

SAUSALITO - MARIN CITY SANITARY DISTRICT  
MARIN COUNTY, CALIFORNIA

# PLANS

FOR THE CONSTRUCTION OF A  
DISTRICT SEWAGE DISPOSAL PROJECT  
PROJECT UNIT 2  
**SEWAGE PUMPING & TREATMENT WORKS**

DISTRICT BOARD  
J HERBERT MADDEN CHAIRMAN  
WALTER M. BAIRD ROBERT M. GUNN  
ERIC BARNETT FRANK KELLY

RICHARD SIMS, JR. DISTRICT ATTORNEY  
LEON A. DELISLE COUNTY AUDITOR

HARRY N. JENKS PALO ALTO CALIF  
J. C. OGLESBY SAN RAFAEL CALIF  
ASSOCIATE CONSULTING ENGINEERS

## INDEX TO PLANS

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### DATUM

U.S. COAST & GEODETIC SURVEY  
MEAN SEA LEVEL OF 1929

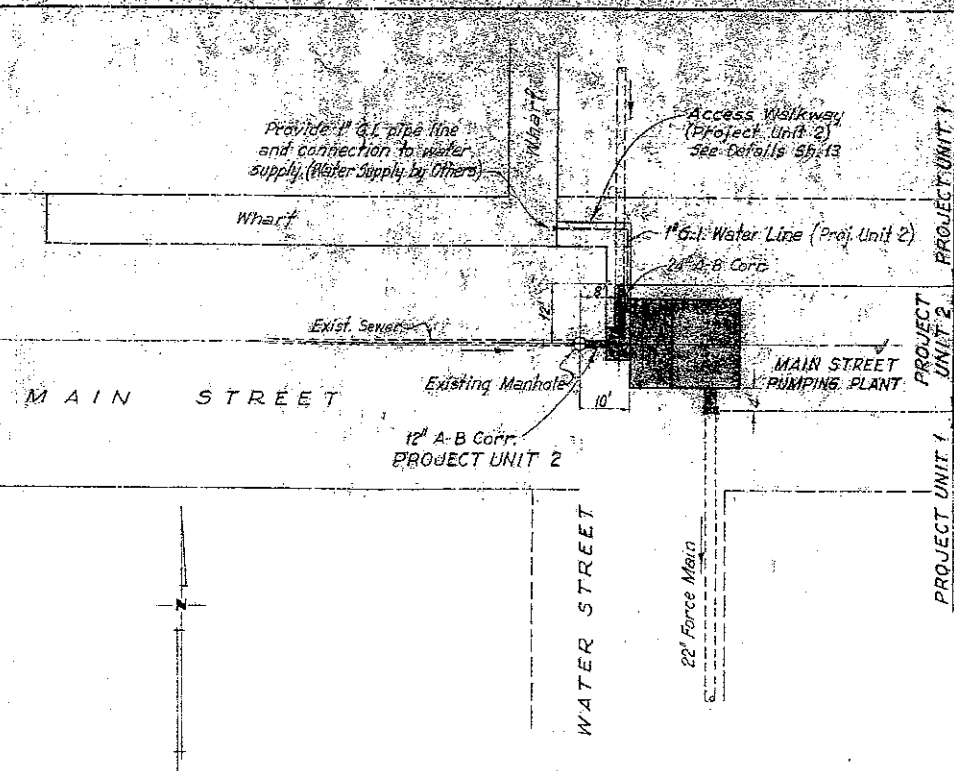
APPROVED *Harry N. Jenks* *J. C. Ogleby*  
ASSOCIATE CONSULTING ENGINEERS

ADOPTED BY DISTRICT BOARD MARCH 12<sup>TH</sup> 1952

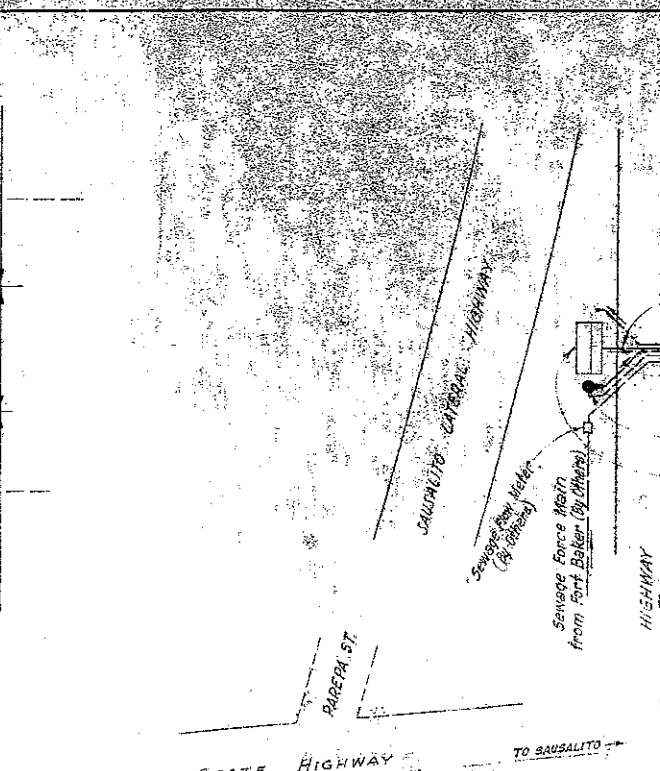
*Herbert Madden*  
CHAIRMAN  
*Walter Baird*  
SECRETARY



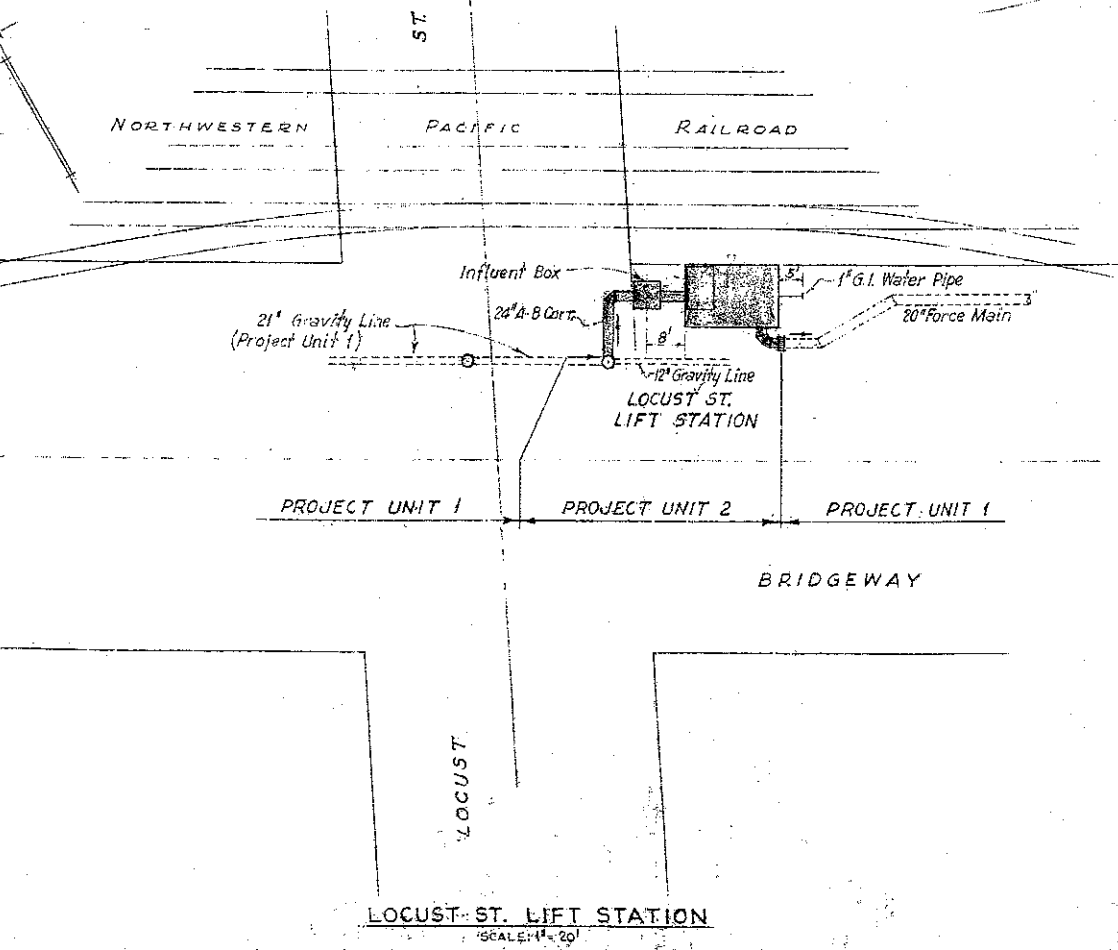
SAUSALITO - MARIN CITY SANITARY DISTRICT MARIN COUNTY, CALIFORNIA	
SEWAGE PUMPING & TREATMENT WORKS	
PROJECT LOCATION MAP & INDEX TO PLANS	
Harry N. Jenks and J. C. Ogleby Associate Consulting Engineers	
Drawn by: G.E.S.	Scale: As Shown
Checked by: R.N.J.	Date: MARCH 1952



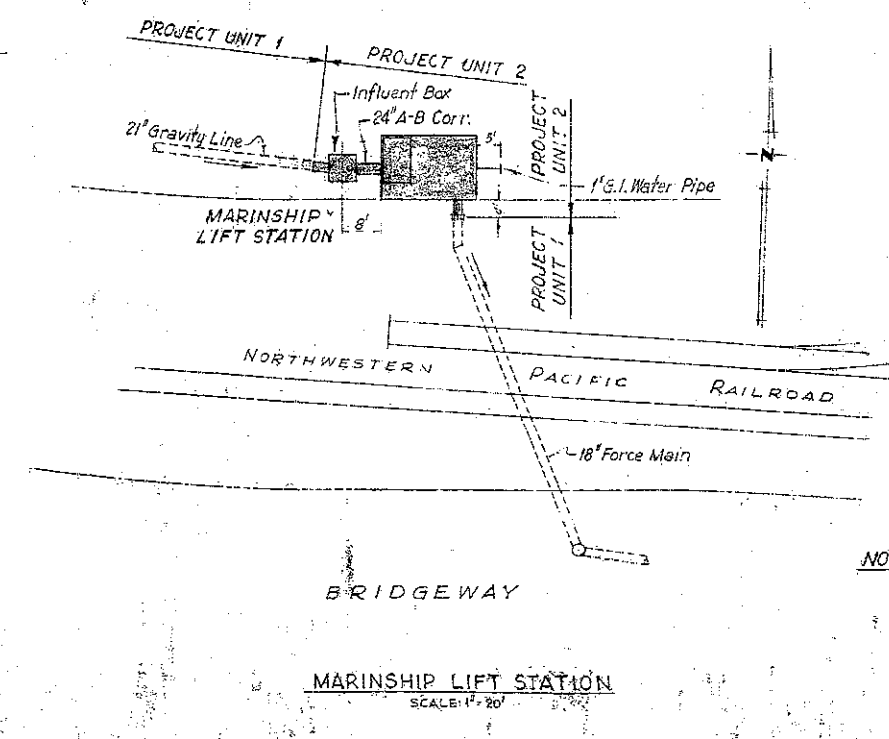
**MAIN ST. PUMPING PLANT**  
SCALE: 1" = 20'



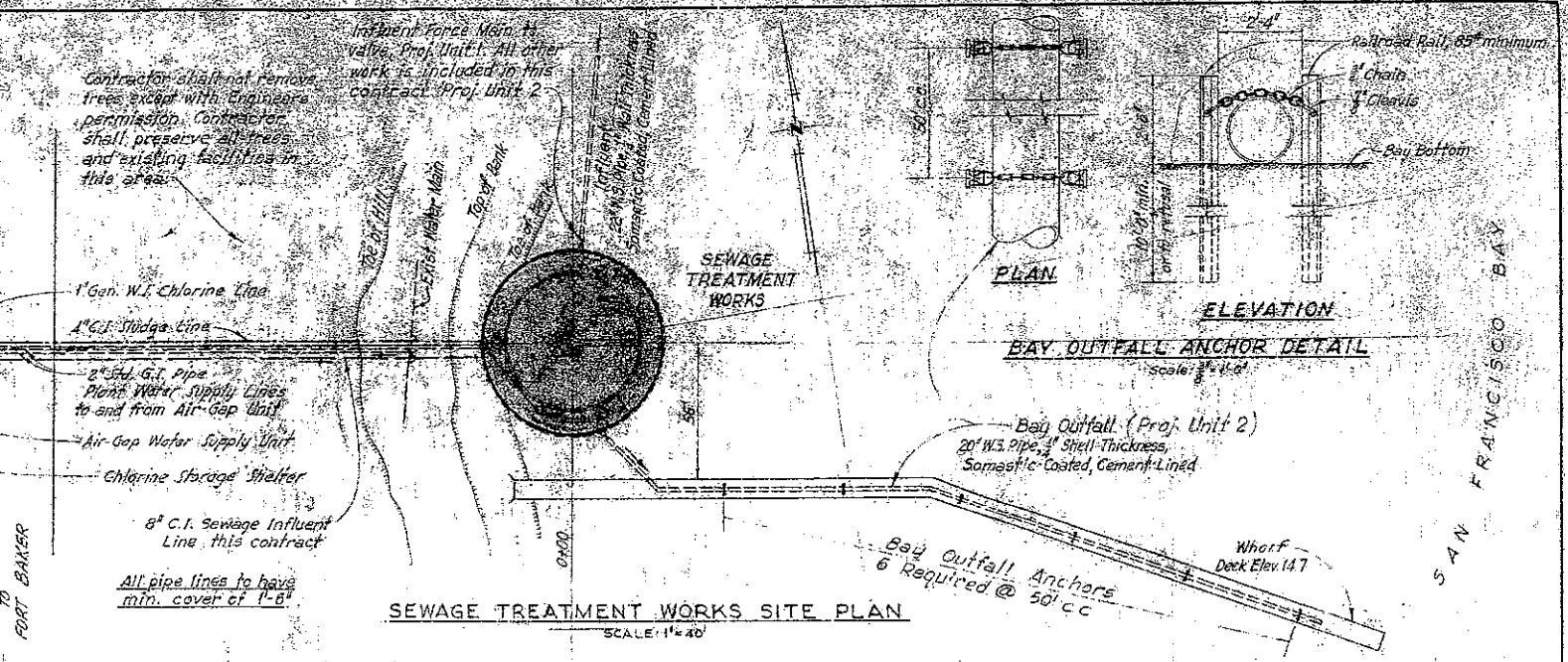
**HIGHWAY BOOSTER STATION**  
NO SCALE



**LOCUST ST. LIFT STATION**  
SCALE: 1" = 20'

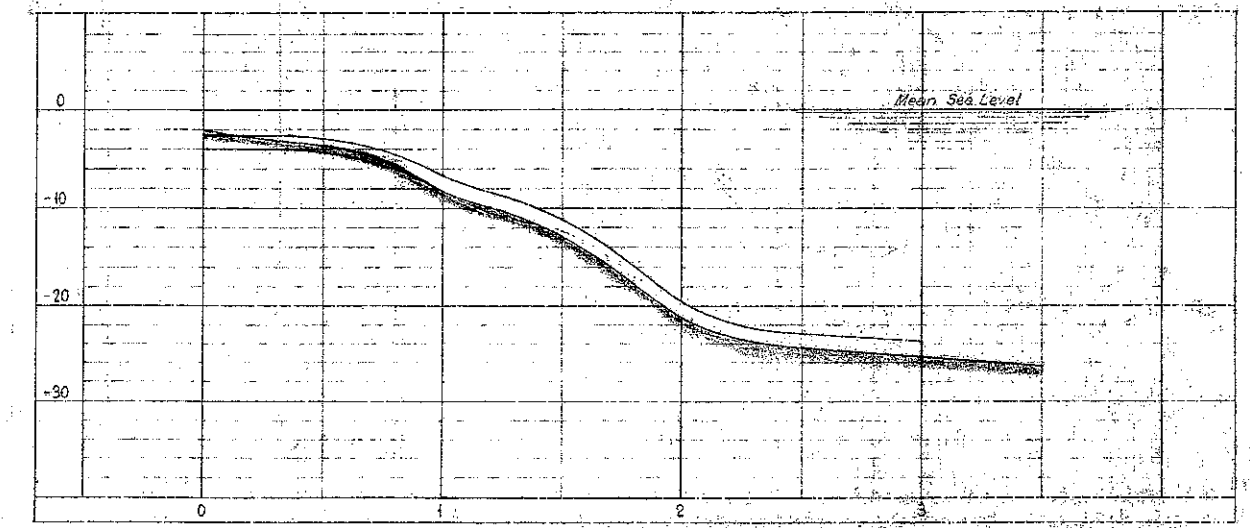


**MARINSHIP LIFT STATION**  
SCALE: 1" = 20'

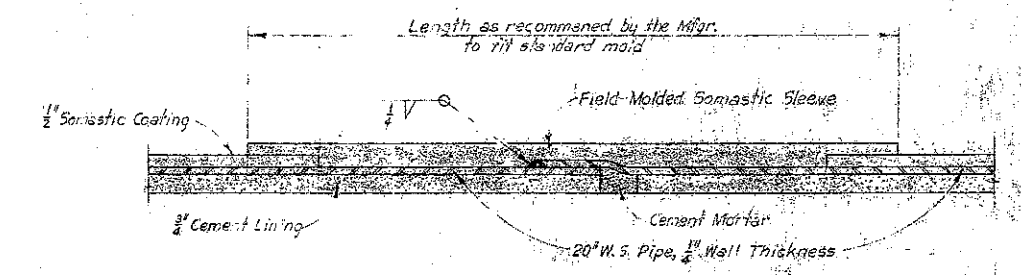


**SEWAGE TREATMENT WORKS SITE PLAN**  
SCALE: 1" = 40'

**BAY OUTFALL ANCHOR DETAIL**  
SCALE: 1" = 10'



**BAY OUTFALL PROFILE**  
SCALE: 1" = 40' HORIZ., 1" = 10' VERT.

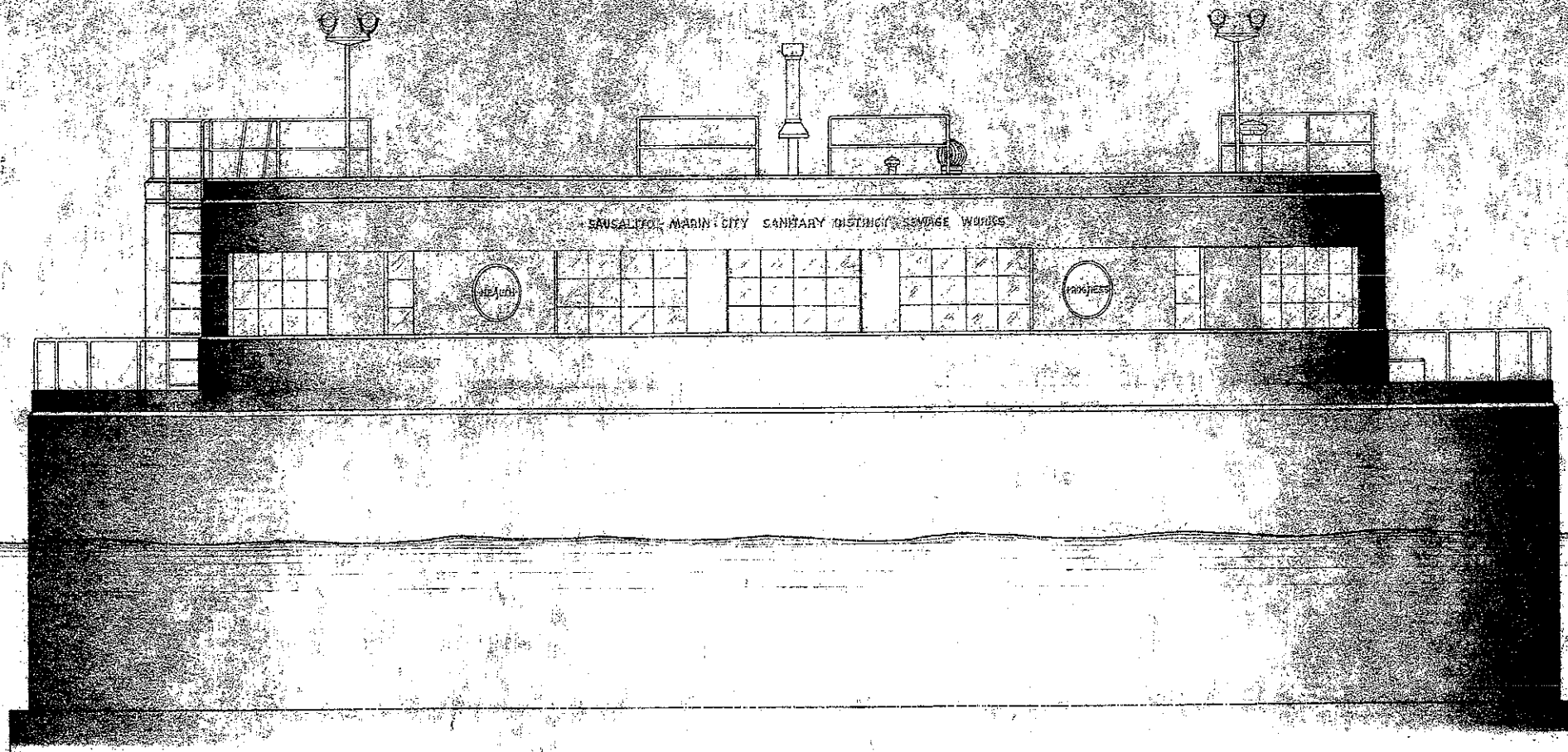


**SOMASTIC-COATED WELDED STEEL PIPE JOINT**  
NO SCALE

**NOTE:** Contractor of Project Unit 2 shall make all connections at junction of pipe lines with Project Unit 1.

2  
OF  
20

SAUSALITO-MARIN CITY SANITARY DISTRICT MARIN COUNTY, CALIFORNIA	
SEWAGE PUMPING & TREATMENT WORKS	
TREATMENT WORKS & PUMPING PLANTS SITE PLANS & BAY OUTFALL	
Harry N. Jenks and J. C. Oglesby Associate Consulting Engineers	
Drawn by: E.L.S.	Scale: As Shown
Checked by: H.H.J.	Date: March 1952

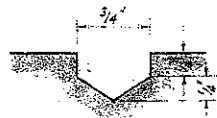


ELEVATION  
Scale: 1/2" = 1'-0"

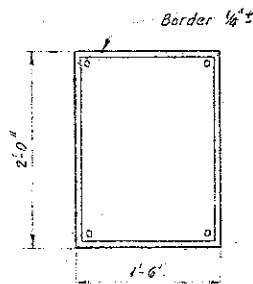
GENERAL NOTE:

Letter Size For Control House As Follows:  
SAUSALITO-MARIN CITY SANITARY DISTRICT  
SEWAGE WORKS — 6" High  
HEALTH & PROGRESS — 4" High

Letters to be Incised in Concrete by Neatly Mitered and Finished Wood Letters on Backing - of Approximate Form Thus:

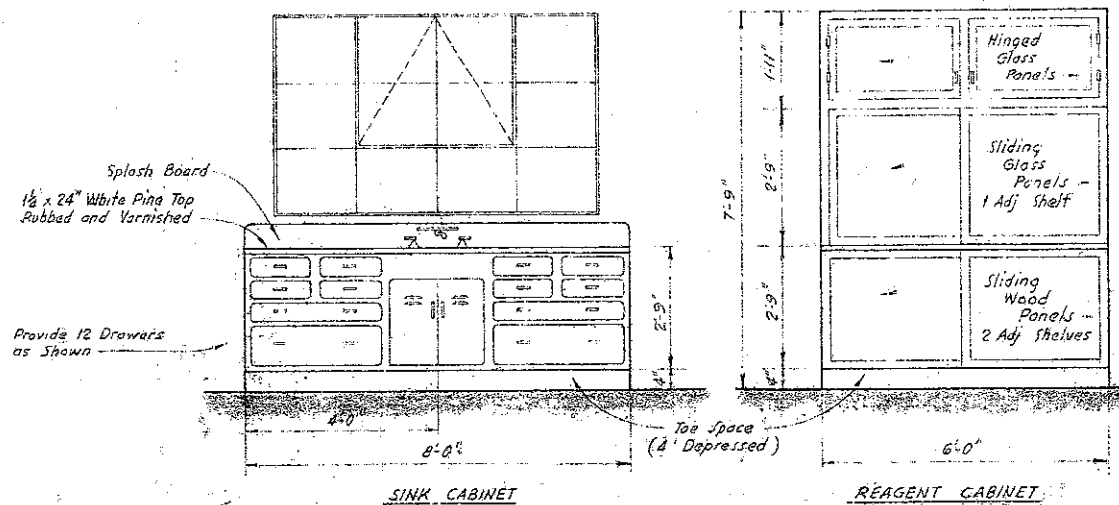


INSCRIPTION DETAIL



For Lettering on Plaque See Spacing

DEDICATION PLAQUE  
Scale: 1" = 1'-0"



SINK CABINET

REAGENT CABINET

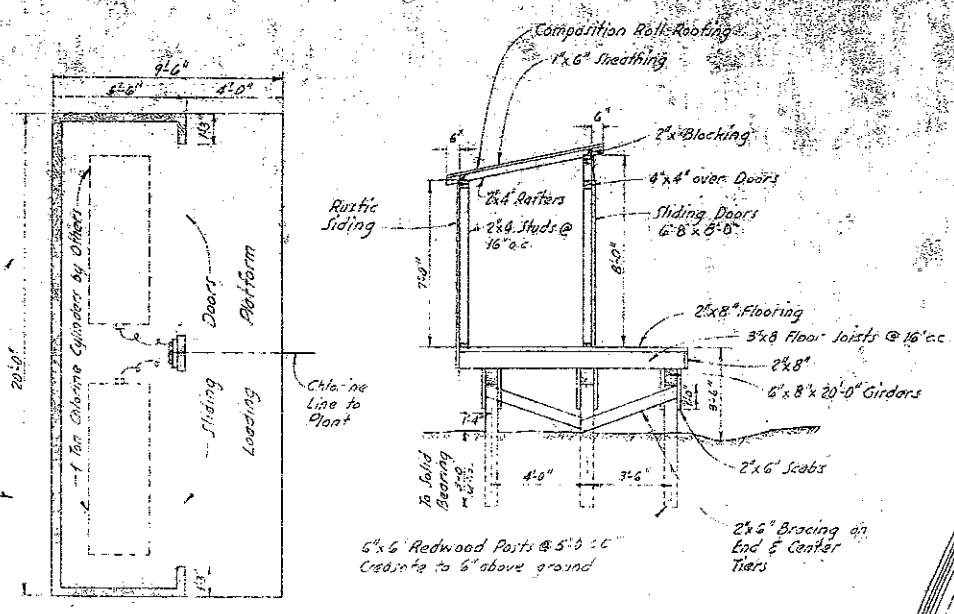
CABINET DETAILS  
Scale: 1/2" = 1'-0"

GENERAL NOTES

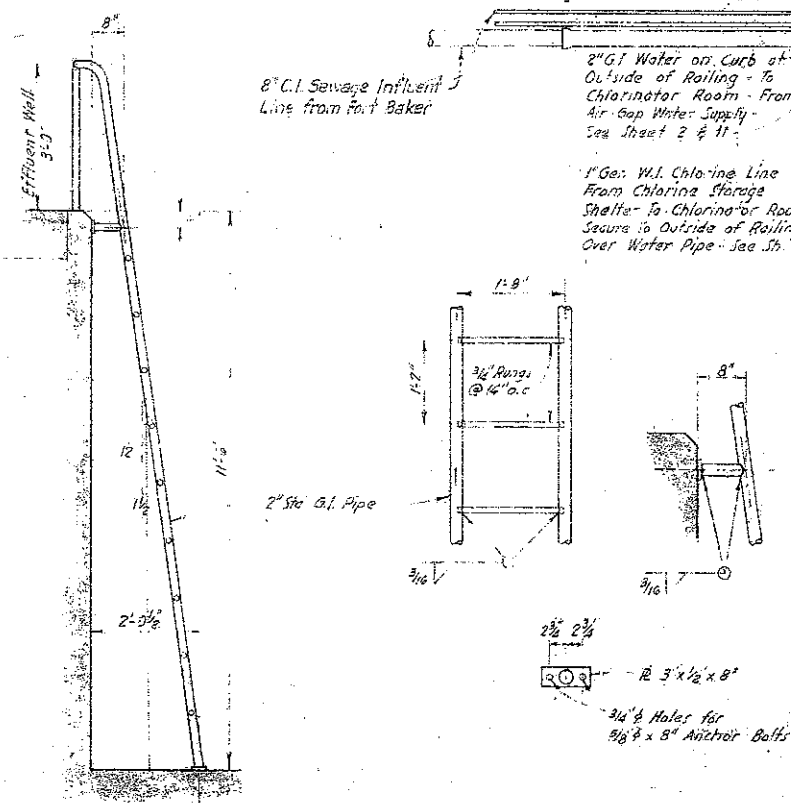
1. Refer to Specifications for Equipment Requirements. See Equipment Manufacturers Drawings for all Equipment Setting & Anchor Bolt Locations. Verify Dimensions & Clearances for Mechanical Installations Before Placing Concrete.
2. All Windows Shall be Commercial Projected Steel Sash, Out-projecting of the Sides & Types Noted. All Lving Doors Shall be Industrial Steel Doors, Half Glass, See Specifications.
3. All Plumbing Fixtures Shall be "Crane" or Equal, and Shall be Similar to Equal to the Crane Fixtures Number or Follows:  
  - Lavatory: 17" "Corona" No 1-370 E
  - Toilet: "Oxford" No 3-140
  - Sink: 18" x 24" No 5-155, Swing Spout No 8-80
  - Shower Head No 9-257, Mixing Valve No 9-390
  - Water Heater: 30 Gal. Capacity No 5-30 40 G.R. Capacity
4. All Office Furniture Shall be "Steelco's" or Equal, & Shall be Similar to Equal to the Following:  
  - Desk: 60" x 30" Model No 15025, Island Base
  - Chair: A-Steel Swivel No C-27
  - File Case: 3-Section Steel, 18" Wide x 15" Deep x 5'-0" High



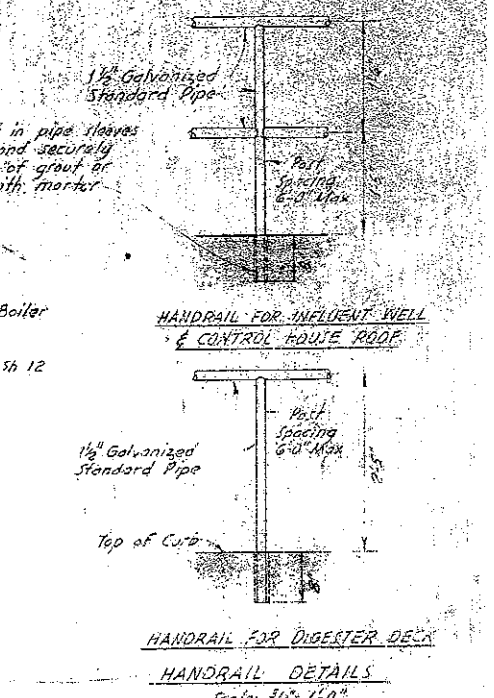
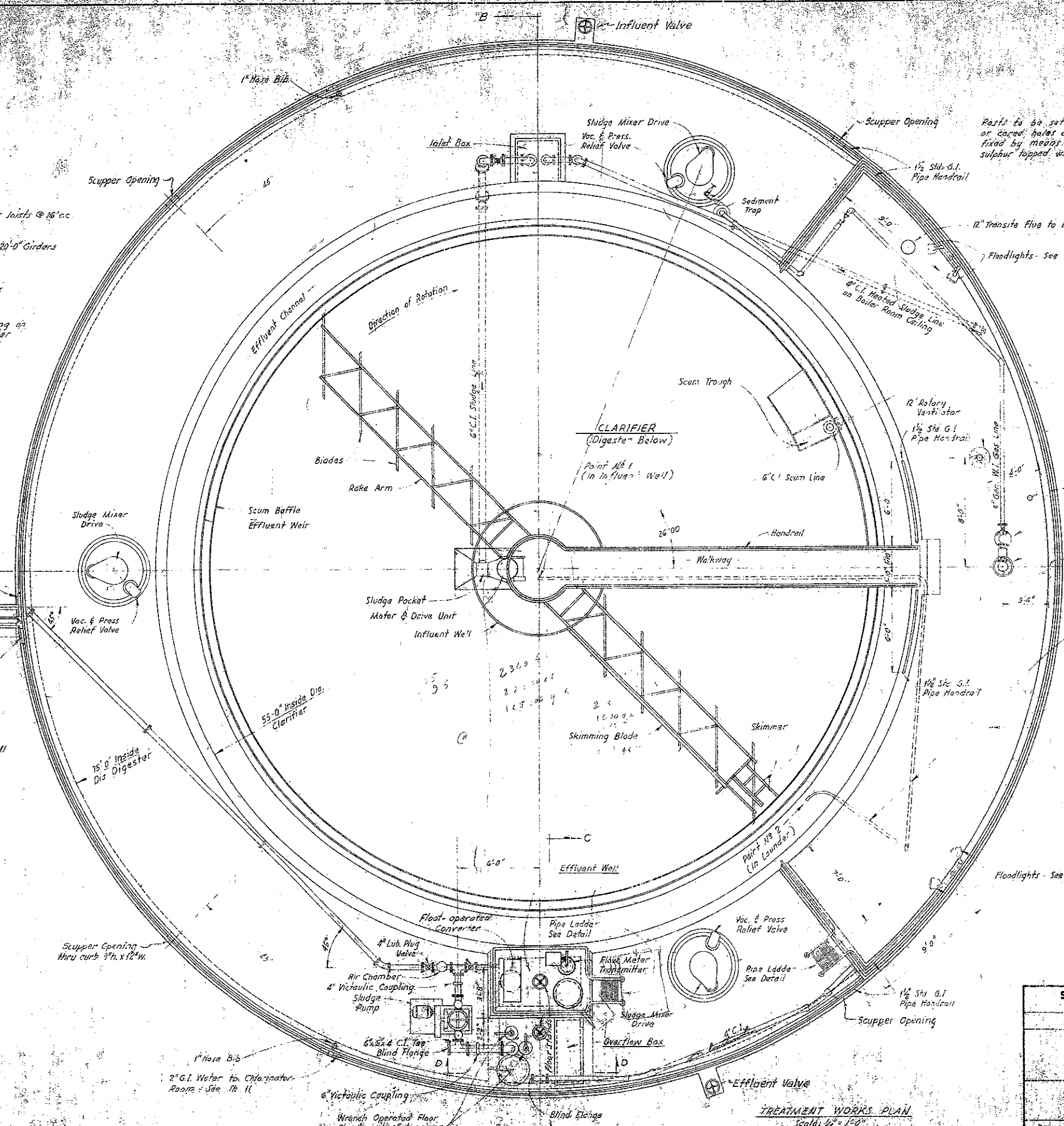
SAUSALITO-MARIN CITY SANITARY DISTRICT MARIN COUNTY, CALIFORNIA	
SEWAGE PUMPING & TREATMENT WORKS	
TREATMENT WORKS ELEVATION & MISCELLANEOUS DETAILS	
Harry N. Jenks and J. C. Oglesby Associate Consulting Engineers	
Drawn by: G.E.P.	Scale: As Shown
Checked by: R.M.J.	Date: March 1952



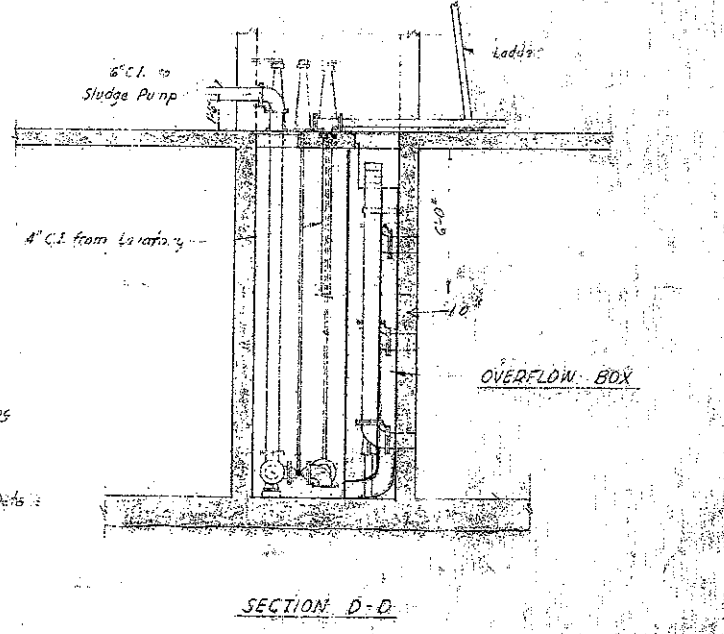
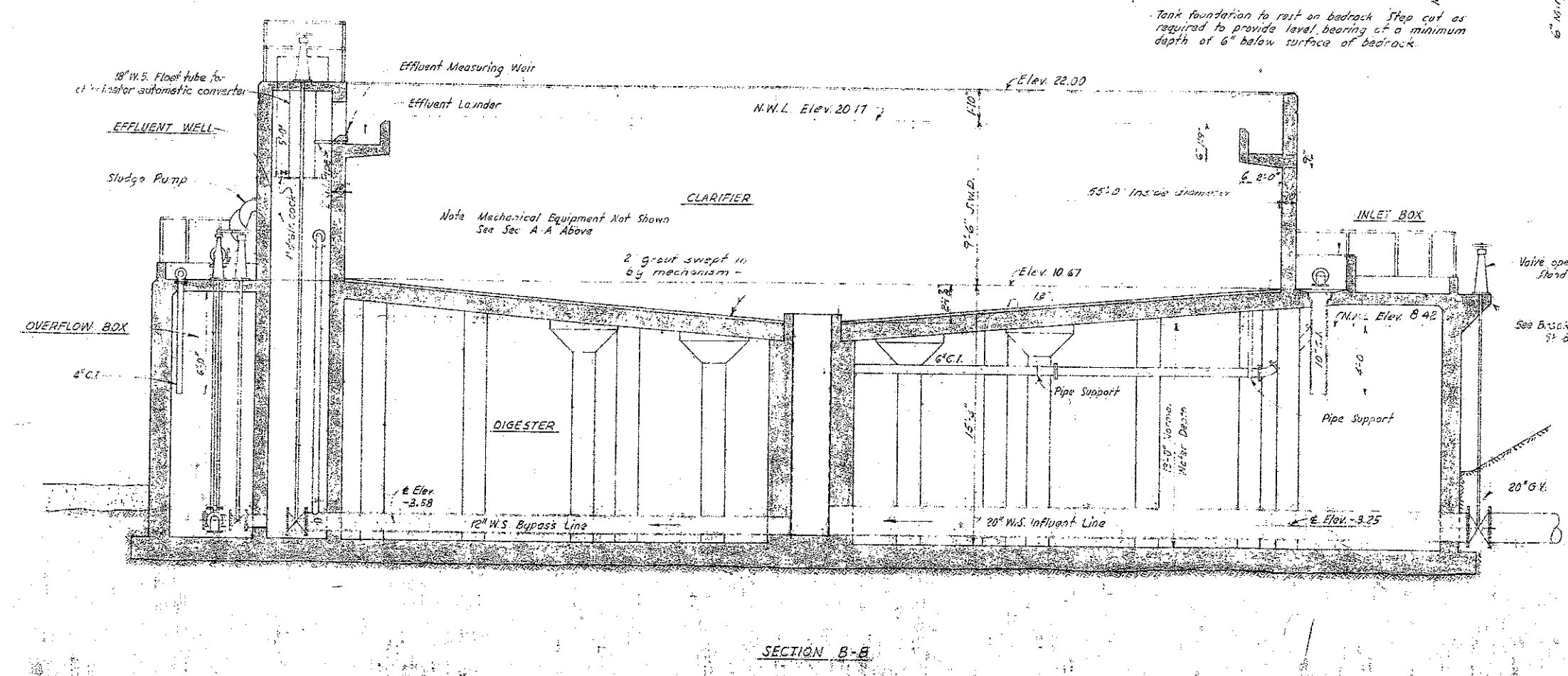
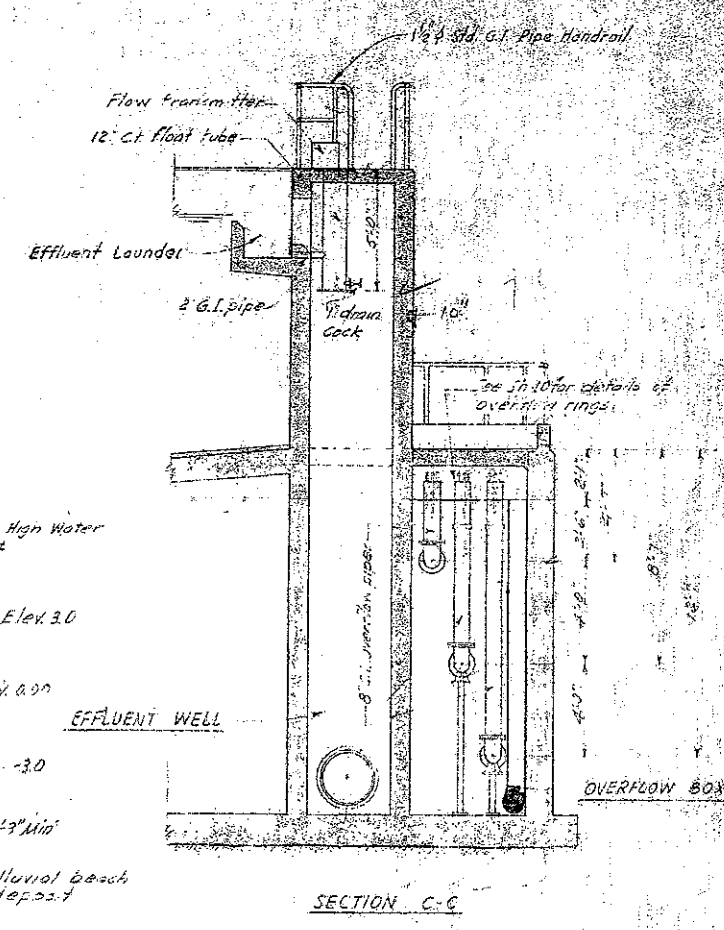
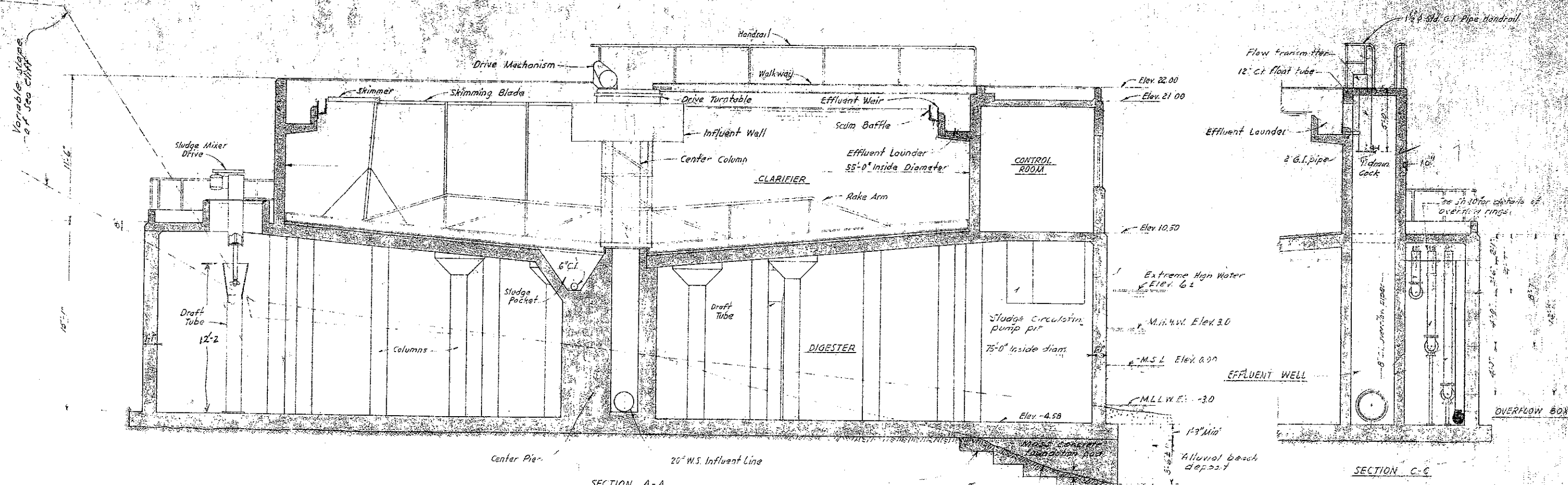
**CHLORINE STORAGE SHELTER**  
 Scale: 1/4" = 1'-0"



**TREATMENT WORKS LADDERS**  
 Scale: 1/4" = 1'-0"



SAUSALITO-MARIN CITY SANITARY DISTRICT MARIN COUNTY, CALIFORNIA	
SEWAGE PUMPING & TREATMENT WORKS	
TREATMENT WORKS PLAN & MISC DETAILS	
Harry N. Jenks and J. C. Daley Associate Consulting Engineers	
Drawn by: G.E.P.	Scale: As Shown
Checked by: H.N.J.	Date: March 1957



5  
OF  
20

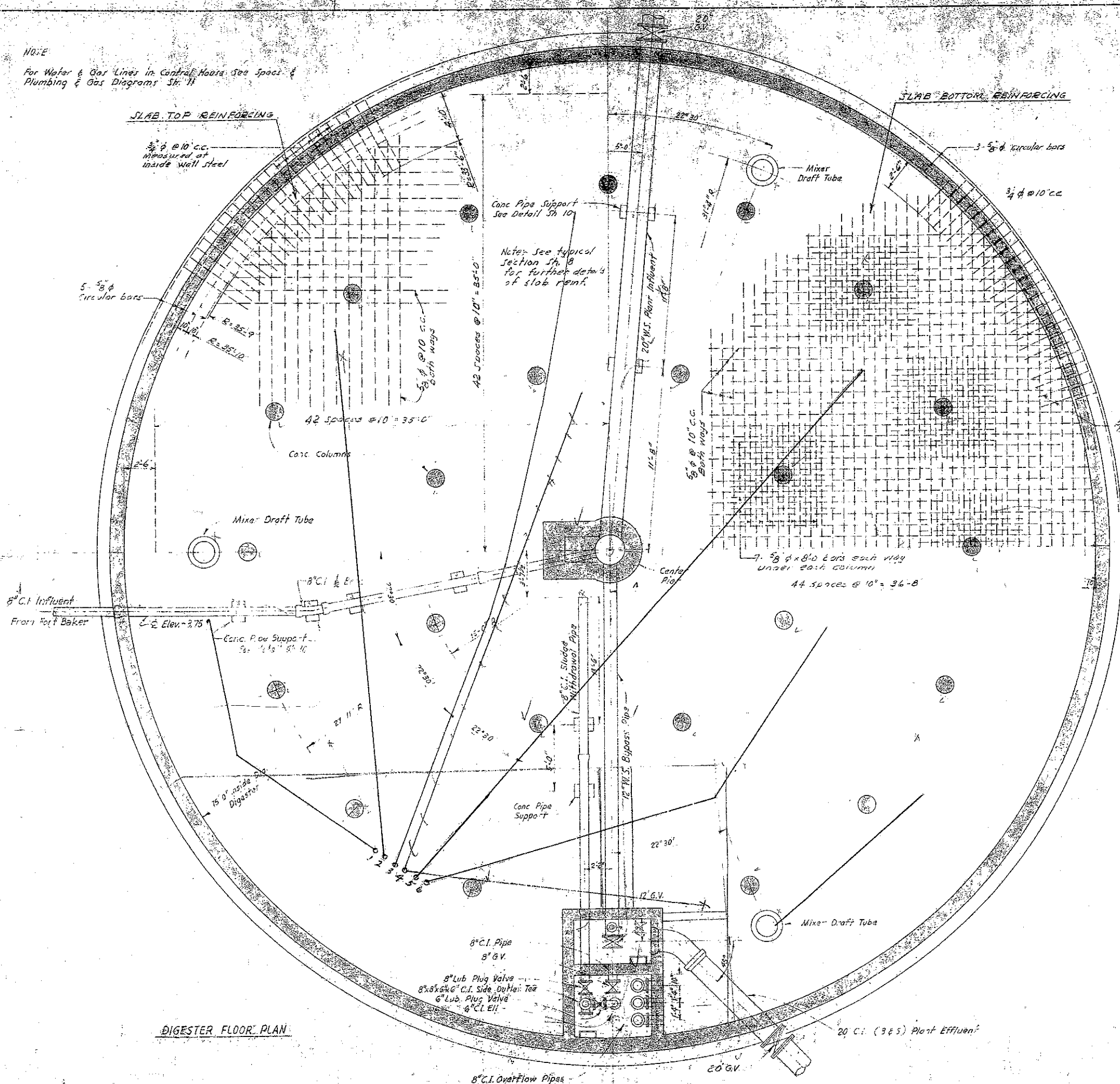
SAUSALITO-MARIN CITY SANITARY DISTRICT MARIN COUNTY, CALIFORNIA	
SEWAGE PUMPING & TREATMENT WORKS	
TREATMENT WORKS SECTIONS	
Harry N. Jenks and J. C. Oglesby Associate Consulting Engineers	
Drawn by: P. L. A. & B. E. P.	Scale: 1/2" = 1'-0"
Checked by: R. N. D.	Date: March 1952

NOTE

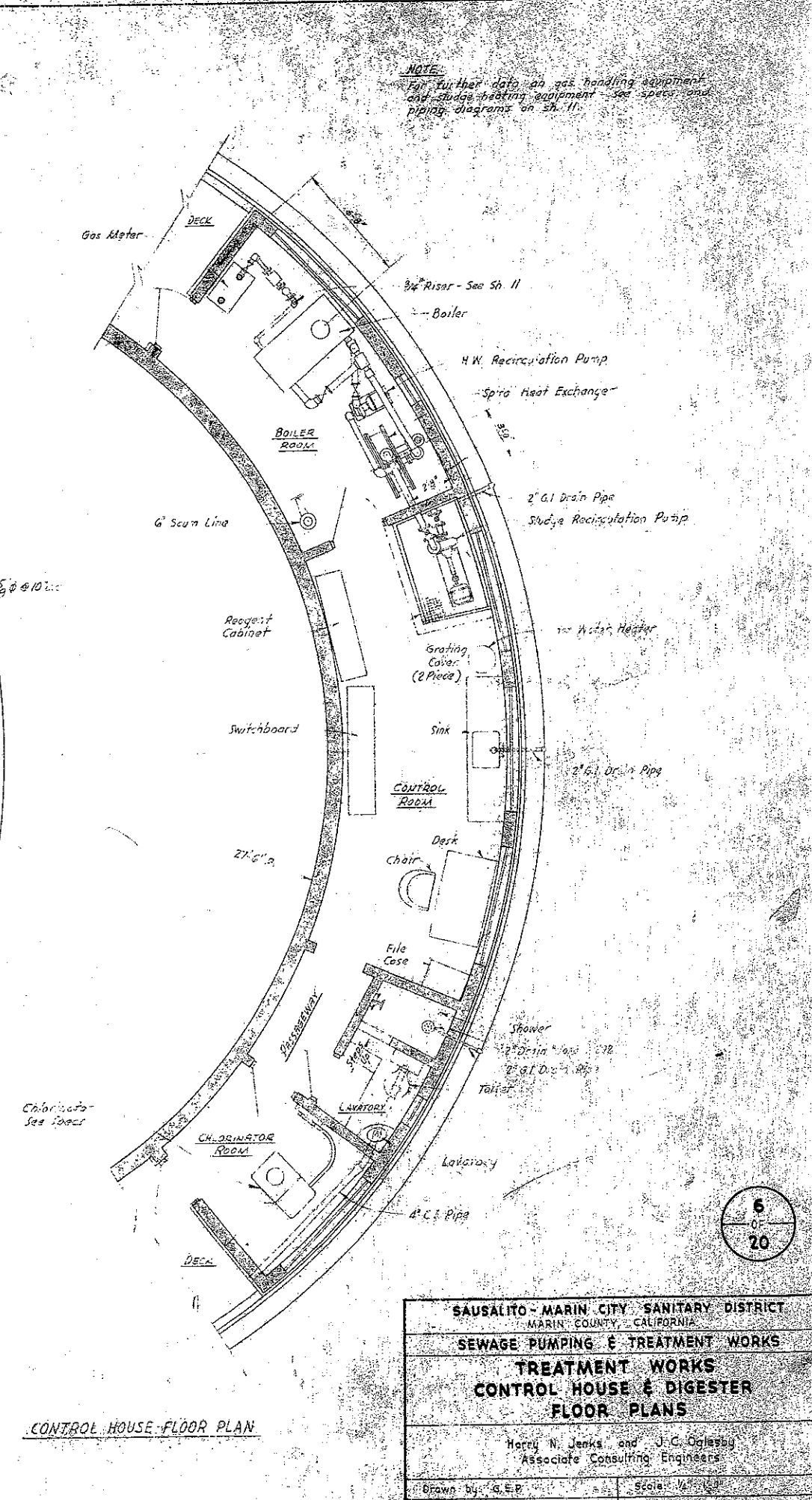
For Water & Gas Lines in Control House See Specs. & Plumbing & Gas Diagrams Sh. 11

NOTE

For further data on gas handling equipment and sludge heating equipment see specs and piping diagrams on Sh. 11.



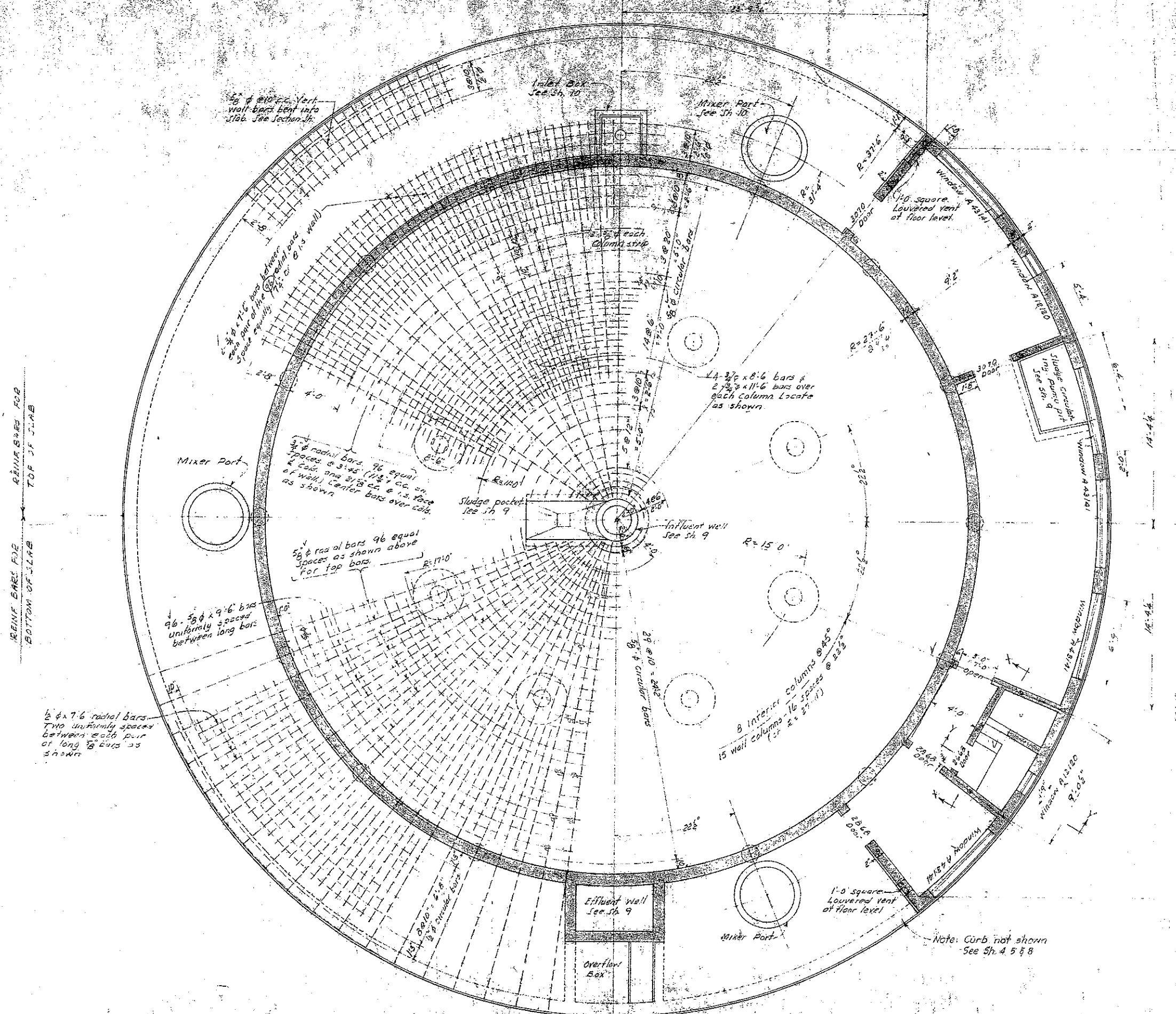
DIGESTER FLOOR PLAN



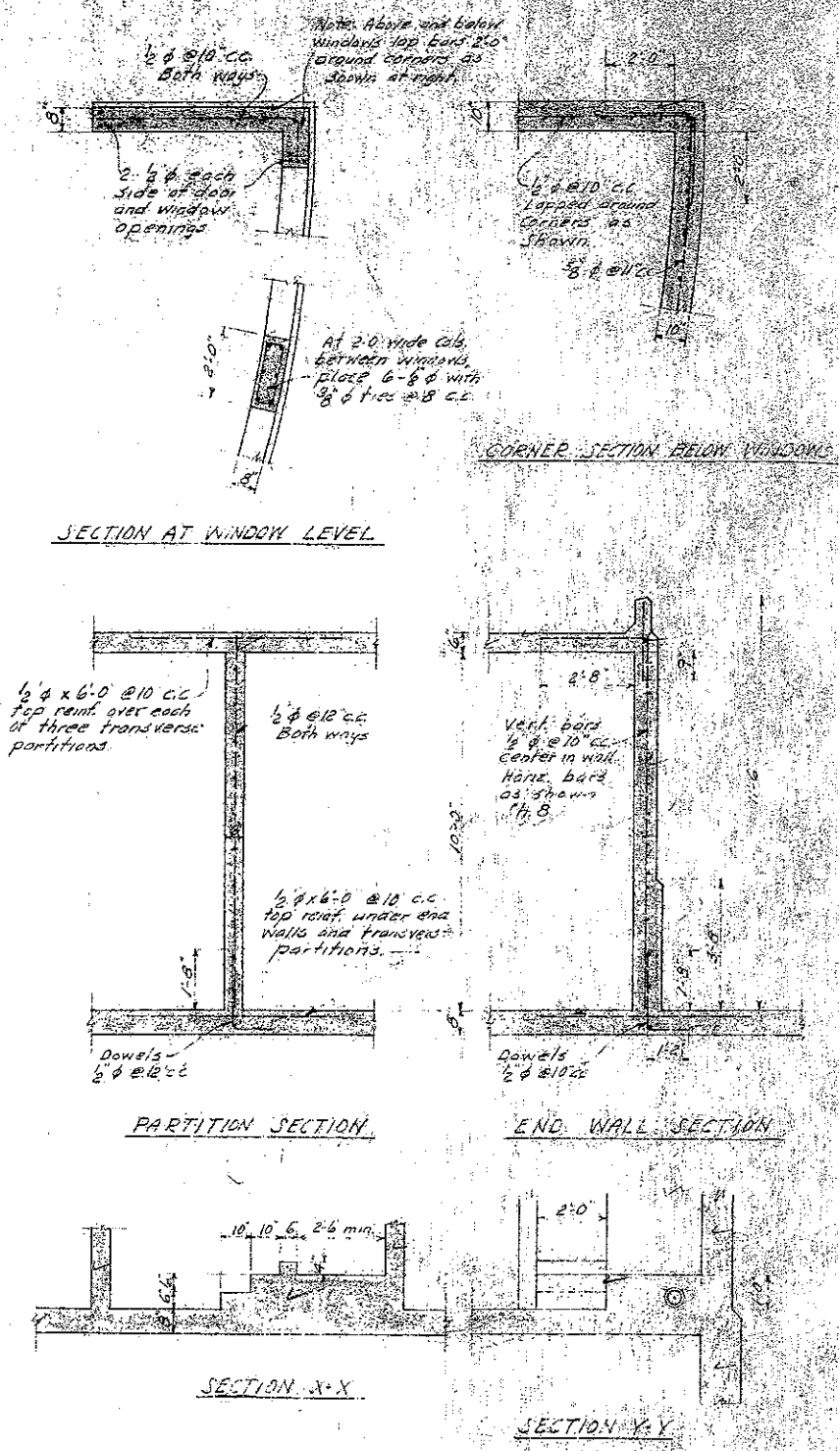
CONTROL HOUSE FLOOR PLAN

SAUSALITO-MARIN CITY SANITARY DISTRICT MARIN COUNTY, CALIFORNIA	
SEWAGE PUMPING & TREATMENT WORKS	
TREATMENT WORKS CONTROL HOUSE & DIGESTER FLOOR PLANS	
Harry N. Jenks and J. C. Oglesby Associate Consulting Engineers	
Drawn by: G. E. P.	Scale: 1/4" = 1'-0"
Checked by: H. N. J.	Date: March 1952





CLARIFIER SLAB & DECK SLAB PLAN  
Scale 1/8" = 1'-0"

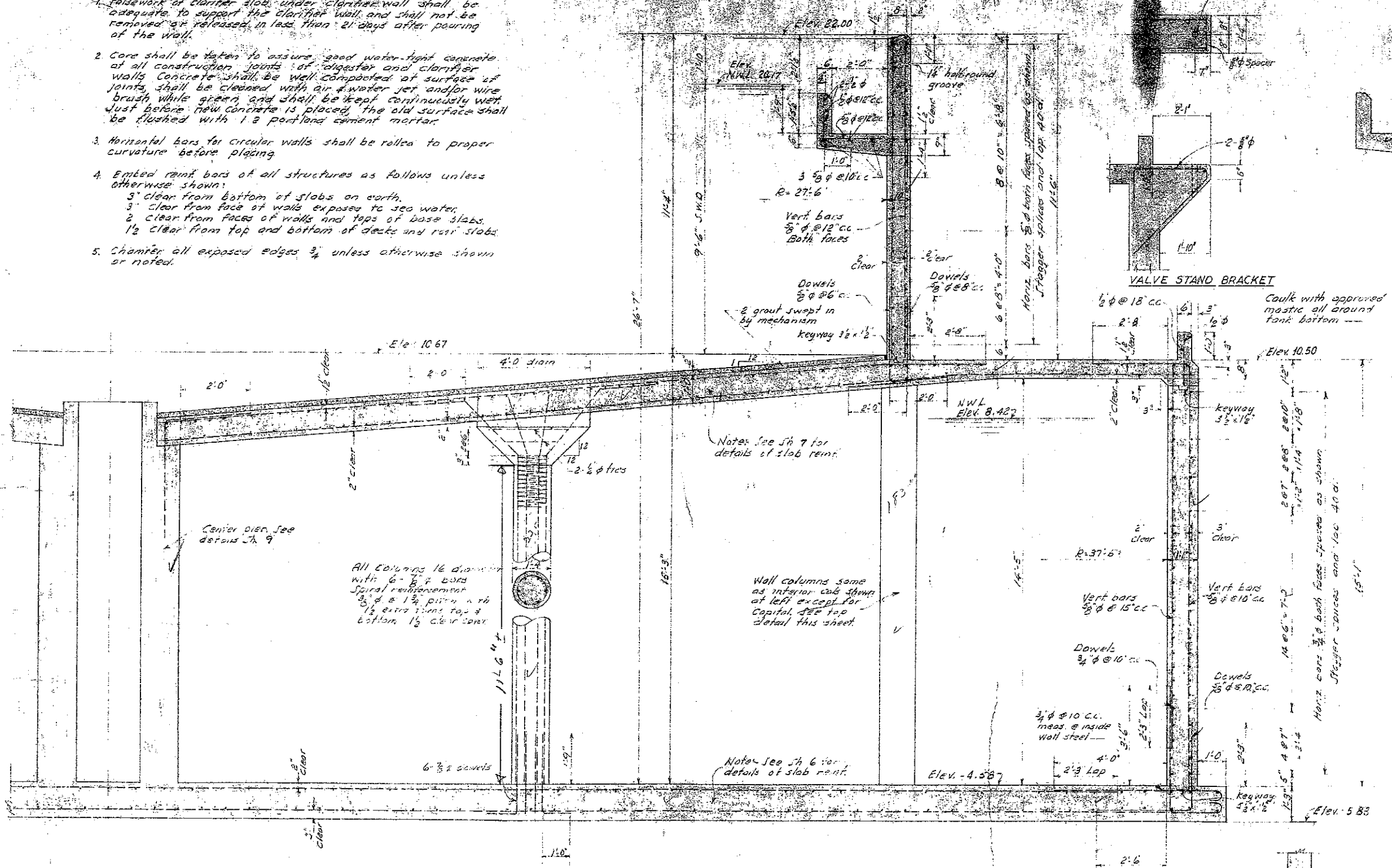


CONTROL HOUSE DETAILS  
Scale 3/8" = 1'-0"

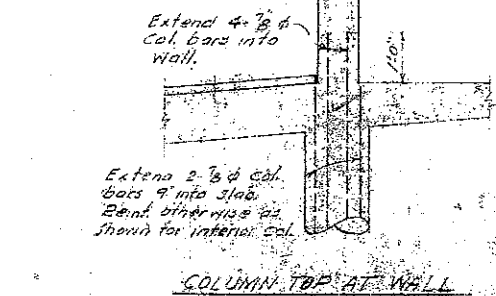
SAUSALITO-MARIN CITY SANITARY DISTRICT MARIN COUNTY, CALIFORNIA	
SEWAGE PUMPING & TREATMENT WORKS	
TREATMENT WORKS DECK SLAB PLAN AND STRUCTURAL DETAILS	
Harry W. Jenks and J. C. Olesby Associate Consulting Engineers	
Drawn by: P.L.A.	Scale: As shown
Checked by: H.N.J.	Date: March 1952

**NOTES**

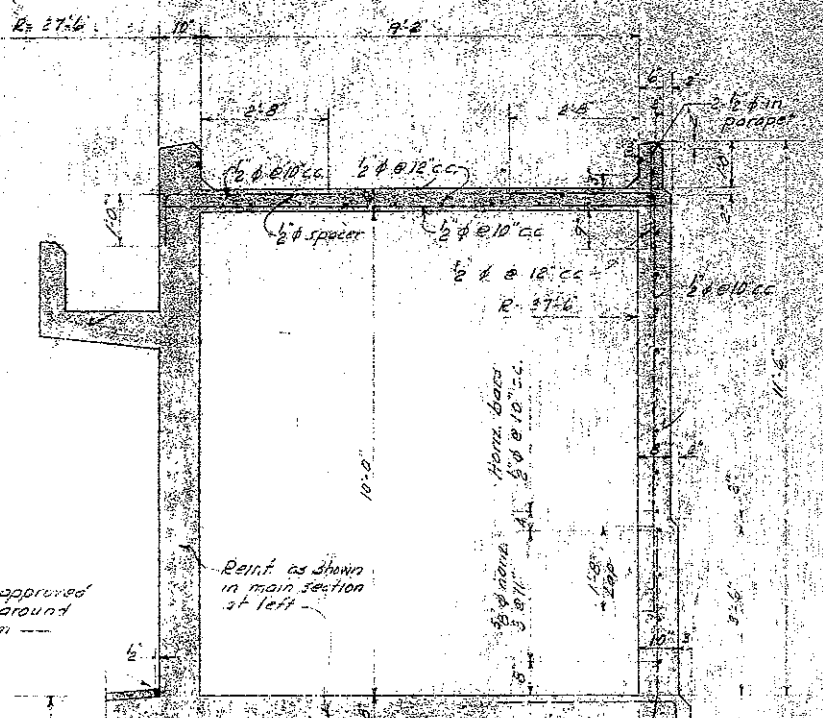
1. Falsework of clarifier slab under clarifier wall shall be adequate to support the clarifier wall, and shall not be removed or released, in less than 21 days after pouring of the wall.
2. Core shall be taken to assure good water-tight concrete at all construction joints of digester and clarifier walls. Concrete shall be well compacted at surface of joints, shall be cleaned with air & water jet and/or wire brush while green, and shall be kept continuously wet just before new concrete is placed, the old surface shall be flushed with 1:2 portland cement mortar.
3. Horizontal bars for circular walls shall be rolled to proper curvature before placing.
4. Embed reinf. bars of all structures as follows unless otherwise shown:
  - 3' clear from bottom of slabs on earth.
  - 3' clear from face of walls exposed to sea water.
  - 2' clear from faces of walls and tops of base slabs.
  - 1/2' clear from top and bottom of decks and roof slabs.
5. Chamfer all exposed edges 3/4" unless otherwise shown or noted.



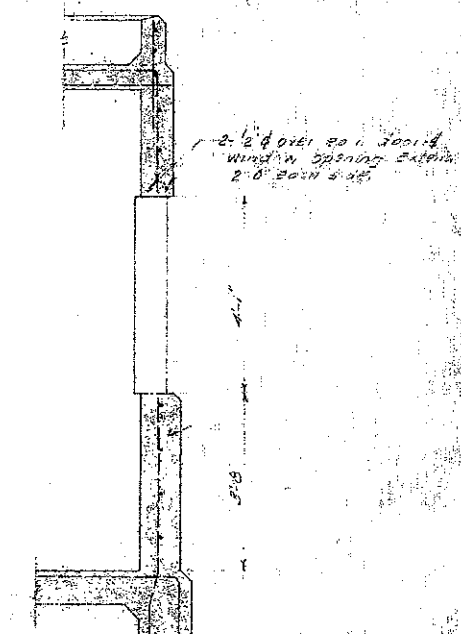
SECTION OF WALL & SLAB REINFORCING



COLUMN TOP AT WALL



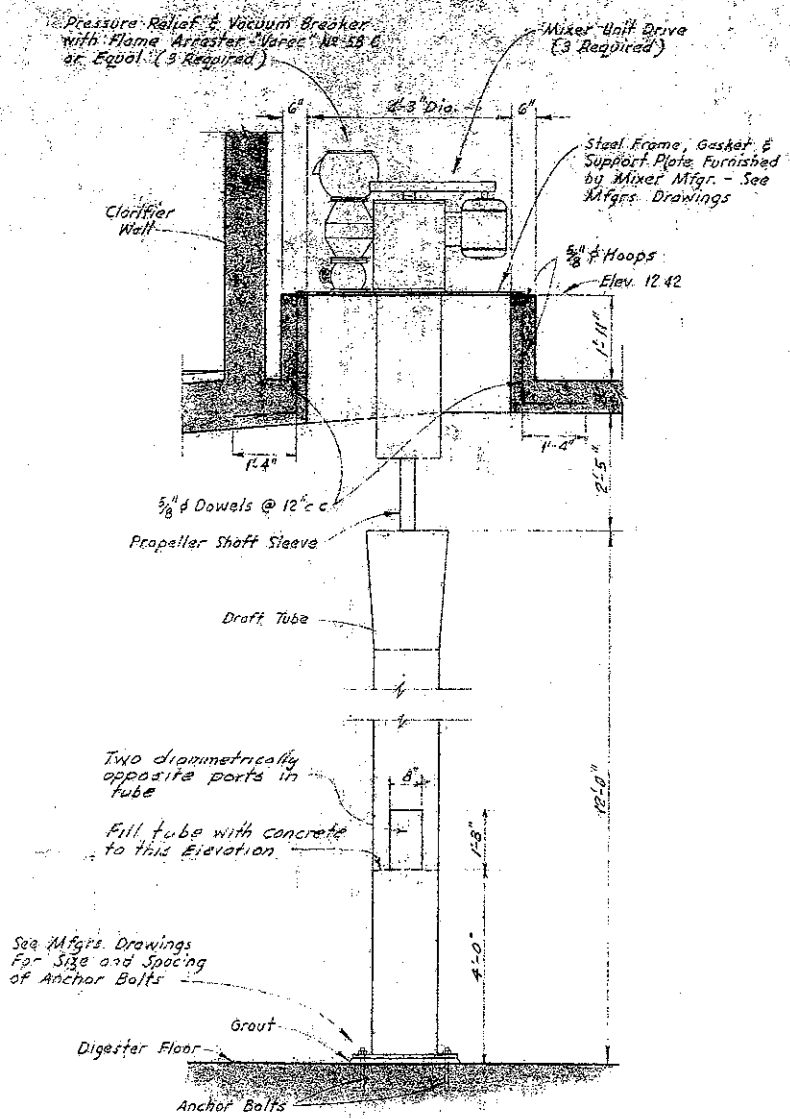
TYPICAL SECTION THRU CONTROL HOUSE



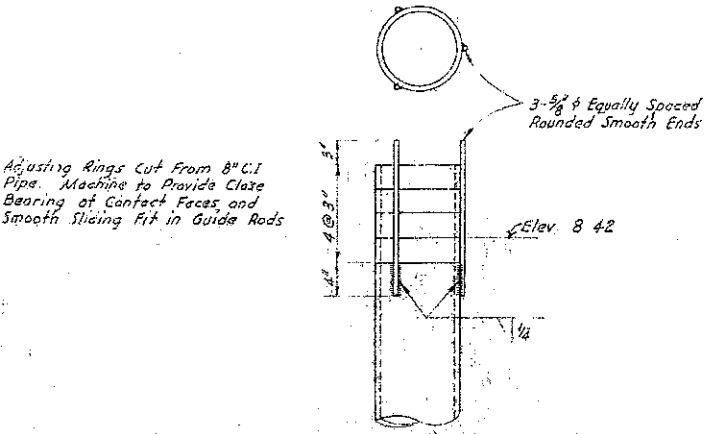
TYPICAL WALL SECTION AT WINDOW

SAUSALITO-MARIN CITY SANITARY DISTRICT MARIN COUNTY, CALIFORNIA	
SEWAGE PUMPING & TREATMENT WORKS	
TREATMENT WORKS STRUCTURAL SECTIONS & DETAILS	
Harry N. Jenks and J. C. Oglesby Associate Consulting Engineers	
Drawn by: S.A.	Scale: 1/4" = 1'-0"
Checked by: S.A.	Date: March 1952

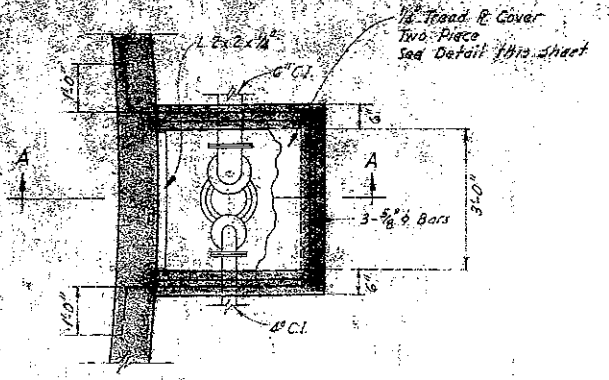




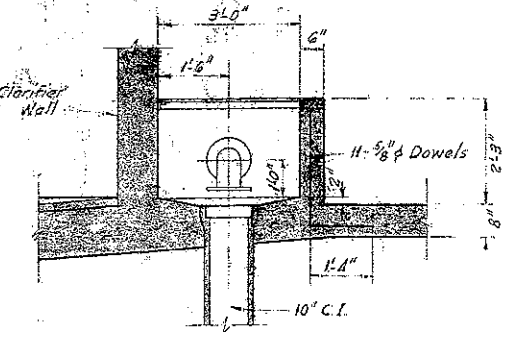
**MIXER PORT & DRAFT TUBE**  
Scale: 1/2" = 1'-0"



**OVERFLOW RINGS**  
Scale: 1" = 1'-0"



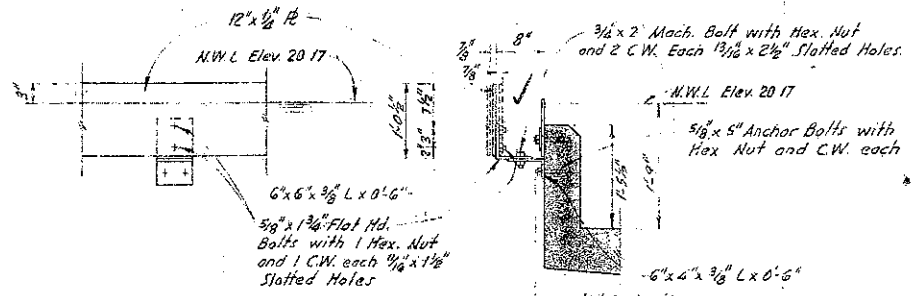
**SECTIONAL PLAN**



**SECTION A-A**

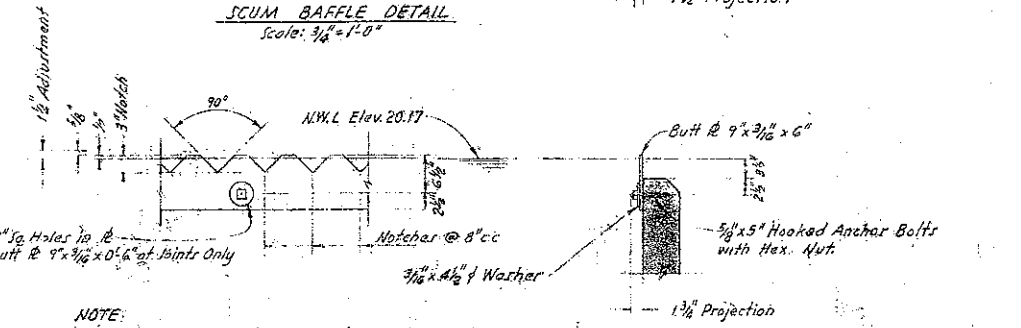
**INLET BOX**

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



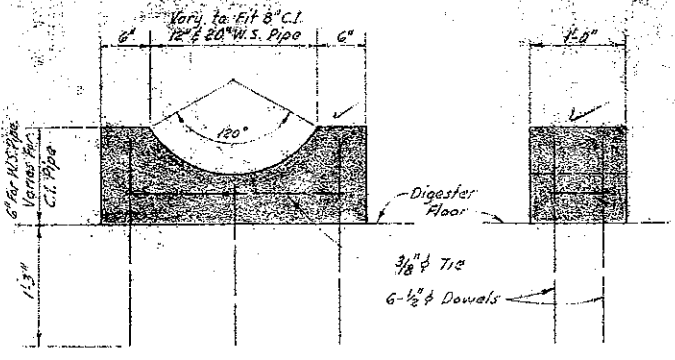
**SCUM BAFFLE DETAIL**

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



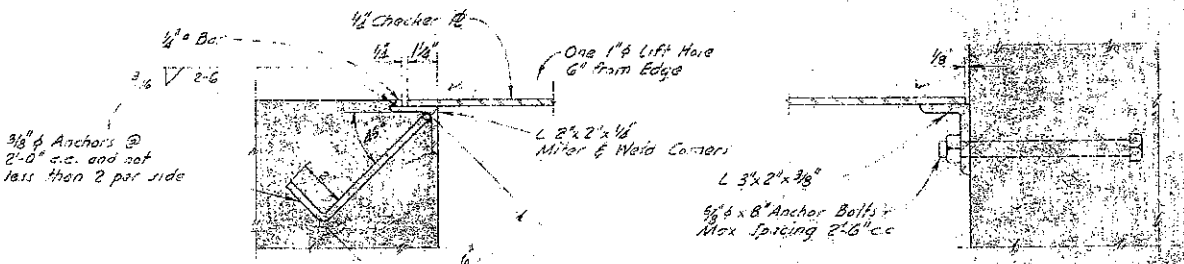
**EFFLUENT WEIR DETAIL**

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



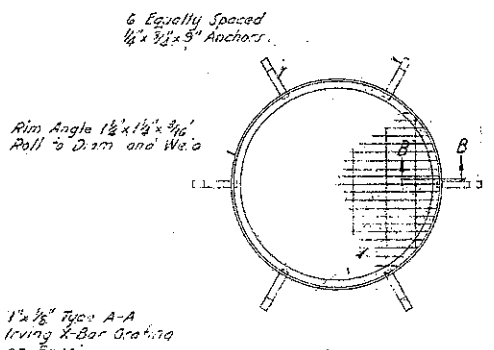
**TYPICAL PIPE SUPPORT**

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



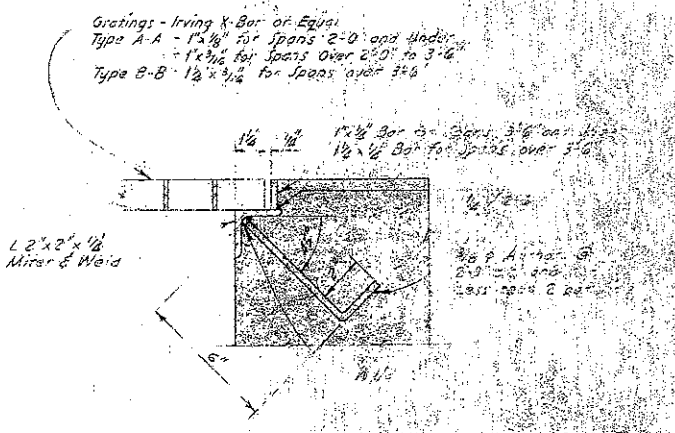
**PLATE COVER & FRAME DETAILS**

Scale: 3" = 1'-0"



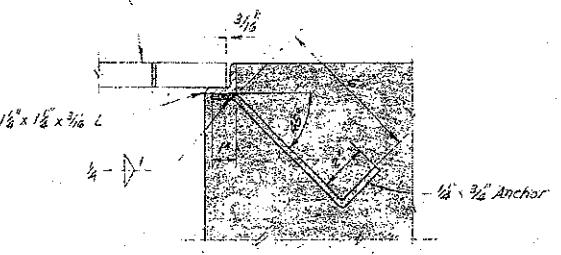
**GRATING DETAIL CIRCULAR OPENINGS**

Scale: 1" = 1'-0"



**GRATING DETAIL RECTANGULAR OPENINGS**

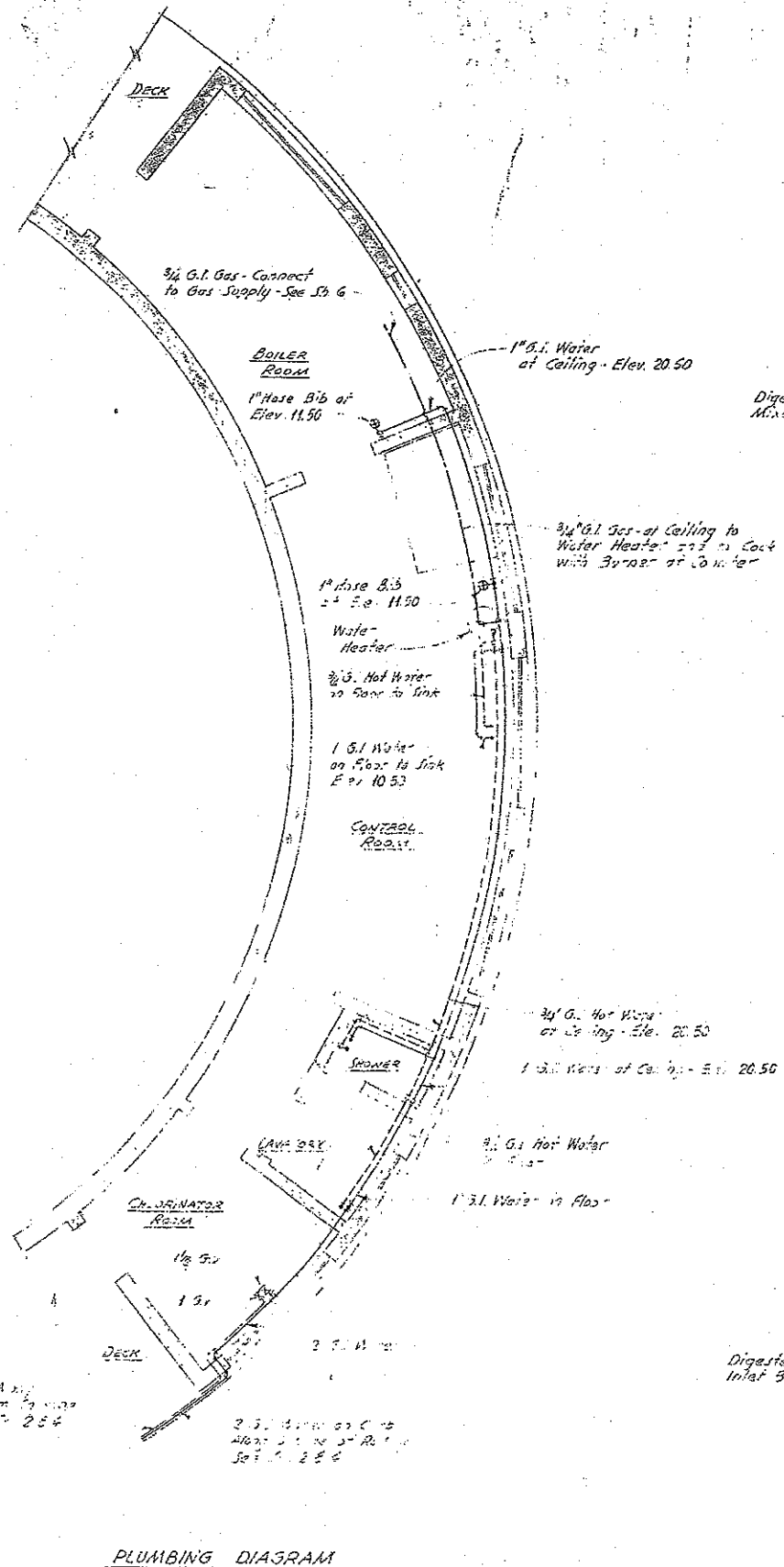
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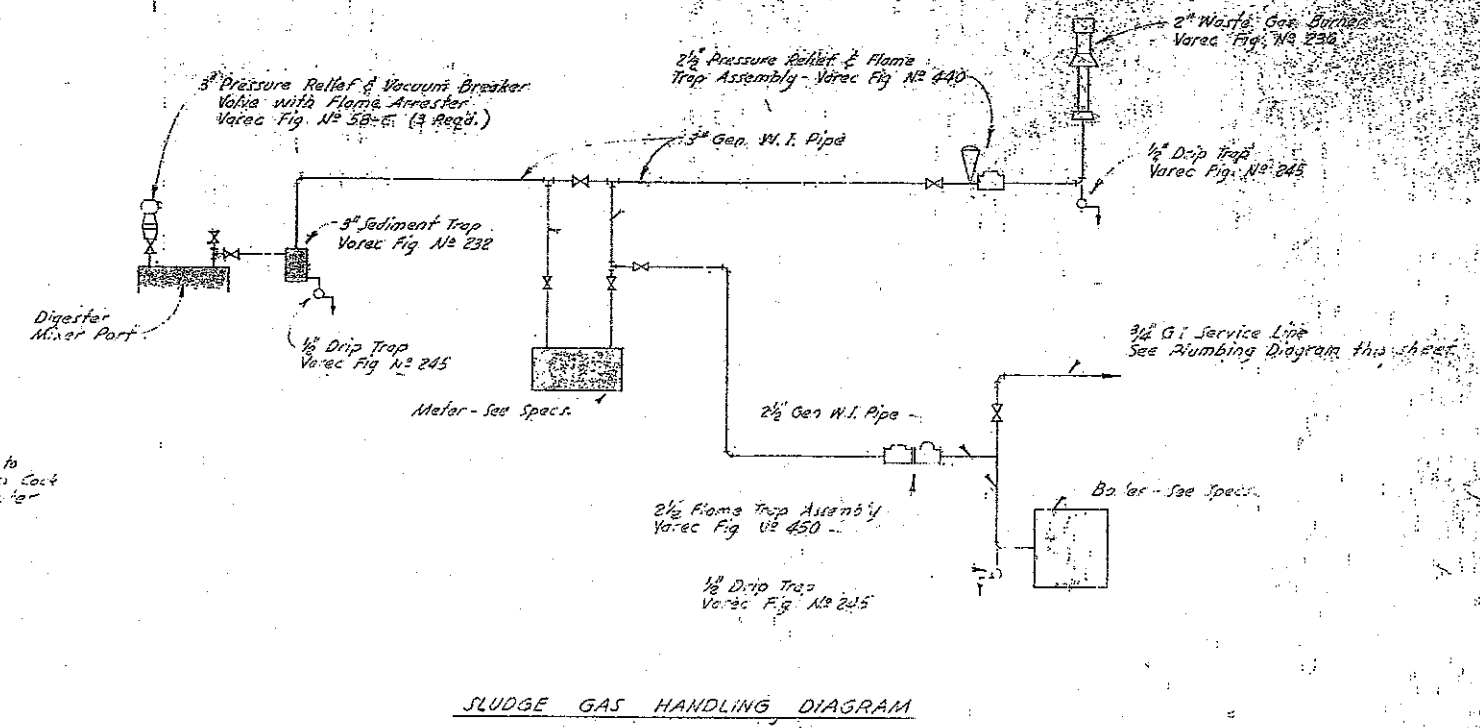
**SECTION B-B**

Scale: 3" = 1'-0"

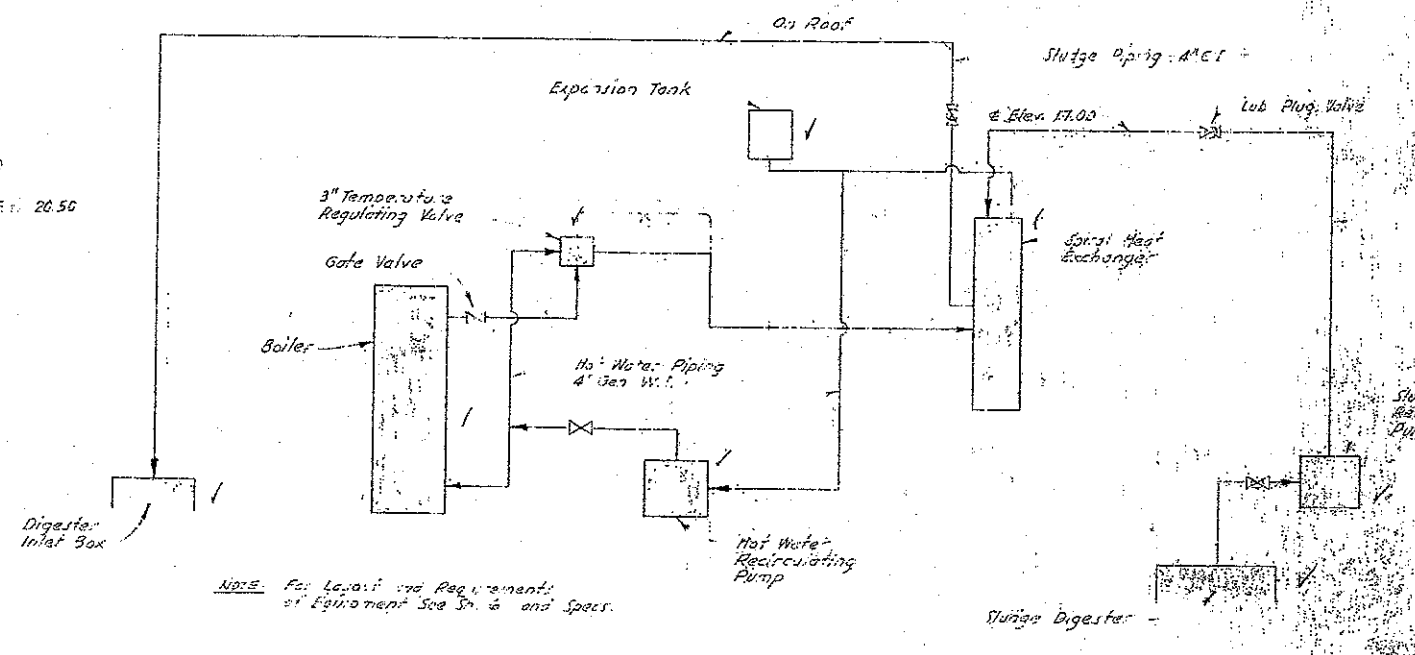
SAUSALITO-MARIN CITY SANITARY DISTRICT MARIN COUNTY, CALIFORNIA	
SEWAGE PUMPING & TREATMENT WORKS	
TREATMENT WORKS MISC. PLANT DETAILS	
Harry N. Jenks and J. C. Oglesby Associates Consulting Engineers	
Drawn by: G.E.R.	Scale: As Shown
Checked by: H.H.U.	Date: March, 1952



PLUMBING DIAGRAM



SLUDGE GAS HANDLING DIAGRAM



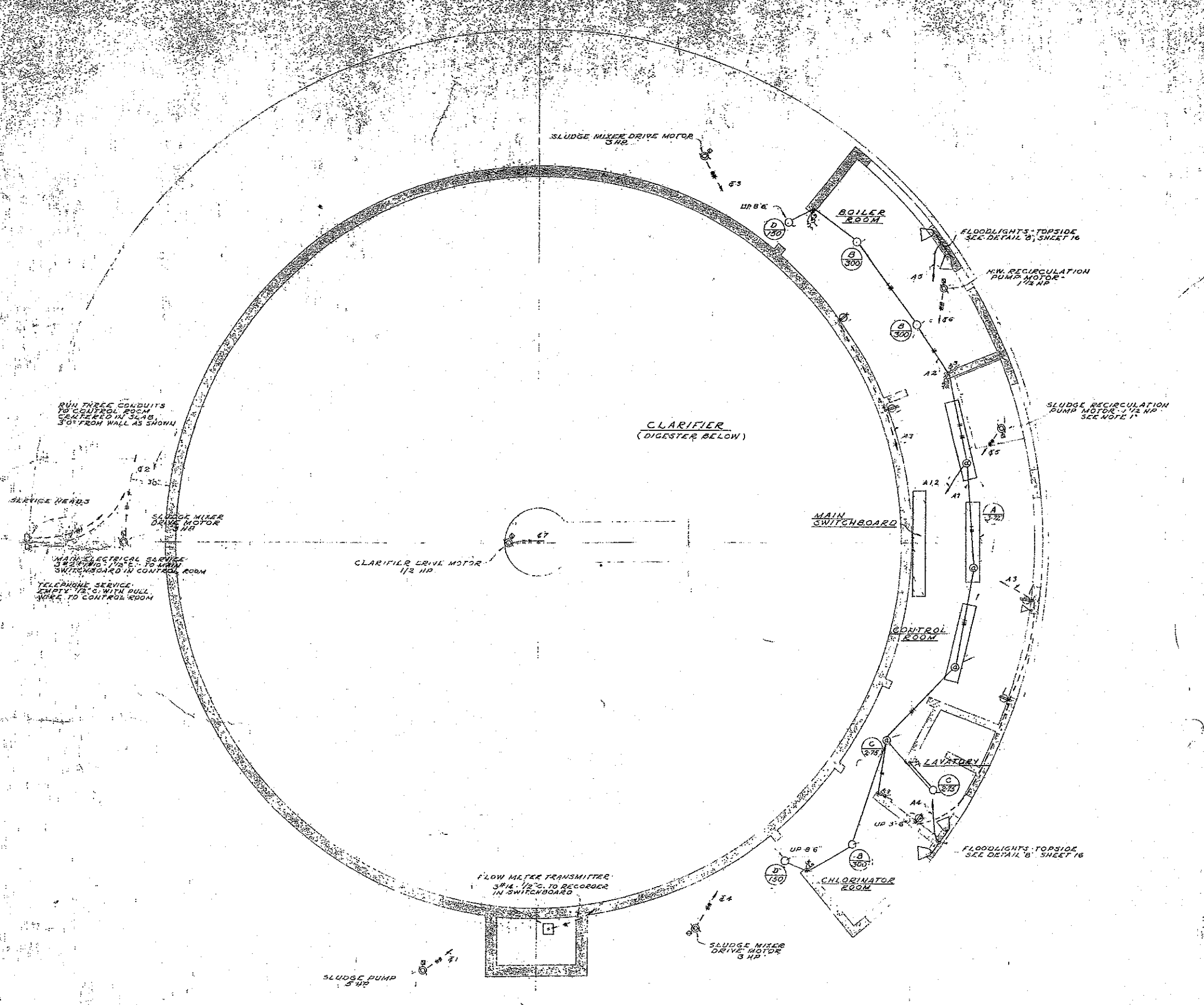
SLUDGE HEATING EQUIPMENT & PIPING FLOW DIAGRAM

1 3/4\"/>

2 3/4\"/>

NOTE: For Layout and Requirements of Equipment See Sp. & and Specs.

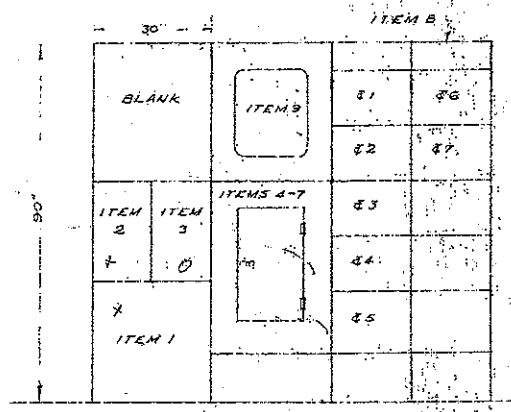
SAUSALITO-MARIN CITY SANITARY DISTRICT MARIN COUNTY, CALIFORNIA	
SEWAGE PUMPING & TREATMENT WORKS	
TREATMENT WORKS PIPING DIAGRAMS & DETAILS	
Hazen, W. Jones and J. C. Orlesby Associate Consulting Engineers	
Drawn by: J. P.	Scale: As Shown
Checked by: H. W. J.	Date: March 1952



MAIN SWITCHBOARD SCHEDULE		
ITEM	DESCRIPTION	REMARKS
1	CIRCUIT BREAKER - 3 POLE 90 AMP.	MAIN CIRCUIT BREAKER
2	METER SOCKET - 3 PHASE, 4 WIRE DELTA	METER FURNISHED BY UTILITY COMPANY
3	METER SOCKET - SPACE ONLY - BLANK	
4	CIRCUIT BREAKER - 3 POLE 70 AMP.	CONTROLLING ITEM
5	CIRCUIT BREAKER - 2 POLE 30 AMP.	CONTROLLING ITEM
6	CIRCUIT BREAKER - 2 POLE 30 AMP. SPACE ONLY	
7	PANEL BOARD 7 1/2 INCHES 200 A. CIRCUITS	CONTROLLING LIGHTING & RESET
8	MOTOR CONTROL CENTER	SEE SCHEDULE BELOW
9	FLOW METER REGISTER	

MOTOR CONTROL CENTER SCHEDULE					
ITEM	CONTROLLING	SIZE	POLES	TRIP	AUXILIARY EQUIPMENT
1	SLUDGE PUMP	1	3	30 A.	START-STOP WITH PILOT
2	SLUDGE MIXER DRIVE MOTOR	1	3	20 A.	
3		1	3	20 A.	
4		1	3	20 A.	
5	SLUDGE RECIRCULATION PUMP	1	3	15 A.	
6	H.W. RECIRCULATION PUMP	1	3	15 A.	
7	CLARIFIER DRIVE MOTOR	1	3	15 A.	
8	SPACE ONLY	1	3		
9		1	3		
10		1	3		

LIGHTING FIXTURE SCHEDULE				
SYMBOL	MANUFACTURER'S NO.	LAMPS	MOUNTING	REMARKS
A	MILLER CS 837-6	2 - 72" T12	UP 9'-0"	
B	SMOOT HOLMAN 13818	1 - 300 W. IF	JUNCTION BOX	
C	SMOOT HOLMAN LH 1112	2 - 75 W. IF	SURFACE	
D	BENJAMIN 7112 A	1 - 150 W. IF	BRACKET #6895	TYRE M JUNCT. VAPORLET
E	BENJAMIN 7613 CX	1 - 200 W. IF	JUNCTION BOX	
F	ALLBRITE 62296 430	2 - 96" T12	SURFACE	



MAIN SWITCHBOARD ELEV.

NOTES:  
SEE OTHER DRAWINGS OF THIS PROJECT FOR DETAILS AND DIMENSIONS WHICH SHALL APPLY TO THIS SHEET.

NOTES:  
WHEN WORKING TO CLOSE TOLERANCE VERIFY DIMENSIONS ON ARCHITECTURAL DRAWINGS

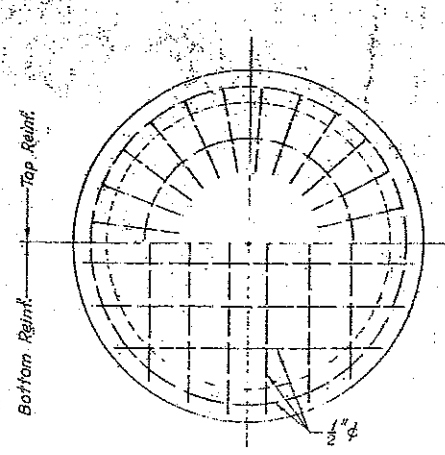
SAUSALITO - MARIN CITY SANITARY DISTRICT  
MARIN COUNTY - CALIFORNIA  
SEWAGE PUMPING & TREATMENT WORKS

**TREATMENT WORKS  
ELECTRICAL LAYOUT**

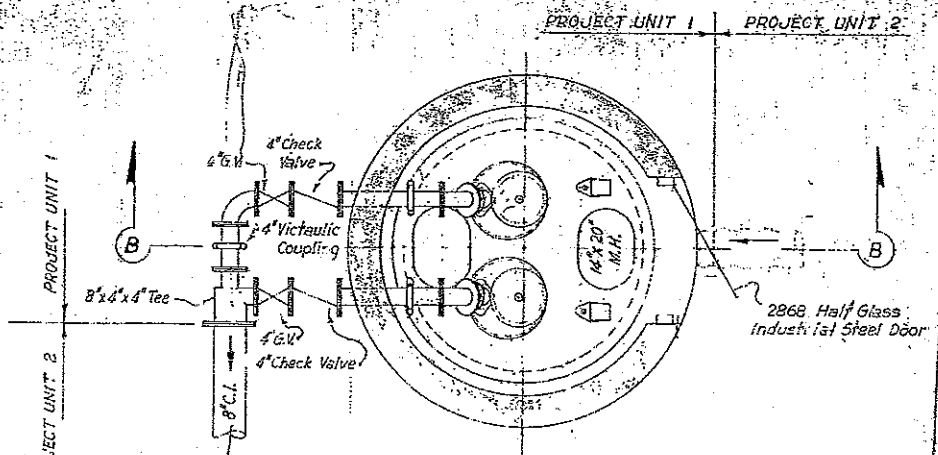
Harry N. Jenks and J. C. Oglesby  
Associate Consulting Engineers

Drawn by: W.L. [Signature]  
Checked by: G.S.E. [Signature]

Scale: 1/4" = 1'-0"  
Date: Month 1952

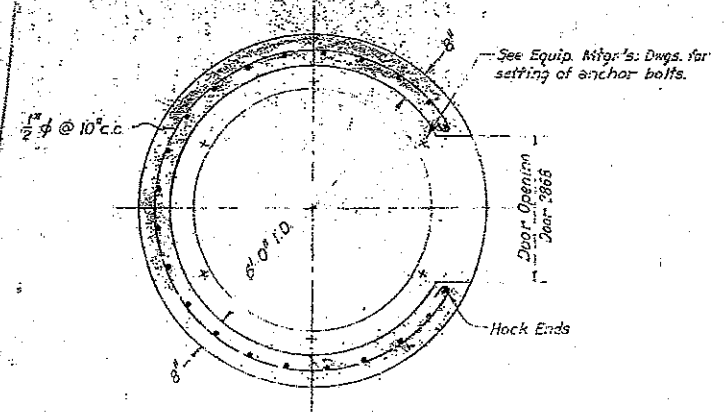


TOP SLAB

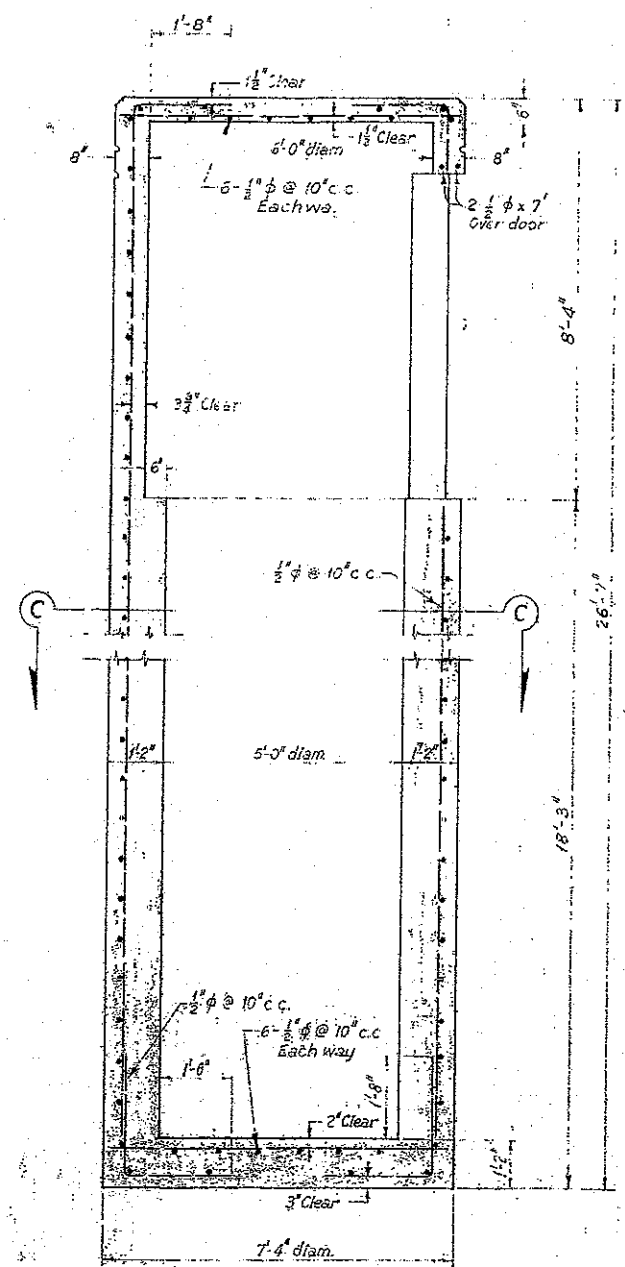


SECTIONAL PLAN A-A

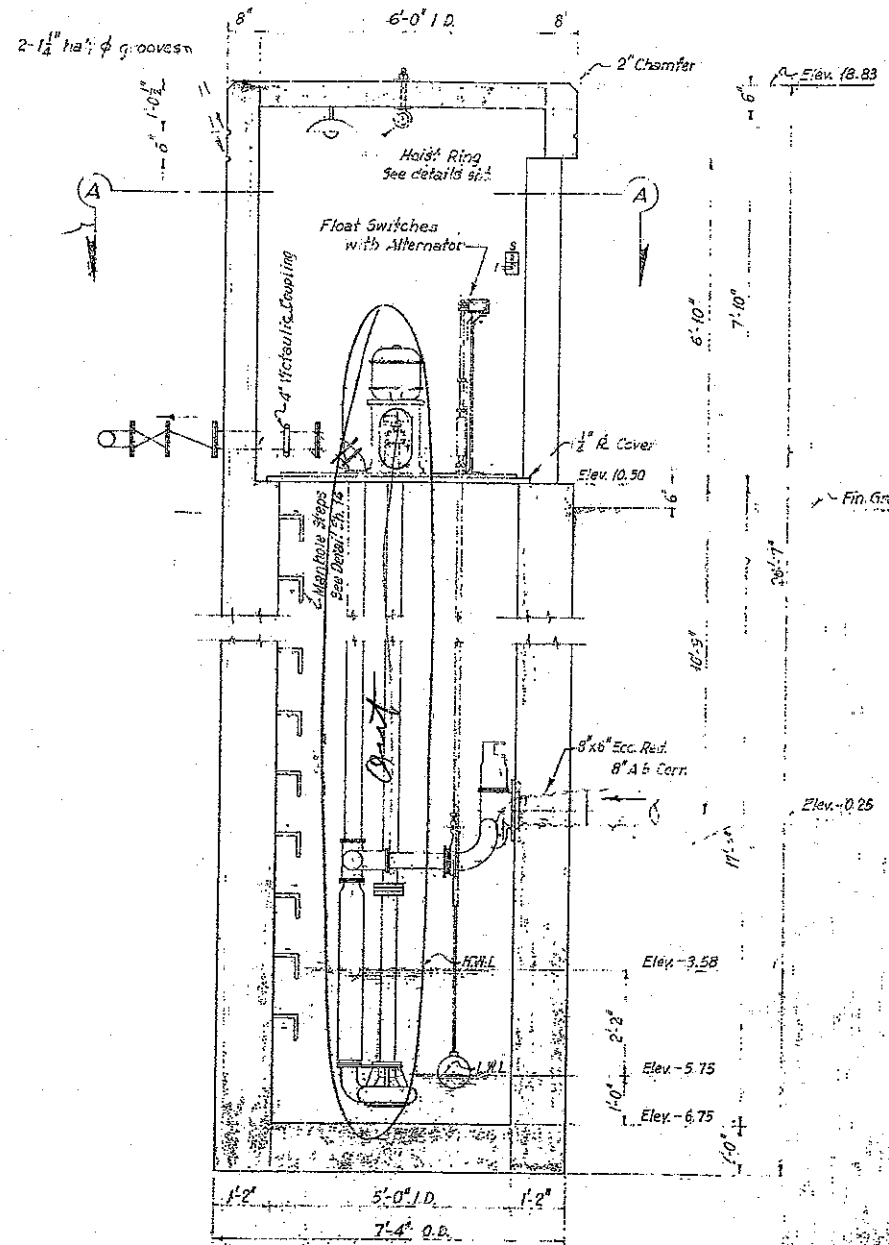
Contractor to check orientation in field and make connection to existing piping



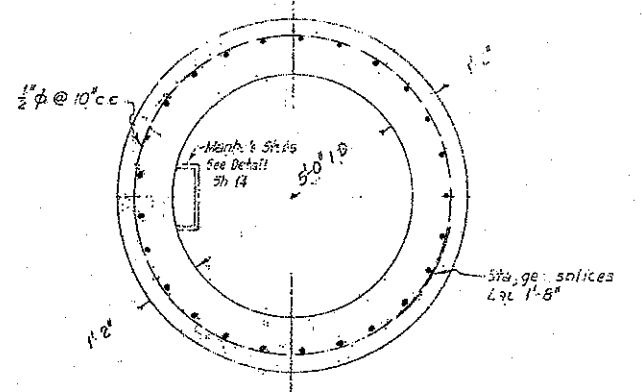
SECTIONAL PLAN A-A



SECTION B-B



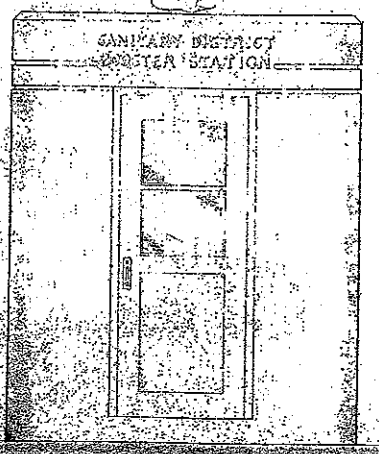
SECTION B-B



SECTIONAL PLAN C-C

NOTES

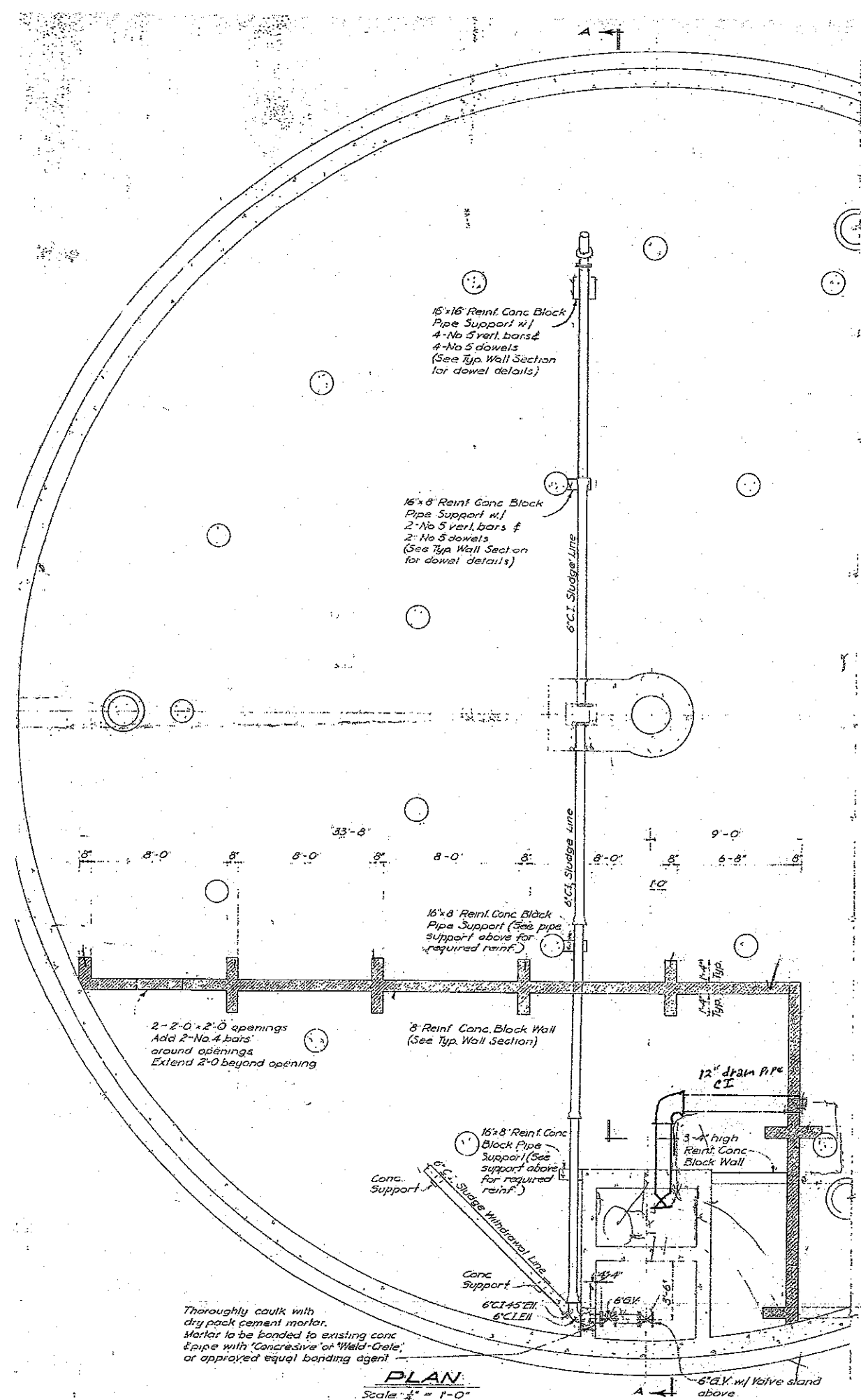
1. See details of mechanical equipment.
2. Booster Station equipment shall be of the following type: Type F, but not centrifugal equipment, "Flush Seal" unit, or equal.
3. Each pump shall be provided with electrical starting and control equipment as specified, together with mechanical equipment.
4. Provide electric light and switch as indicated.



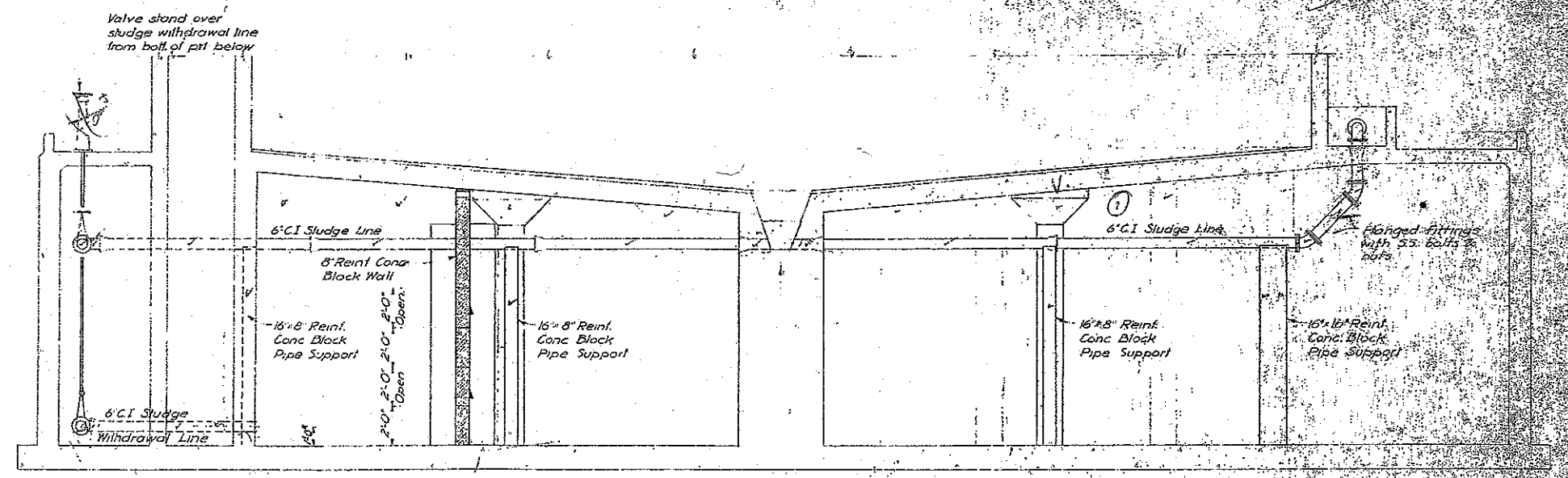
ELEVATION

**SAUSALITO-MARIN CITY SANITARY DISTRICT**  
 MARIN COUNTY, CALIFORNIA  
**SEWAGE PUMPING & TREATMENT WORKS**  
**HIGHWAY BOOSTER STATION**  
**PLANS AND DETAILS**  
 Harry N. Jenks and J. C. Oglesby  
 Associate Consulting Engineers  
 Drawn by: E.L.S.      Scale: 1/2" = 1'-0"

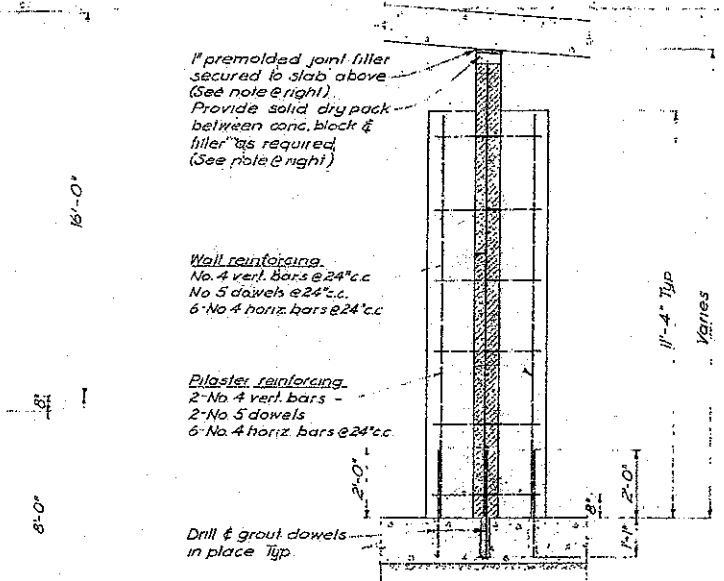




**PLAN**  
Scale: 1/4" = 1'-0"



**SECTION A-A**  
Scale: 1/4" = 1'-0"



**TYP. WALL SECTION**  
Scale: 1/4" = 1'-0"

**SPECIFICATIONS**

- 1. Reinforcing Concrete Block** - Units shall conform with the requirements for Grade A Units in the A.S.T.M. Standard Specifications for Hollow Concrete Masonry Units (C-90). All cells shall be filled with grout. Cleanout holes required at bottom of each vertical cell. Grout may be done in lifts of not more than half the wall height and with a interval between successive lifts of 10 to 50 minutes.
- 2. Mortar** - Mortar shall be Type S, Portland Cement and Aggregate developing a compressive strength of not less than 3000 psi in 28 days.
- 3. Reinforcing Steel** - Reinforcing steel shall be intermediate grade deformed bars in accordance with A.S.T.M. Designation A-305. All splices shall be lapped 24 diameters unless otherwise shown.
- 4. Cast Iron Pipe** - All pipe shall conform to the specifications of the current standard specification of the American Standard Association ASA A216, Class 150 with bell ends, except pipe at 45° bell end shall have flange as required. Bell and spigot ends may be either beveled, lead or caulked, or approved mechanical joints.
- 5. Gate Valves** - Gate valves shall be low, or equal, iron body, bronze mounted non-rising stem, double-disc, parallel seat, designed for working pressure of not less than one hundred (100) psi.

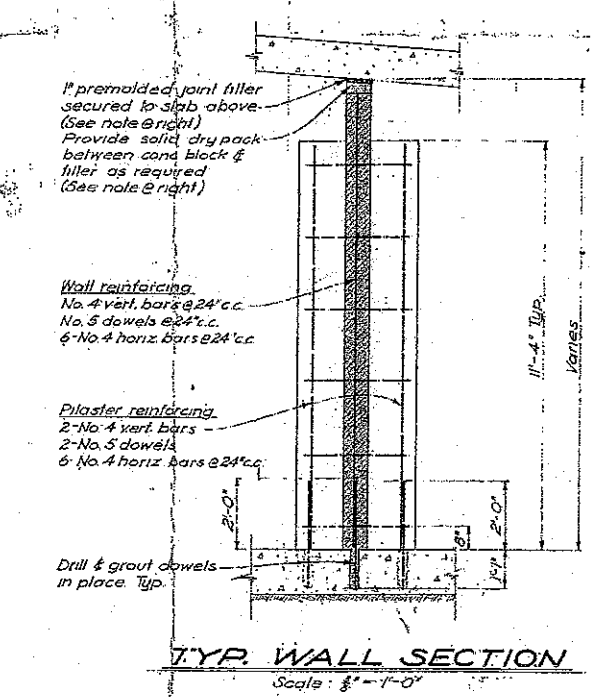
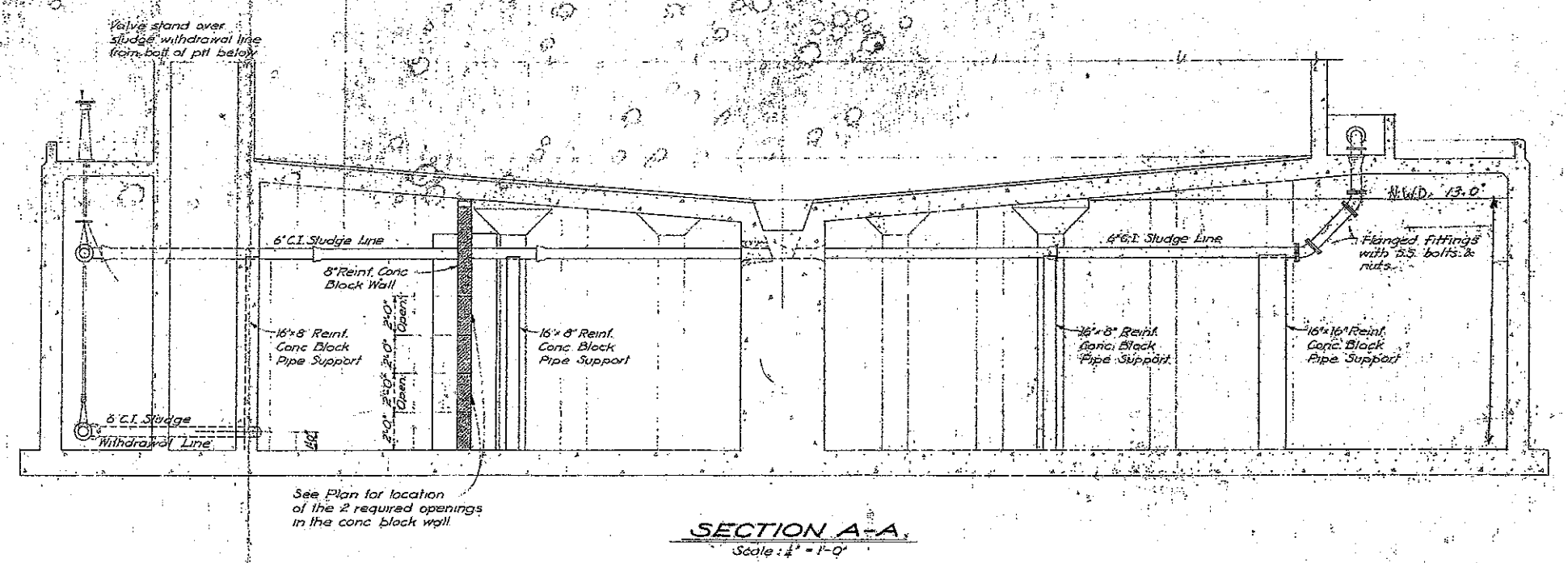
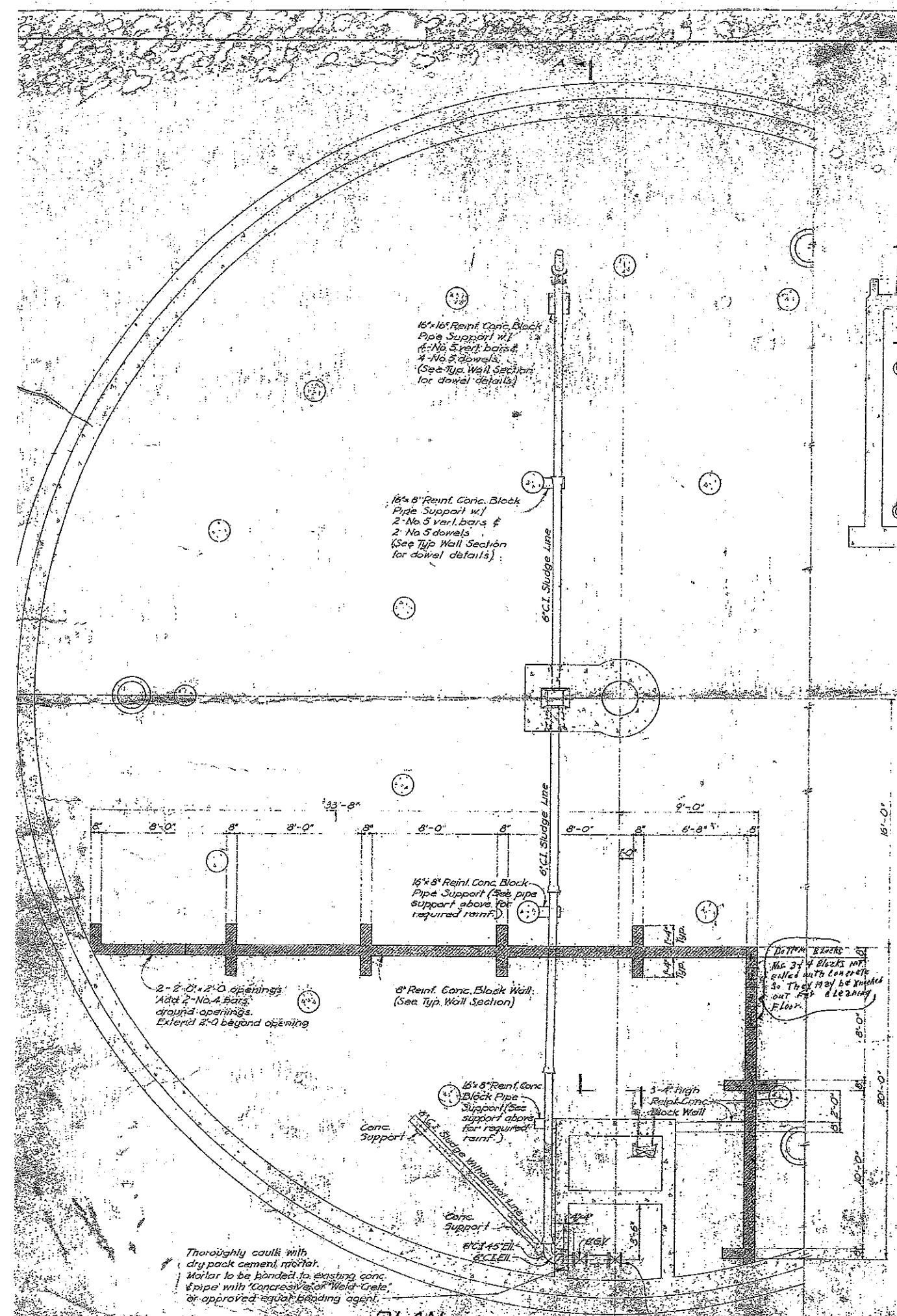
**Note:**  
13'-8" max. height of wall. Space between 13'-8" wall and ceiling to be left open where ceiling height is less than 13'-8", treat as shown in Typ Wall Section 2 left.

SAUSALITO MARIN CITY SANITARY DISTRICT  
MARIN COUNTY, CALIFORNIA  
**SEWAGE TREATMENT WORKS IMPROVEMENT**

**DIGESTER TANK MODIFICATIONS**

HARRY N. JENKS - JOHN H. JENKS  
CONSULTING SANITARY ENGINEERS  
P.O. BOX 100  
PACIFIC HEIGHTS, CALIFORNIA

Drawn by: J.C.J.	Scale: 1/4" = 1'-0"
Checked by: J.H.J.	Date: NOVEMBER 1954



- SPECIFICATIONS**
- 1. Reinforced Concrete Block** Units shall comply with the requirements for Grade A Units in the A.S.T.M. Standard Specifications for Hollow Load-Bearing Concrete Masonry Units (C90-35). All cells shall be filled with grout. Cleanout holes required at bottom of each vertical. Grouting may be done in lifts of not more than half the wall height and with an interval between successive lifts of 10 to 30 minutes.
  - 2. Mortar** Mortar shall be Type "A" - 1 pt. Cement, 3 pts. Aggregate, developing a compressive strength of not less than 3000 p.s.i. in 28 days.
  - 3. Reinforcing Steel** Reinforcing steel shall be intermediate grade deformed bars in accordance with A.S.T.M. Designation A-305. All splices shall be lapped 24 diameters, unless otherwise shown.
  - 4. Cast Iron Pipe** All pipe shall conform to the specifications of the current standard specifications of the American Standard Association, ASA A216, Class 150 with bell and spigot ends or ASA B16.1, Class 125 flange as required. Bell and spigot ends may be either flared and caulked, or approved mechanical joints.
  - 5. Gate Valves** Gate valves shall be iron body, bronze mounted, non-rising stem, double-disc, parallel seat, designed for water working pressure of not less than one hundred (100) p.s.i.

**Note:**  
13'-8" max. height of wall. Space between 13'-8" wall and ceiling to be left open. Where ceiling height is less than 13'-8", treat as shown in Typ. Wall Section @ left.

SAUSALITO-MARIN CITY SANITARY DISTRICT  
MARIN COUNTY, CALIFORNIA

**SEWAGE TREATMENT WORKS IMPROVEMENT**

**DIGESTER TANK MODIFICATIONS**

HARRY N. JENKS - JOHN H. JENKS  
CONSULTING SANITARY ENGINEERS  
PALO ALTO, CALIFORNIA