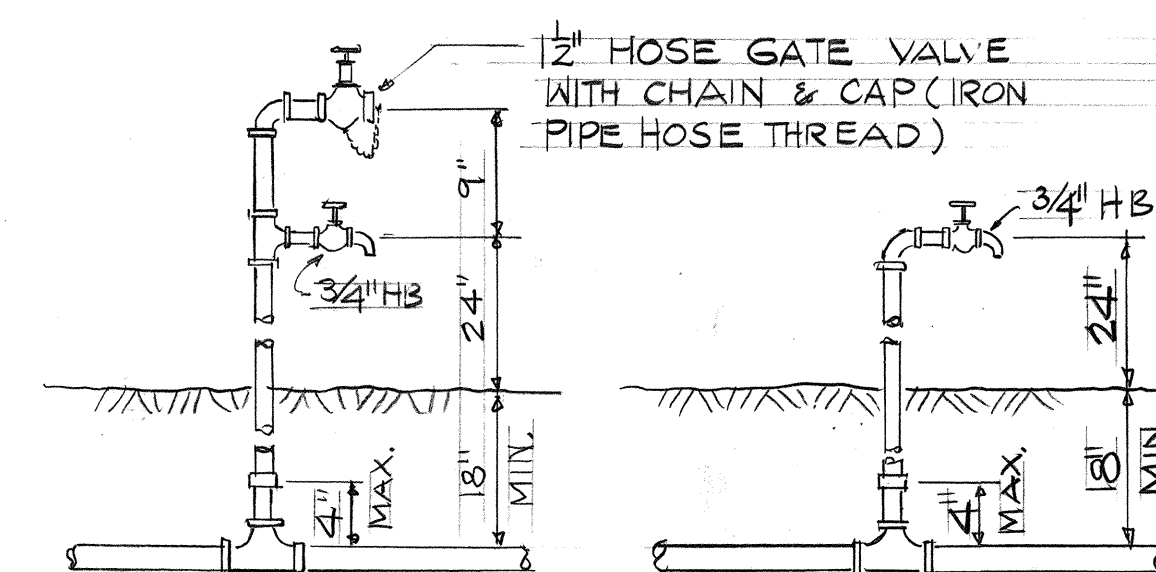
APPROVED: *[Signature]*
CHIEF DIV. OF WASTEWATER DATE 6/24/80
MANAGEMENT

WILSON OKAMOTO & ASSOC. ENGINEERS-ARCHITECTS-PLANNERS HONOLULU HAWAII	CORRECTED NOTE #5:		8-26-80	<i>[Signature]</i>
	SYM	DESCRIPTION	DATE	APP'D
REVISIONS				
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF WATER AND LAND DEVELOPMENT				
SAND ISLAND PARKWAY INCREMENT II, PHASE I & SEWAGE PUMP STATION VENTURI METER DETAILS & SECTIONS				
DESIGNED: HS	SUBMITTED: <i>[Signature]</i>			
DRAWN: KN	CHIEF DESIGN & CONSTR. ENGINEER			
CHECKED: HS, KN	DATE: 5/24/80			
APPROVED: <i>[Signature]</i>	MANAGER-CHIEF ENGINEER			
DATE: 5/24/80	FILE NO.			



SANITARY PIPING SCHEMATIC DIAGRAM

COLD WATER PIPING SCHEMATIC DIAGRAM



(A) TYPICAL 1 1/2\" HOSE GATE VALVE
(B) TYPICAL 3/4\" HB

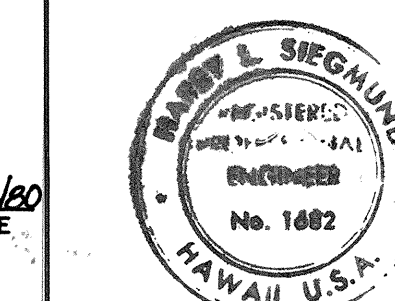
1 1/2\" HOSE GATE PIPE DETAIL
NO SCALE;

- NOTES:
1. GATE VALVES OR ANGLE VALVES WITH BRONZE DISCS OR PLUGS SHALL BE USED.
 2. VALVES SHALL BE RISING OR NON RISING STEM DESIGN.
 3. 3/4\" HB, AND 1 1/2\" GATE VALVE SHALL BE 90° APART.

APPROVED:

G. L. L...
CHIEF, DIV. OF WASTEWATER
MANAGEMENT

WILSON OKAMOTO & ASSOC.
ENGINEERS - ARCHITECTS - PLANNERS
HONOLULU HAWAII



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Harry L. Siegmund
Signature

SYM	DESCRIPTION	DATE	APP'D.
REVISIONS			
STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF WATER AND LAND DEVELOPMENT			
SAND ISLAND PARKWAY INCREMENT II, PHASE I & SEWAGE PUMP STATION SANITARY AND COLD WATER PIPING DIAGRAMS			
DESIGNED: H.S.	SUBMITTED:		
DRAWN: K.N.	DATE:		
CHECKED: H.S.	DATE:		
APPROVED:	DATE:		
MANAGER - CHIEF ENGINEER		FILE NO.	