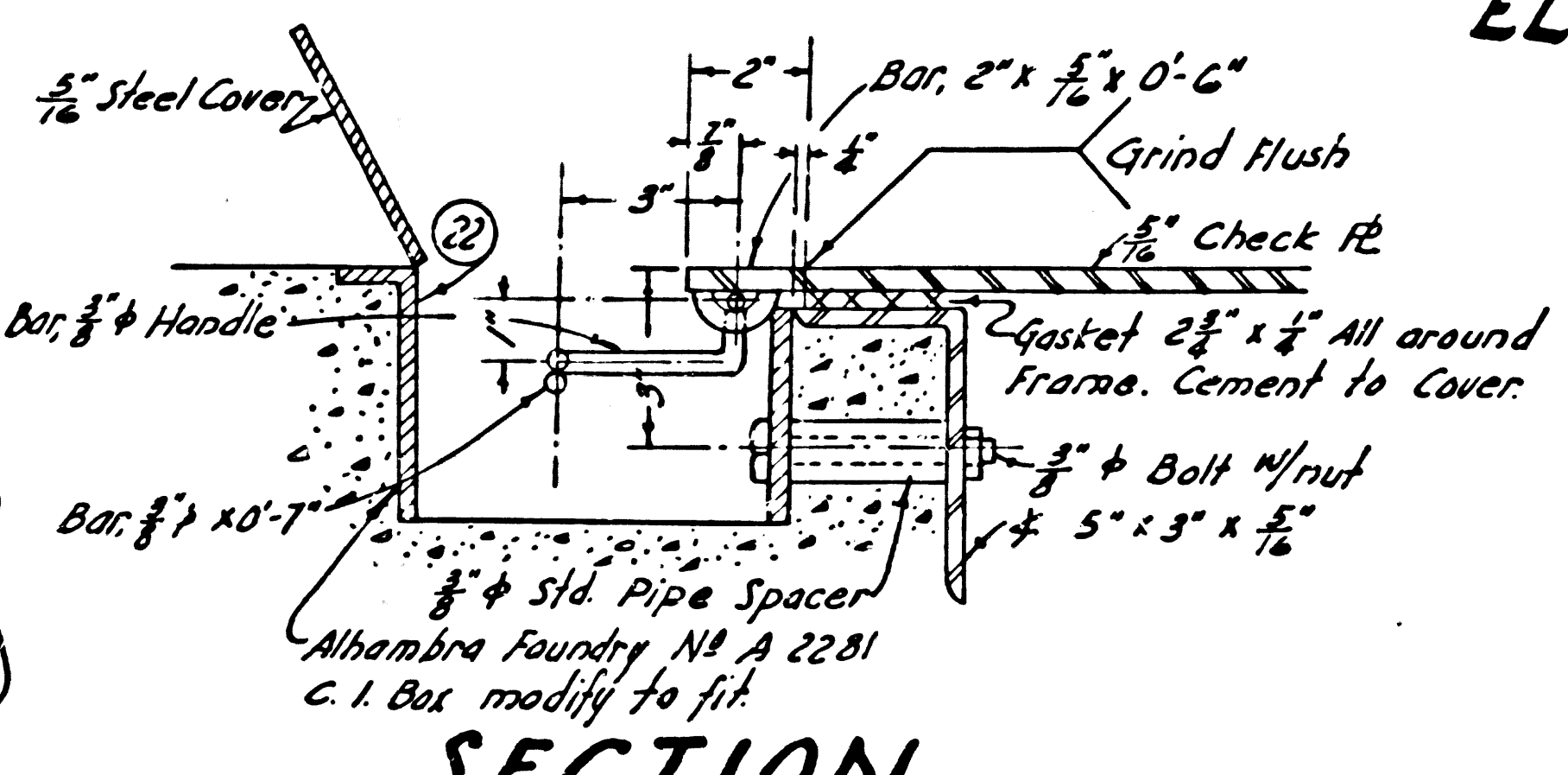
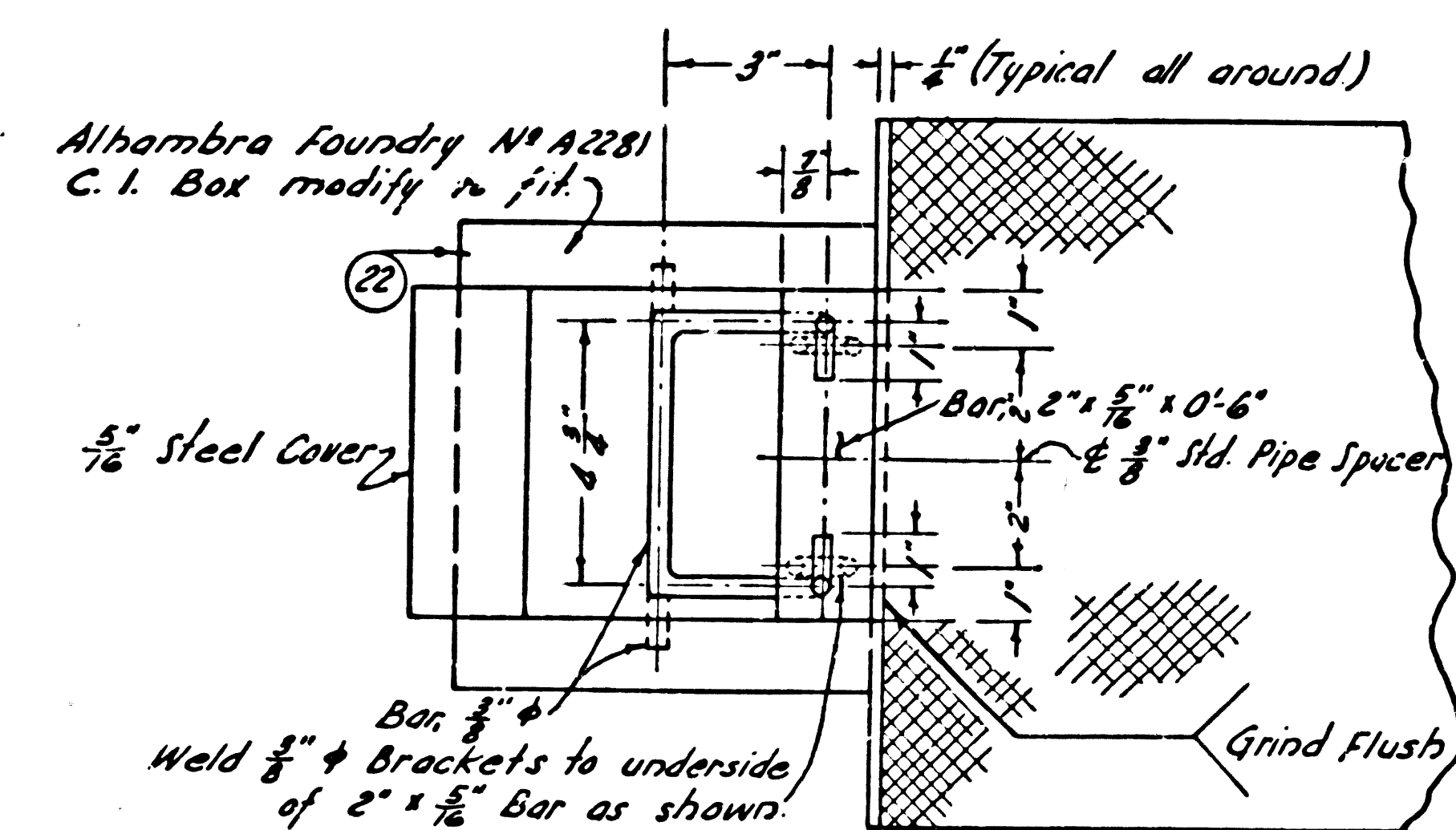
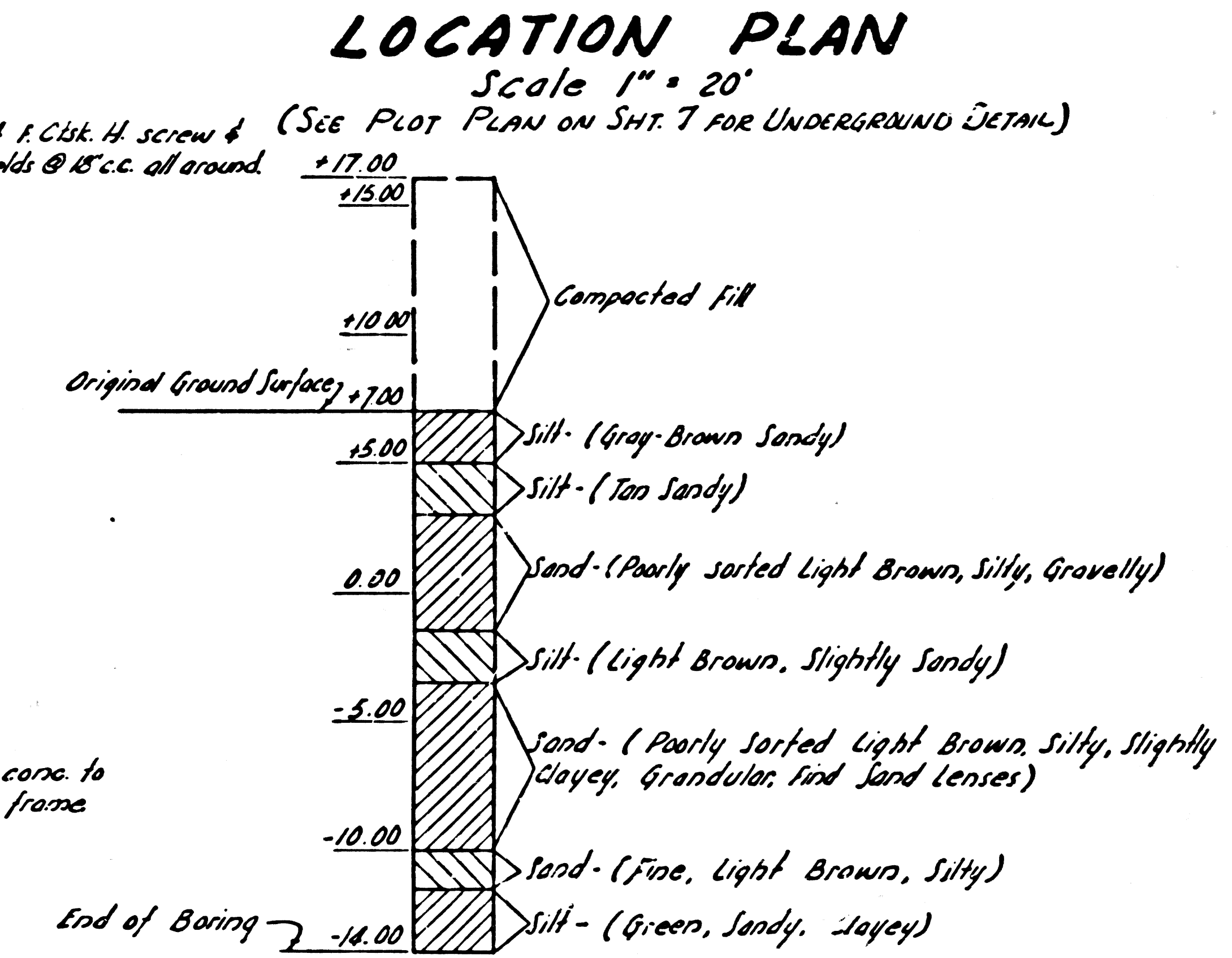
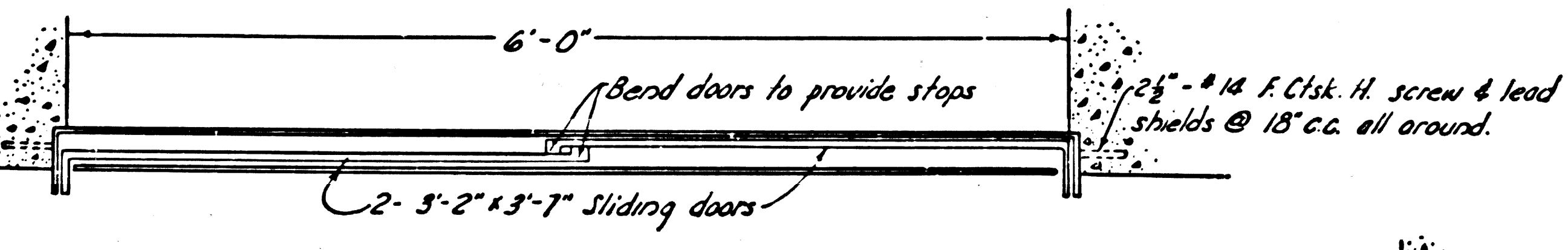
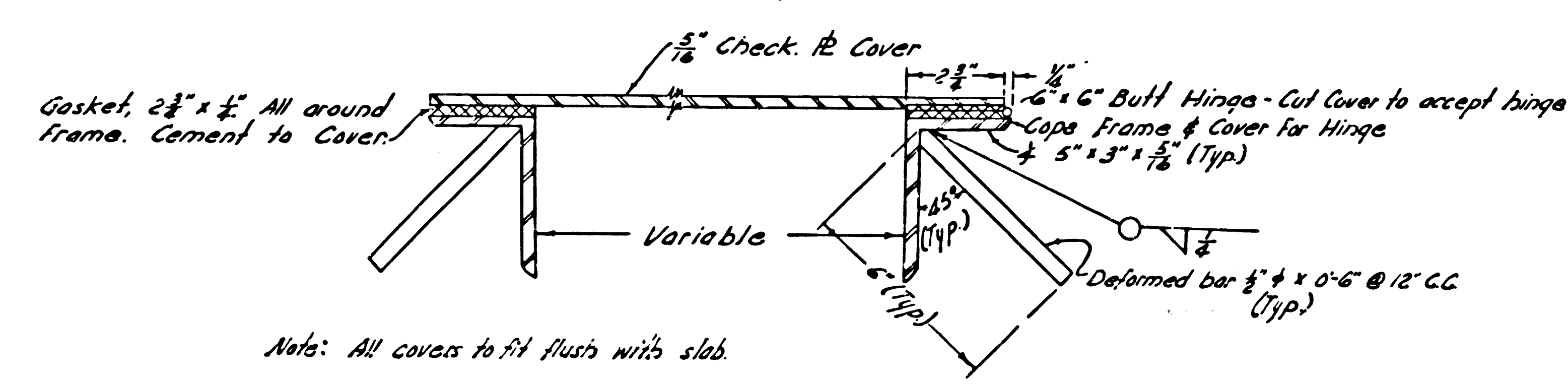
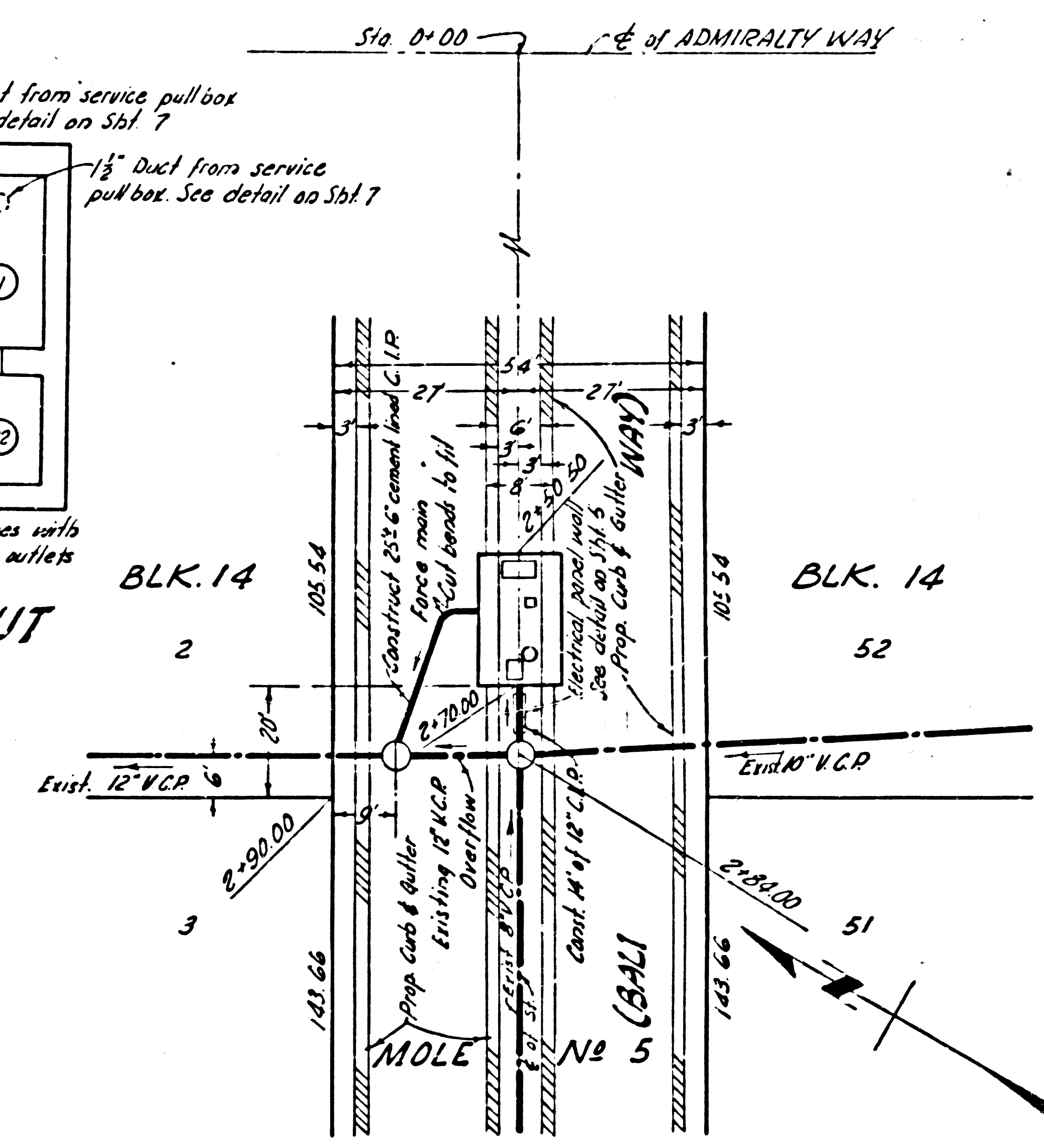
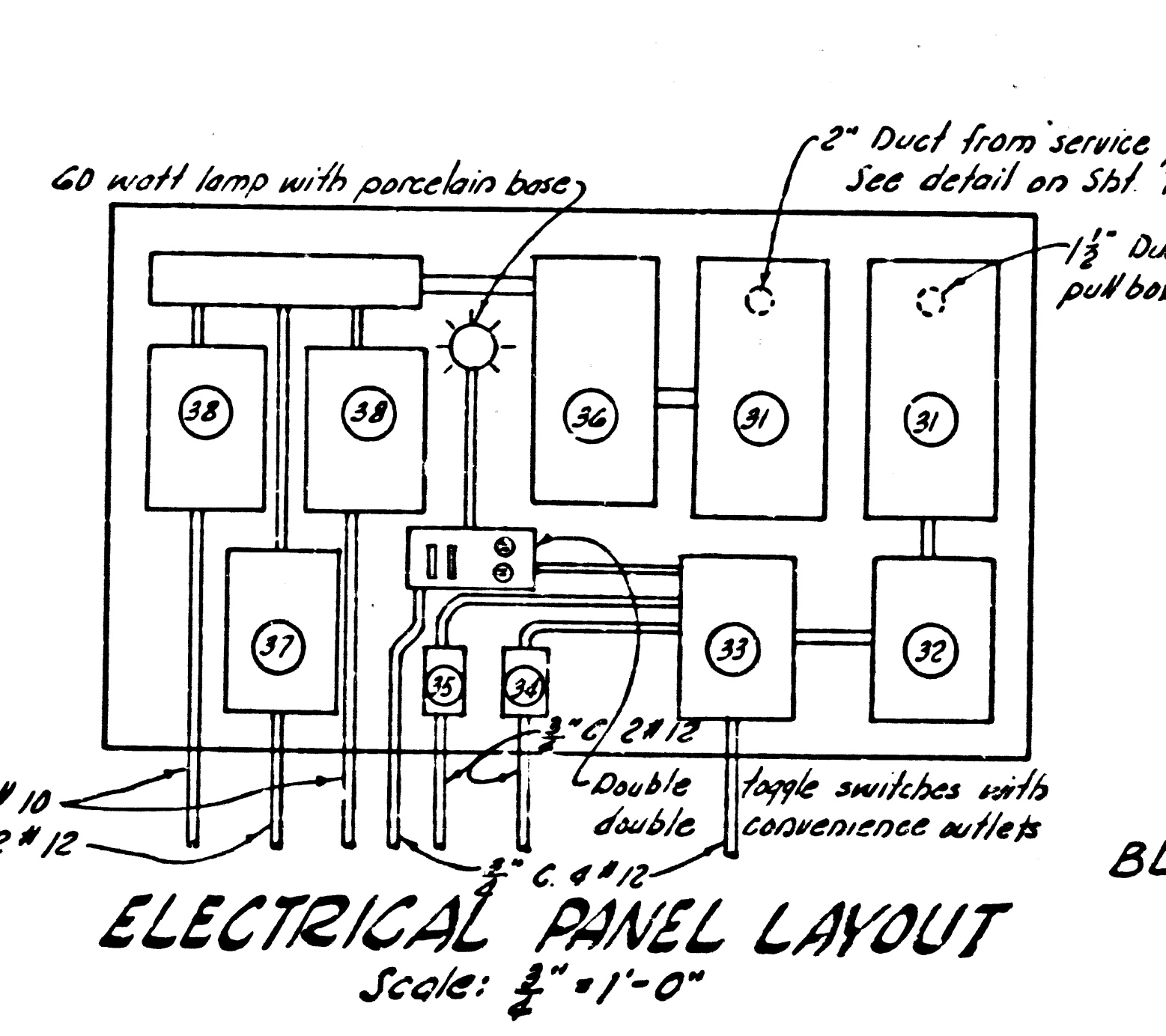
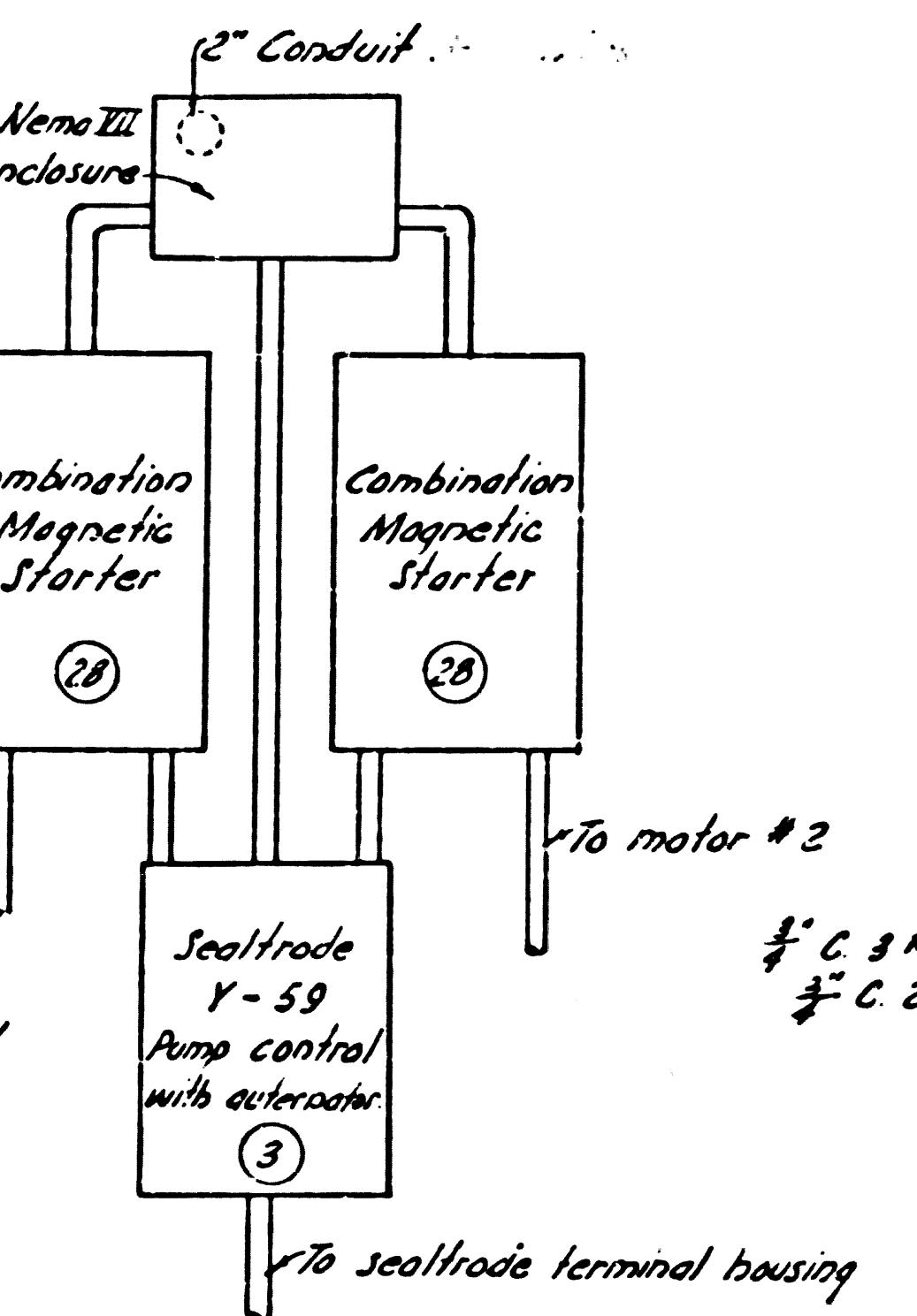
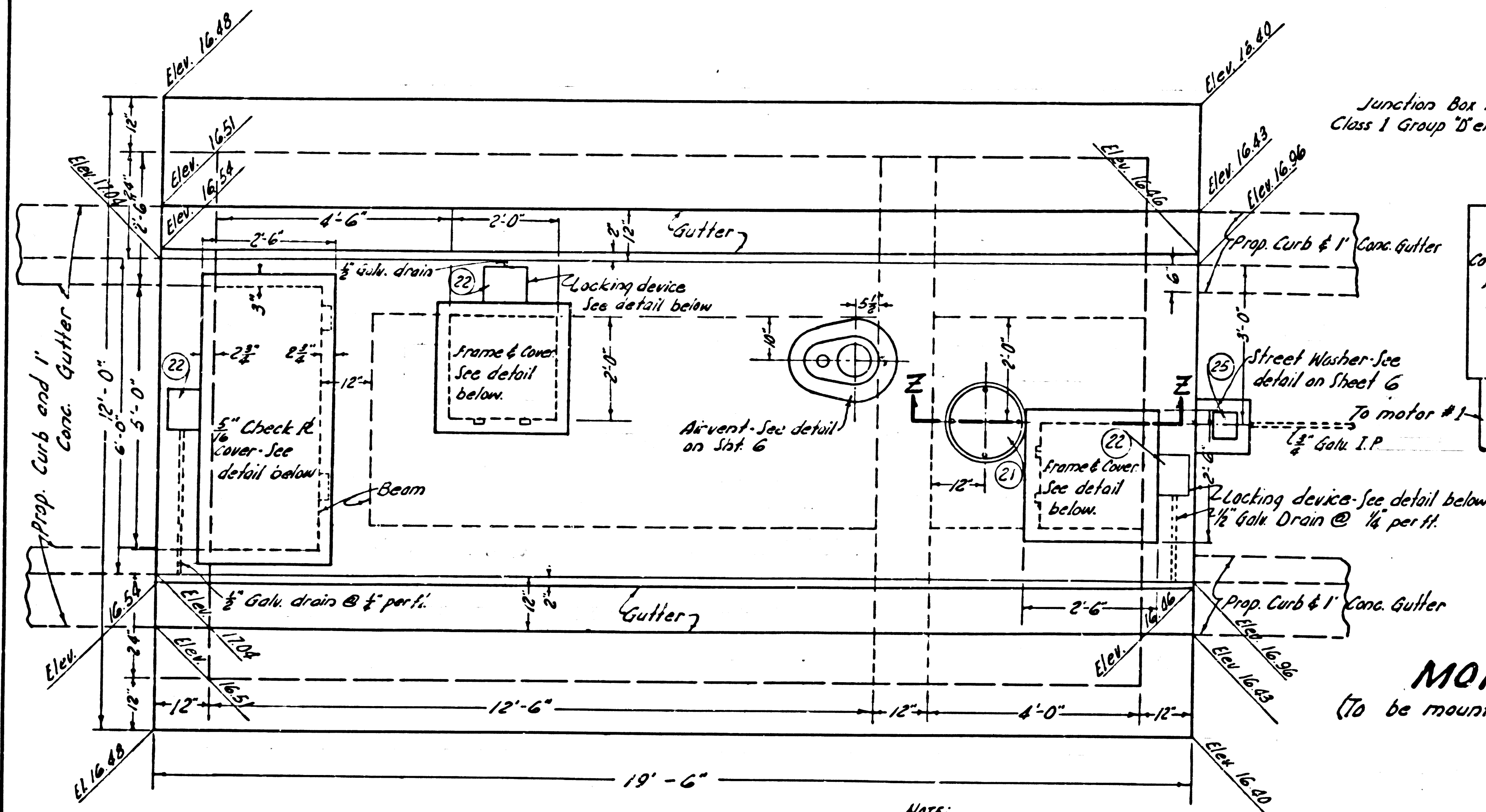


BC 287C



ELECTRIC METER PANEL CABINET DOOR DETAIL
NO SCALE

NOTES
Contractor to supply all necessary conduits, fittings, fiber covers, safety socket boxes, and all other items as required. Reference is made to Southern California Edison Co. "Electrical Service Requirements."

Grounding - Exposed metal parts of motors and control equipment shall be permanently grounded as required in Article 7, Electrical Safety Orders. All electrical work shall meet requirements of County of Los Angeles Electrical Ordinance, Ordinance No. 2252.

All conduits from meter panel cabinet to pump station shall be imbedded in concrete wall and footing.

Elevations for top slab are subject to minor change upon notification from County Engineer.

GENERAL NOTES:
It is necessary for the contractor to co-operate with the County and other contractors engaged by the County to expedite the work. - See Section 24, General Legal Requirements of the Specifications. Contractor shall be responsible for damage to improvements already installed or being installed. - See Section 15 of "Standard Specifications for the Construction of Sanitary Sewers."

SEE SHEET 5 FOR DOOR SUPPORT DETAIL

Figures in circles indicate item number (See Sht. 6)

MARINA DEL REY SEWAGE PUMP STATION
P. C. 5846 J. N. 8910.76

ELECTRICAL & MISC. DETAILS

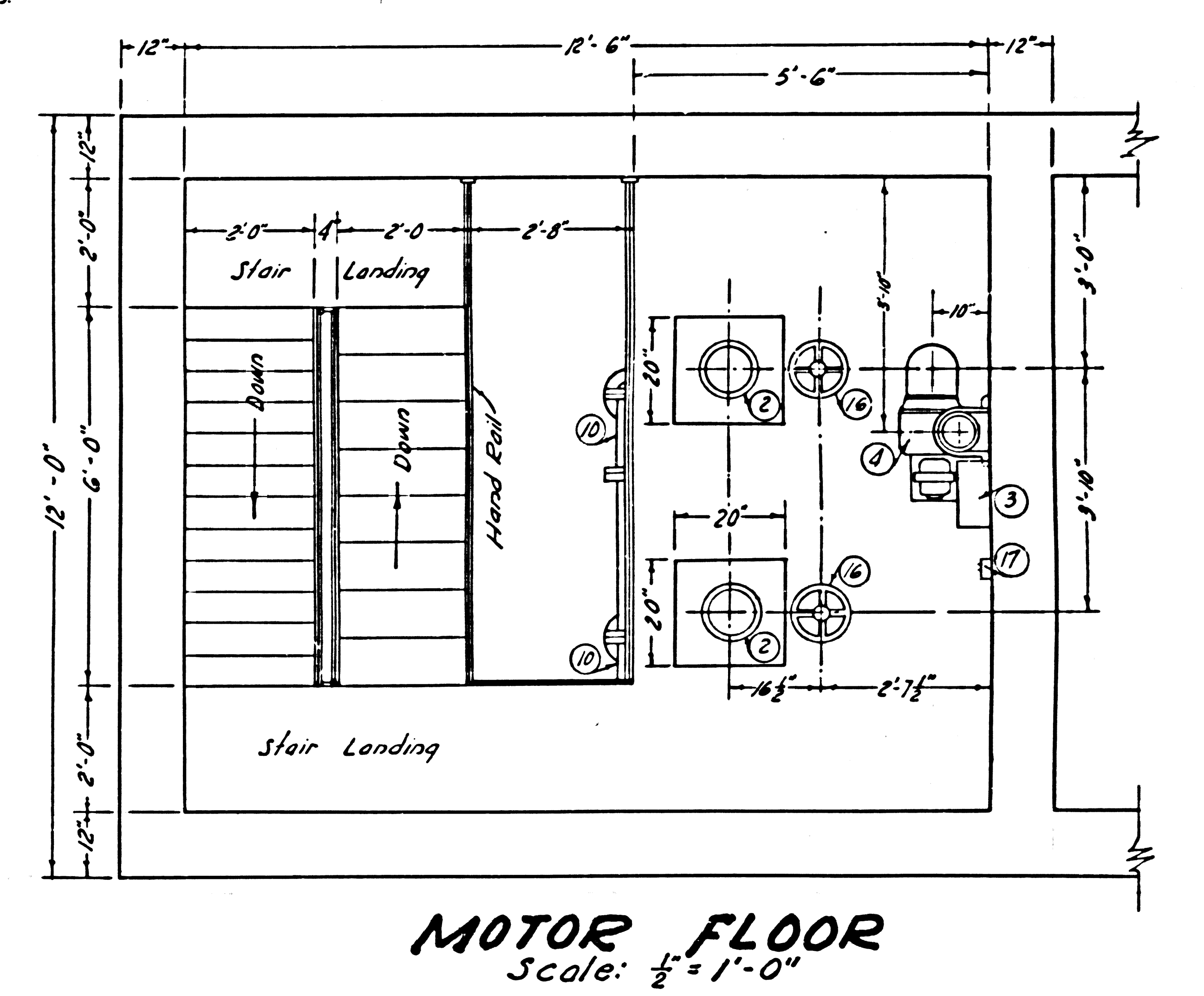
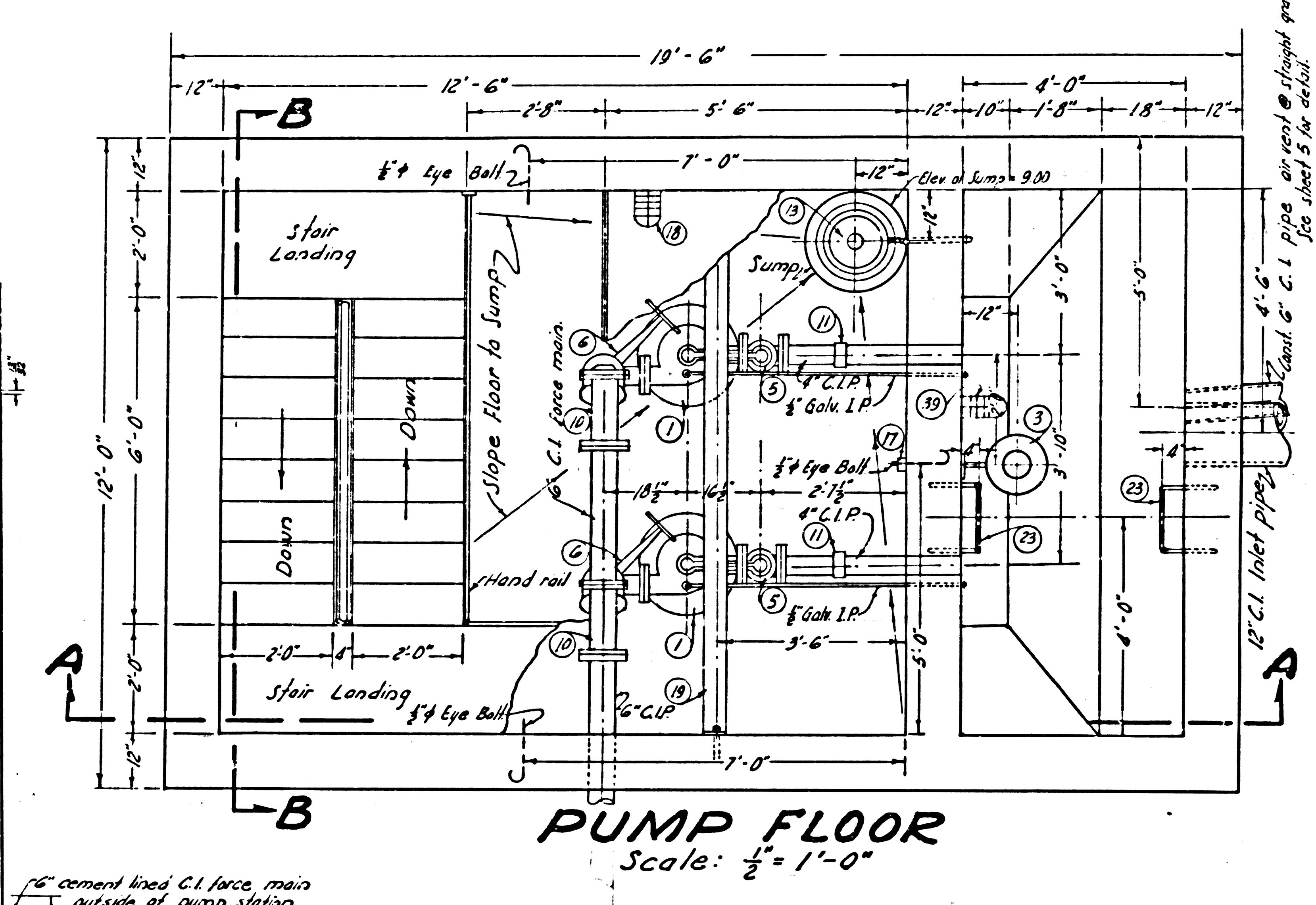
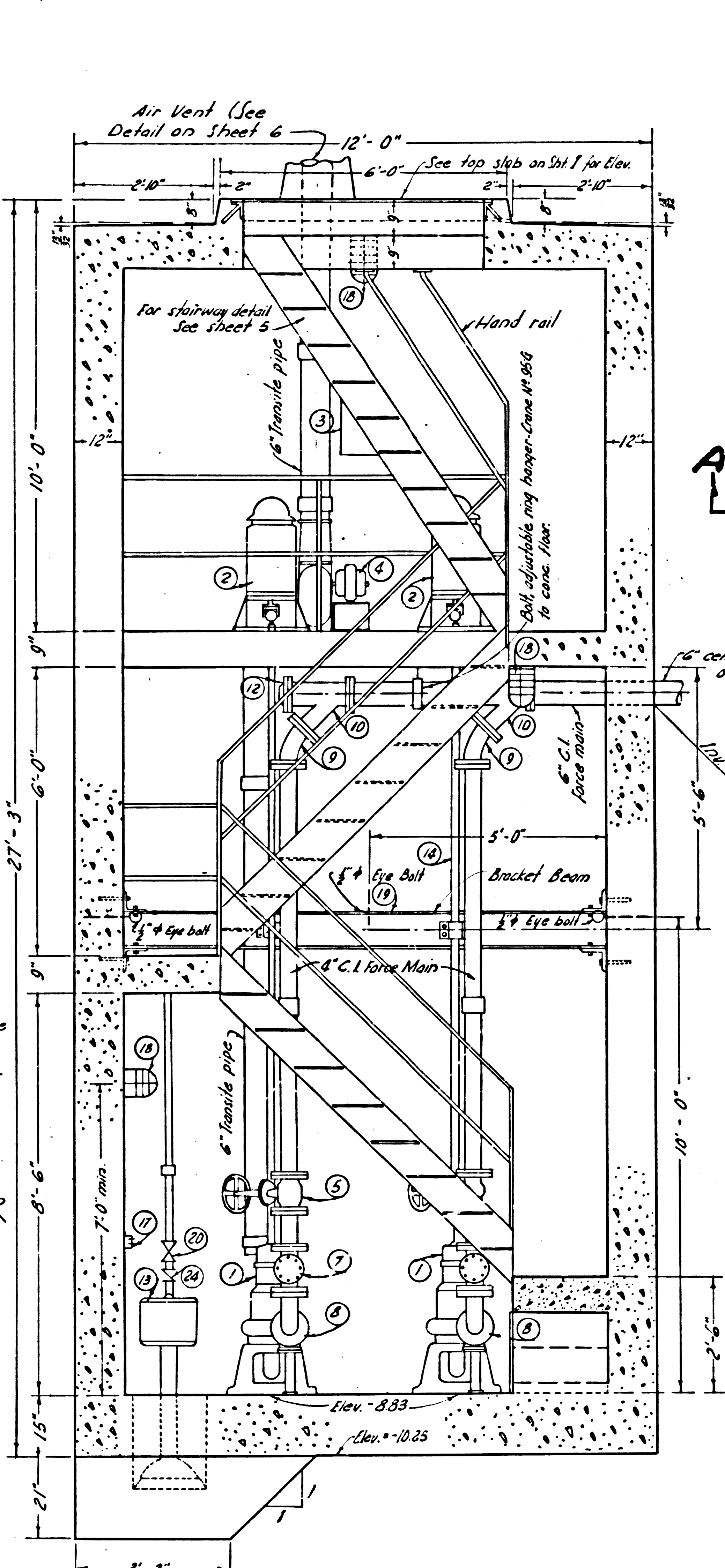
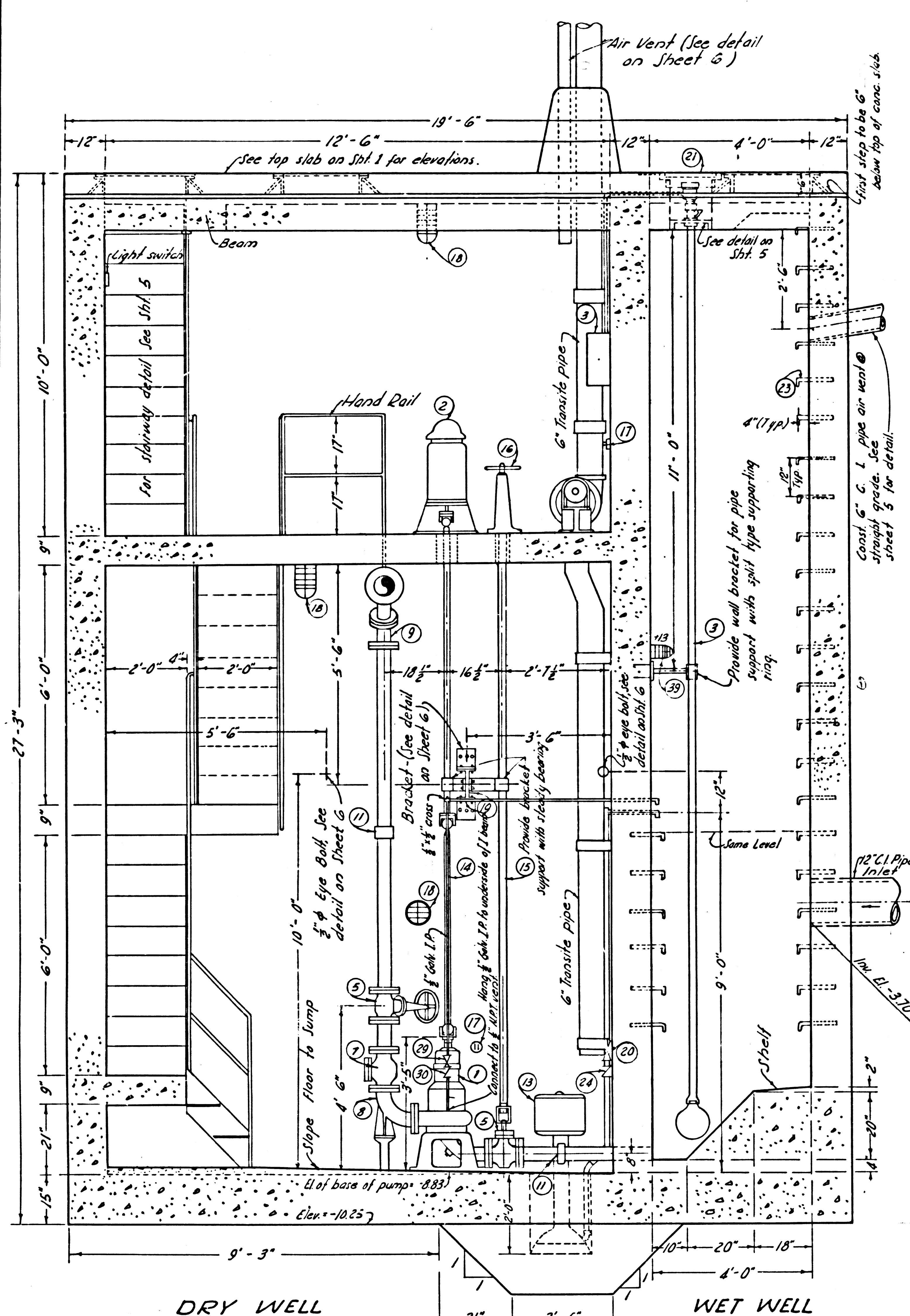
COUNTY OF LOS ANGELES CALIFORNIA
JOHN A. LAMBIE COUNTY ENGINEER

SUBMITTED: *E.E. Brumby* APPROVED: *John A. Lambie*
Assistant Sanitary Engineer Sanitary Engineer

APPROVED: *W.A. Williams* APPROVED: *John A. Lambie*
Director, Department of Small Craft Harbors County Engineer

DESIGNED: H. LEE TRACED: T. HONDA CHECKED: C. PEARSON

SCALE: AS SHOWN DATE: APR. '60 SHEET NO. 1 OF 7 SHEETS



SECTION A-A
Scale: $\frac{1}{2}'' = 1'-0''$

SECTION B-B
Scale: $\frac{1}{2}'' = 1'-0''$

GENERAL NOTES

- All cast iron pipe and fittings shall be as specified in the specification.
- Contractor shall contact the Dept. of Small Craft Harbors of L.A. County and provide water service when available.
- Contractor shall contact the Dept. of Small Craft Harbors of L.A. County and provide power service when available.
- All metal parts shall be painted with one shop coat and two coats of aluminum paint, see specifications.
- After pump station equipment has been erected by contractor, the equipment shall be placed in final adjustment and operation by a qualified engineer furnished by the manufacturer.
- The pump station, in its entirety, shall be in successful operation prior to being accepted by the County Engineer.
- Figures in circles indicate item numbers. (See sheet G)

- Contractor shall excavate to elevation one foot below bottom of concrete base slab and backfill with aggregate base materials per Sec. 70 of Standard Specs. For The Construction of Sanitary Sewers as Amended Oct. 10, 1960.
- Contractor to provide concrete thrust blocks with minimum bearing surface of not less than 2 square feet for the 6" cement lined C.I. force main at all angle points.
- Elevations are in feet above mean lower low water. March 1956
- The contractor shall provide and maintain at his expense an adequate supply of water for required construction purposes.

MARINA DEL REY
SEWAGE PUMP STATION
P. C. 5846 J. N. 891076

MECHANICAL DETAILS

COUNTY OF LOS ANGELES CALIFORNIA
JOHN A. LAMBIE COUNTY ENGINEER

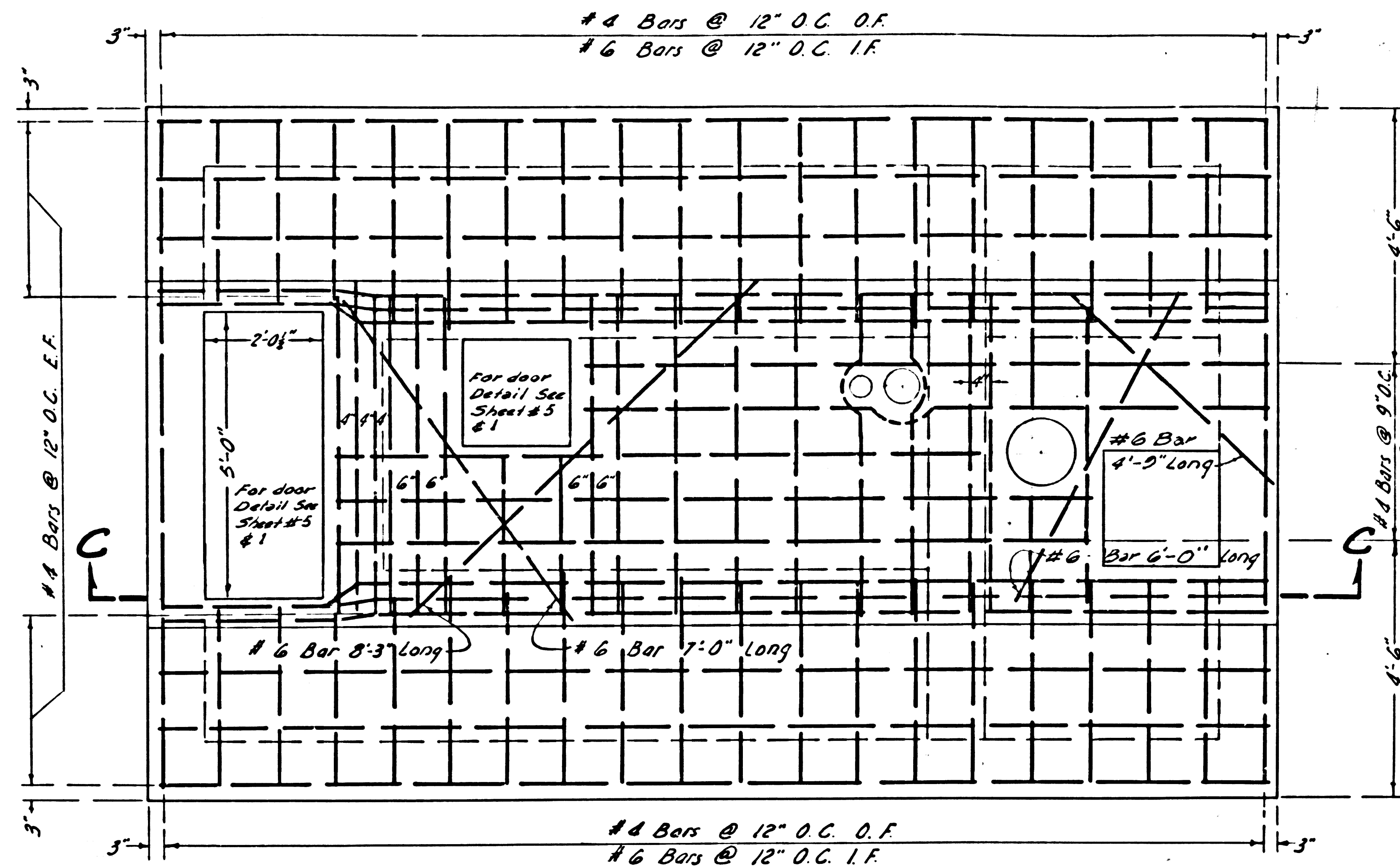
SUBMITTED: *C.E. Brantly* APPROVED: *L.H. Hughes*
ASSISTANT SANITATION ENGINEER SANITATION ENGINEER

APPROVED: *E.P. Munson* APPROVED: *John A. Lambie*
DIRECTOR, DEPARTMENT OF SMALL CRAFT HARBORS COUNTY ENGINEER

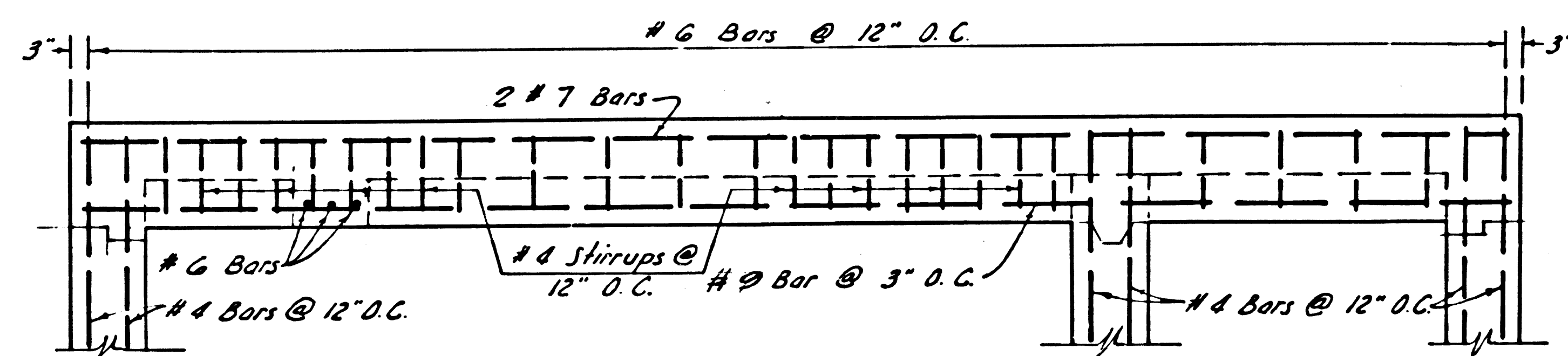
DESIGNED: H. LEE TRACED: T. HONDA CHECKED: C. PEARSON

SCALE: AS SHOWN DATE: APR. '60 SHEET NO. 2 OF 7 SHEETS

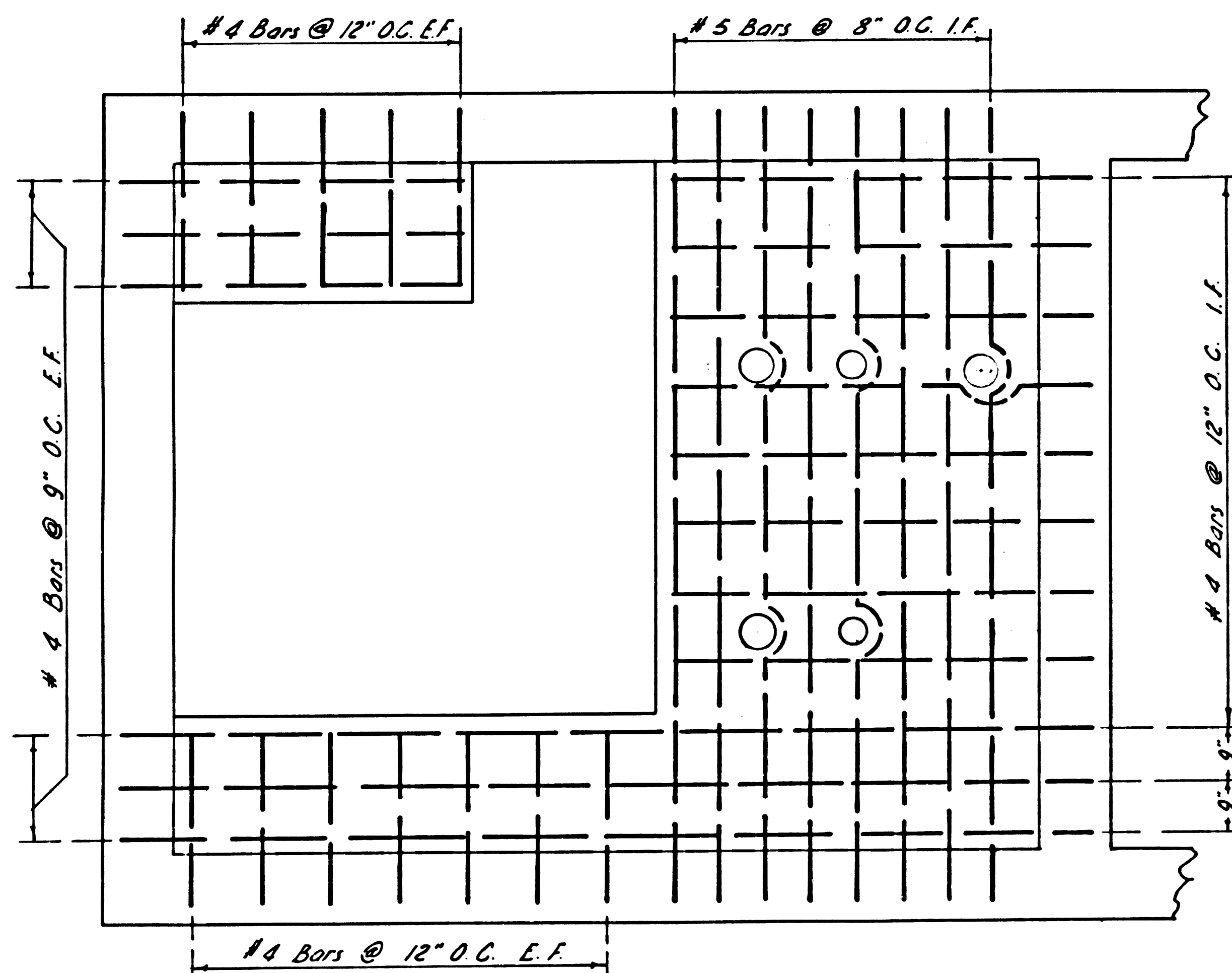
Trim Line



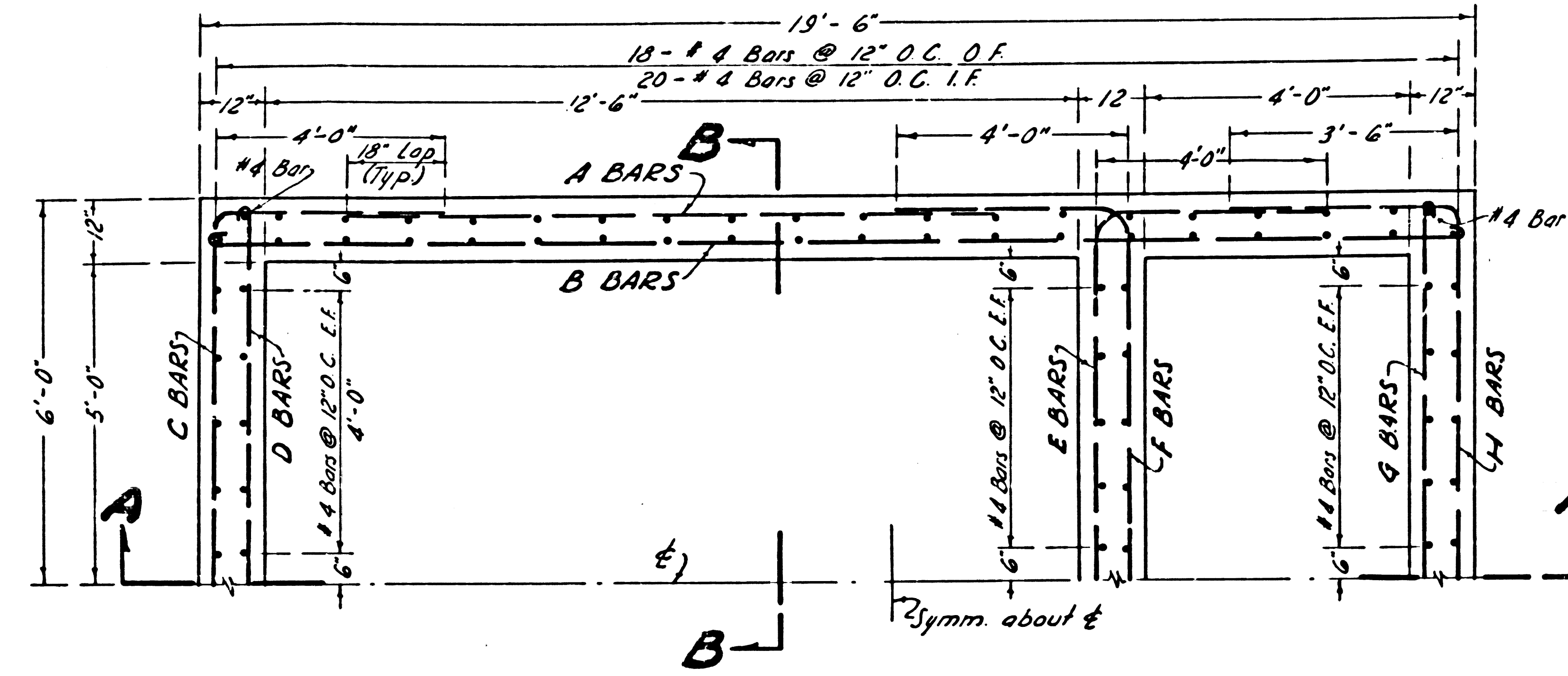
PLAN OF TOP SLAB REINFORCEMENT
Scale: $\frac{1}{2}'' = 1'-0''$



SECTION C-C (BEAM)
Scale: $\frac{1}{2}'' = 1'-0''$



PLAN OF MOTOR FLOOR REINFORCEMENT
Scale: $\frac{1}{2}'' = 1'-0''$

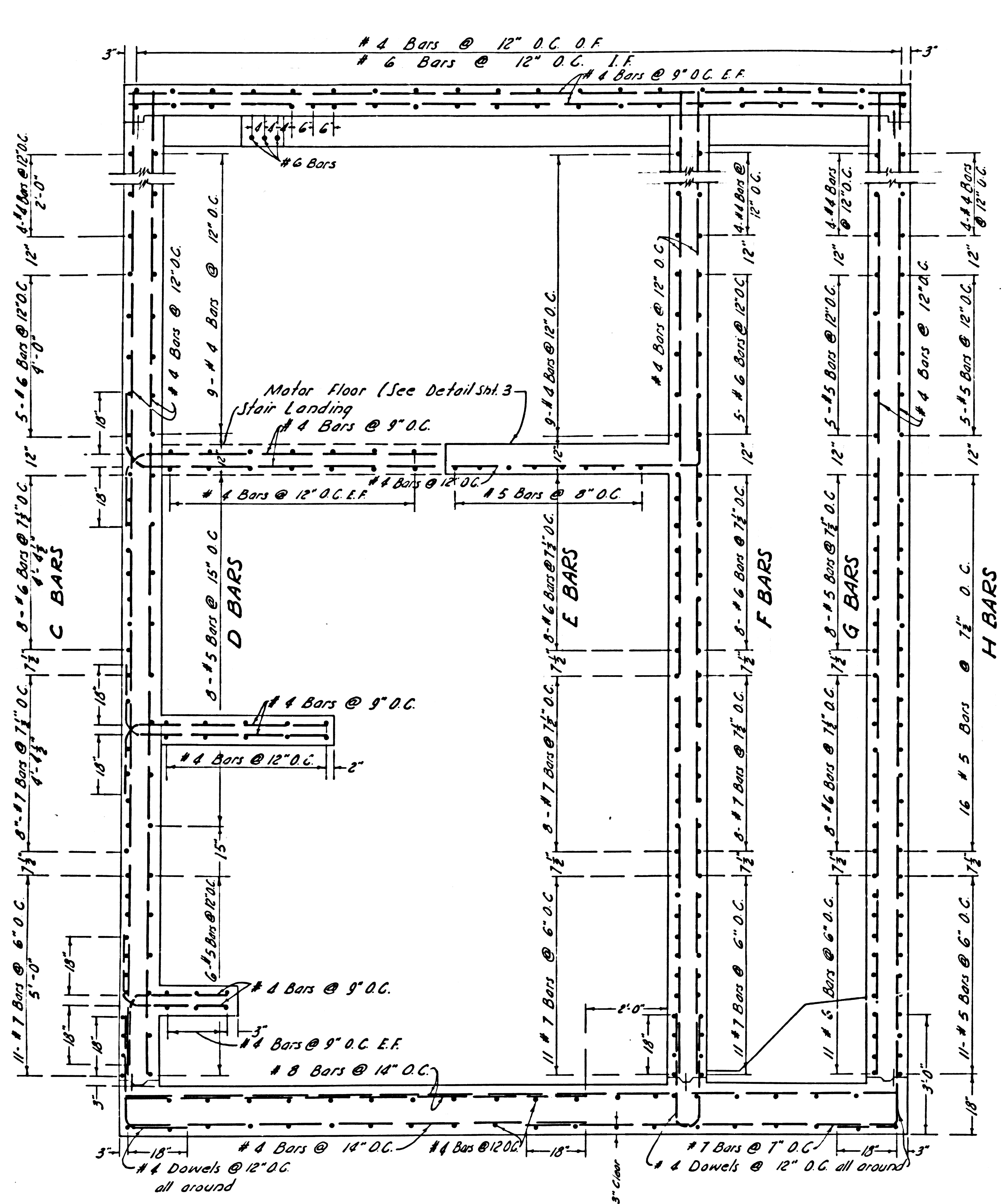


PLAN OF WALL REINFORCEMENT
Scale: $\frac{1}{2}'' = 1'-0''$

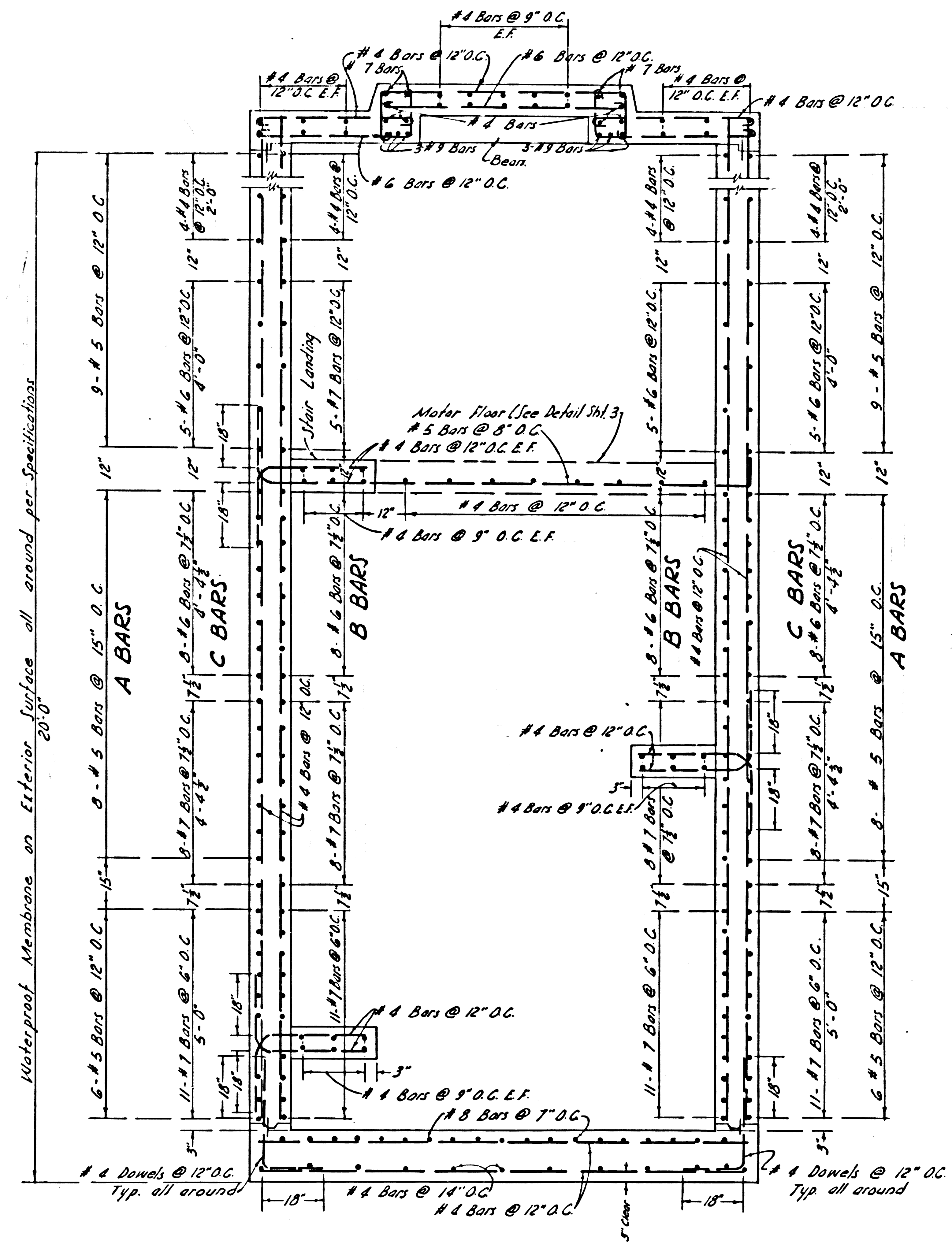
GENERAL NOTES

1. Concrete shall have an ultimate compressive unit stress of 3000 PSI in 28 days.
2. Reinforcing steel shall be intermediate grade deformed bars per A.S.T.M. A-15-58T with deformations per A.S.T.M. A-305-58T.
3. All bars, bends and hooks shall conform to the American Concrete Institute "Manual of Standard Practice".
4. Dimensions from face of concrete to steel are to center of bars and spacing of bars are center to center of bars unless otherwise noted.
5. Bar splices, other than those shown on plans, shall not be permitted without prior approval of the County Engineer. The min. splice for stressed steel carrying moment or direct stress shall be 30 diameters and that for tie bars shall be 20 diameters.
6. Exposed edges of concrete shall be beveled or rounded.
7. End steel 2" clear of openings and edges.
8. In denoting reinforcing steel placement, E.F. means each face, I.F. means inside face, O.F. means outside face and E.W. means each way.
9. Bend reinforcing bars to miss openings if necessary.
10. All reinforcing bars to have a minimum clear distance of 2 1/2" from the face of the structure to face of steel except as noted.
11. Interior surfaces of wet well including steel parts therein shall receive one coat of coal tar product "Inertal" or equal applied in accordance to manufactures specifications.
12. Surfaces of floor slab and bottom slab shall be non-skid broom finish or equal.
13. Water proofing membrane shall consist of cotton fabric and coats of asphalt. (See specifications-page B9)
14. Prior to fabrication of reinforcing steel, the contractor shall submit bar schedules to the County Engineer for approval.
15. All wire ties shall be so placed as to provide 2 1/2" clearance to inside face of forms.

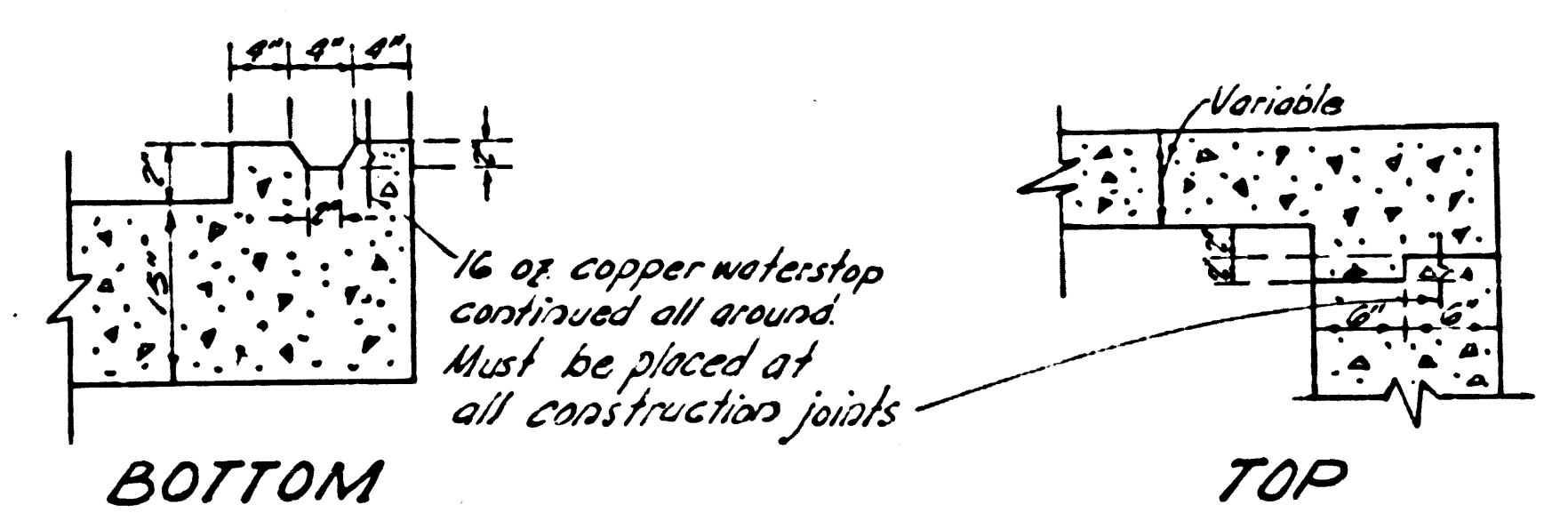
MARINA DEL REY		
SEWAGE PUMP STATION		
P. C. 5846	J. N. 8910.76	
STRUCTURAL DETAIL		
COUNTY OF LOS ANGELES CALIFORNIA		
JOHN A. LAMBIE		COUNTY ENGINEER
SUBMITTED: <i>[Signature]</i>	APPROVED: <i>[Signature]</i>	
<small>ASSISTANT SANITATION ENGINEER</small>	<small>SANITATION ENGINEER</small>	
APPROVED: <i>[Signature]</i>	APPROVED: <i>[Signature]</i>	
<small>DIRECTOR, DEPARTMENT OF</small>	<small>COUNTY ENGINEER</small>	
<small>SHRIMP CANALS</small>		
DESIGNED: H. LEE	TRACED: T. HONDA	CHECKED: C. PEARSON
SCALE: $\frac{1}{2}'' = 1'-0''$	DATE: APR. '60	SHEET NO. 3 OF 7 SHEETS



SECTION A-A
Scale: $\frac{1}{2}'' = 1'-0''$

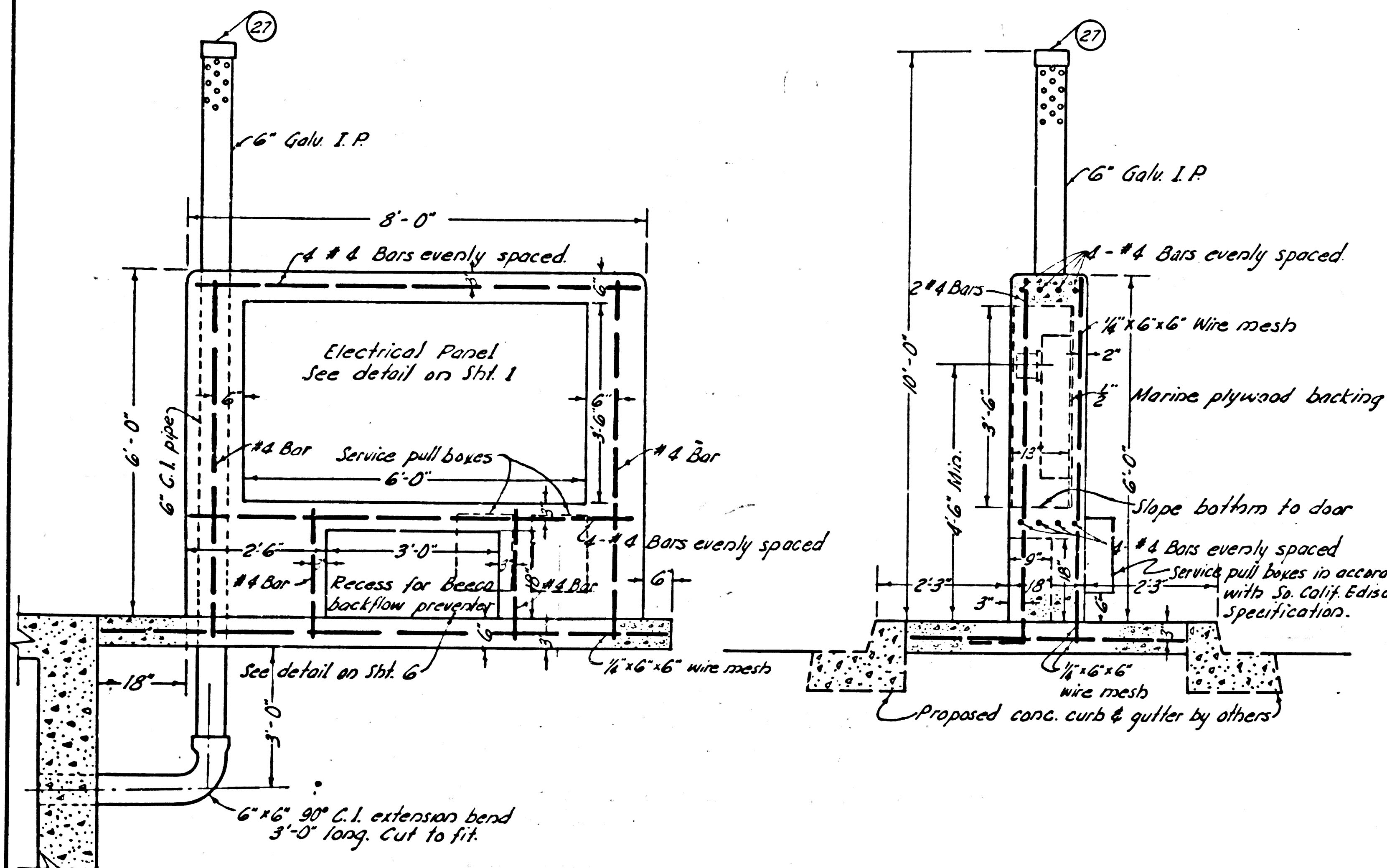


SECTION B-B
Scale: $\frac{1}{2}'' = 1'-0''$

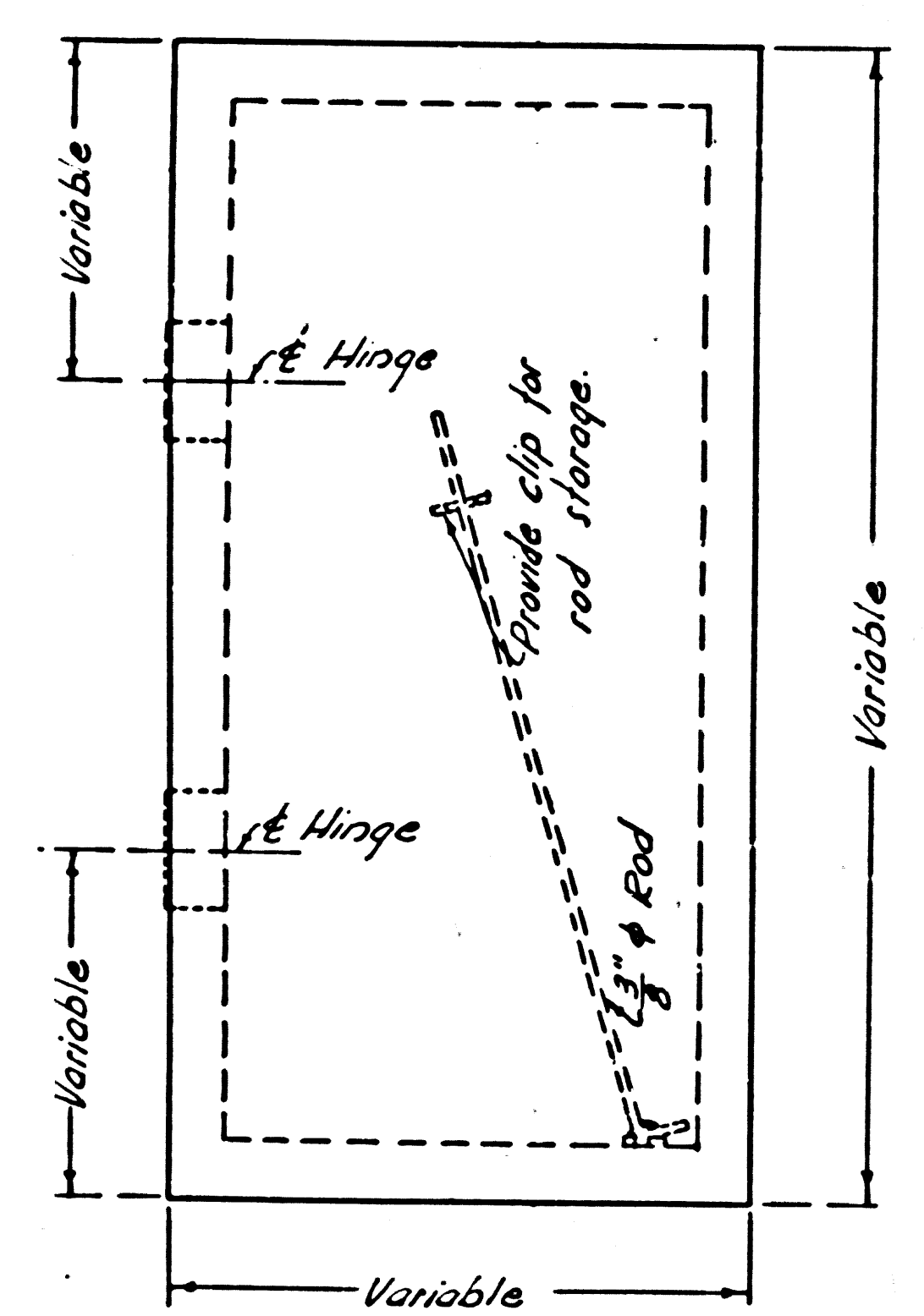


OPTIONAL CONSTRUCTION JOINTS
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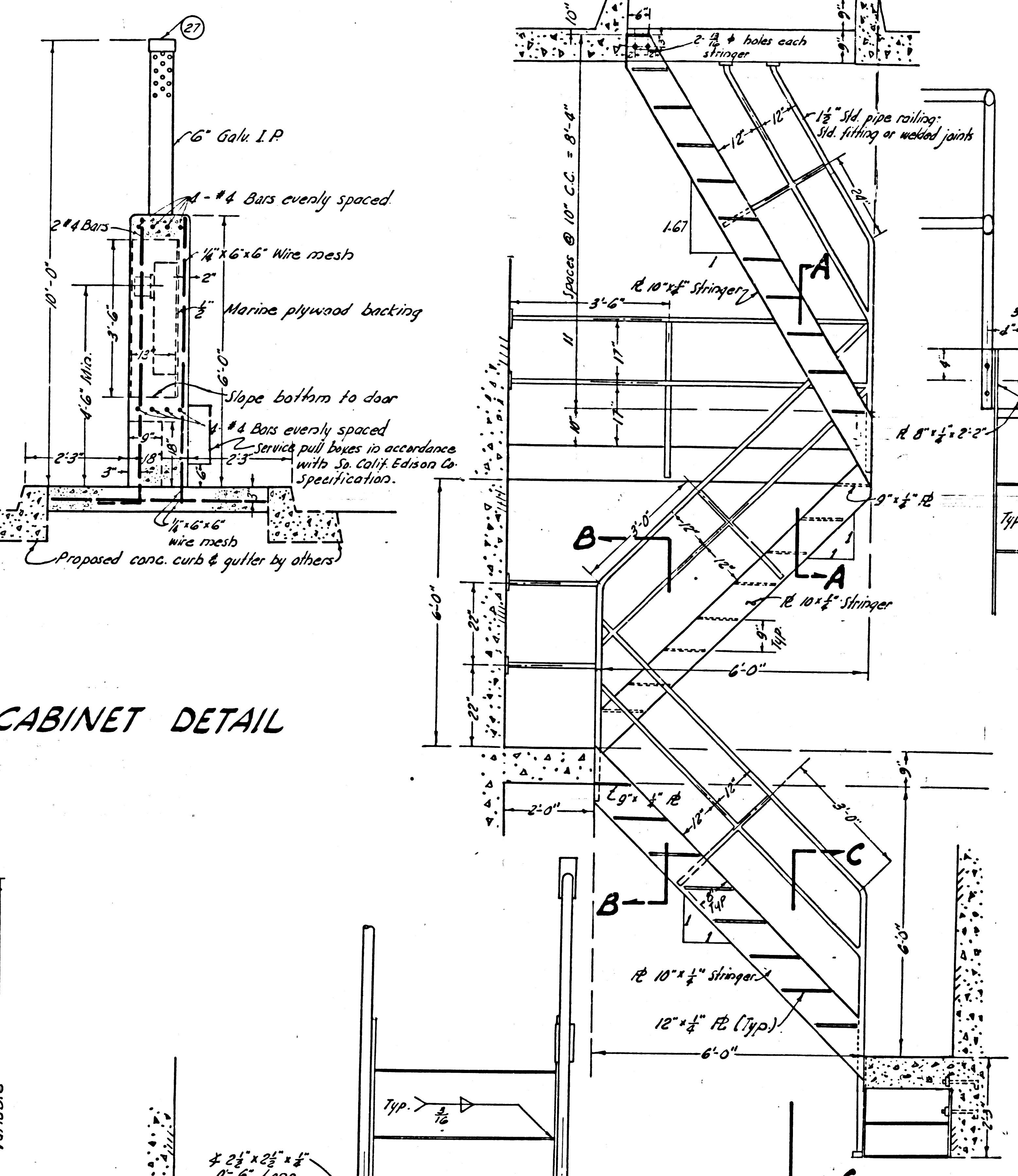
MARINA DEL REY		
SEWAGE PUMP STATION		
P. C. 5846	J. N. 891076	
STRUCTURAL DETAIL		
COUNTY OF LOS ANGELES CALIFORNIA		
JOHN A. LAMBIE		COUNTY ENGINEER
SUBMITTED: <i>[Signature]</i>	APPROVED: <i>[Signature]</i>	
<small>ASSISTANT SANITATION ENGINEER</small>		<small>SANITATION ENGINEER</small>
APPROVED: <i>[Signature]</i>	APPROVED: <i>[Signature]</i>	
<small>DIRECTOR, DEPARTMENT OF</small>		<small>COUNTY ENGINEER</small>
<small>SMALL COAST HARBORS</small>		
DESIGNED: H. LEE	TRACED: T. HONDA	CHECKED: C. PEARSON
SCALE: AS SHOWN	DATE: APR. '60	SHEET NO. 4 OF 7 SHEETS



ELECTRIC METER PANEL CABINET DETAIL
Scale: 1/2" = 1'-0"

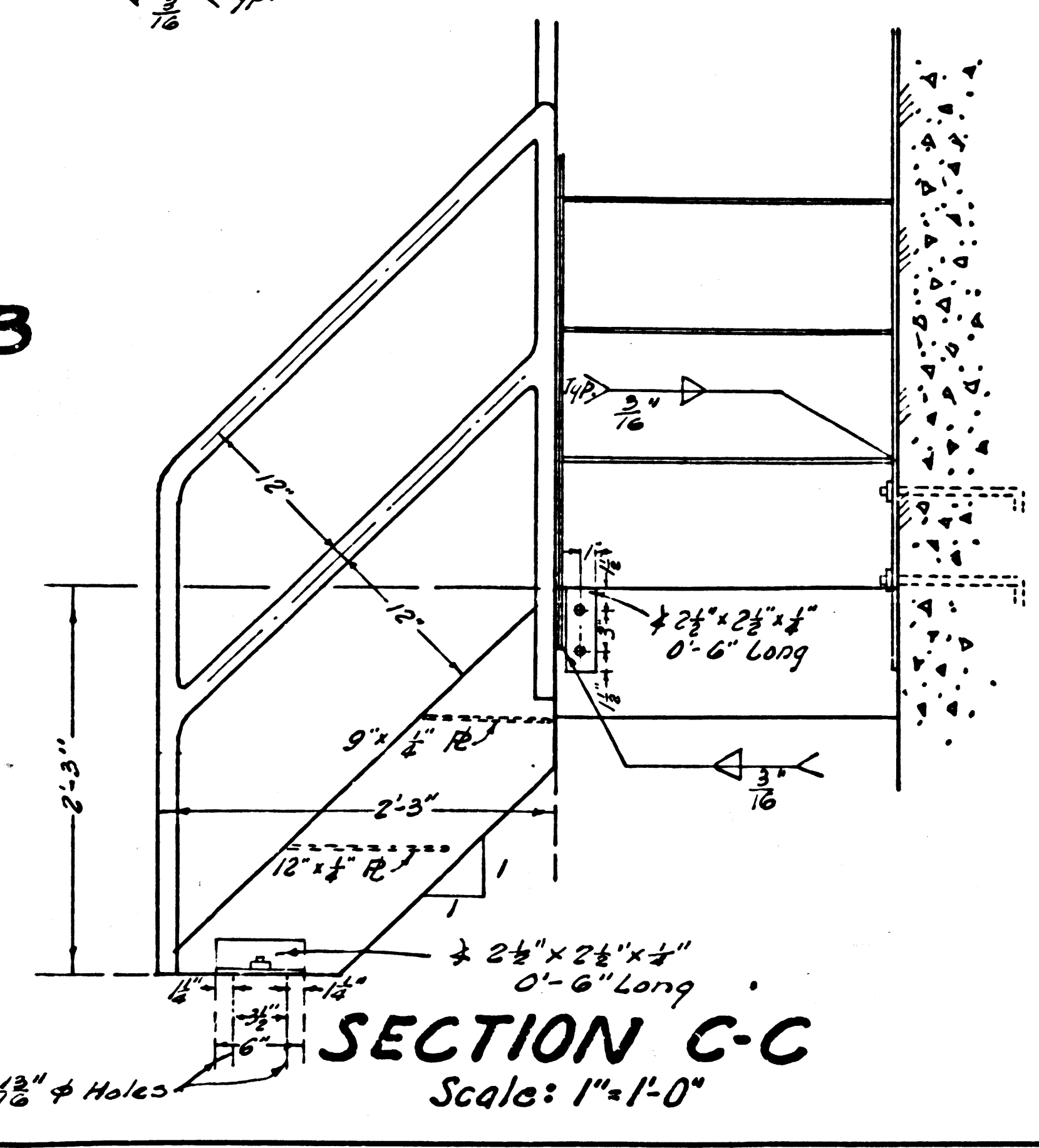


TYPICAL DOOR SUPPORT DETAIL (3 REQ)
Scale: 1" = 1'-0"

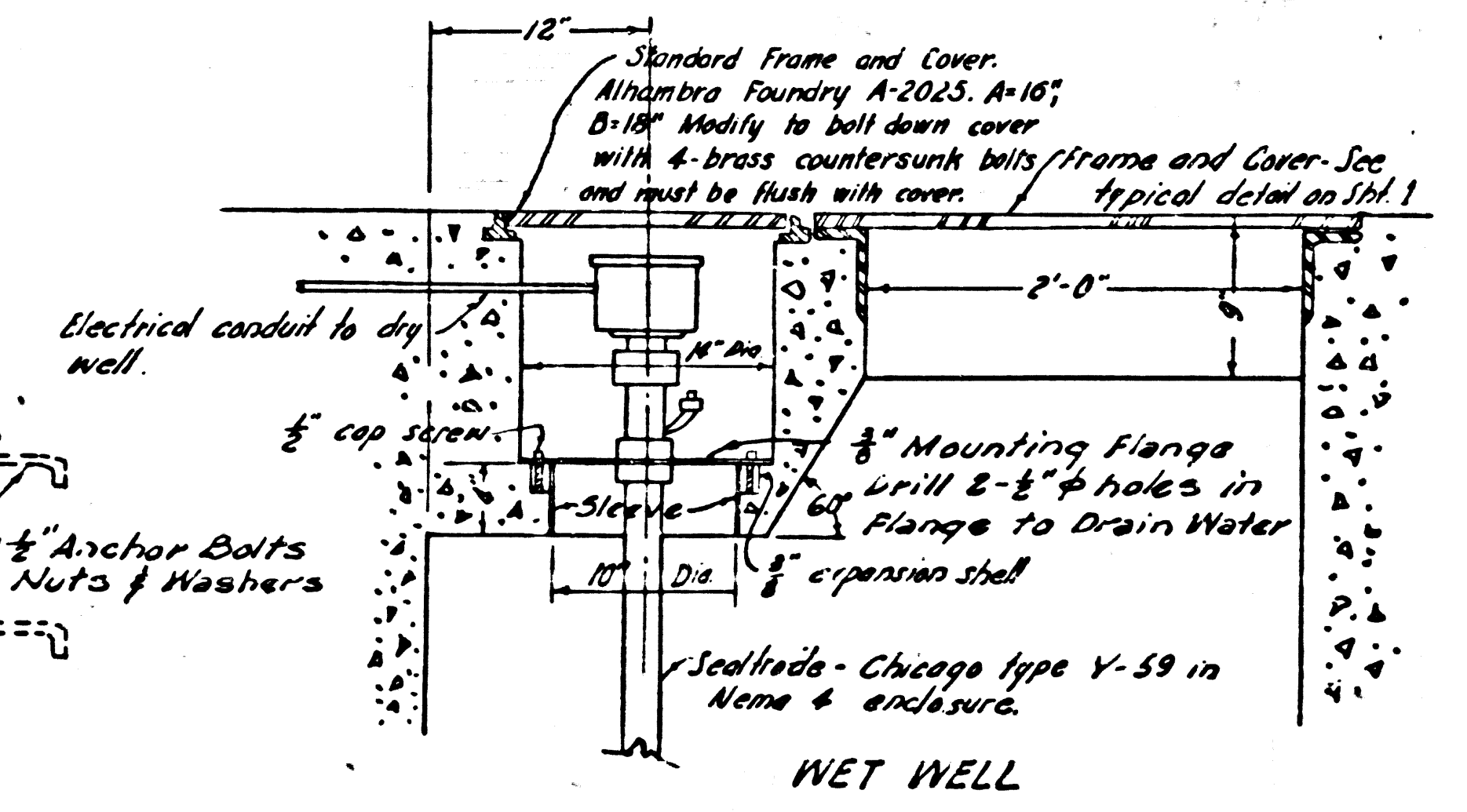


SECTION A-A
Scale: 1" = 1'-0"

SECTION B-B
Scale: 1" = 1'-0"



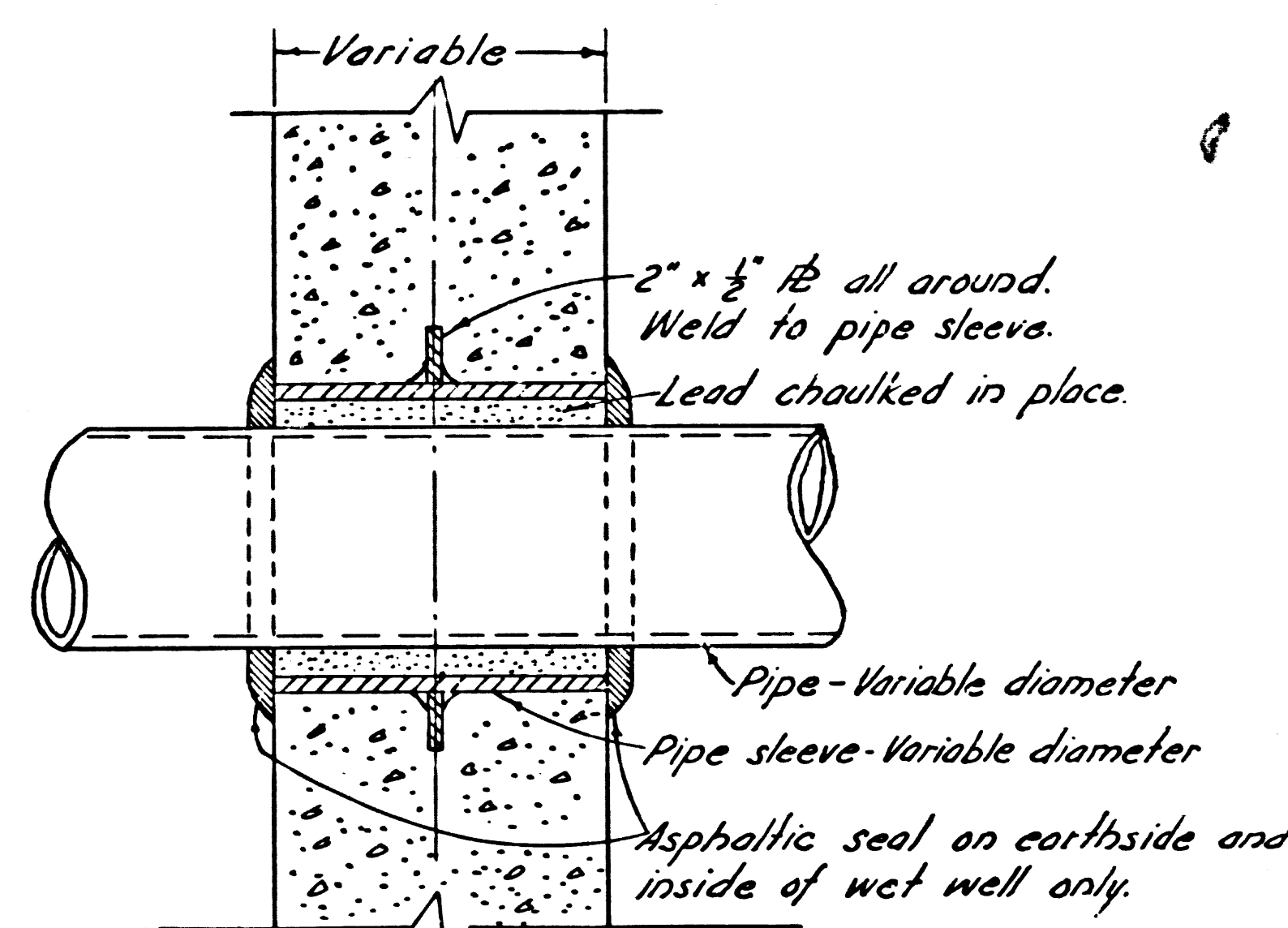
SECTION C-C
Scale: 1" = 1'-0"



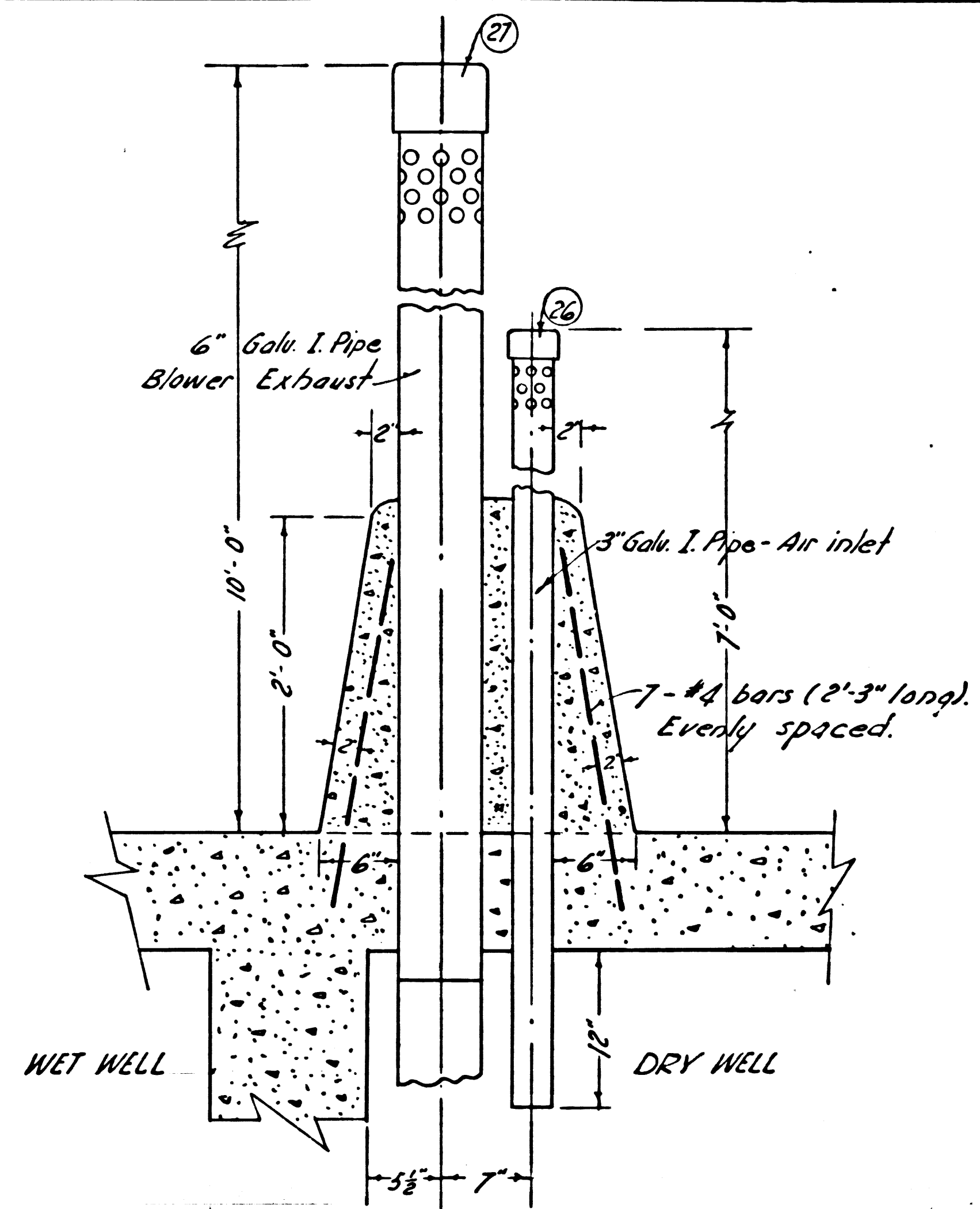
SECTION Z-Z (SEE SHEET 1)
Scale: 1" = 1'-0"

- STAIRWAY GENERAL NOTES**
- 1 The Contractor shall have the option of using 1 1/2" W.I. Pipe Railing with welded joints or Standard Pipe fittings or combination thereof.
 - 2 Railing to be either bolted to concrete floor or welded to Plate Stringer.
 - 3 Phillip Special Flush Shells for 1/2" Hex Bolts may be used in lieu of Anchor Bolts shown thereon.
 - 4 Ladder and railing shall be Galvanized after fabrication.

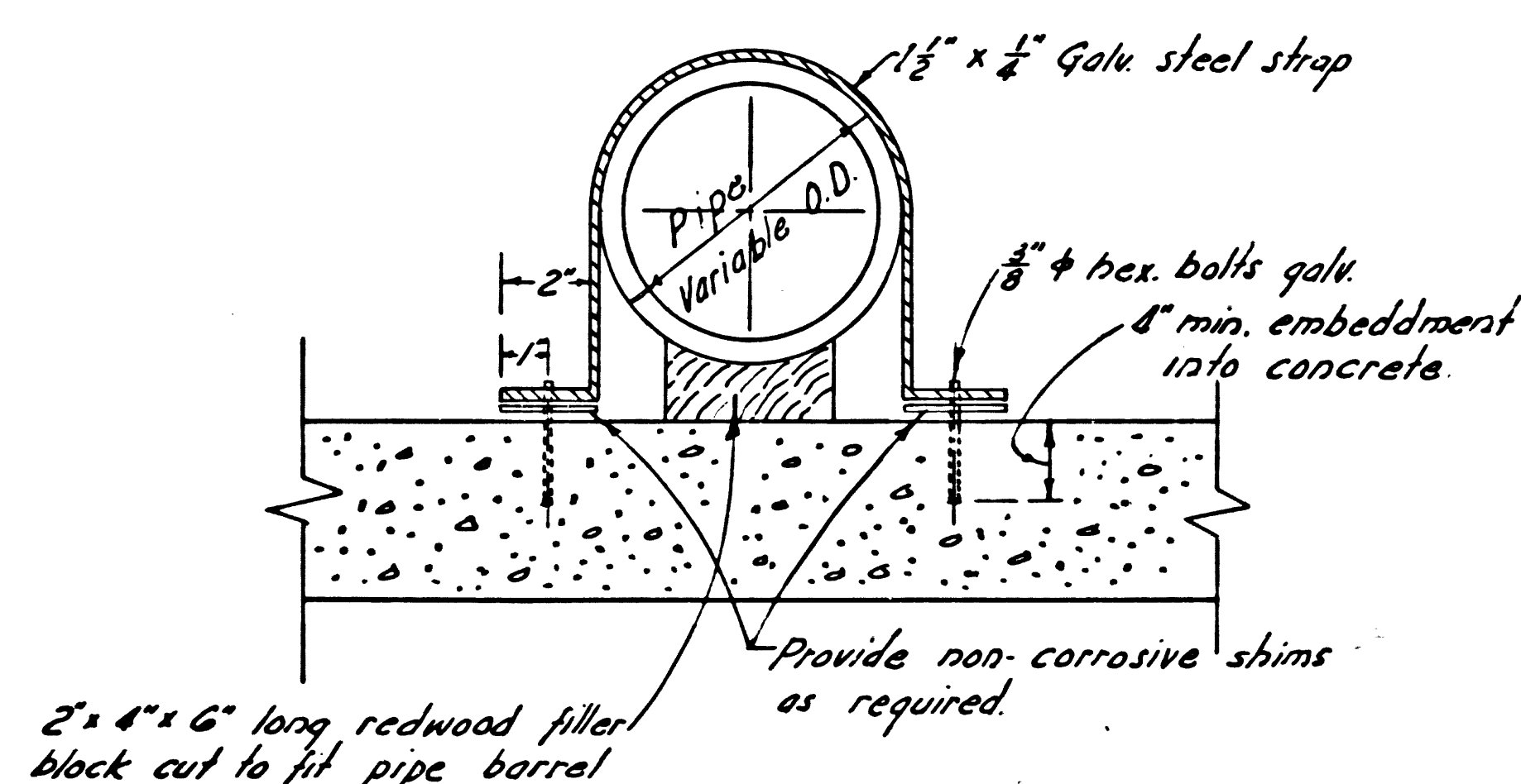
MARINA DEL REY		
SEWAGE PUMP STATION		
P.C. 5846	J.N. 8910.76	
STAIRWAY & MISC. DETAILS		
COUNTY OF LOS ANGELES CALIFORNIA		
JOHN A. LAMBIE		COUNTY ENGINEER
SUBMITTED: <i>[Signature]</i>	APPROVED: <i>[Signature]</i>	
ASSISTANT SANITATION ENGINEER		SANITATION ENGINEER
APPROVED: <i>[Signature]</i>	APPROVED: <i>[Signature]</i>	
DIRECTOR, DEPARTMENT OF		COUNTY ENGINEER
SMALL COAST HARBORS		
DESIGNED: H. LEE	TRACED: T. HONDA	CHECKED: C. PEARSON
SCALE: AS SHOWN DATE: APR. '60 SHEET NO. 5 OF 7 SHEETS		



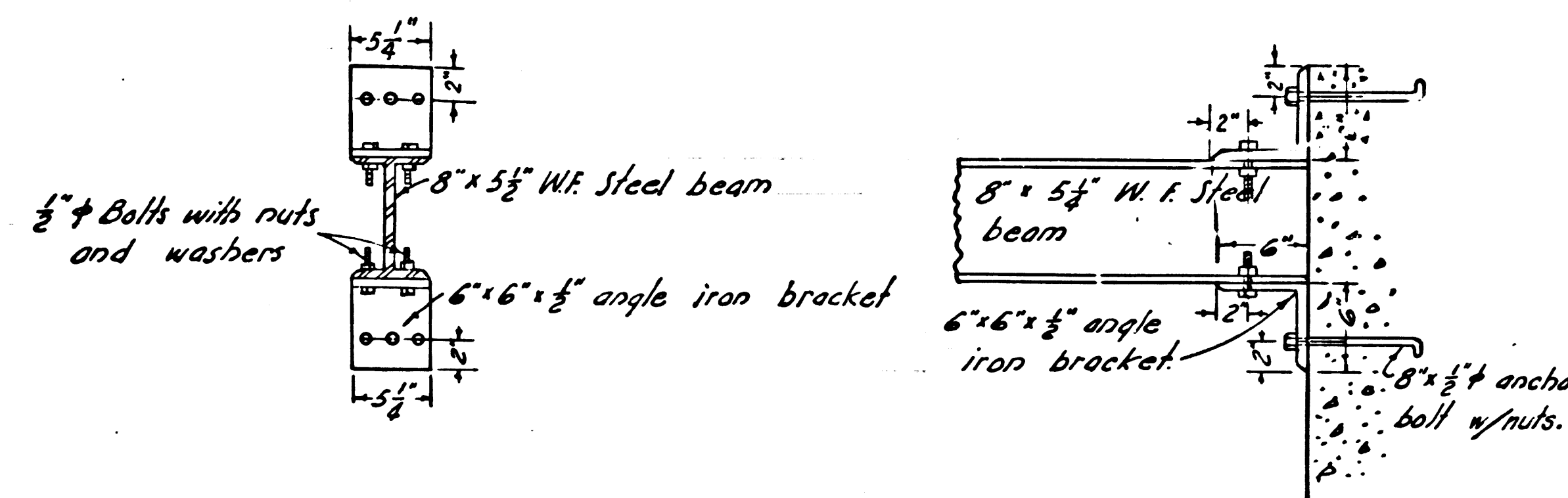
**TYPICAL
PIPE SLEEVE DETAIL THRU WALL**
No Scale



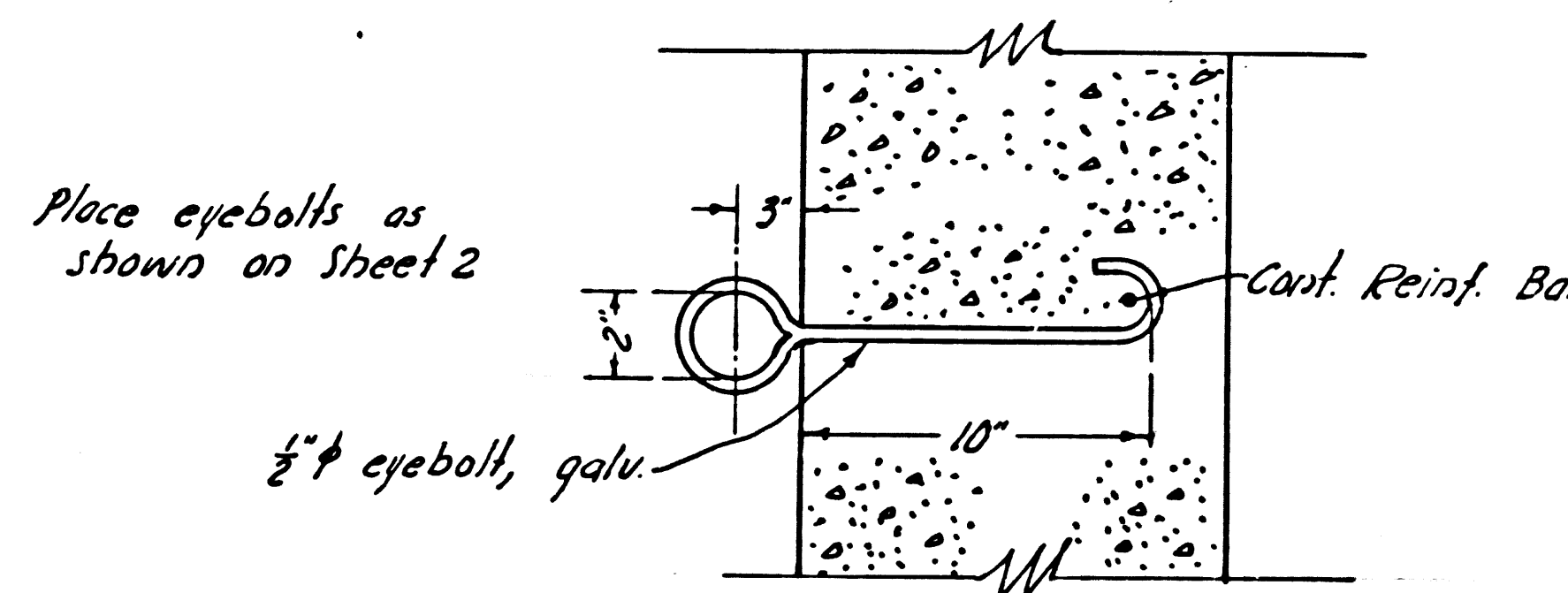
AIR VENT DETAIL
Scale 1"=1'-0"



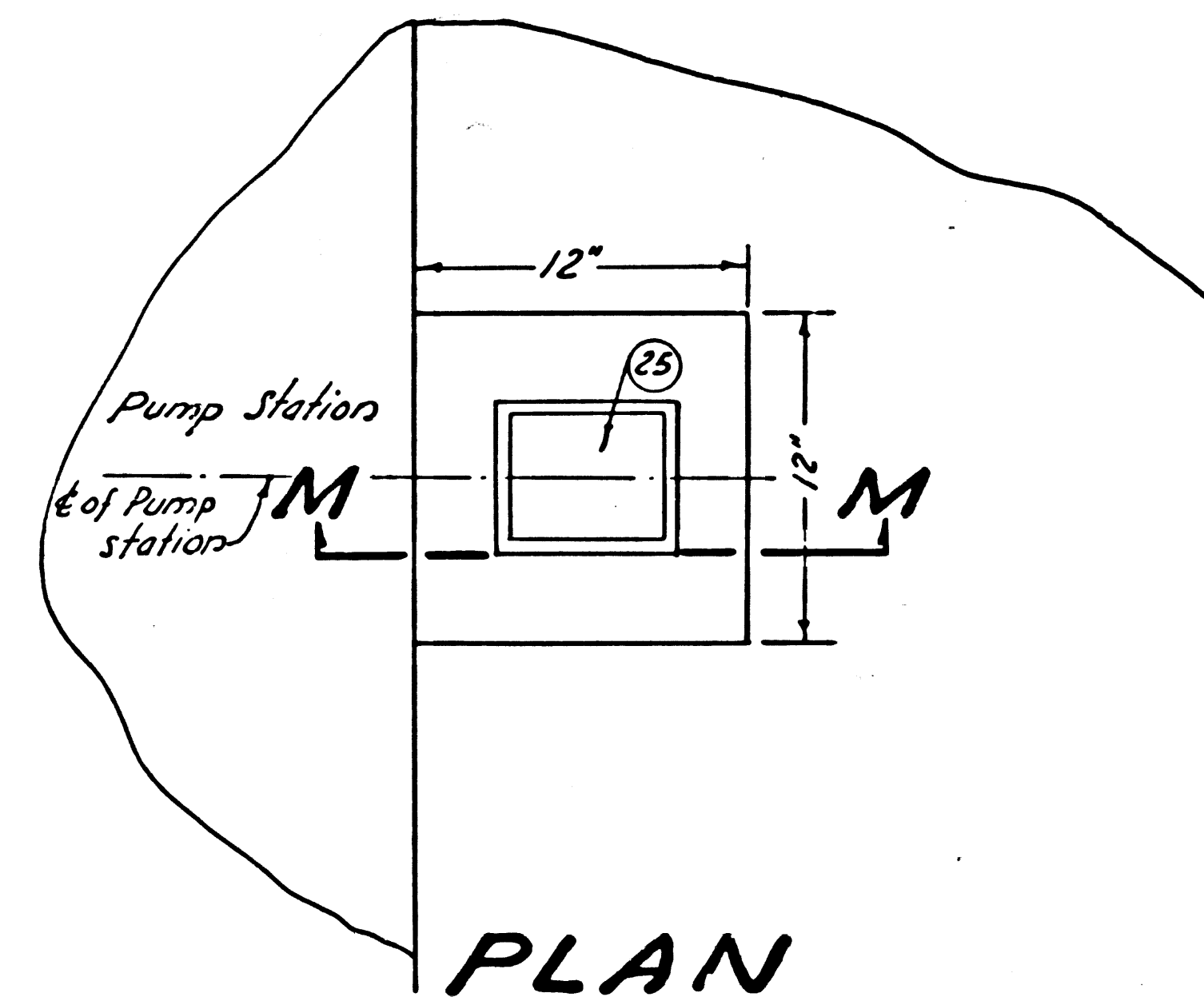
PIPE STRAP DETAIL
No Scale



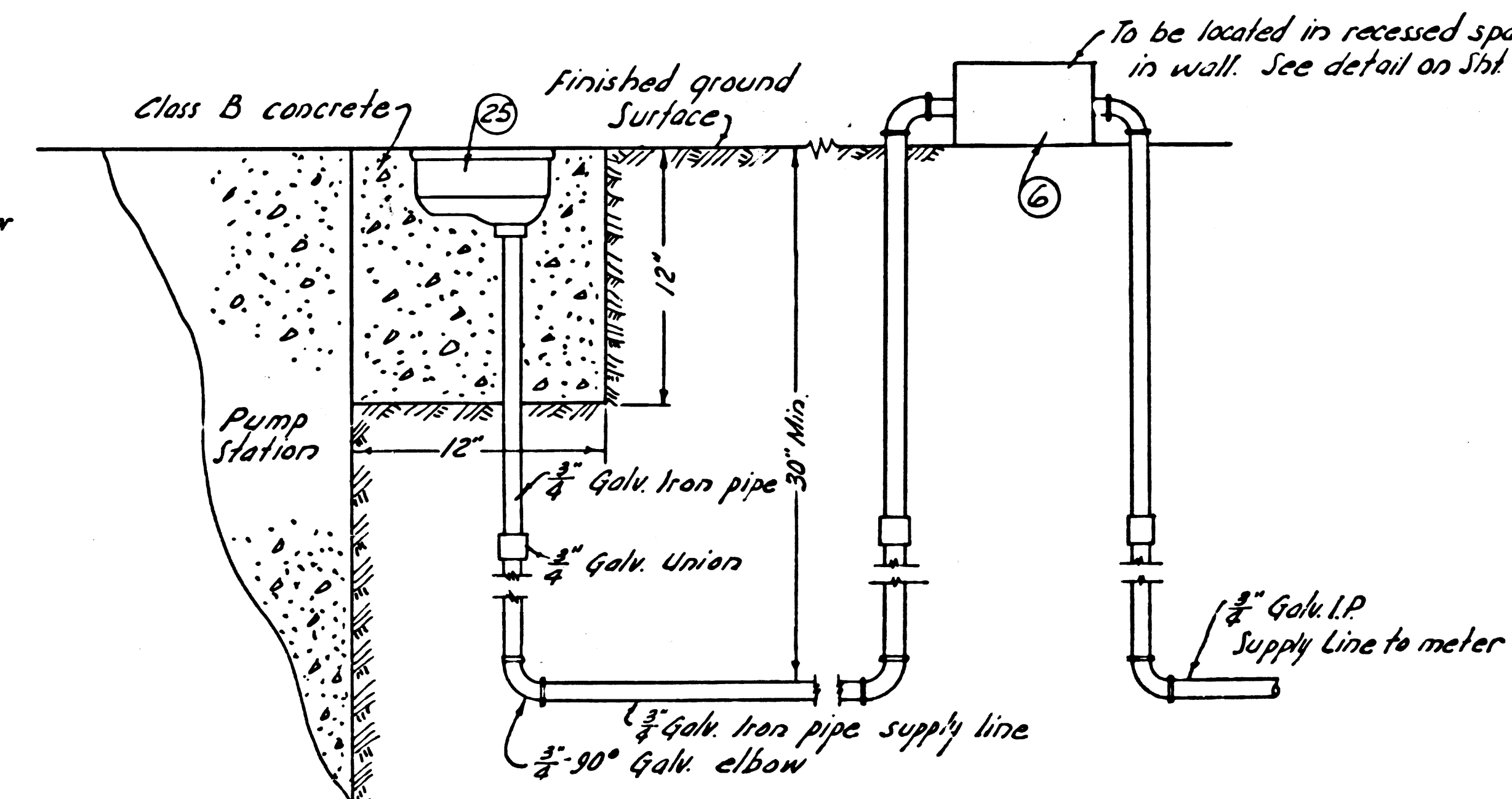
BRACKET DETAIL
Scale 1"=1'-0"



EYE BOLT DETAIL
No Scale



PLAN



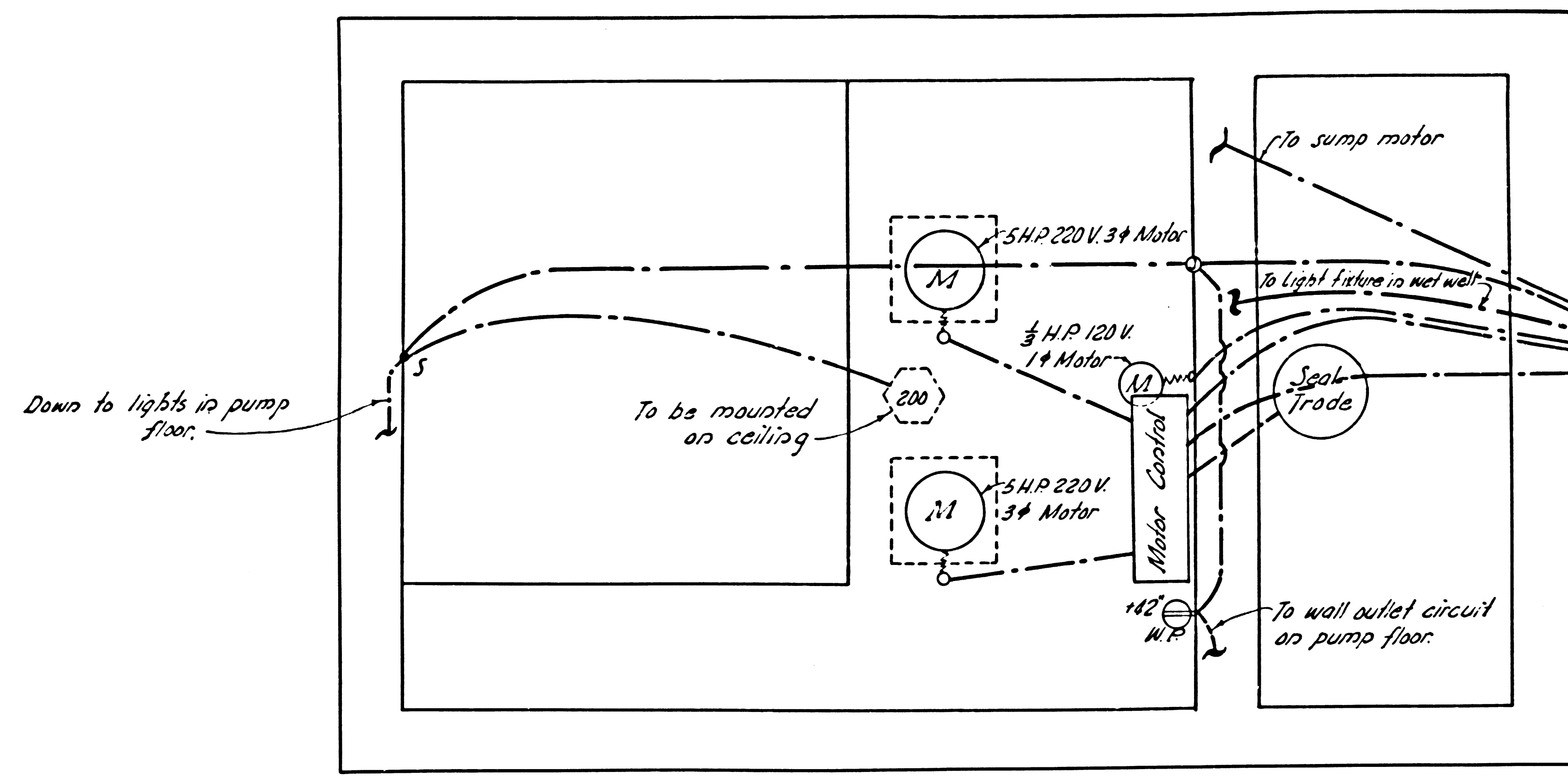
**SECTION M-M
WATER SERVICE DETAIL**
Scale 1 1/2"=1'-0"

ITEM DESCRIPTION

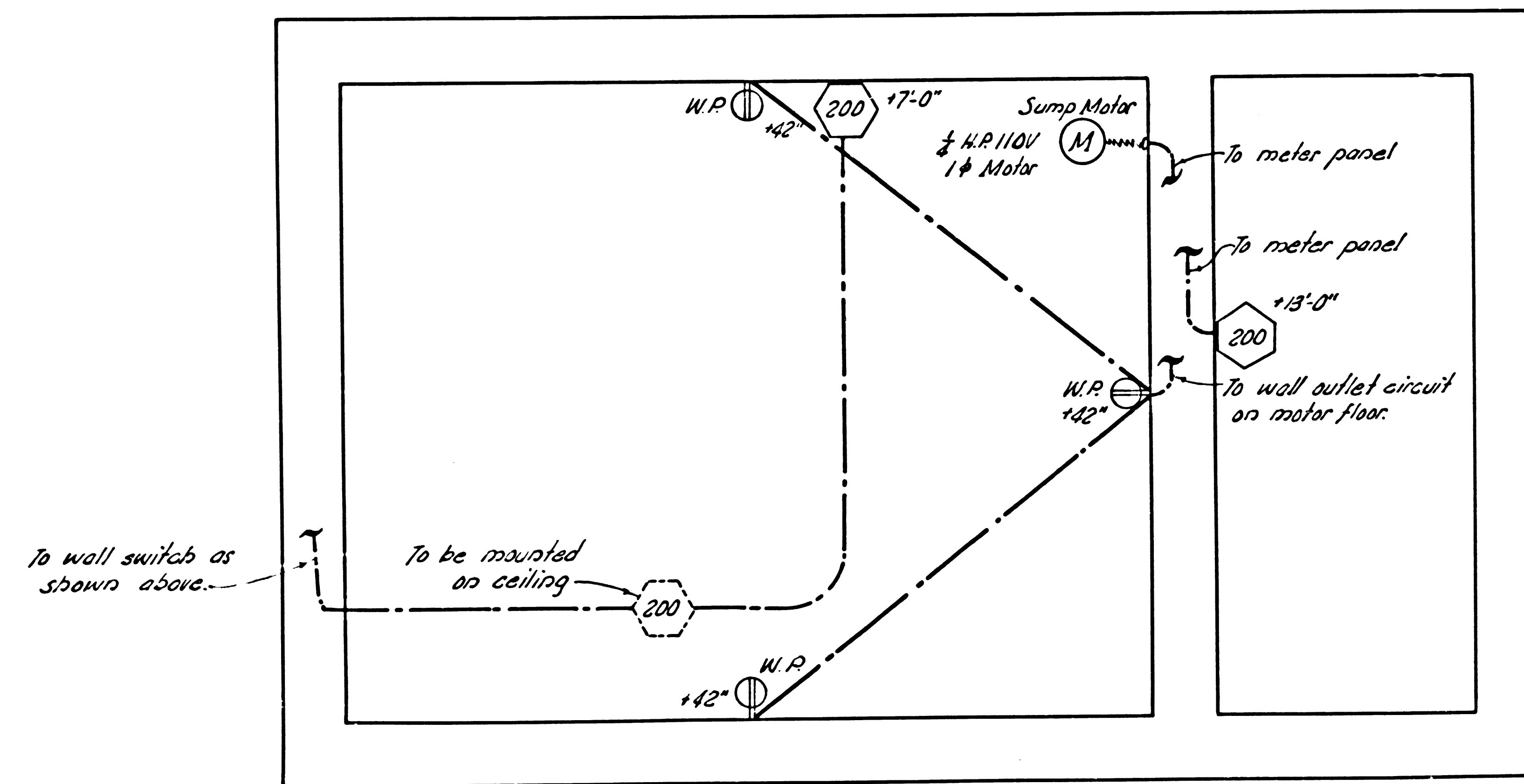
- 1- 2-Torque flow wemco model "DVL" 4" solids pumps or equal operating at 1170 R.P.M. and capable of delivering 340 gpm at 19 ft. TDH functioning singly or 400 gpm at 22 ft. TDH functioning together.
- 2- 2- 5 H.P. 1170 R.P.M., 3 ϕ , 60 cycles $\frac{220}{60}$ with Sld. "P" base motors.
- 3- 1- "Sealthrode" with automatic pump alternation, "Chicago Type Y-59" in Nema 4 enclosures or equal.
- 4- 1- $1\frac{1}{2}$ " H, $\frac{1}{2}$ " H.P., 3 ϕ , 60 cycle, $\frac{220}{60}$ American Blower or equal.
- 5- 4- 4" Flanged, brass trimmed gate valve Crane N^o 461-(2 without wheels) or equal.
- 6- 1- Beaco model 12- $\frac{3}{4}$ " reduced pressure backflow preventer as manufactured by Backflow Engineering and Equipment Co. or approved equal.
- 7- 2- 4" Swing check valve, iron body, brass trimmed with O.L. & W. Crane N^o 383 or equal.
- 8- 2- 4"x4" flanged 90° long radius base elbow.
- 9- 2- 4"x4" flanged 45° long radius elbow.
- 10- 2- 6"x6"x 4" Lateral-Flanged.
- 11- 4- 4" Victaulic coupling.
- 12- 1- 6" Blind flanged.
- 13- 1- Yeoman's Drain Ori" size D-2, model B, sump pump or equal with diving bell explosion proof switch, copper float capable of delivering 15 gpm at 20 ft. T.D.H.
- 14- 2- Watson Spicer coupling and shafting series N^o 27 or equal with adequate steady bearings.
- 15- 2- Extension stem for 4" non rising stem gate valve with supporting brackets.
- 16- 2- floor stand with indicator for 4" non rising stem gate valve, including wheel and wheel stem coupling.
- 17- 3- Electrical receptacle, vapor tight.
- 18- 3- 200 Watts vapor proof ceiling lights, Crouse-Hinds Type AR B91 or equal.
- 19- 10 Lin. ft. - 8" x 5 $\frac{1}{2}$ " i.F. 17# Steel beam with angle iron brackets and anchor bolts.
- 20- 1-1 $\frac{1}{2}$ " gate valve. Crane N^o 430 or equal.
- 21- 1- frame and cover, Alhambra Foundry A-2025 (A=16", B=18") or equal.
- 22- 3- Side walk frame with hinged cover. Alhambra foundry A-228 or equal.
- 23- 29- Standard manhole step per S-a-162.
- 24- 1-1 $\frac{1}{8}$ " swing check valve - Crane N^o 38 or equal.
- 25- 1- Special brass street washer with concealed hinged Alhambra Foundry 392 A or equal.
- 26- 1- 3" pipe vent Alhambra foundry A-2153 or equal.
- 27- 2- 6" Pipe vent Alhambra Foundry A-2153 or equal.
- 28- 2- Combination circuit breaker and magnetic starter. 5 H.P. 220 V. 3 ϕ , 60 cycle Square "D" class 3539, CAW-3, form C, NEMA 4, HVA selector switch or approved equal.
- 29- 2- $\frac{1}{2}$ " gate valve. Crane N^o 34 or equal.
- 30- 2- $\frac{1}{2}$ " swing check valve - Crane N^o 430 or equal.
- 31- 2- 100 A Safety socket box. Square "D" # 1096 R0 or approved equal.
- 32- 1- 100 A 2 pole $\frac{1}{4}$ " circuit breaker. Square "D" # 75016 D or approved equal.
- 33- 1- Circuit breaker load center. Square "D" # Q06 R0 w/a-20A. 1-pole $\frac{1}{8}$ " # Q120 or approved equal.
- 34- 1- 1 H.P. man. starter. $\frac{1}{2}$ " H.P. 110 V, 1 ϕ Square "D" # 2510-AW-1 or approved equal.
- 35- 1- 1 H.P. Man. starter $\frac{1}{2}$ " H.P. 110 V, 1 ϕ Square "D" # 2510-AW-1 or approved equal.
- 36- 1- 100 A 3 pole, 240 V. main circuit breaker. Square "D" # 75316 D or approved equal.
- 37- 1- 15 A 2 pole, circuit breaker for 240 V. controls. Square "D" # 76215 D or approved equal.
- 38- 2- 30 A 3 pole, circuit breaker for 240 V. controls. Square "D" # 76310 D or approved equal.
- 39- 1- 200 Watt explosion proof lighting fixture.

Items not covered in Item Description, see plans and specifications.
Figures in circles indicate item numbers. (See Sht 6)

MARINA DEL REY SEWAGE PUMP STATION		
P. C. 5846		J. N. 8910.76
ITEM DESCRIPTION & MISC. DETAILS		
COUNTY OF LOS ANGELES CALIFORNIA		
JOHN A. LAMBIE		COUNTY ENGINEER
SUBMITTED: <i>[Signature]</i>		APPROVED: <i>[Signature]</i>
ASSISTANT SANITATION ENGINEER		SANITATION ENGINEER
APPROVED: <i>[Signature]</i>		APPROVED: <i>[Signature]</i>
DIRECTOR, DEPARTMENT OF SMALL CRAFT MARBOES		COUNTY ENGINEER
DESIGNED: H. LEE	TRACED: T. HONDA	CHECKED: C. PEARSON
SCALE: AS SHOWN	DATE: APR. '60	SHEET NO. 6 OF 7 SHEETS



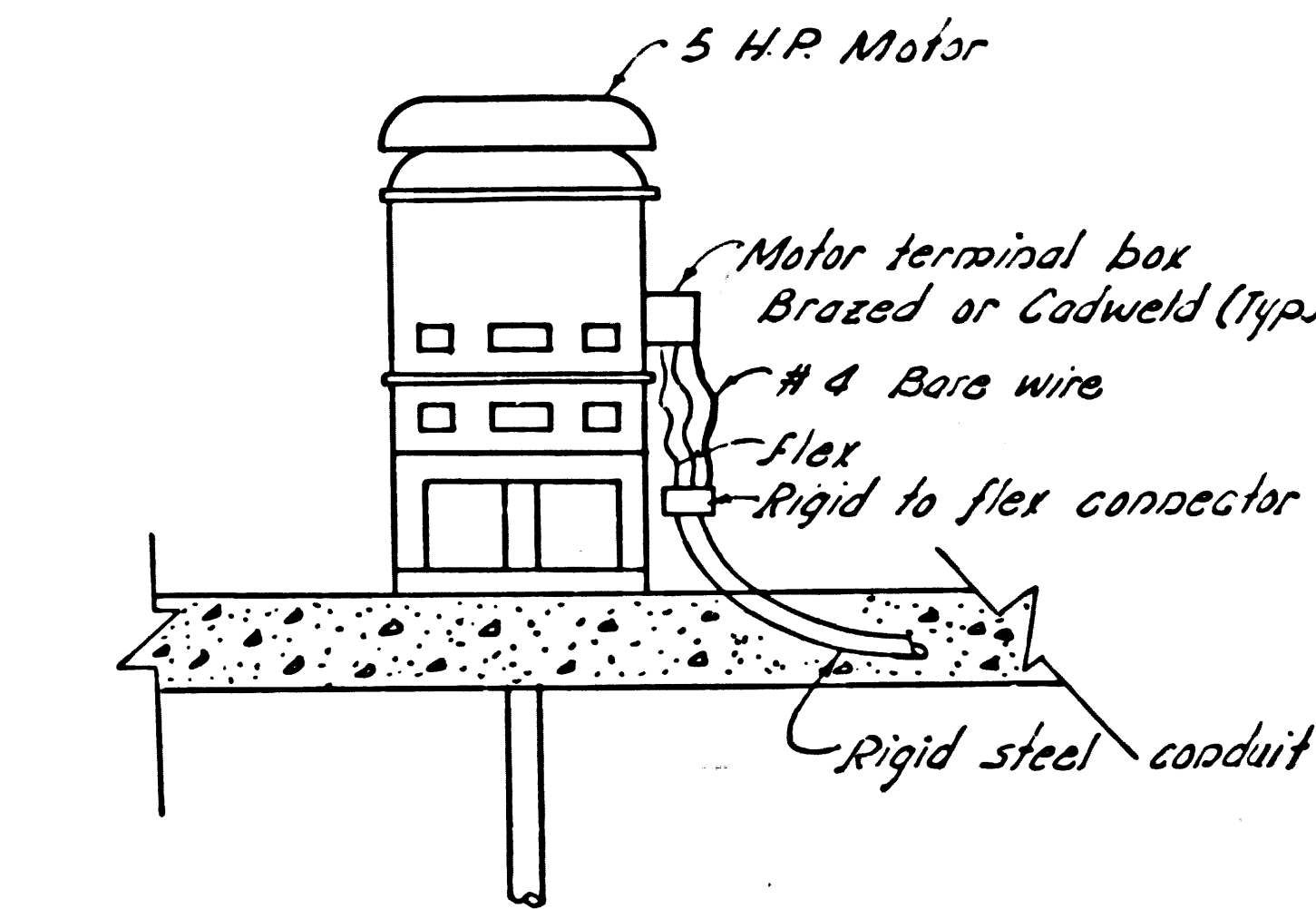
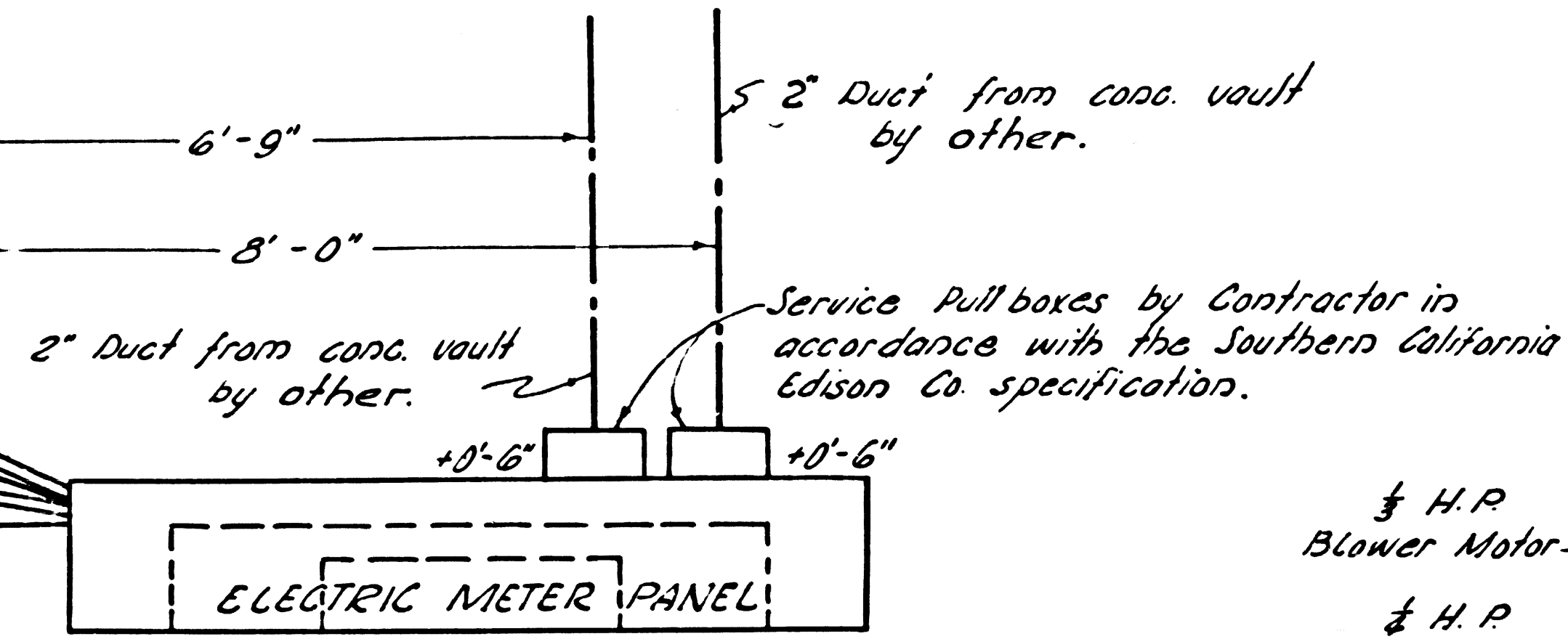
MOTOR FLOOR PLAN~LIGHTING AND POWER
SCALE: 1/2" = 1'-0"



PUMP FLOOR PLAN- LIGHTING
SCALE: 1/2" = 1'-0"

SYMBOL LIST

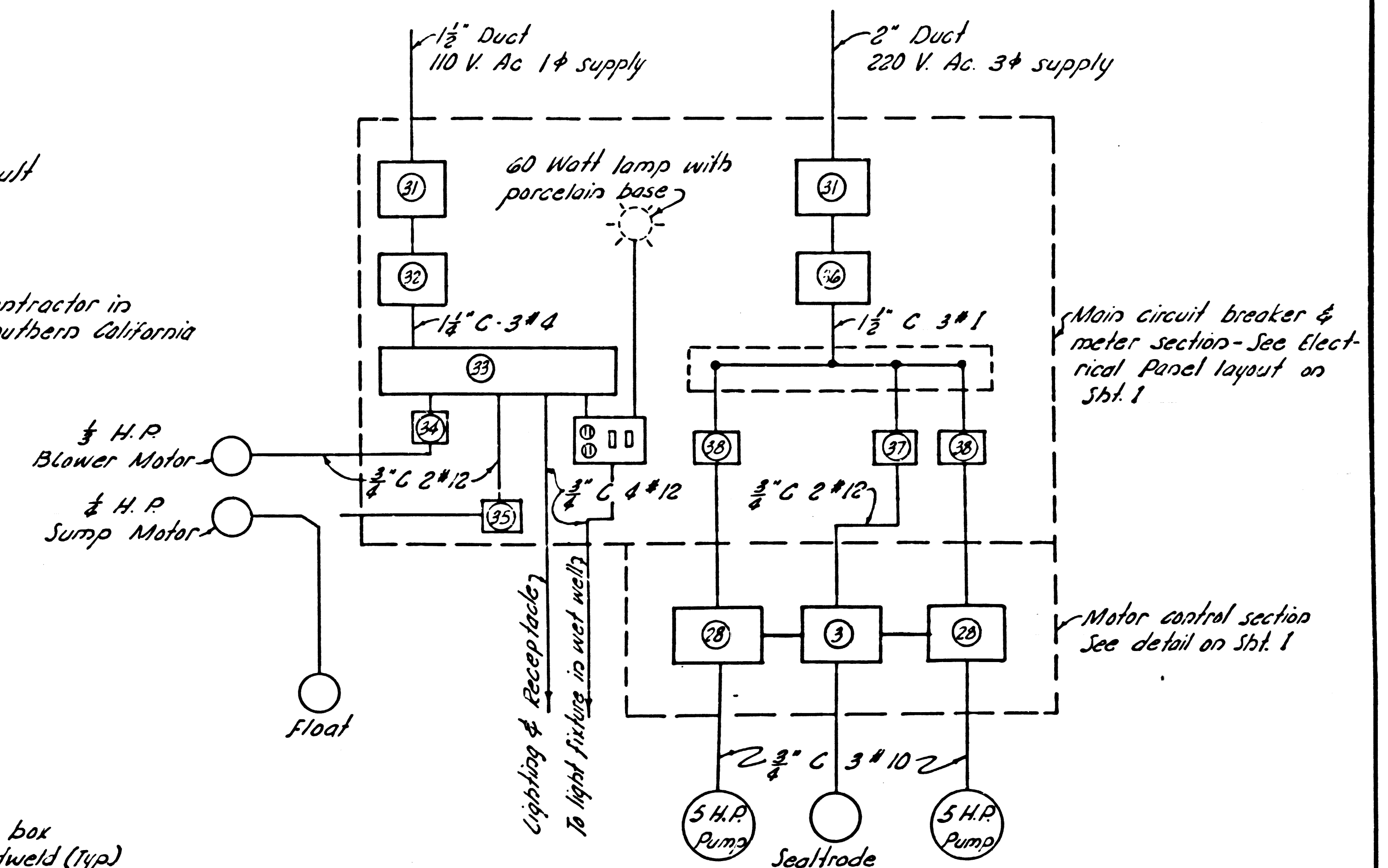
- Branch circuit concealed in ceiling or wall
- ⊙----- Wall outlet
- S----- 1 Pole S.T. switch
- ⊙----- Motor
- W.P.----- Indicates weather proof
- ⊙----- Lighting fixture symbol. Number denotes wattage of fixture.



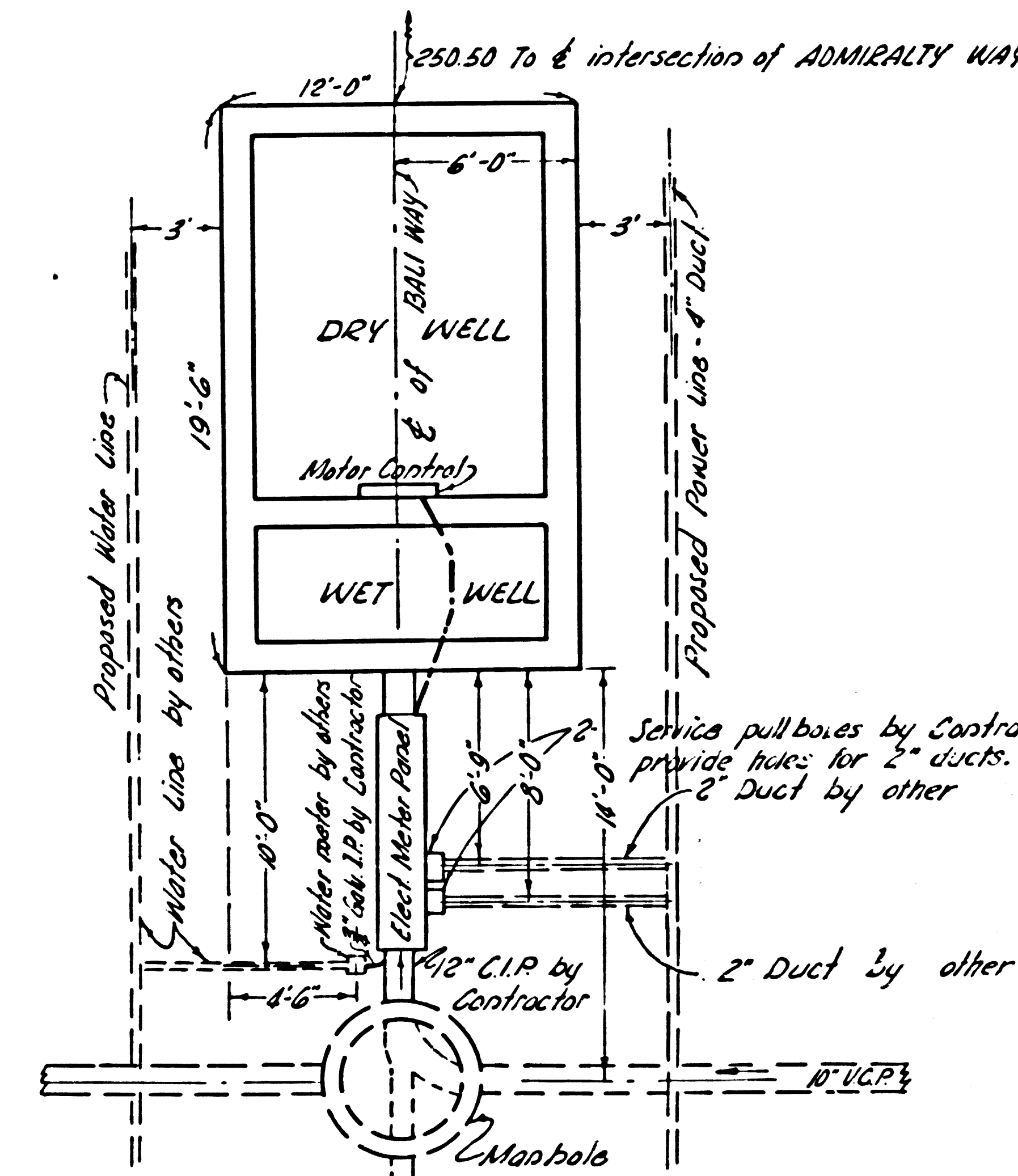
MOTOR CONNECTION DETAIL
NO SCALE

- GENERAL NOTES**
- All conduit runs shall be rigid steel.
 - Mounting heights indicated on the drawings shall be from finished floor to bottom of device or fixture.
 - Service pull boxes at Elect. Meter Panel by Contractor. In the event that no permanent power supply is available upon completion of the pump station, it is the contractor's responsibility to coordinate with the design division of the County Engineer and Southern Calif. Edison Co. to connect the power supply when it is available at his expense prior to the final acceptance of the station.
 - It is the Contractor's responsibility to connect the water supply to the water meter when made available by the serving Co. The Contractor shall verify the serving location and requirements.

Figures in circles indicate item numbers. (See Sht. 6)



SINGLE LINE ELECTRICAL DIAGRAM
NO SCALE



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

**MARINA DEL REY
SEWAGE PUMP STATION**

P. C. 5846 J. N. 891076

ELECTRICAL DETAILS

COUNTY OF LOS ANGELES CALIFORNIA

JOHN A. LAMBIE COUNTY ENGINEER

SUBMITTED: *C. E. Pearson* APPROVED: *John A. Lambie*
ASSISTANT SANITATION ENGINEER SANITATION ENGINEER

APPROVED: *John A. Lambie* APPROVED: *John A. Lambie*
DIRECTOR, DEPARTMENT OF COUNTY ENGINEER
SMALL CRAFT HARBOURS

DESIGNED: H. LEE	TRACED: T. HONDA	CHECKED: C. PEARSON
SCALE: AS SHOWN	DATE: APR. '60	SHEET NO. 7 OF 7 SHEETS

B.C. 284E