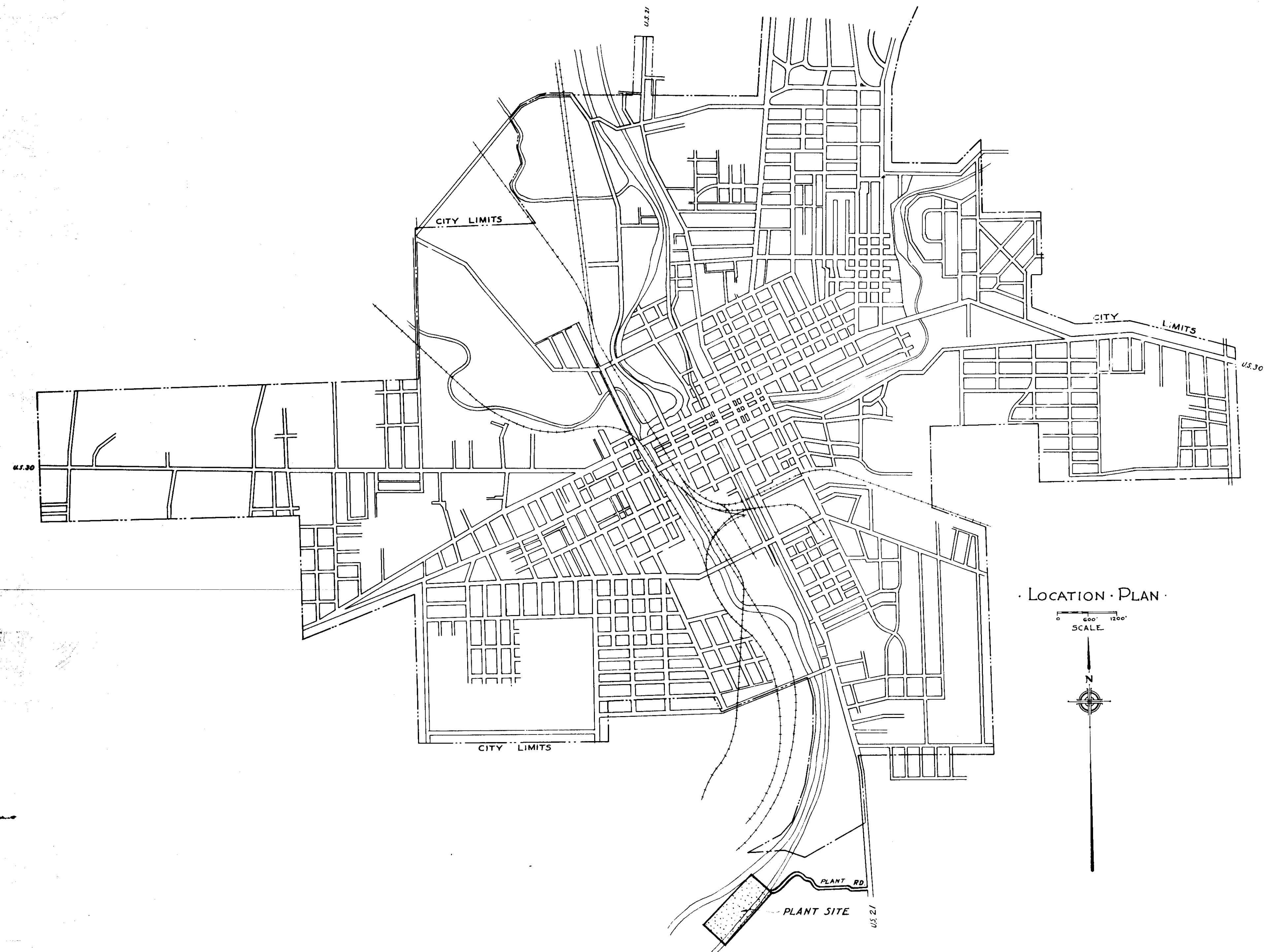


CITY OF MASSILLON OHIO ·
SEWAGE TREATMENT WORKS

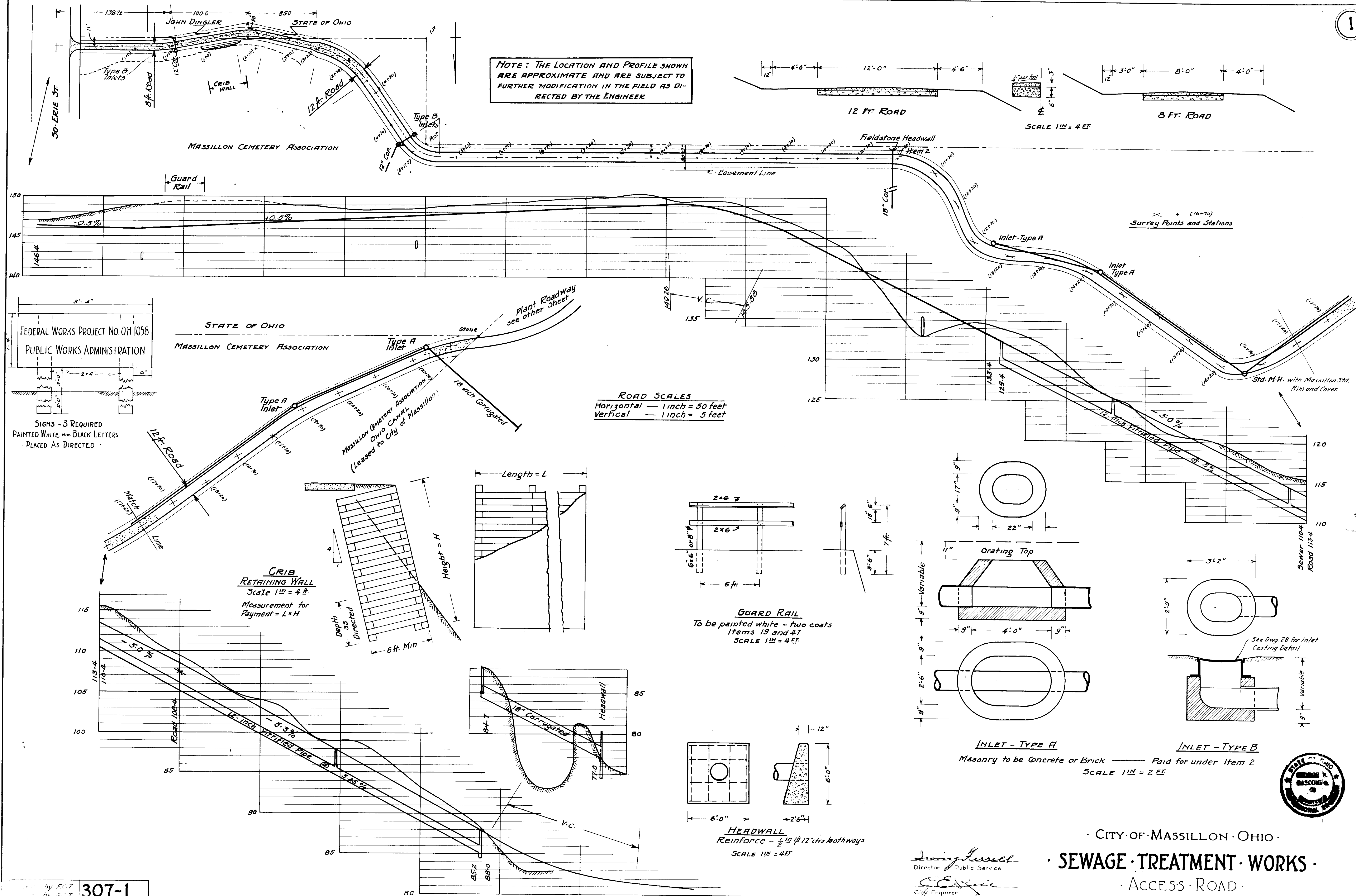


WILLIAM LIMBACH *Mayor*
IRVING FERRELL *Director of Public Service*

C. E. RICE
City Engineer



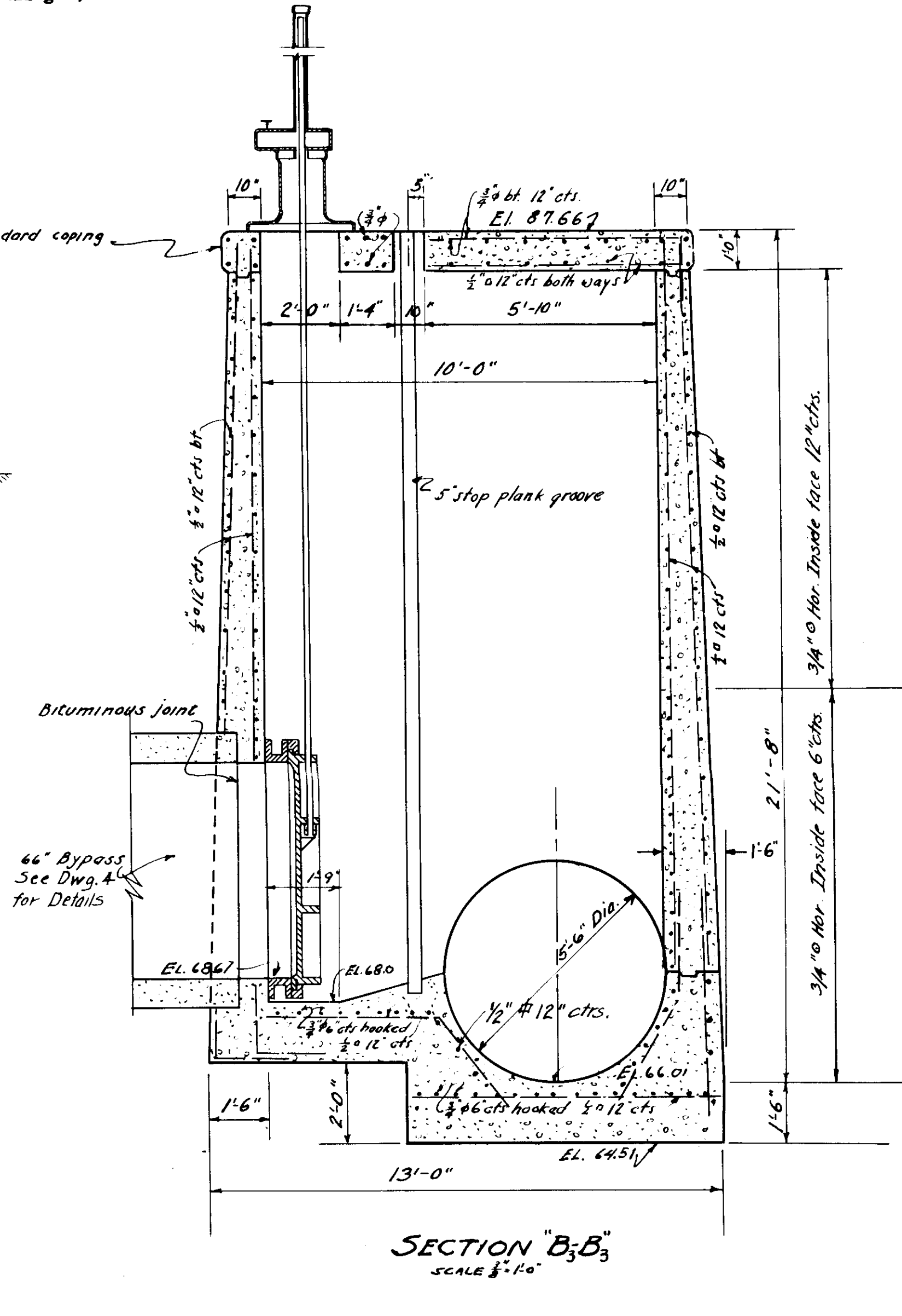
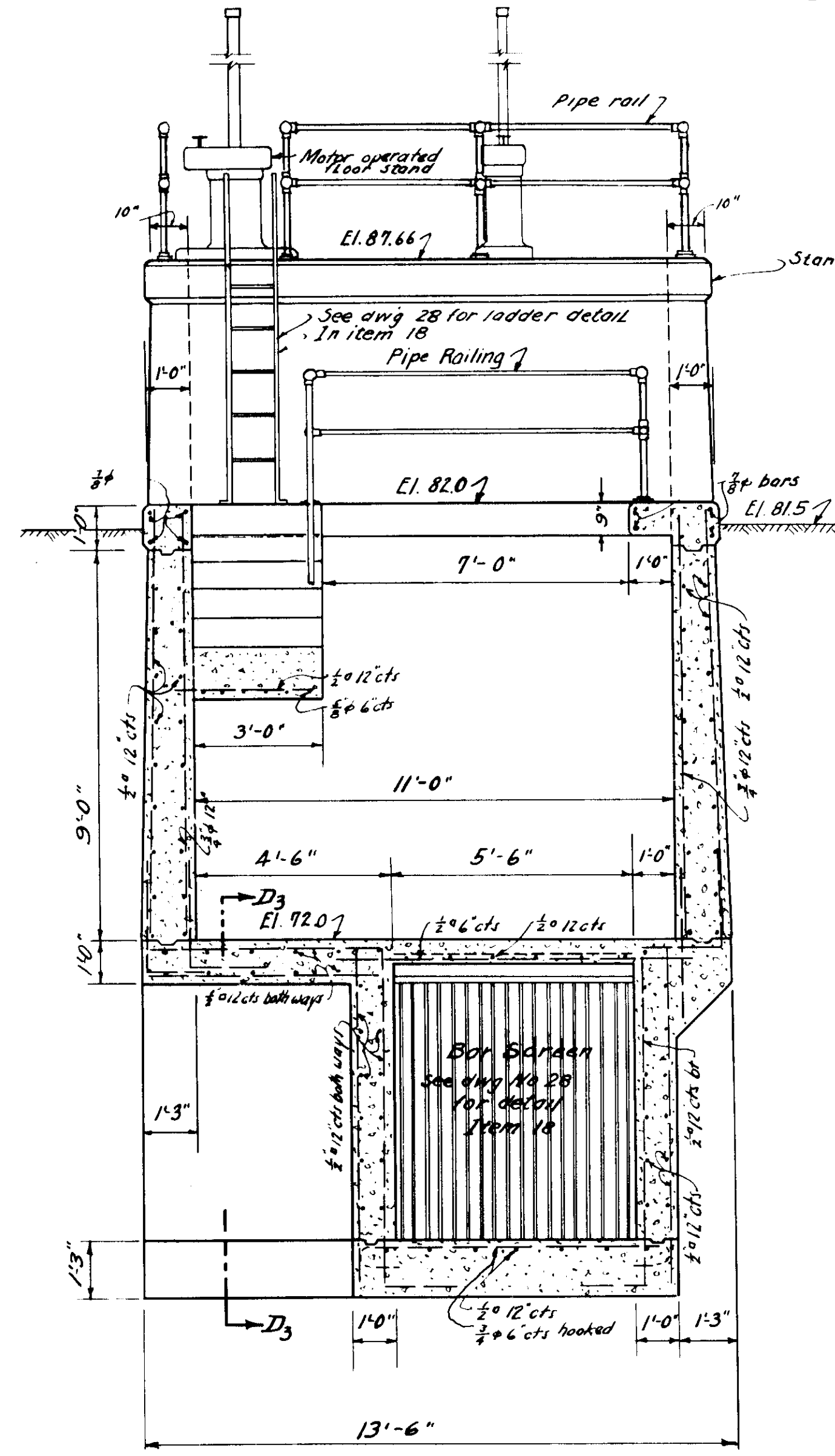
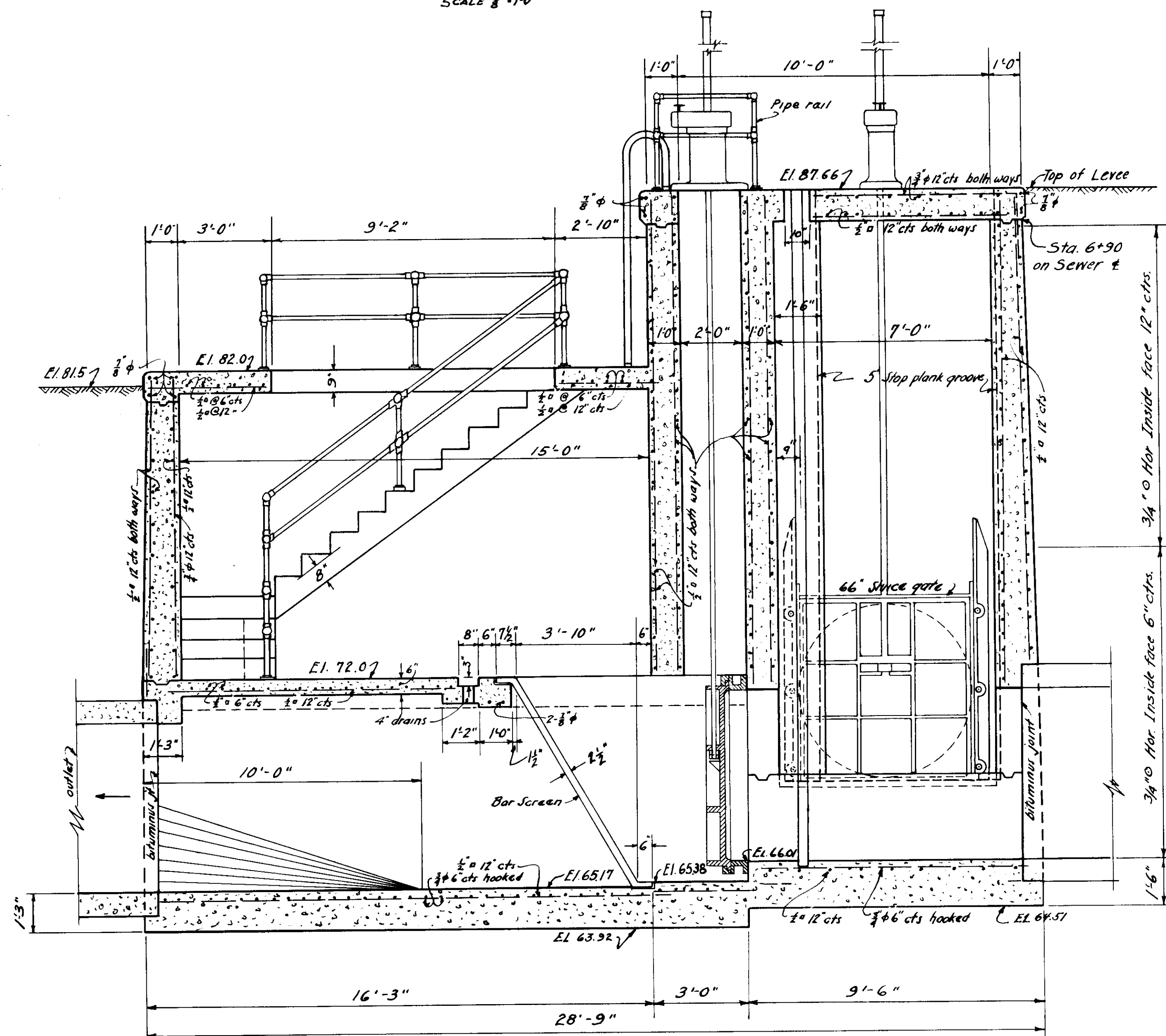
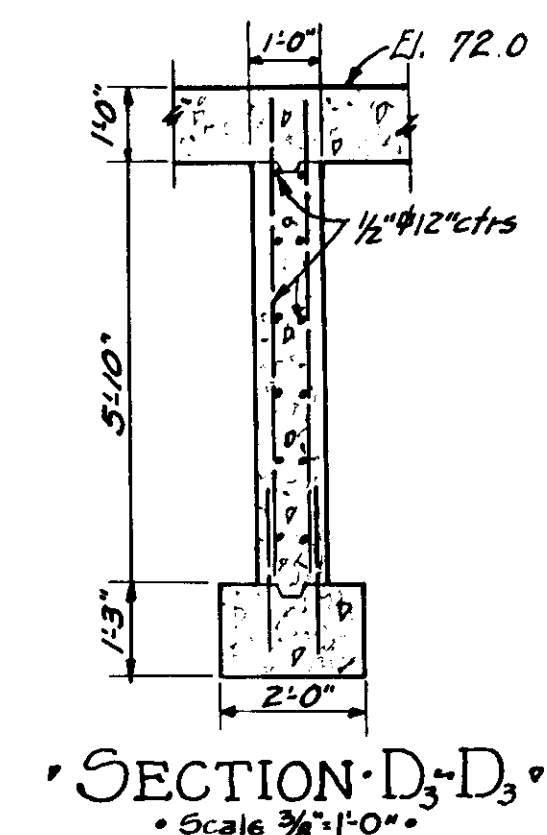
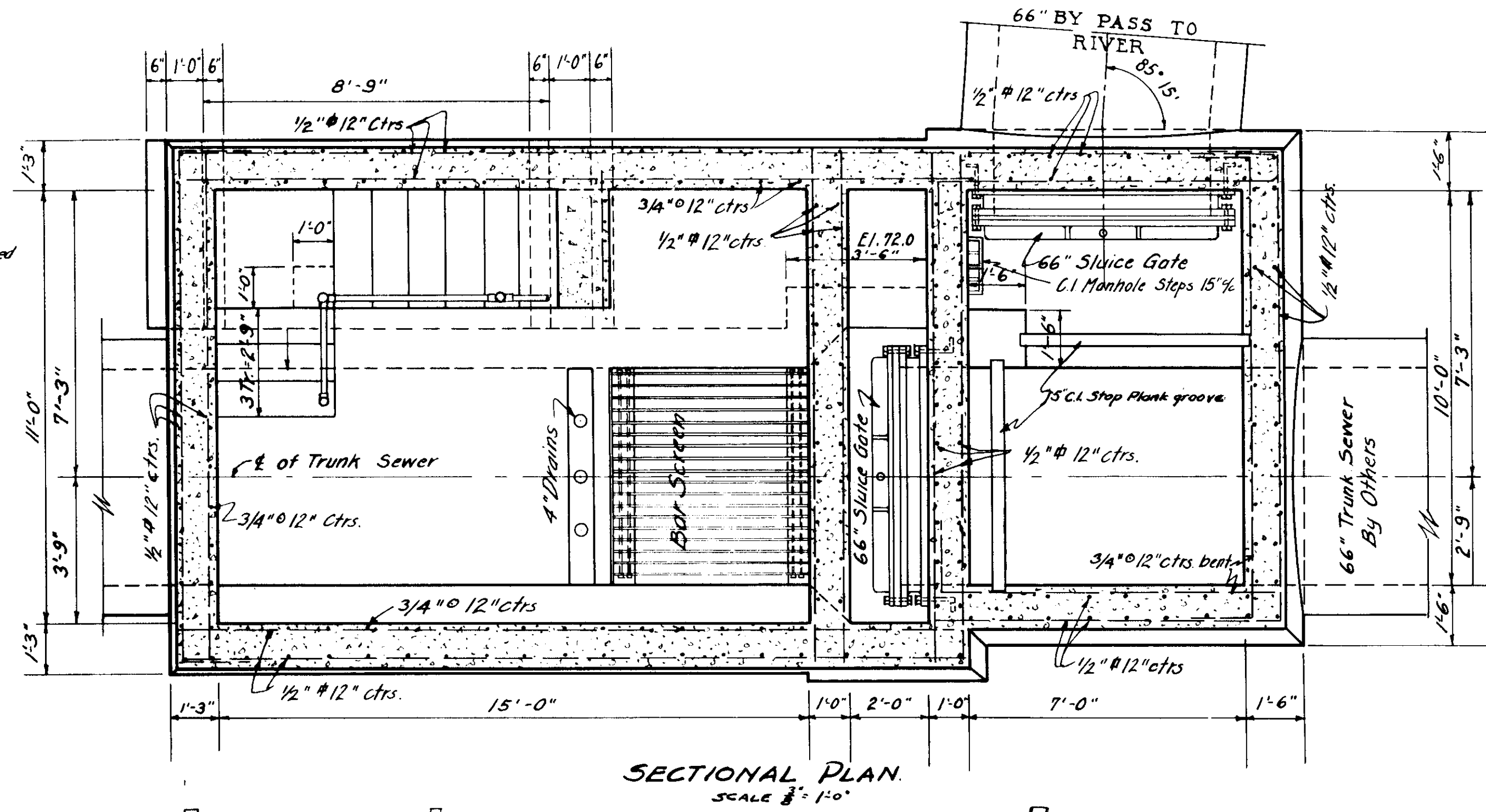
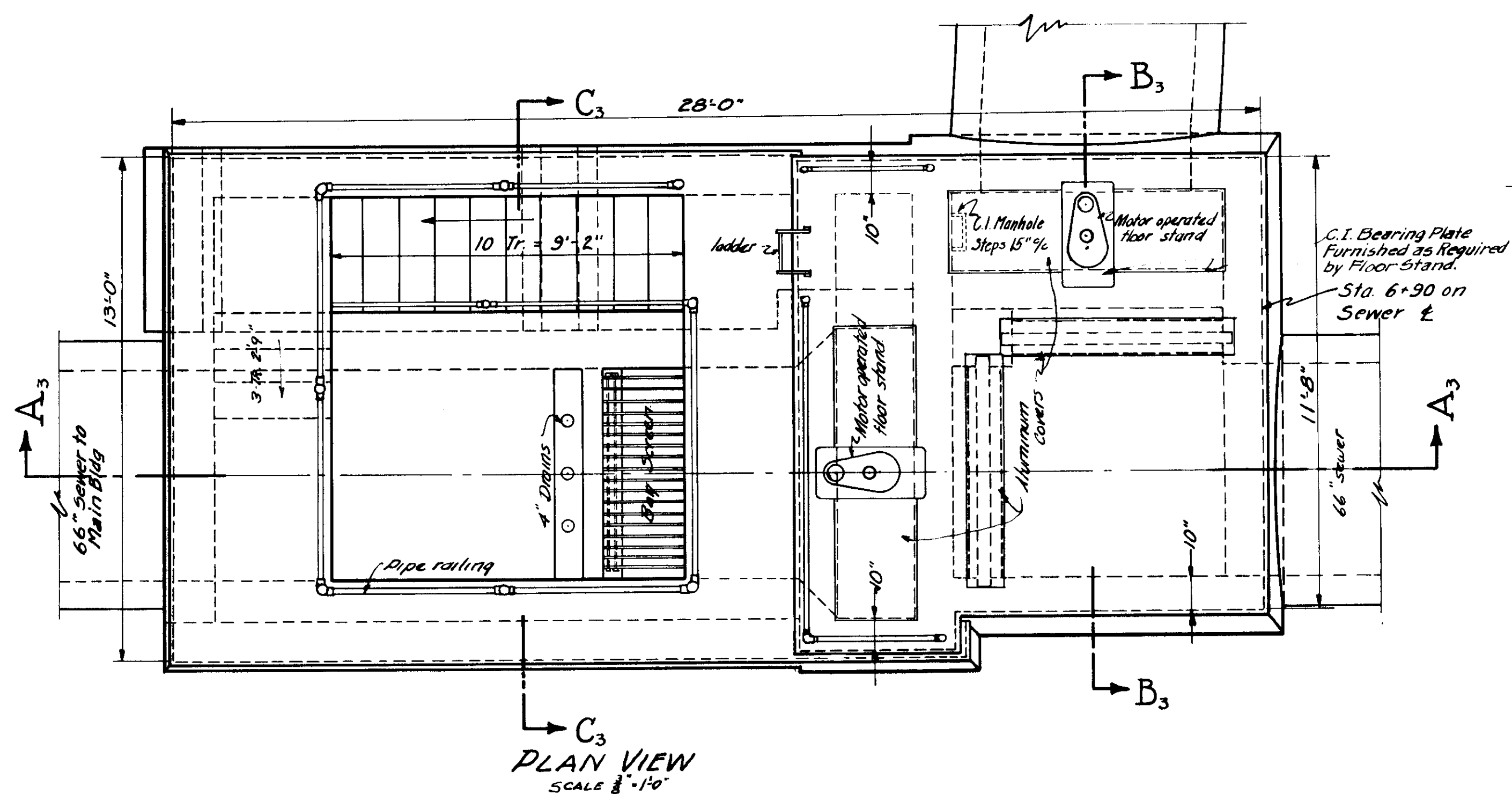
GEORGE B. GASCOIGNE
Consulting Sanitary Engineer



· CITY OF MASSILLON · OHIO ·
· SEWAGE TREATMENT WORKS ·
· ACCESS ROAD ·

· SCALE · AS · SHOWN · · NOVEMBER · 1935 ·

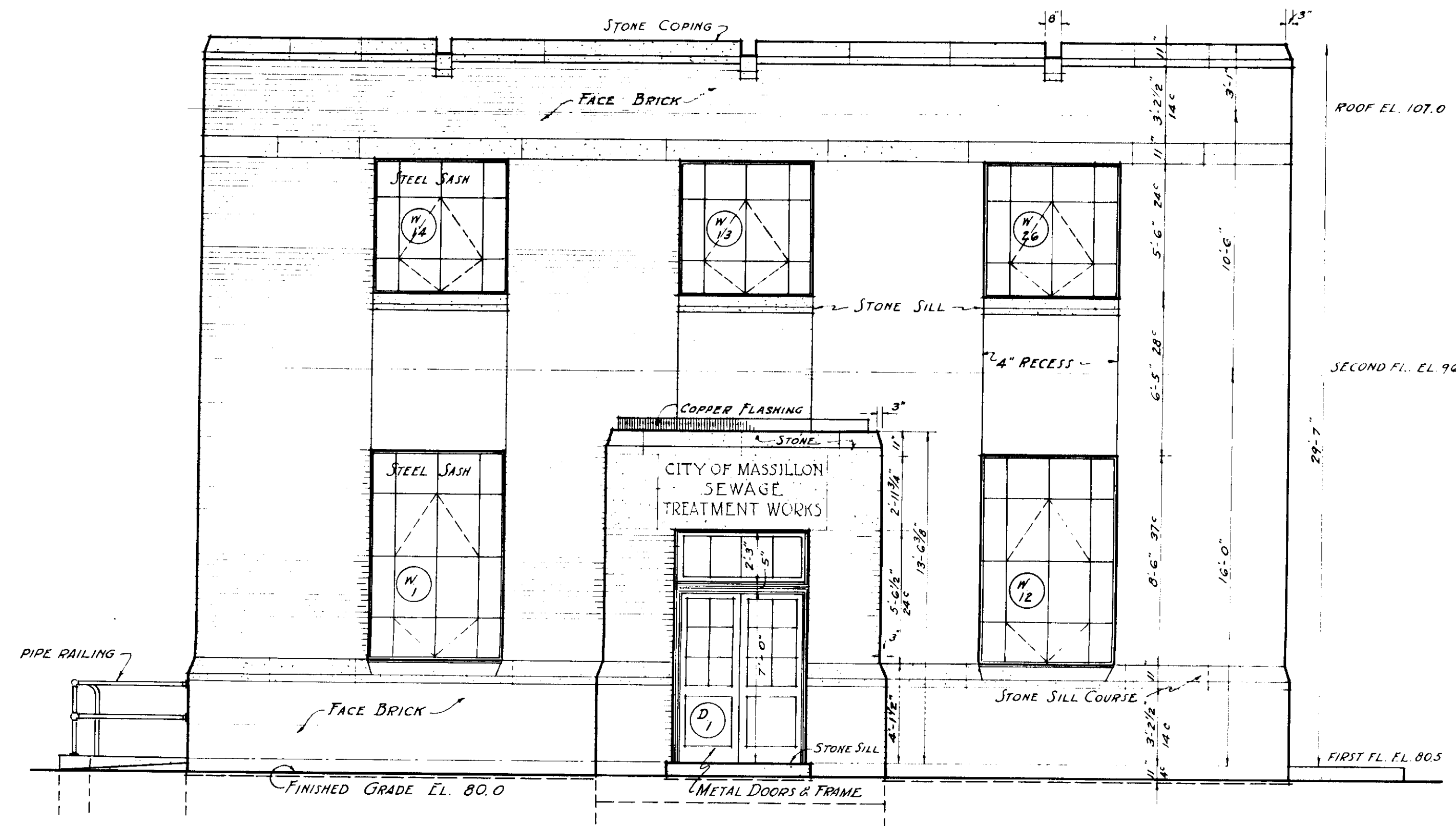
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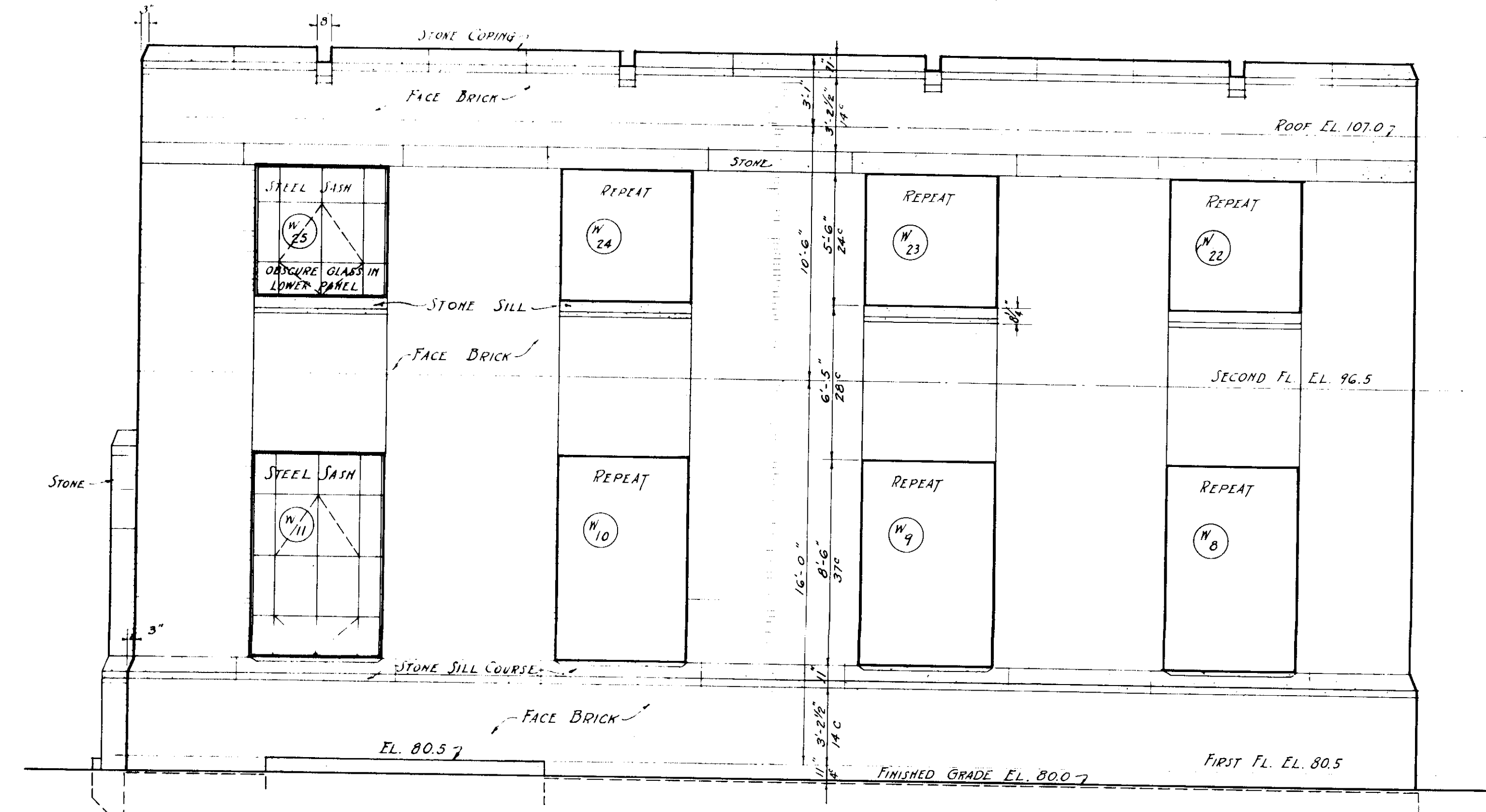

 Director of Public Service

 City Engineer

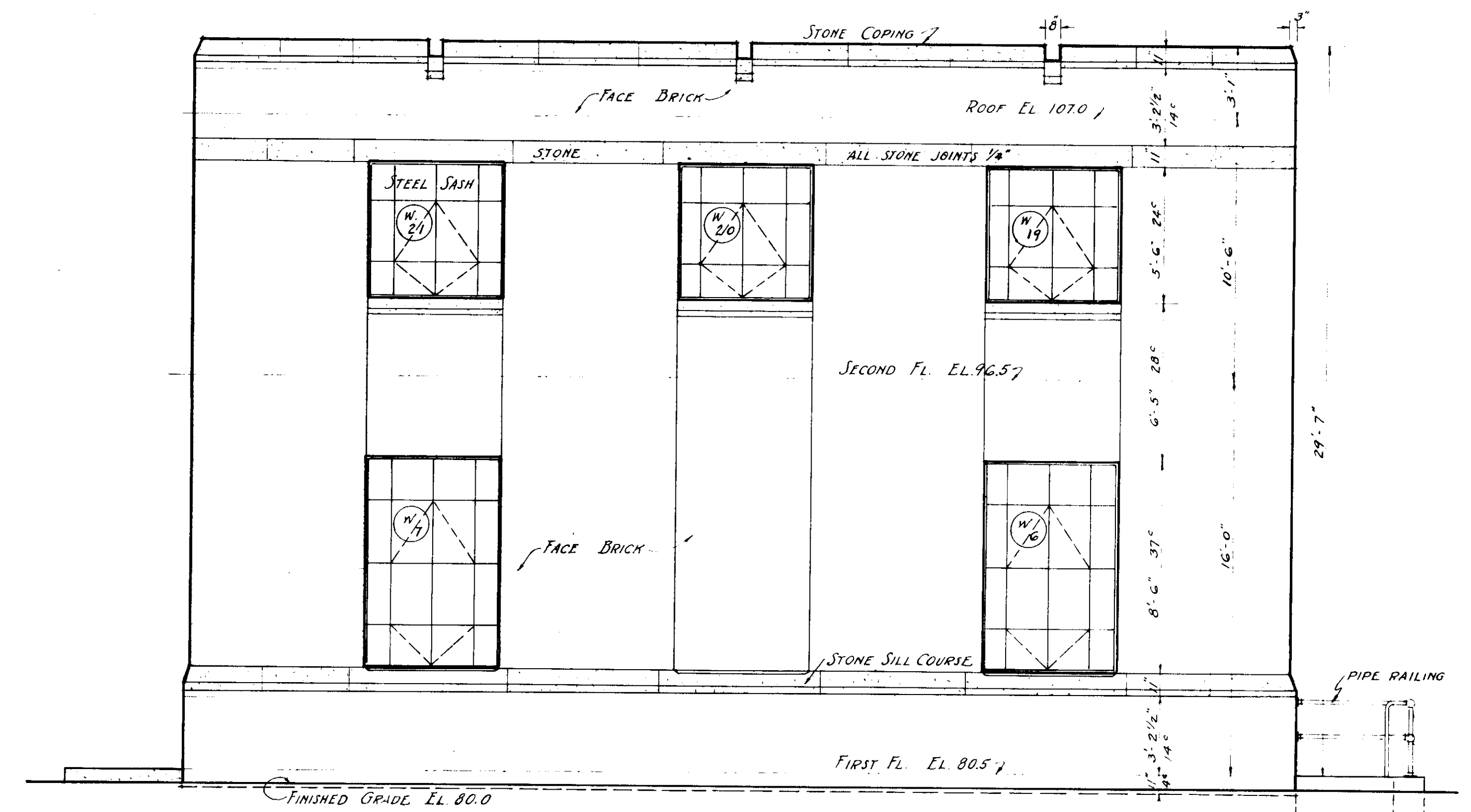
 Consulting Sanitary Engineer



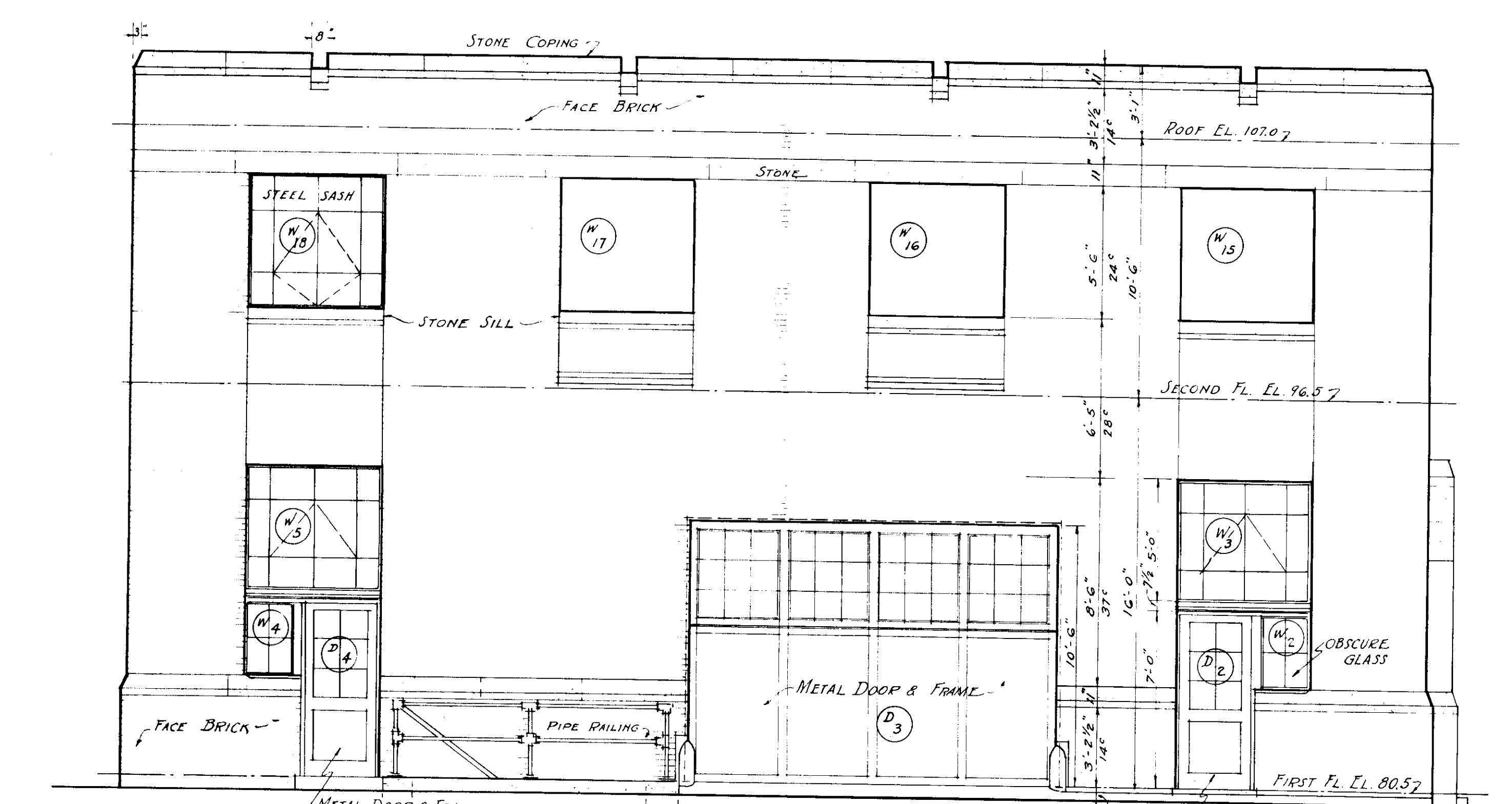
EAST ELEVATION
SCALE 1/4" = 1'-0"



NORTH ELEVATION
SCALE 1/4" = 1'-0"



WEST ELEVATION
SCALE 1/4" = 1'-0"



SOUTH ELEVATION
SCALE 1/4" = 1'-0"



CITY OF MASSILLON OHIO

SEWAGE TREATMENT WORKS

MAIN BUILDING

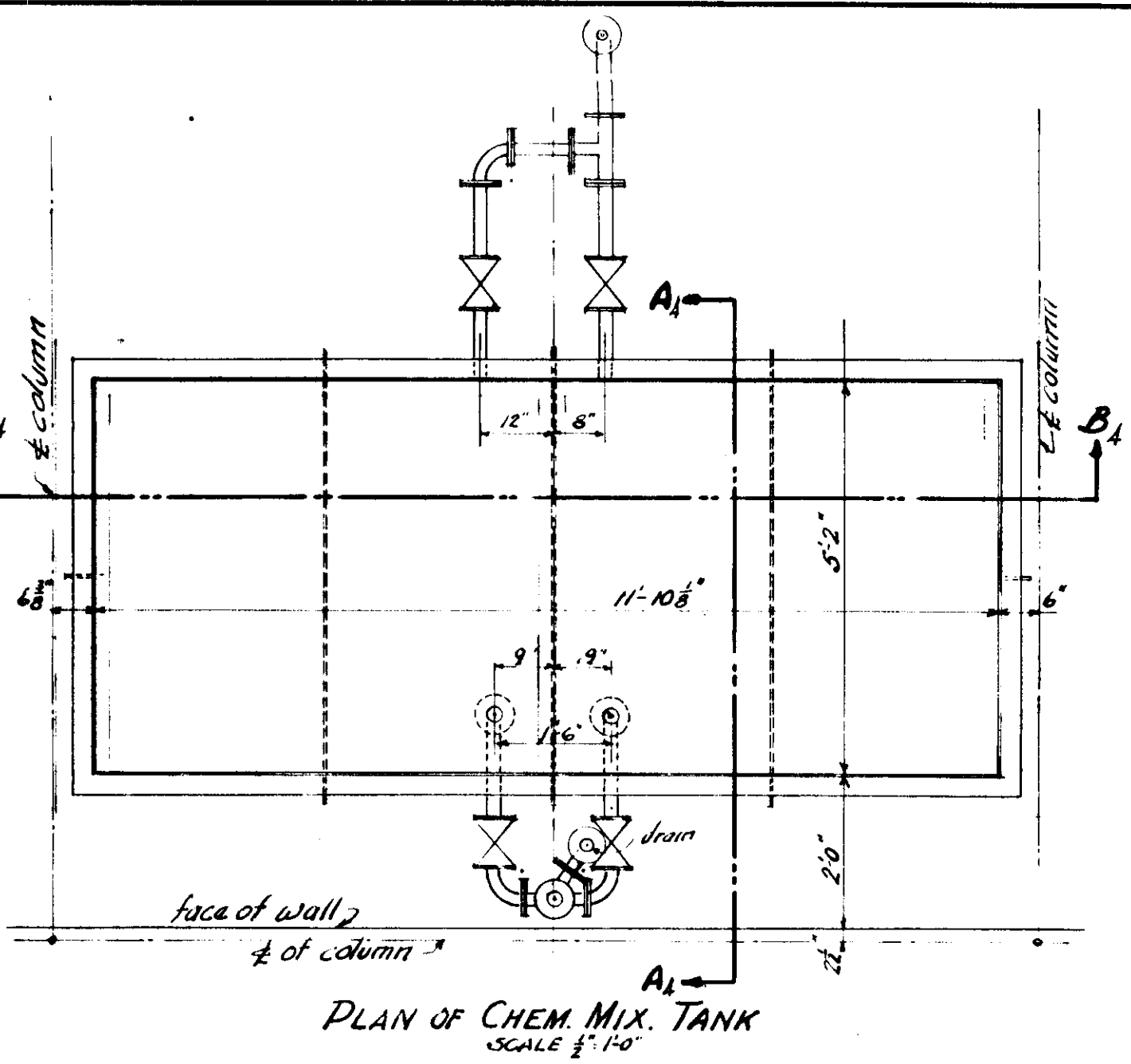
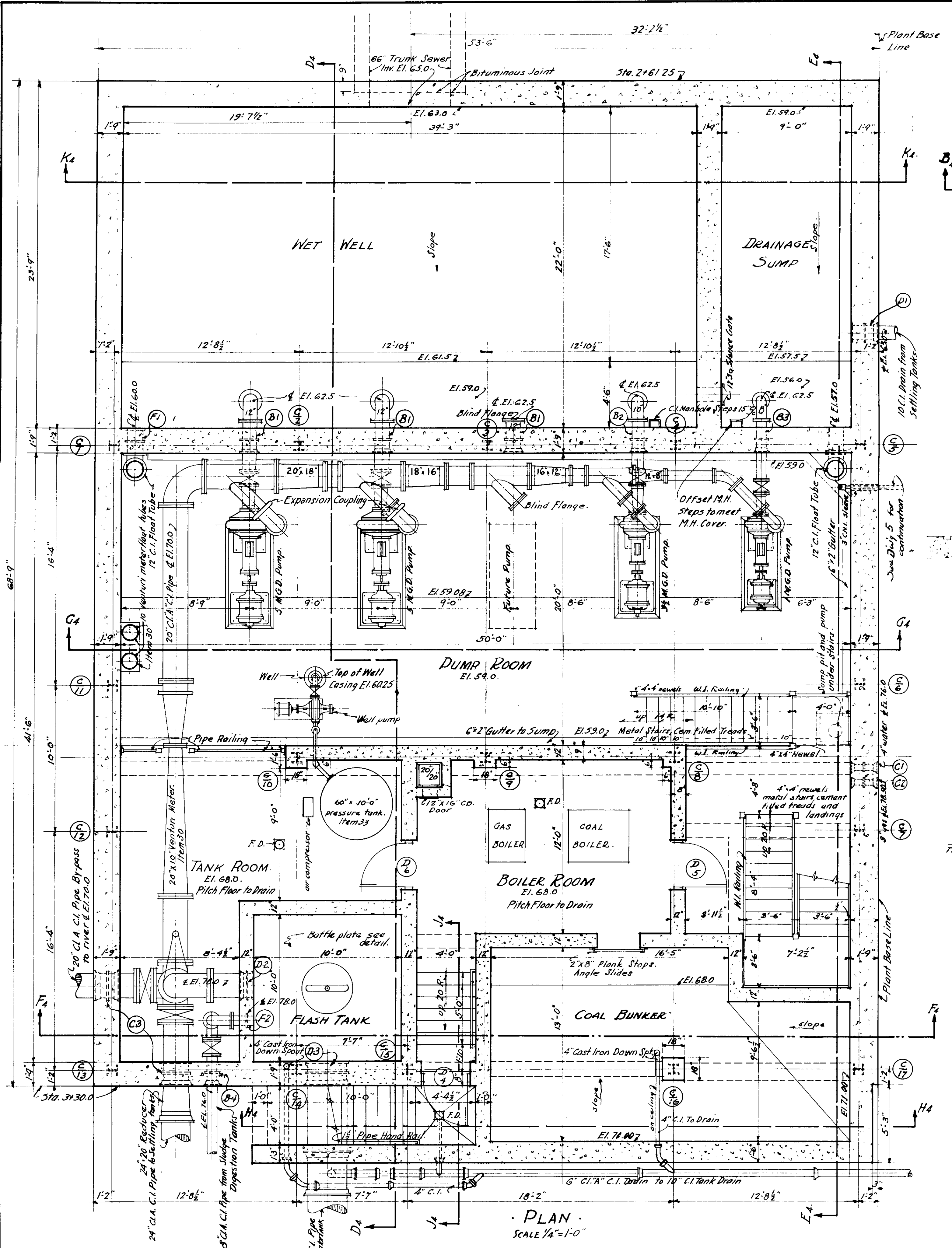
ELEVATIONS

SCALE 1/4" = 1'-0"

NOVEMBER 1935

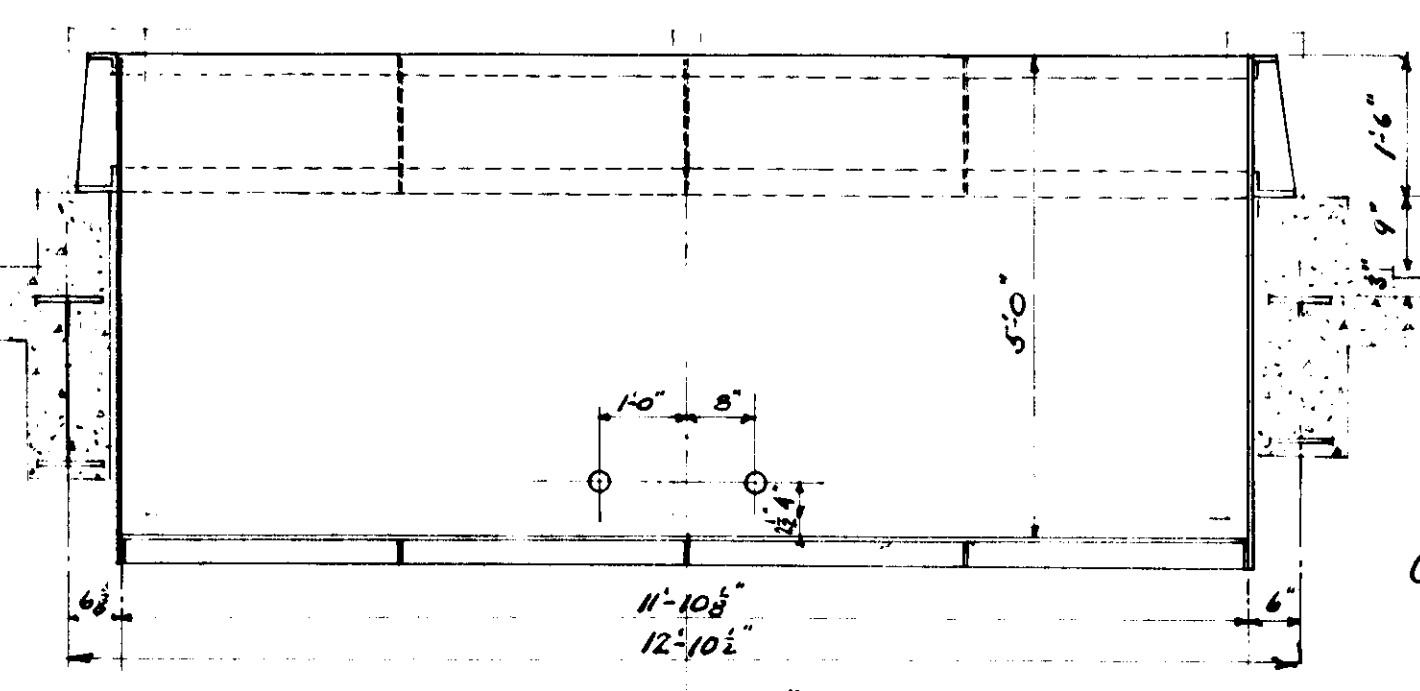
Drawn by T.J.H.
Traced by N.H.W.
Checked by T.H.W.
307-6
30 SHEETS

Irving L. Jones
Director of Public Service
City Engineer
George B. Castoigne
Consulting Sanitary Engineer



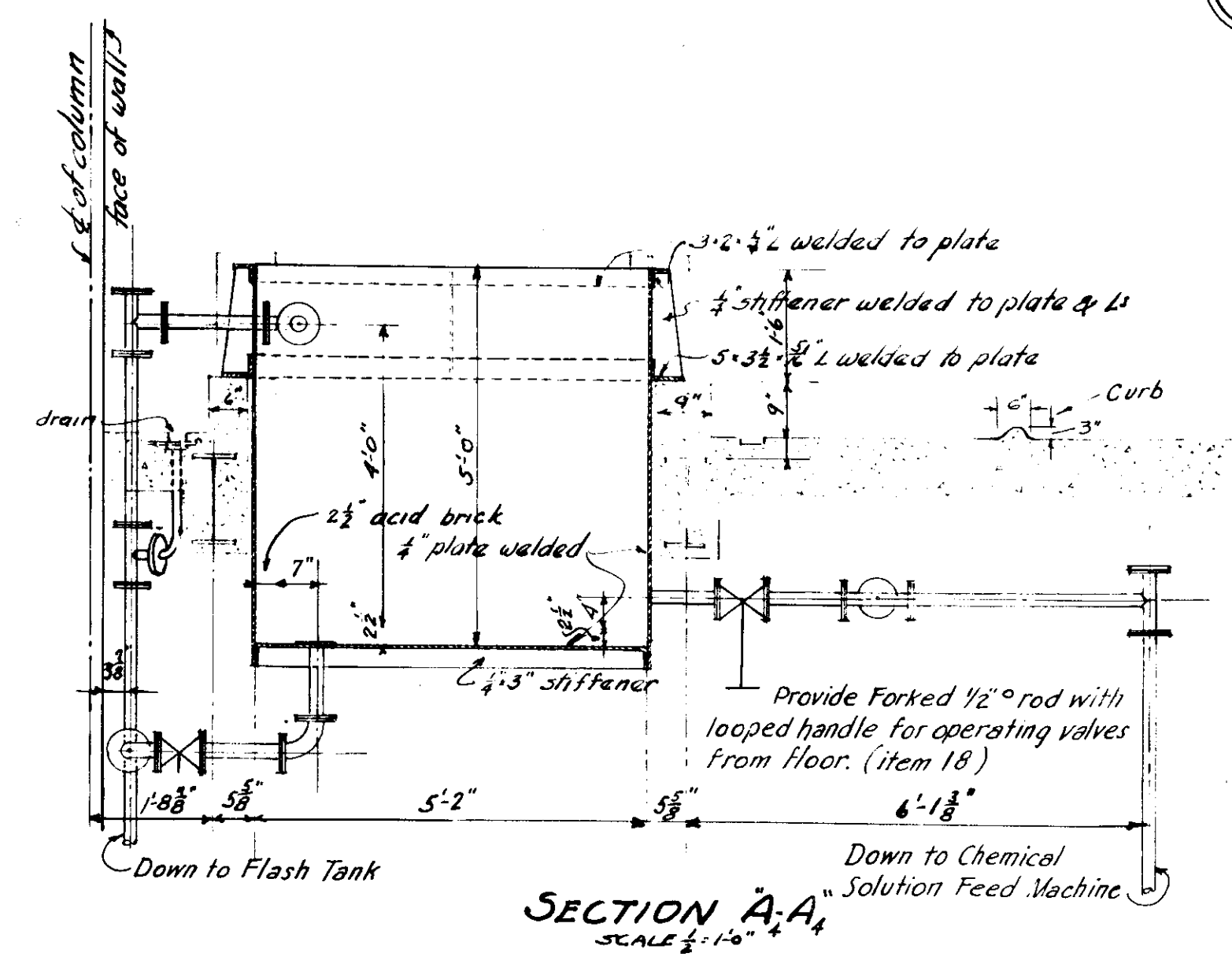
PLAN OF CHEM. MIX. TANK
SCALE 1/2" = 1'-0"

Note: All piping shown is Rubber lined.
All valves are rubber lined.

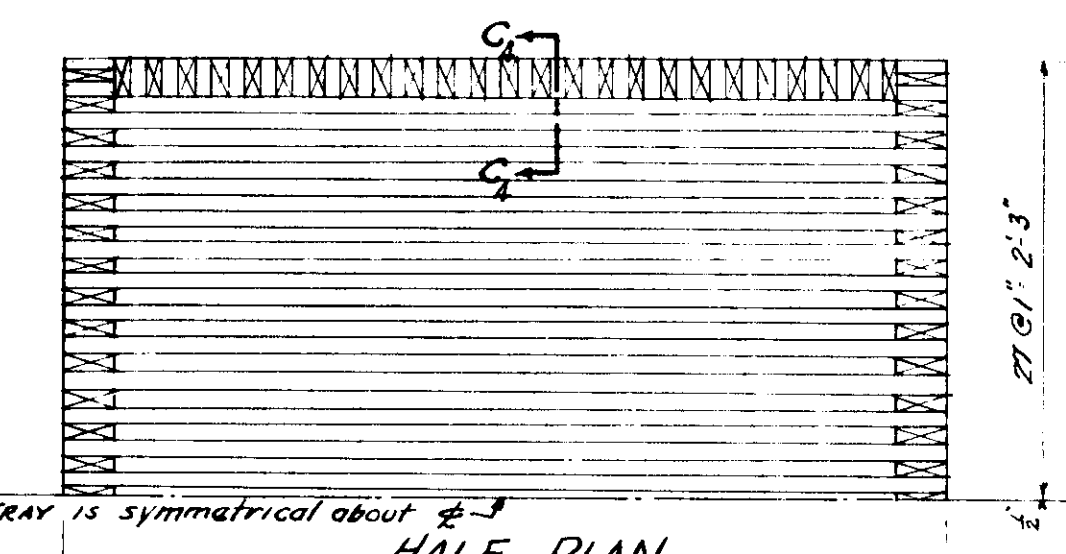


SECTION B-B
SCALE 1/2" = 1'-0"

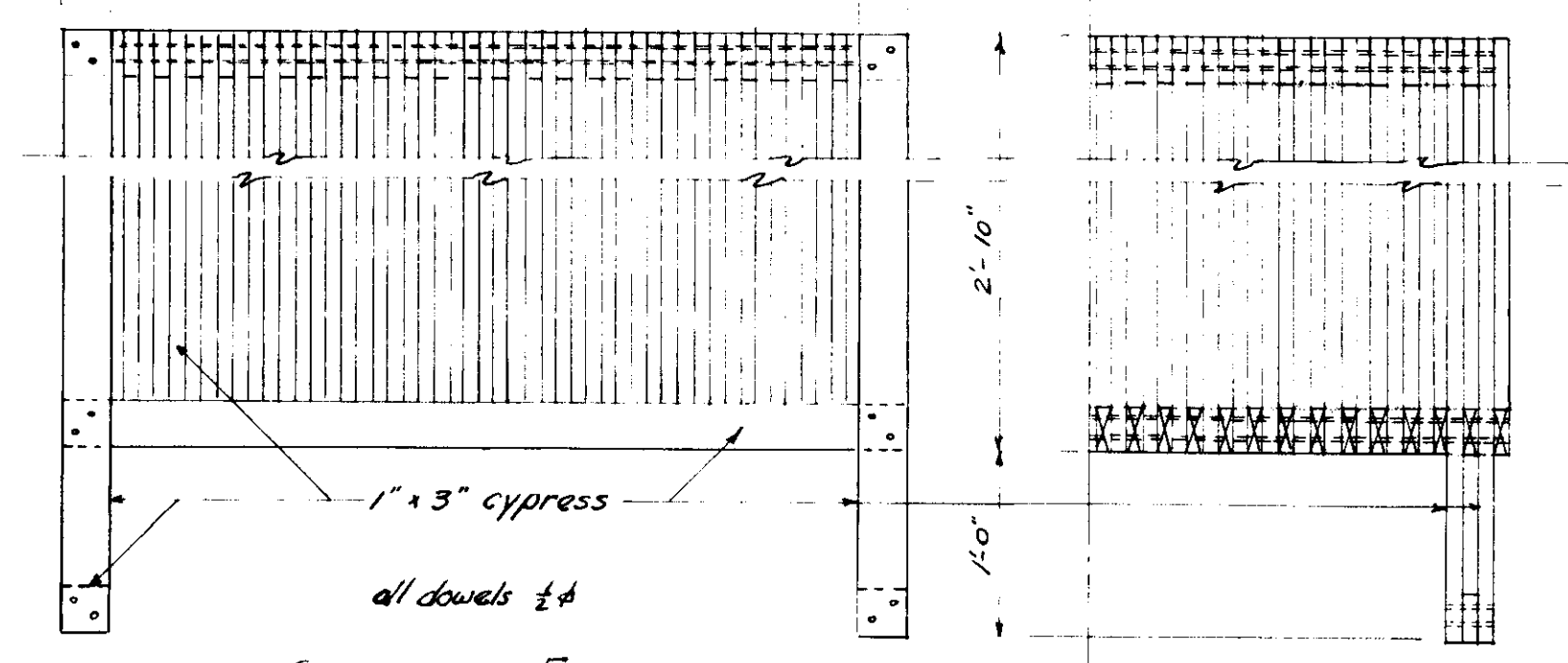
DETAIL OF CHEM. MIX. TANK
SCALE 1/2" = 1'-0"
Item 34



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



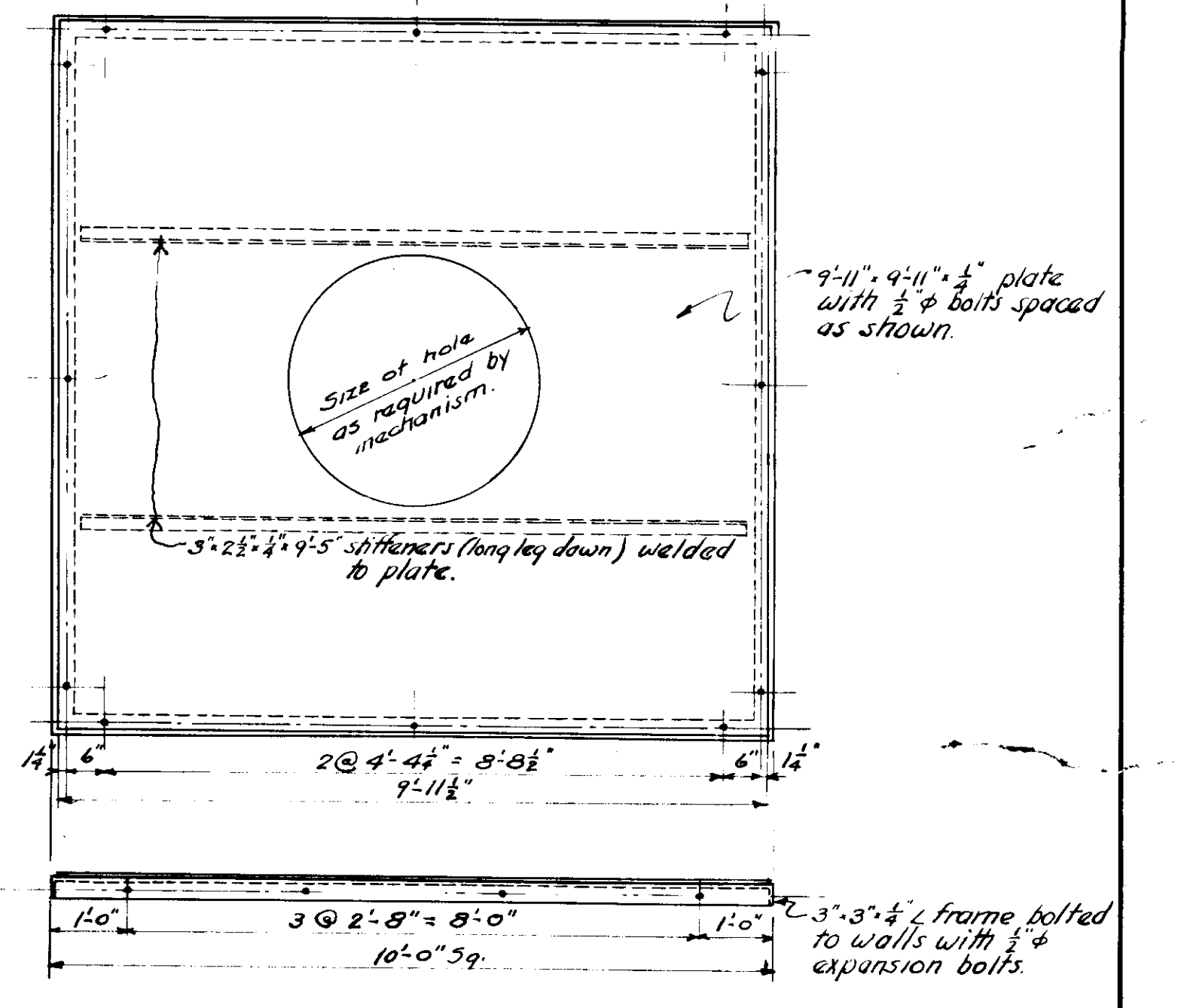
HALF PLAN
SCALE 1/2" = 1'-0"



SECTIONAL ELEVATION HALF SIDE ELEVATION

DETAILS OF WOODEN CHEMICAL TRAY
SCALE 1/2" = 1'-0"

Note: TWO REQUIRED.
Item 34



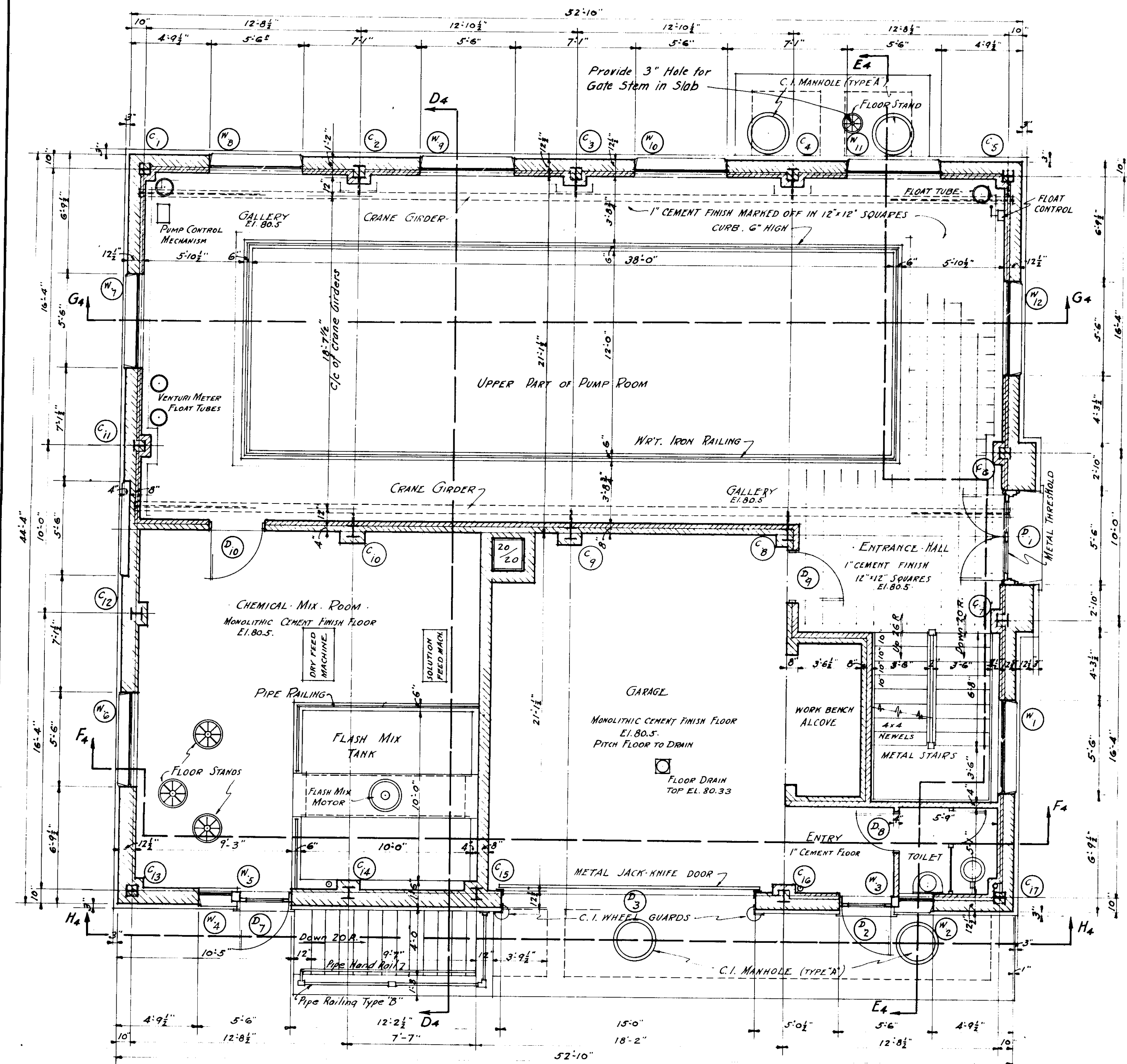
DETAIL OF BAFFLE PLATE
SCALE 1/2" = 1'-0"
Item 18

Drawn by T.J.H.M.S.
Traced by T.J.H.M.S.
Checked by M.A.
307-7
30 SHEETS

Director of Public Service
City Engineer
Consulting Sanitary Engineer

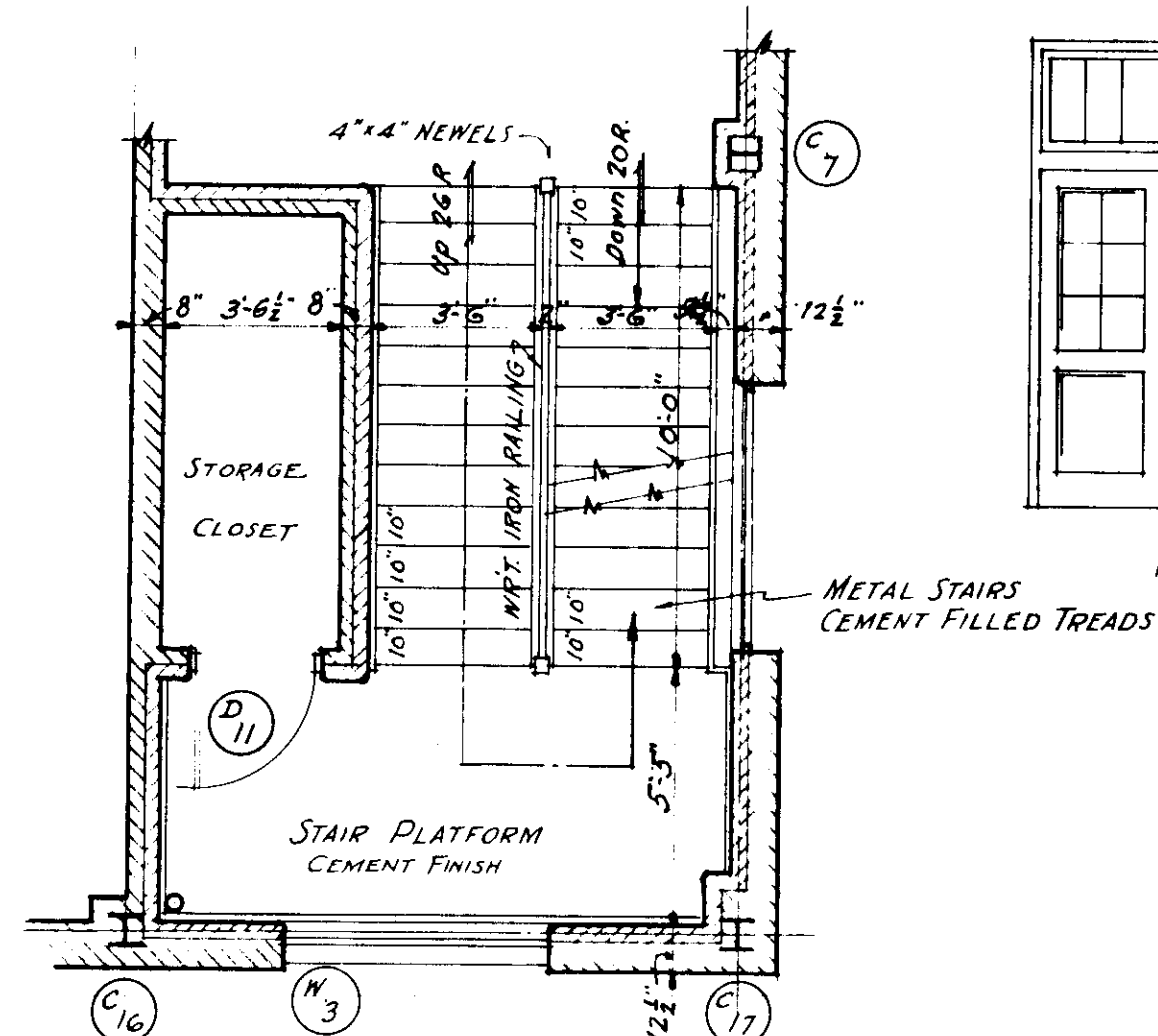
CITY OF MASSILLON, OHIO
SEWAGE TREATMENT WORKS
MAIN BUILDING
BASEMENT PLAN & DETAILS
SCALE AS SHOWN
NOVEMBER 1935



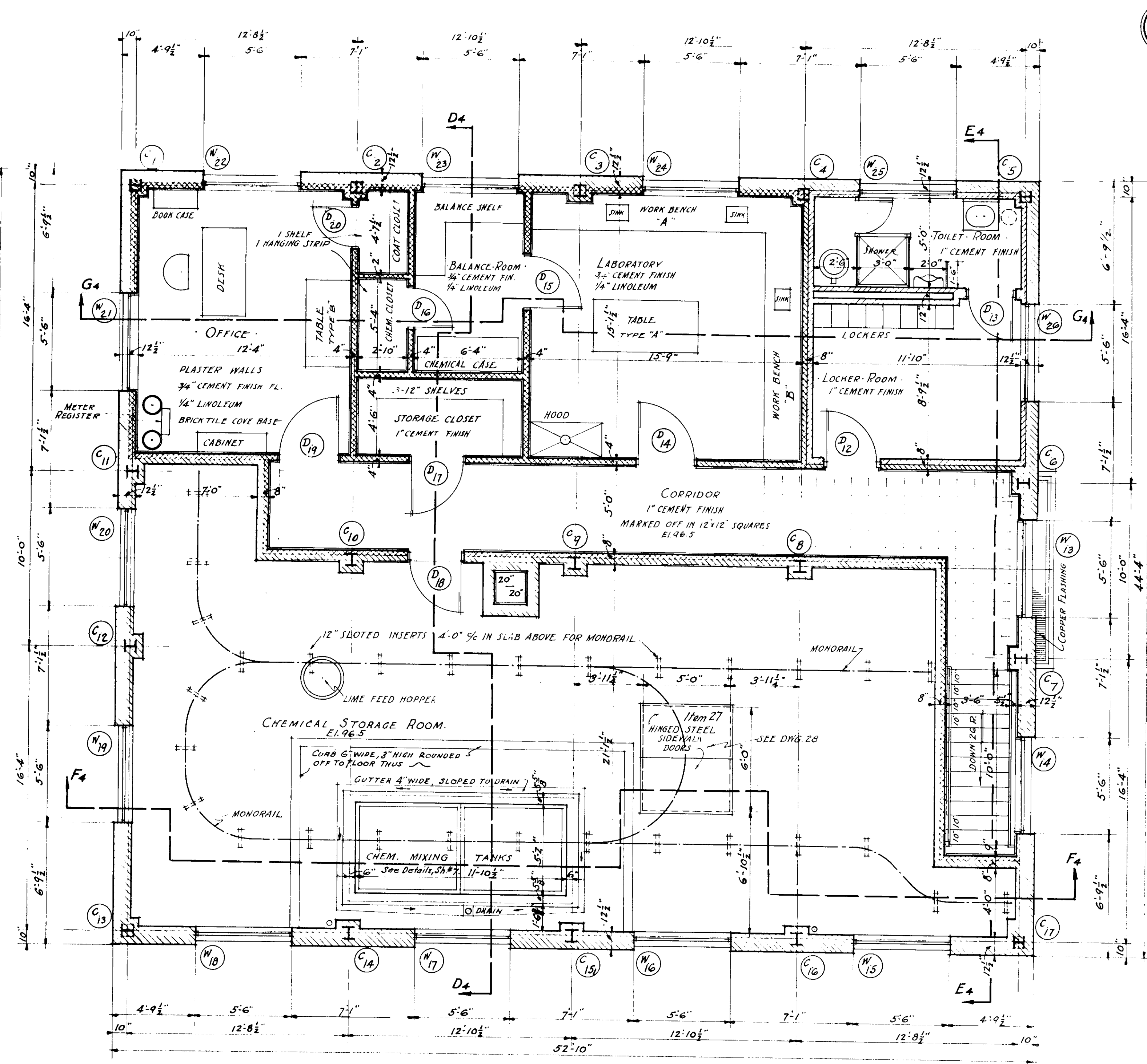


FIRST FLOOR PLAN
SCALE 1/4" = 1'-0"

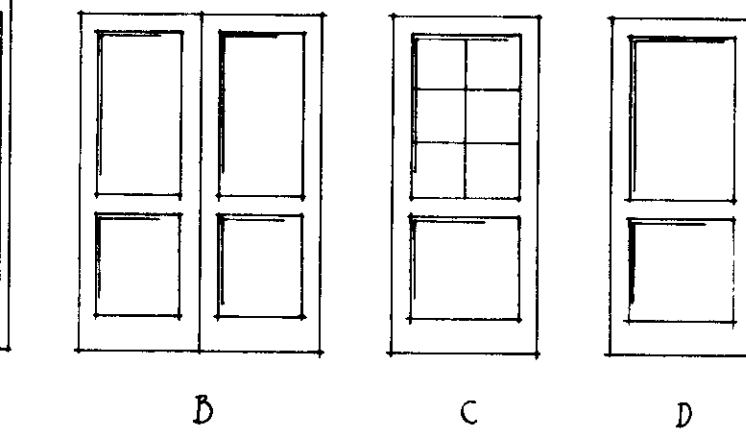
ROOM FINISH					
FLOOR	ROOM	FLOOR & FINISH	WALLS & FINISH	CEILINGS	REMARKS
B5MT.	PUMP	CONCRETE	MONOLITHIC CONCRETE	PAINTED CONCRETE	
"	BOILER	"	"	UNFINISHED CONCRETE	
"	PRESSURE TANK	"	"	"	
1ST	UPPER PART PUMP RM.	1" CEMENT	GLAZED BRICK-TILE	CONCRETE, PAINTED	BRICK-TILE COVE BASE
"	GARAGE	CONCRETE	COMMON BRICK	CONCRETE	
"	CHEMICAL MIX	"	"	"	
"	ENTRANCE HALL	1" CEMENT	GLAZED BRICK-TILE	CONCRETE, PAINTED	BRICK-TILE COVE BASE
"	ENTRY & TOILET	1" " COLORED	"	"	"
"	STAIR LANDING & CLOSET	1" " COLORED	"	"	"
2ND	CORRIDORS	1" " COLORED	PLASTER	PAINTED CONCRETE	"
"	CHEMICAL STORAGE	CONCRETE	MONOLITHIC CONCRETE	CONCRETE	"
"	LOCKER & TOILET	1" CEMENT	GLAZED BRICK-TILE	CONCRETE, PAINTED	BRICK-TILE COVE BASE
"	LABORATORY	3/4" " 1" LINOLEUM	PLASTER	PAINTED	"
"	BALANCE	3/4" " 1" " "	"	"	"
"	CLOSETS	1" " COLORED	"	"	"
"	OFFICE	3/4" " 1" LINOLEUM	"	"	"



PLAN OF STAIRWAY AT LANDING
FIRST TO SECOND FLOOR
SCALE 1/4" = 1'-0"



SECOND FLOOR PLAN
SCALE 1/4" = 1'-0"



DOOR DESIGN TYPES

FOR DETAILS OF HEATING & PLUMBING
SEE DWGS 14 & 15

DOOR SCHEDULE							
TYPE	DOOR NUMBER	SIZE	FRAME	SCREEN DOOR	DOOR	LOCATION	REMARKS
A	D1	2'-6" x 7'-0" x 1 3/4"	METAL	D-1	11x11	MAIN BLDG.	PLATE GLASS IN DOORS AND TRANSOM
B	D22	"	"	"	11x11	"	"
C	D2, D4, D7	(04 3'-0" x 6'-8" x 1 3/4")	"	"	"	"	"
"	D12, D18	3'-0" x 7'-0" x 1 3/4"	METAL	"	1	MAIN BLDG.	OBSOLETE GLASS IN D12
"	D14, D19	3'-3" x 7'-0" x 1 3/4"	"	"	1	"	"
D	D3, D6, D9	"	"	"	"	"	"
"	D10, D17, D18	"	"	"	"	"	"
"	D21	3'-0" x 7'-0" x 1 3/4"	"	"	"	MAIN BLDG. - D21 DRAIN PUMP CHAMBER	"
"	D8, D11, D13	"	"	"	"	"	"
"	D16, D20	"	"	"	"	"	"



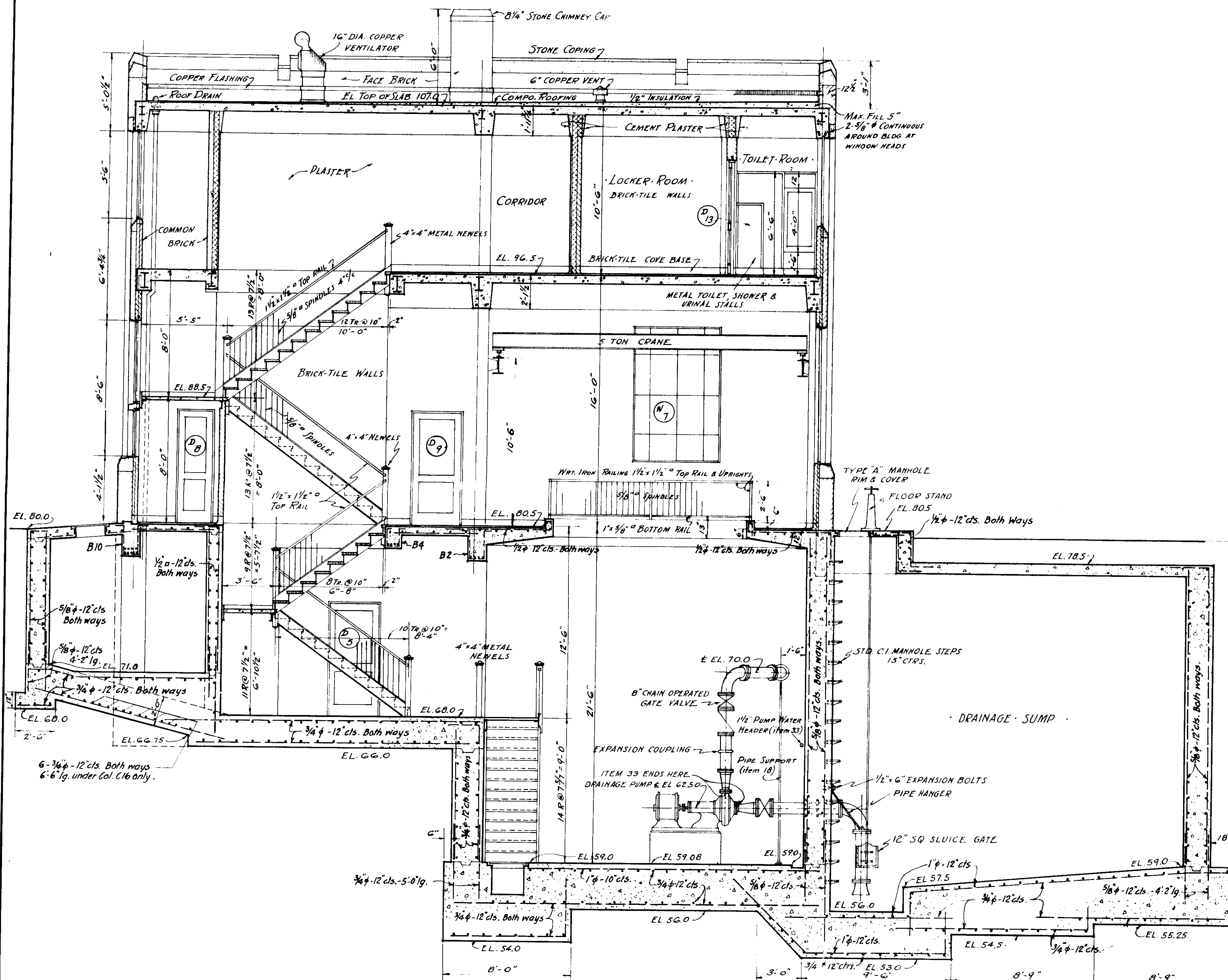
Director of Public Service
City Engineer
Consulting Sanitary Engineer

CITY OF MASSILLON OHIO
SEWAGE TREATMENT WORKS

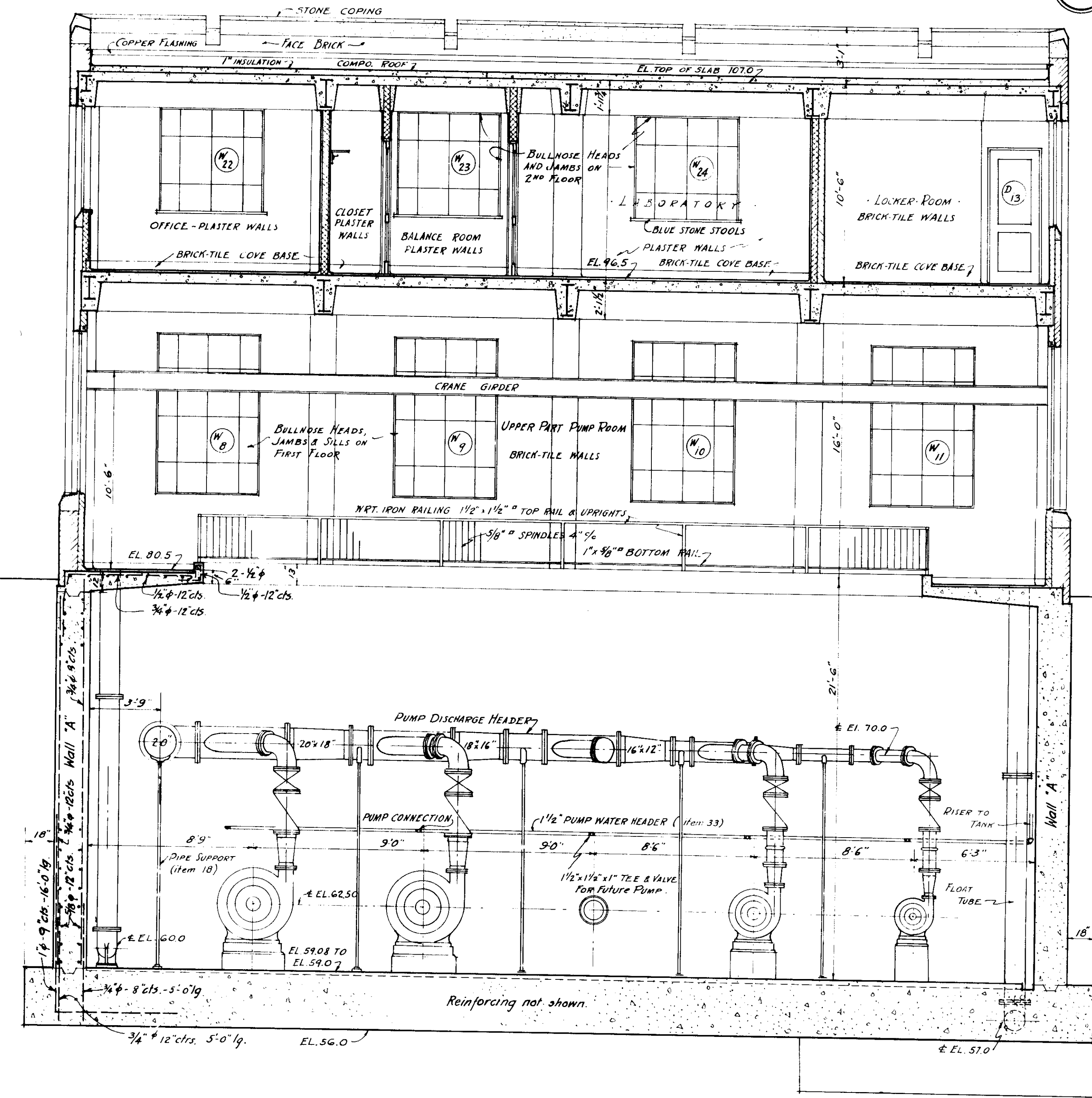
MAIN BUILDING
FIRST & SECOND FLOOR PLANS

SCALE 1/4" = 1'-0" NOVEMBER 1935

Drawn by T.J.H.
Traced by T.J.H.
Checked by M.L.A.
307-8
30 SHEETS



SECTION E4 E4
SCALE 1/4"=1'-0"



SECTION G4 G4
SCALE 1/4"=1'-0"

Drawn by T.J.H.
Traced by T.J.H.
Checked by R.H.H.

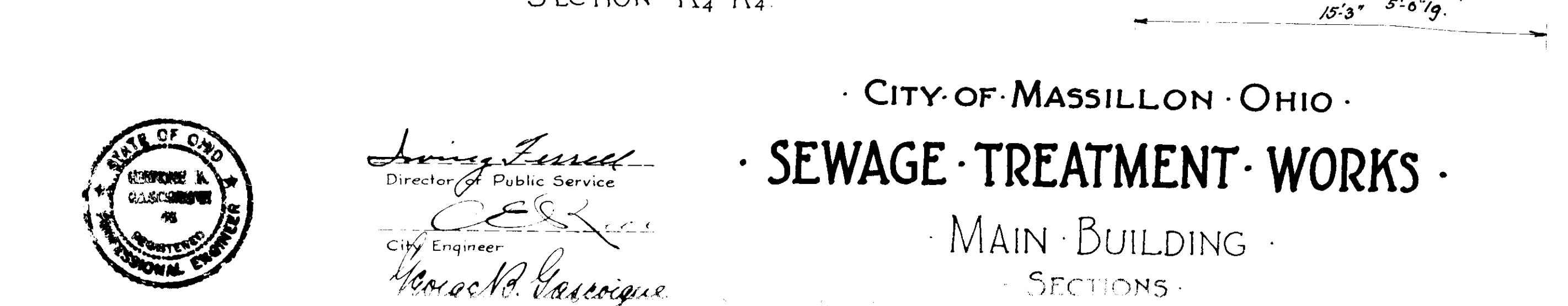
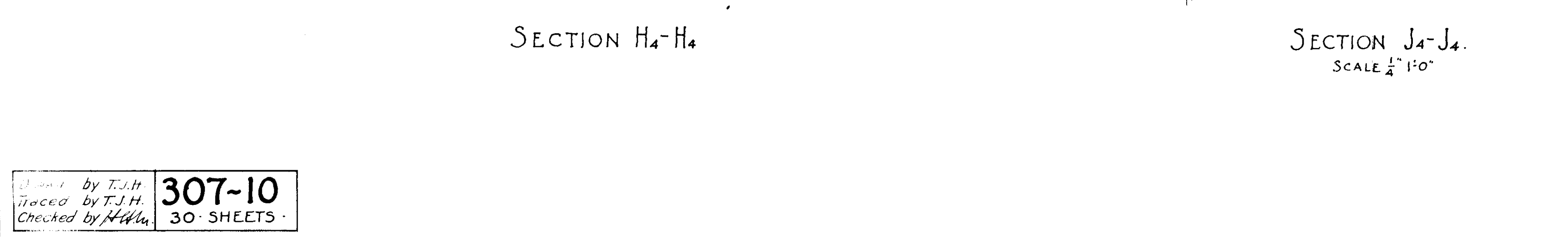
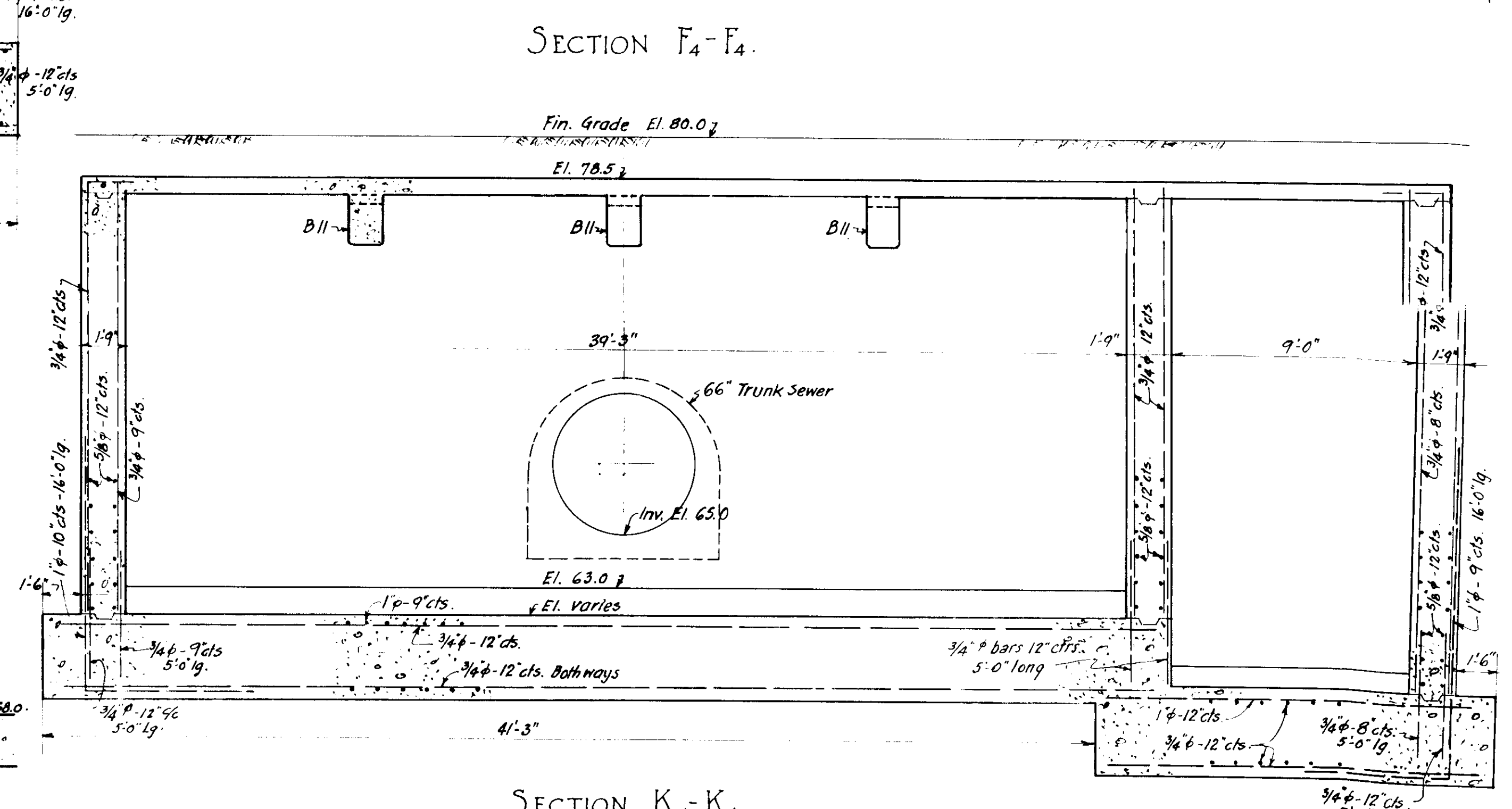
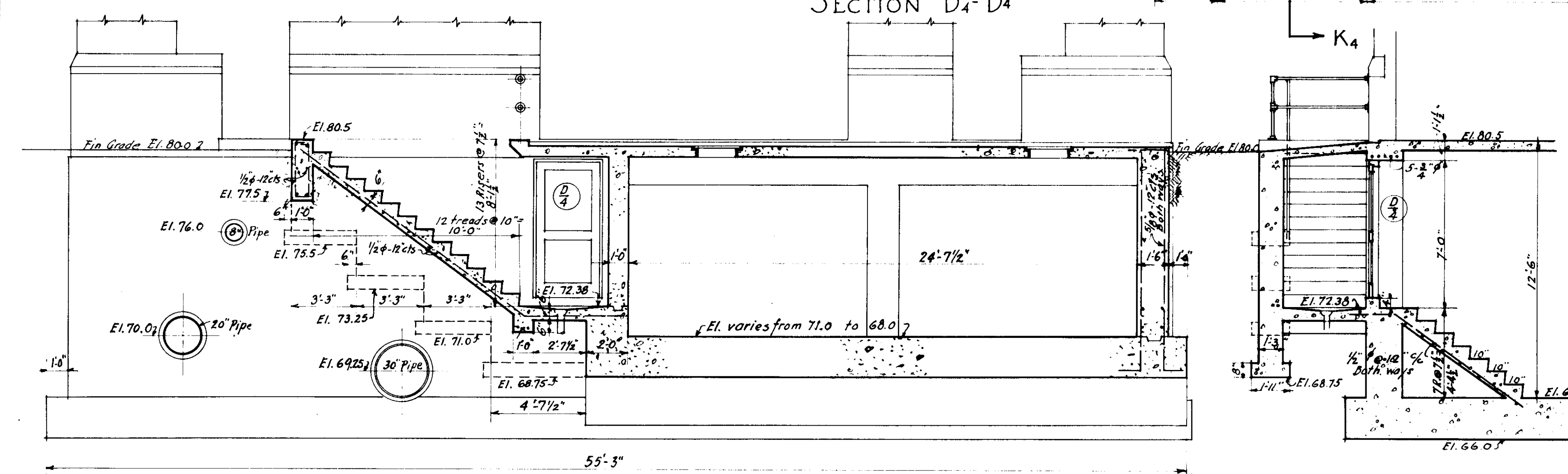
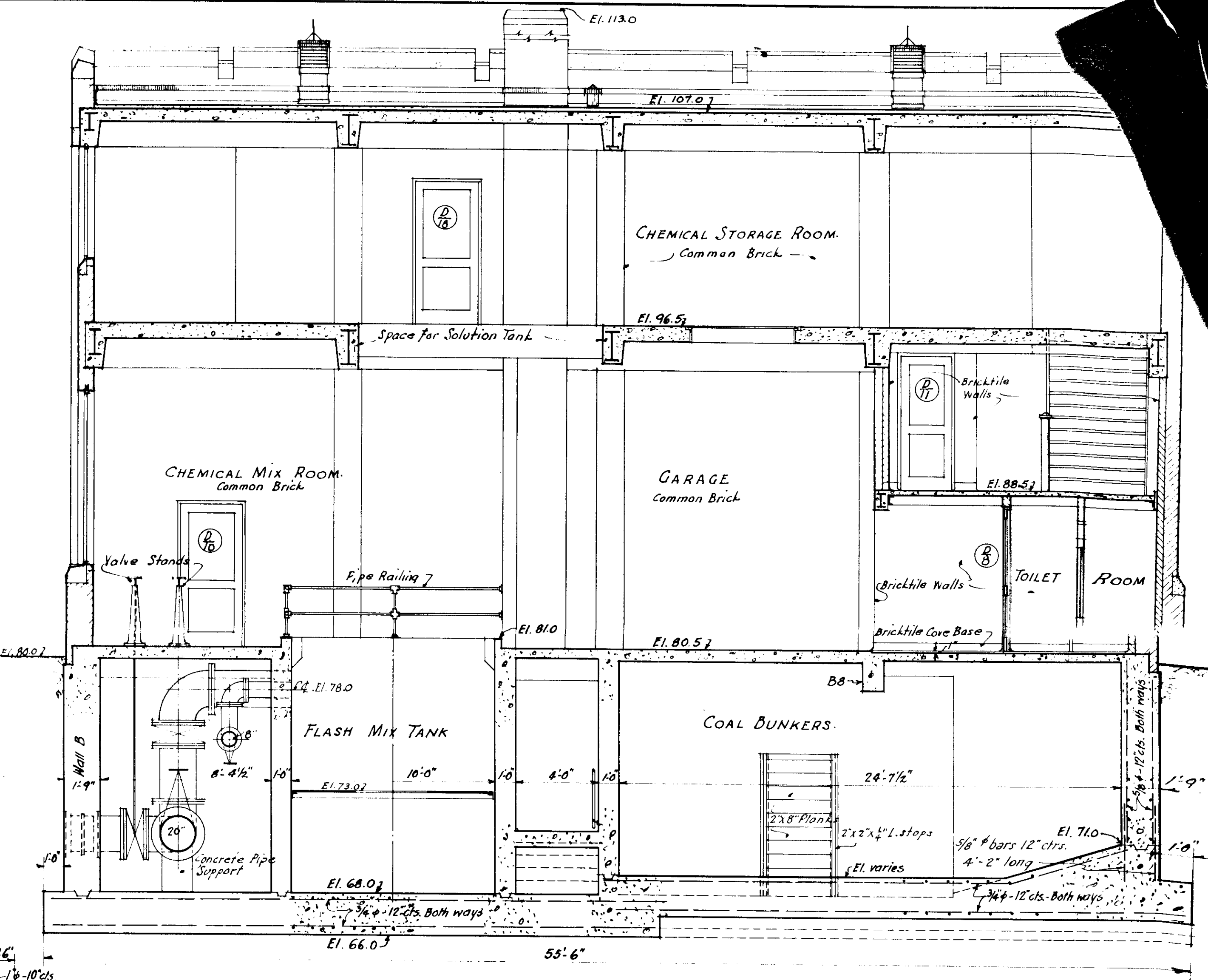
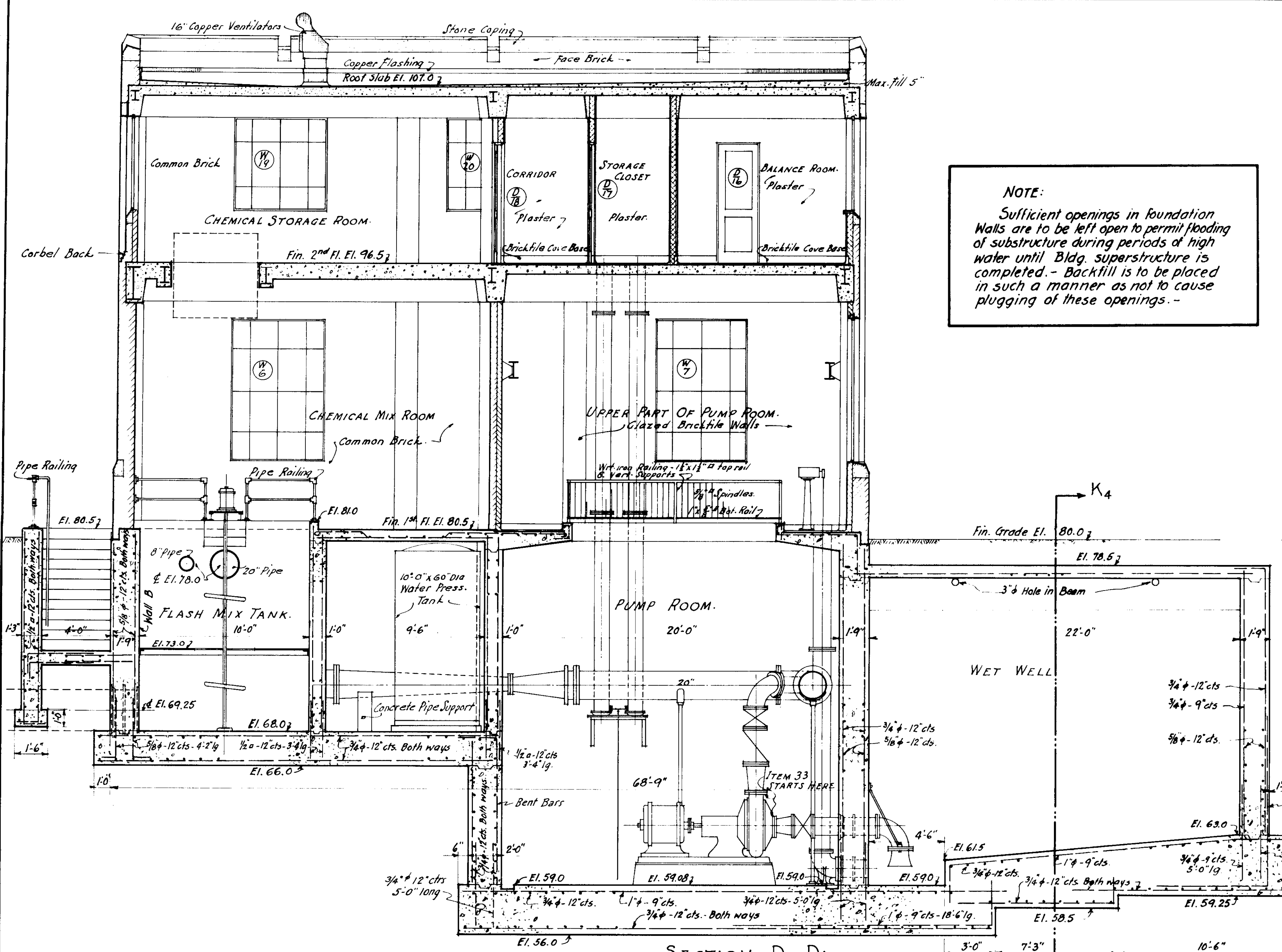
307-9
30 SHEETS

James L. Farrell
Director of Public Service
City Engineer
H. C. Cascoque
Consulting Sanitary Engineer

CITY OF MASSILLON, OHIO
SEWAGE TREATMENT WORKS
MAIN BUILDING
SECTIONS
SCALE 1/4"=1'-0"



NOVEMBER 1935

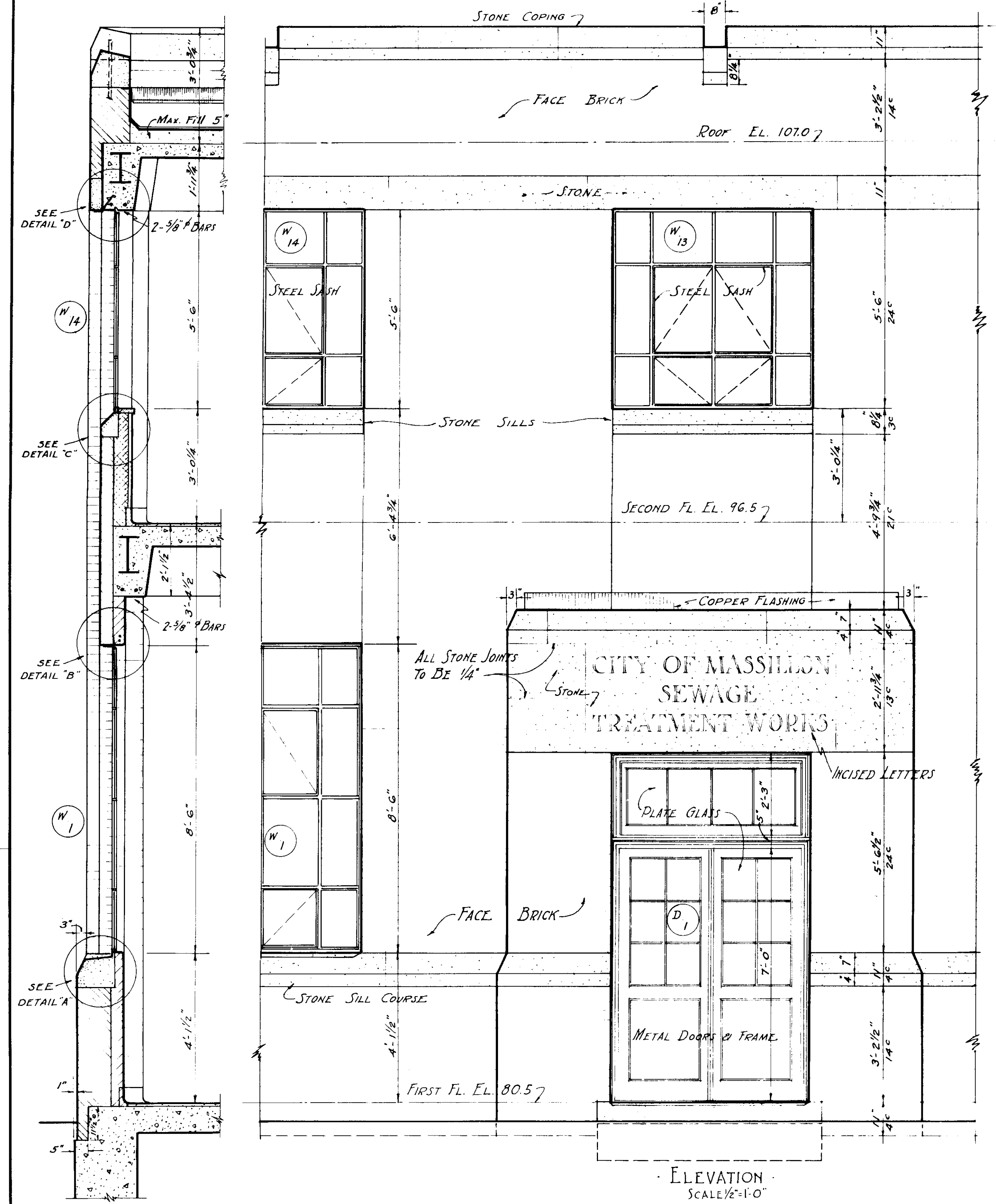


Drawn by T.J.H.
Checked by T.J.H.
307-10
30 SHEETS

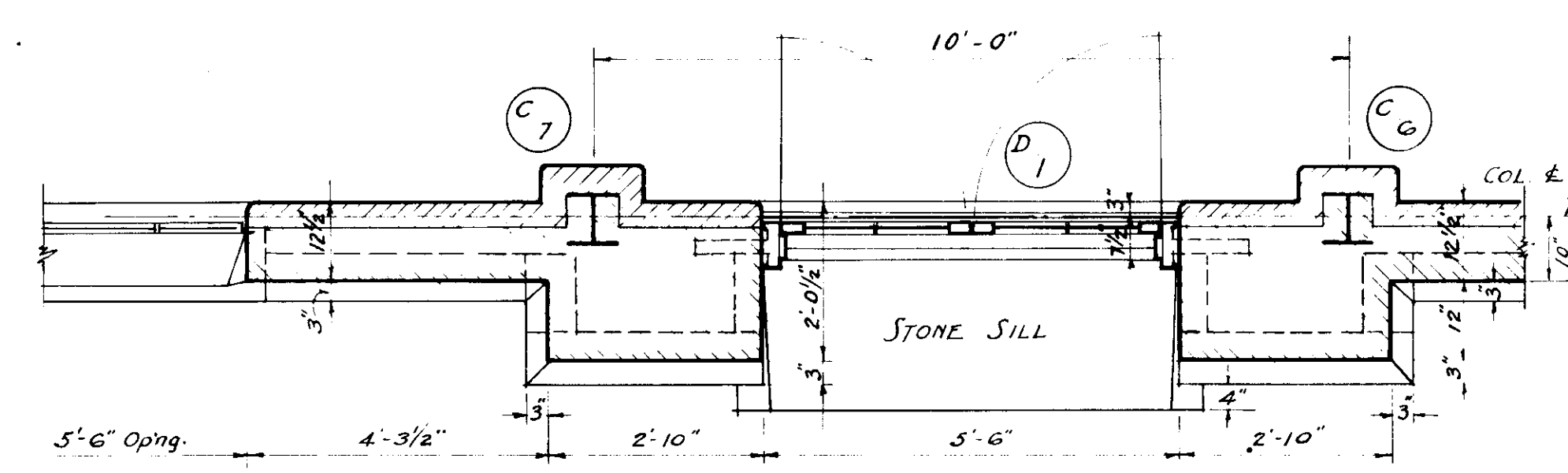


Livingston
Director of Public Service
City Engineer
Hercules B. Garcoque

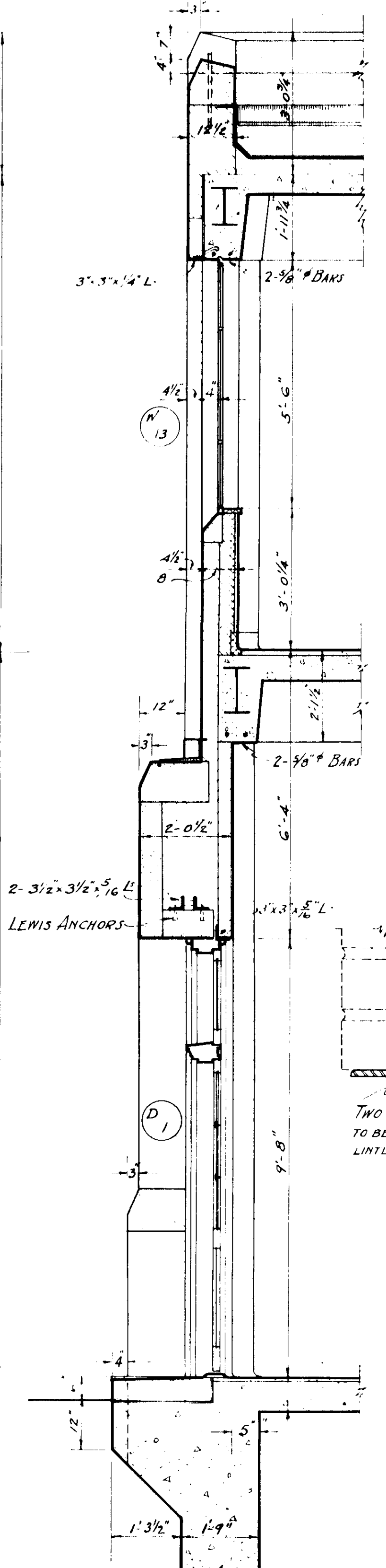
CITY OF MASSILLON · OHIO ·
SEWAGE · TREATMENT · WORKS ·
MAIN BUILDING
SECTIONS



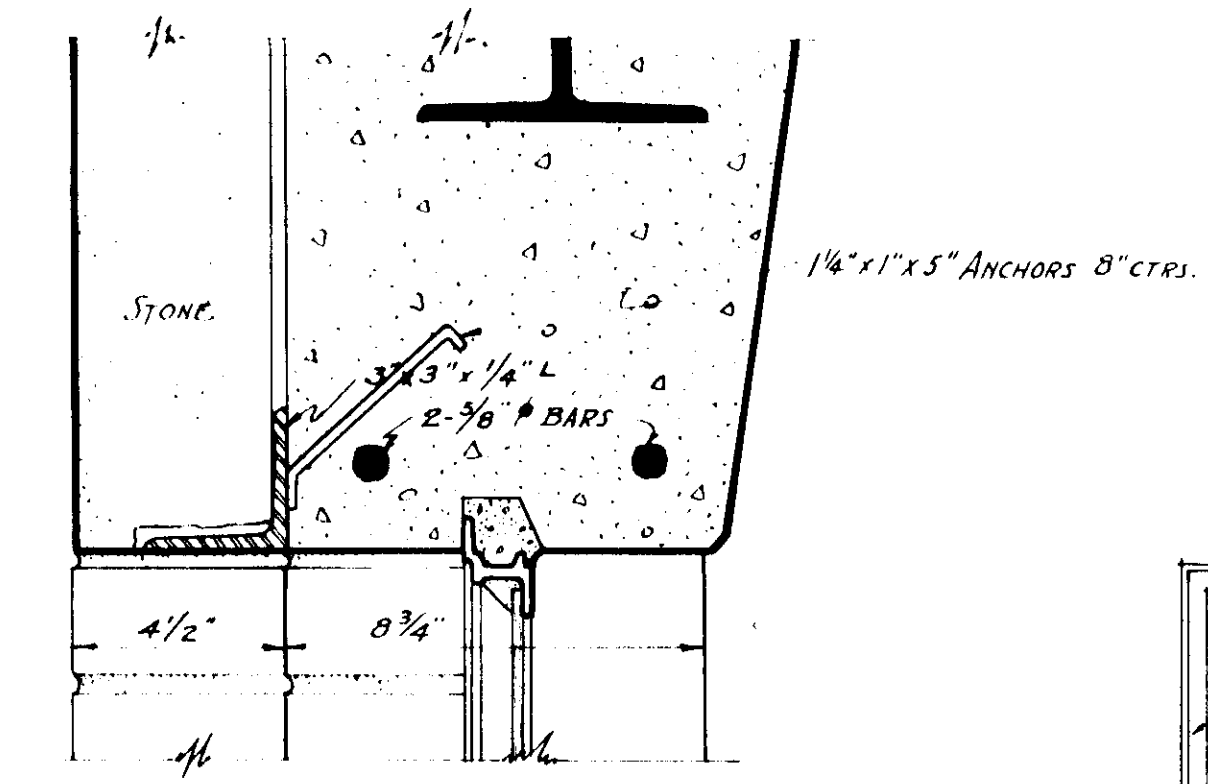
TYPICAL WALL SECTION
SCALE 1/2" = 1'-0"



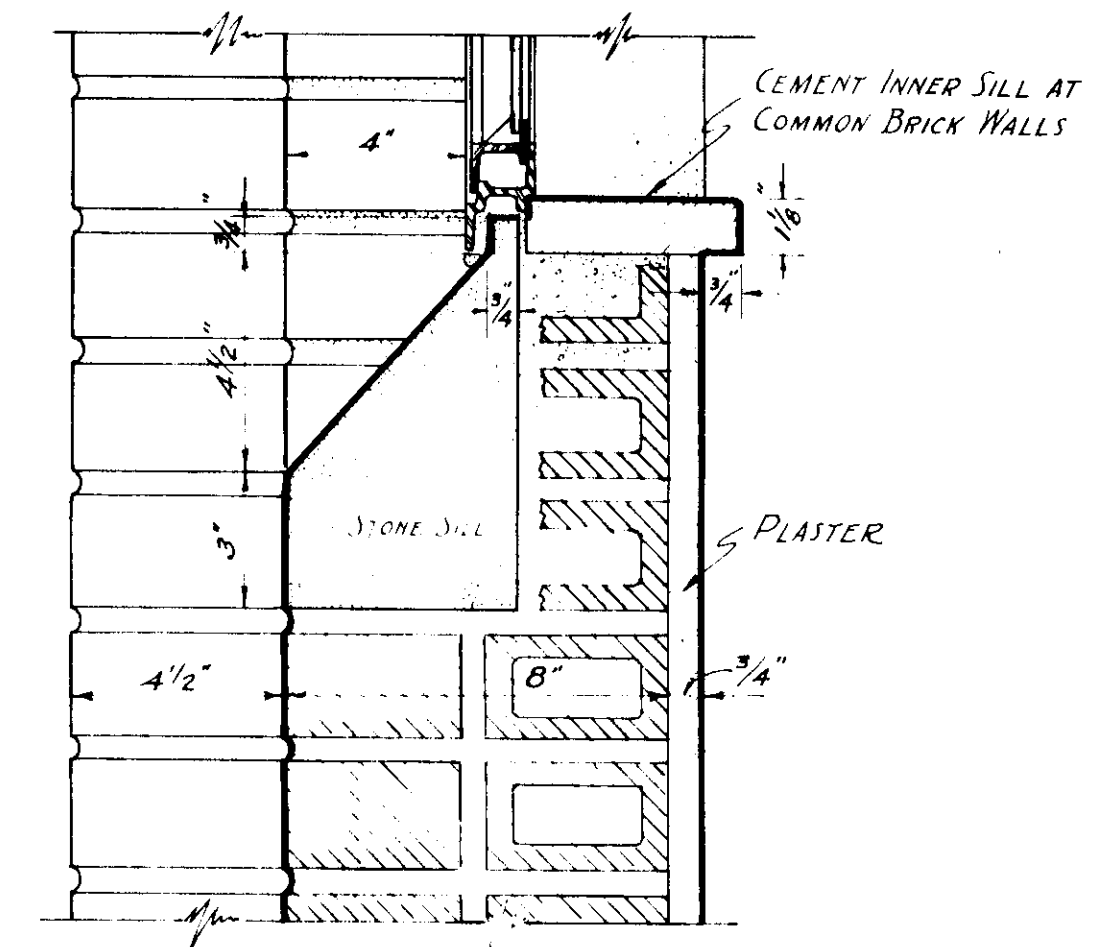
PLAN OF FRONT ENTRANCE
SCALE 1/2" = 1'-0"



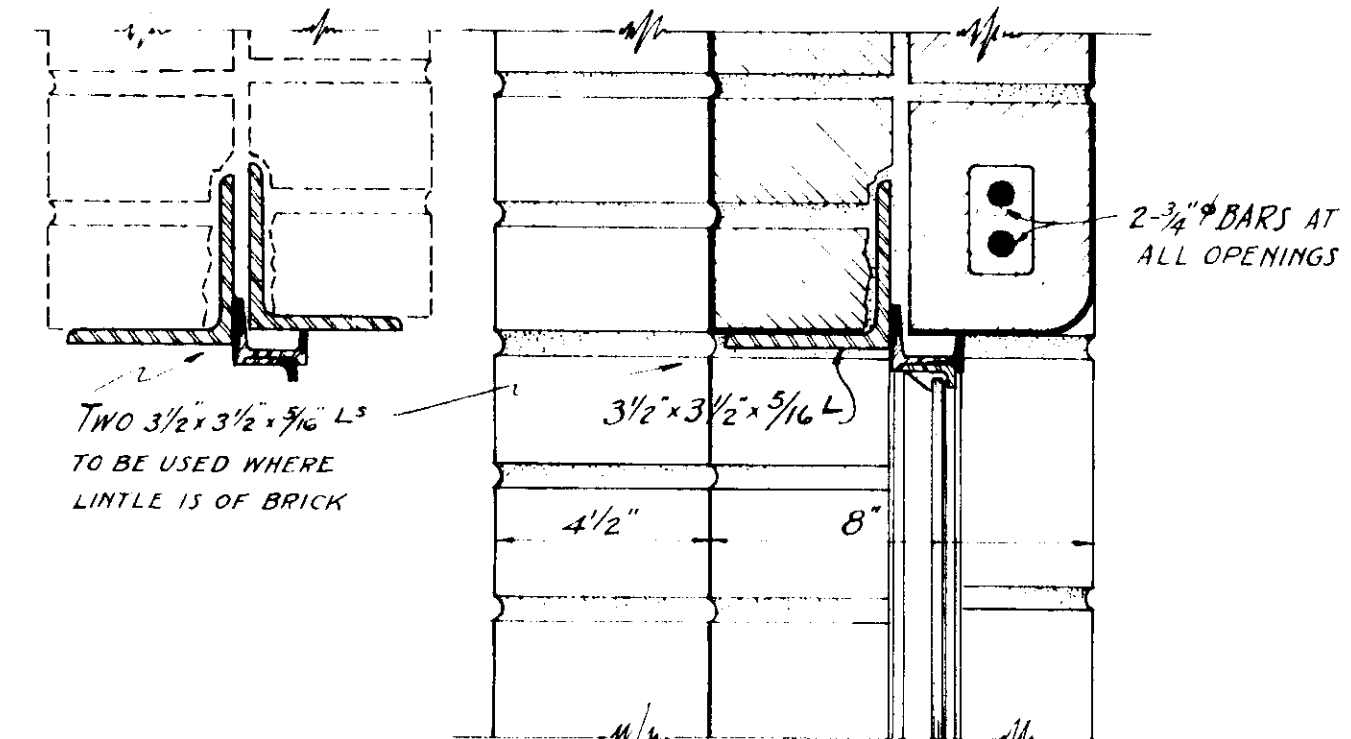
SECTION THRU ENTRANCE
SCALE 1/2" = 1'-0"



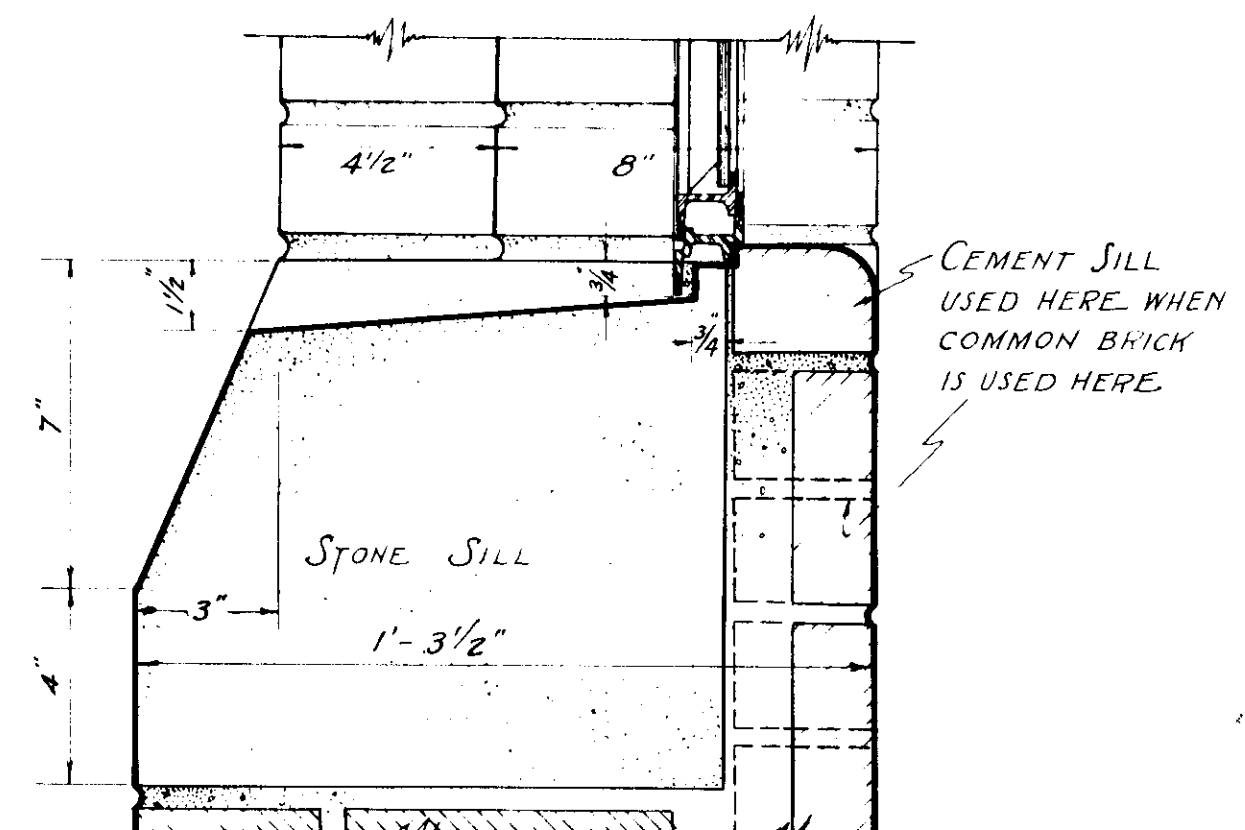
DETAIL D
SCALE 3" = 1'-0"



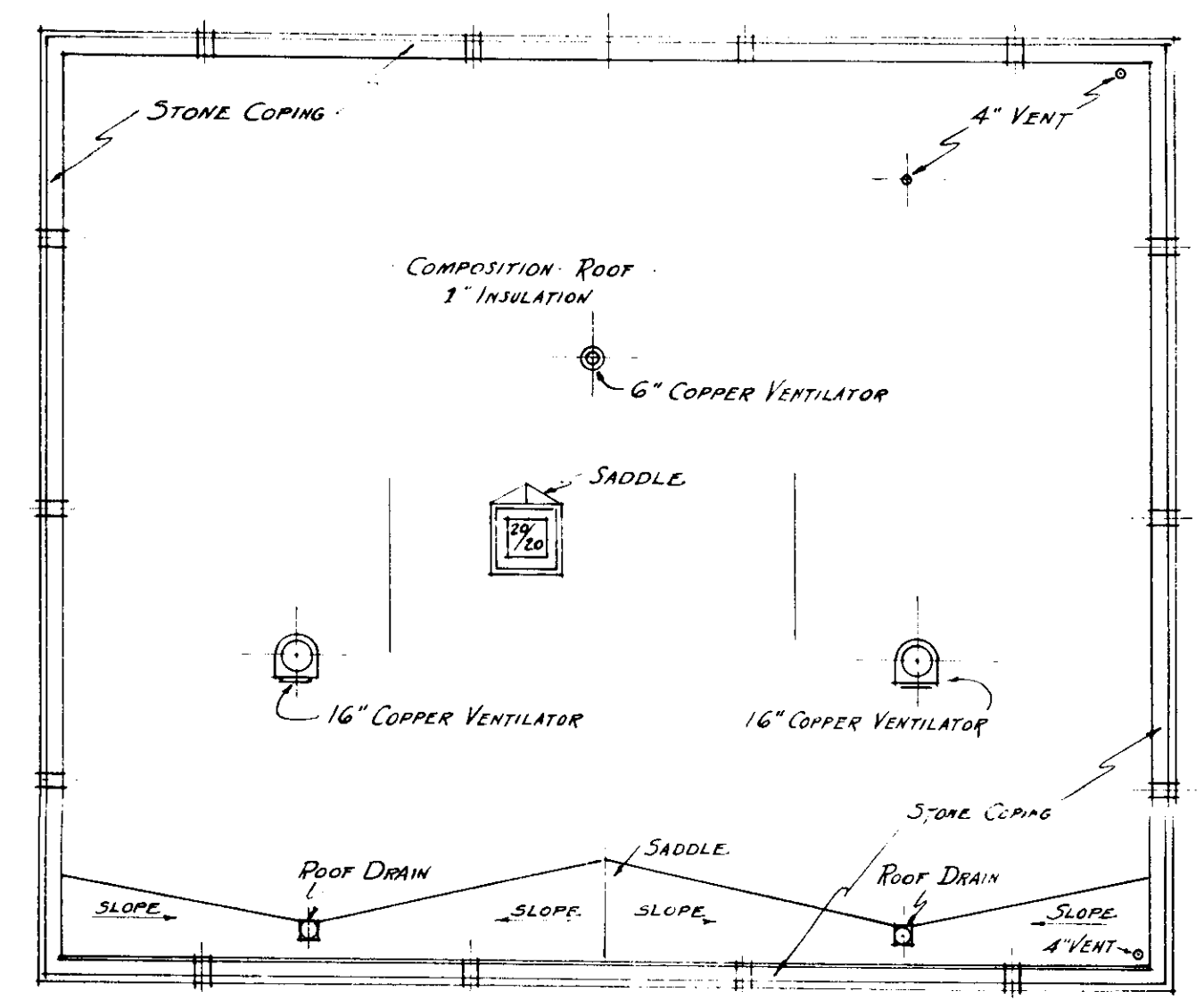
DETAIL C
SCALE 3" = 1'-0"



DETAIL B
SCALE 3" = 1'-0"



DETAIL A
SCALE 3" = 1'-0"



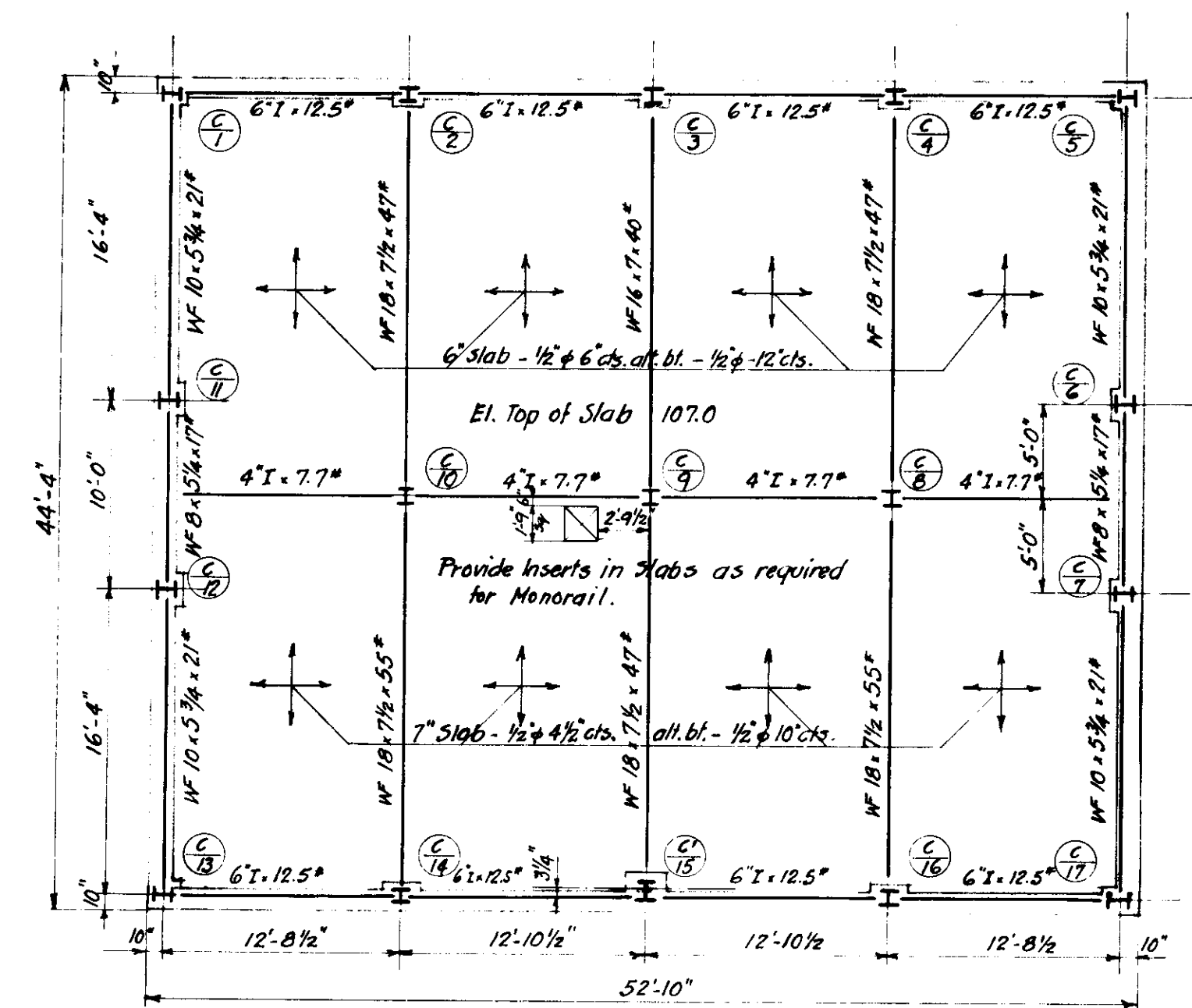
ROOF PLAN
SCALE 1/8" = 1'-0"



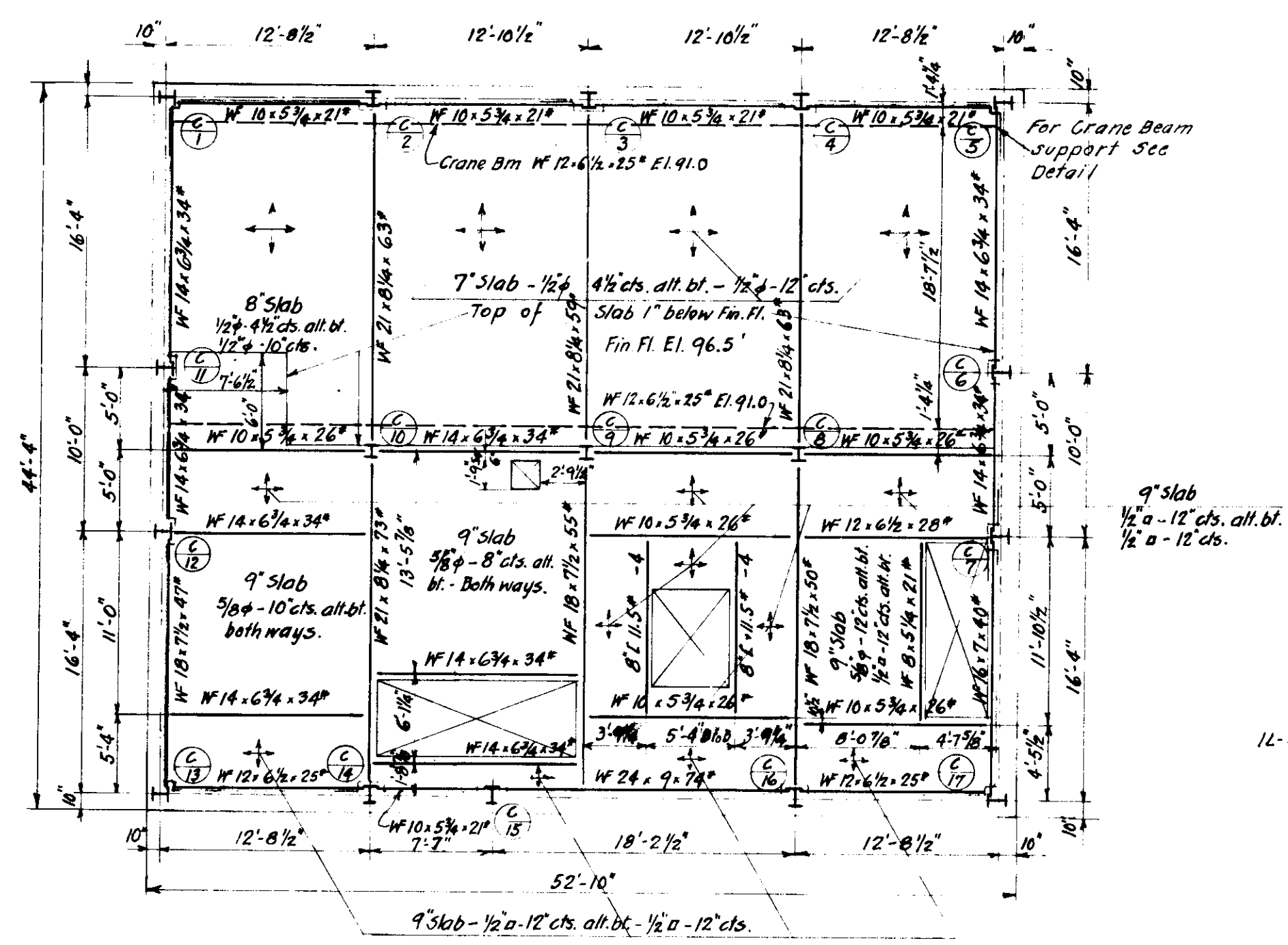
Drawn by T.J.H.
Traced by W.P.H.
Checked by J.H.H.
307-11
30 SHEETS

Living Fessell
Director of Public Service
City Engineer
George R. Gascongne
Consulting Sanitary Engineer

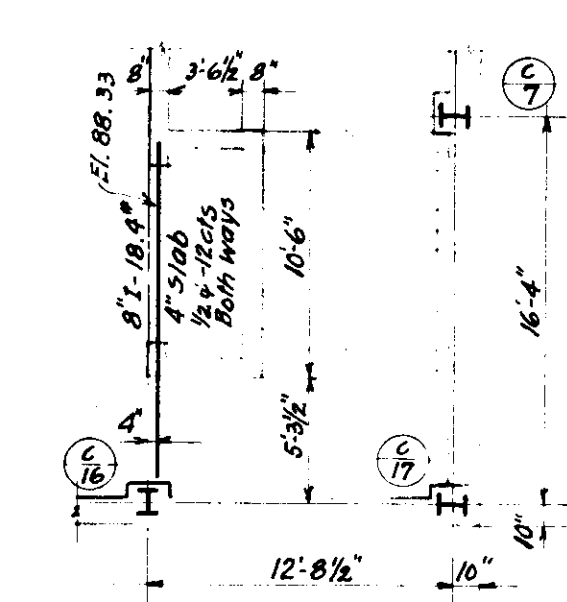
CITY OF MASSILLON, OHIO
SEWAGE TREATMENT WORKS
MAIN BUILDING
TYPICAL EXTERIOR DETAILS
SCALE AS SHOWN
NOVEMBER, 1935



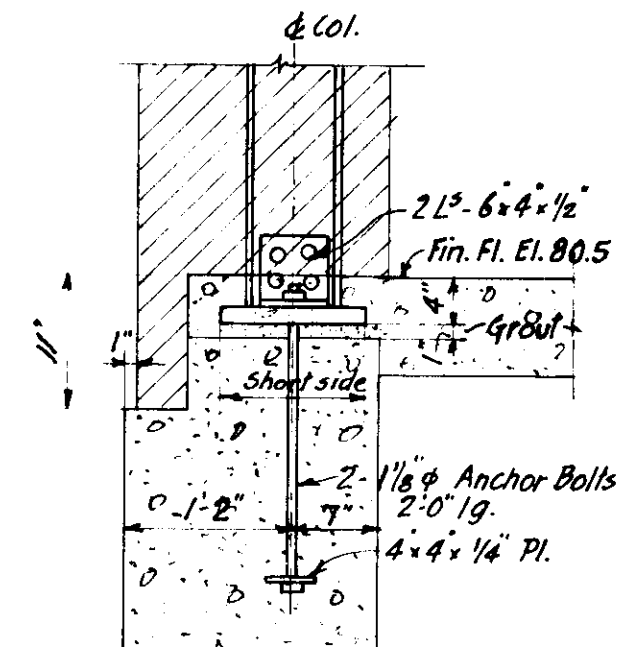
ROOF FRAMING PLAN
SCALE 1/8" = 1'-0"



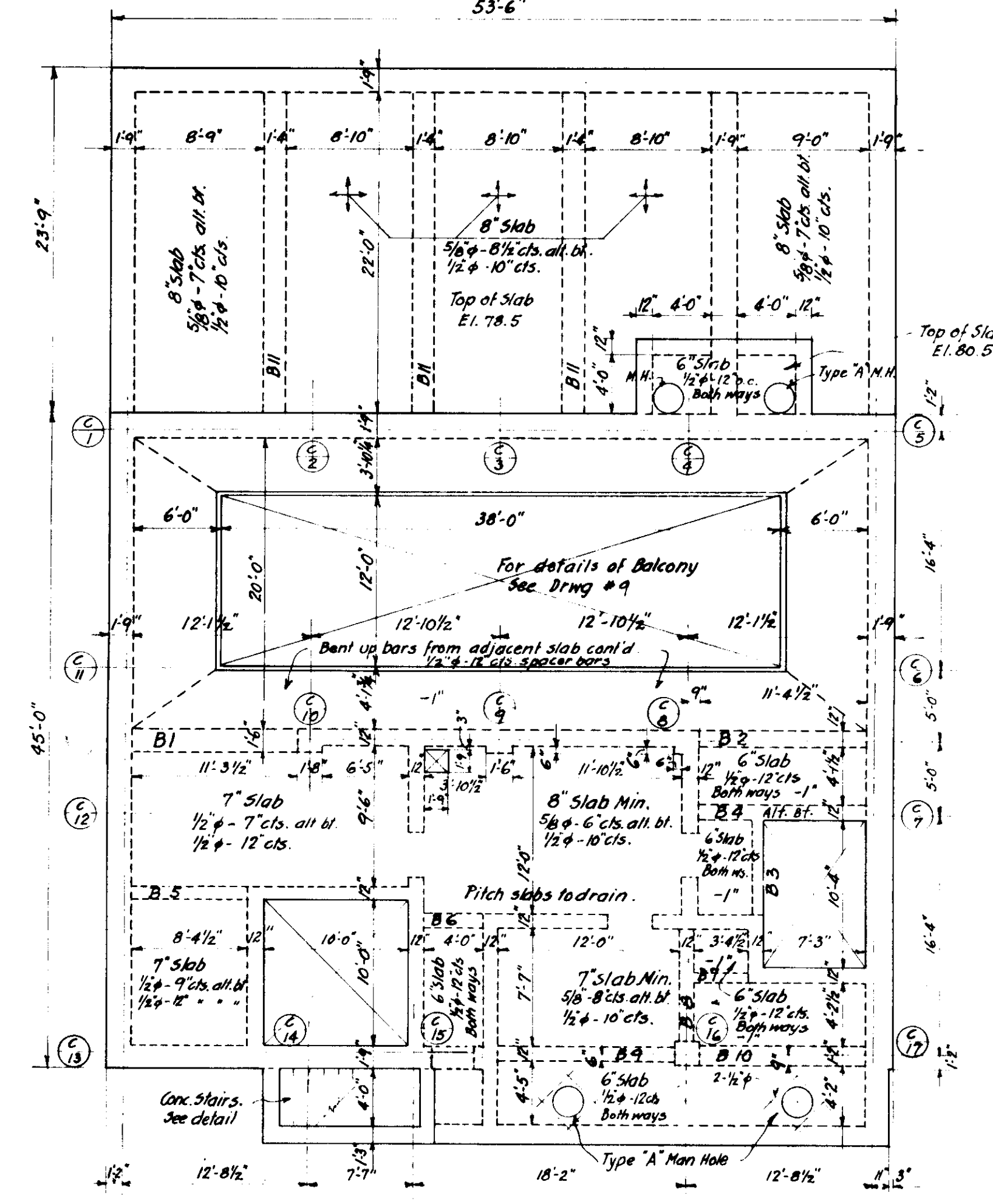
SECOND FLOOR FRAMING PLAN
SCALE 1/8" = 1'-0"



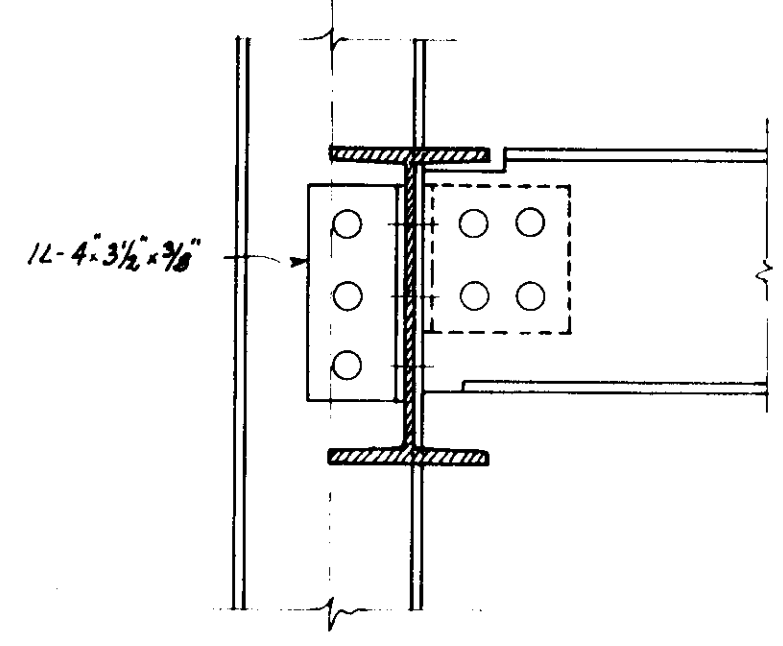
FRAMING PLAN FOR CLOSET
ELEV. 00.5
SCALE 1/8" = 1'-0"



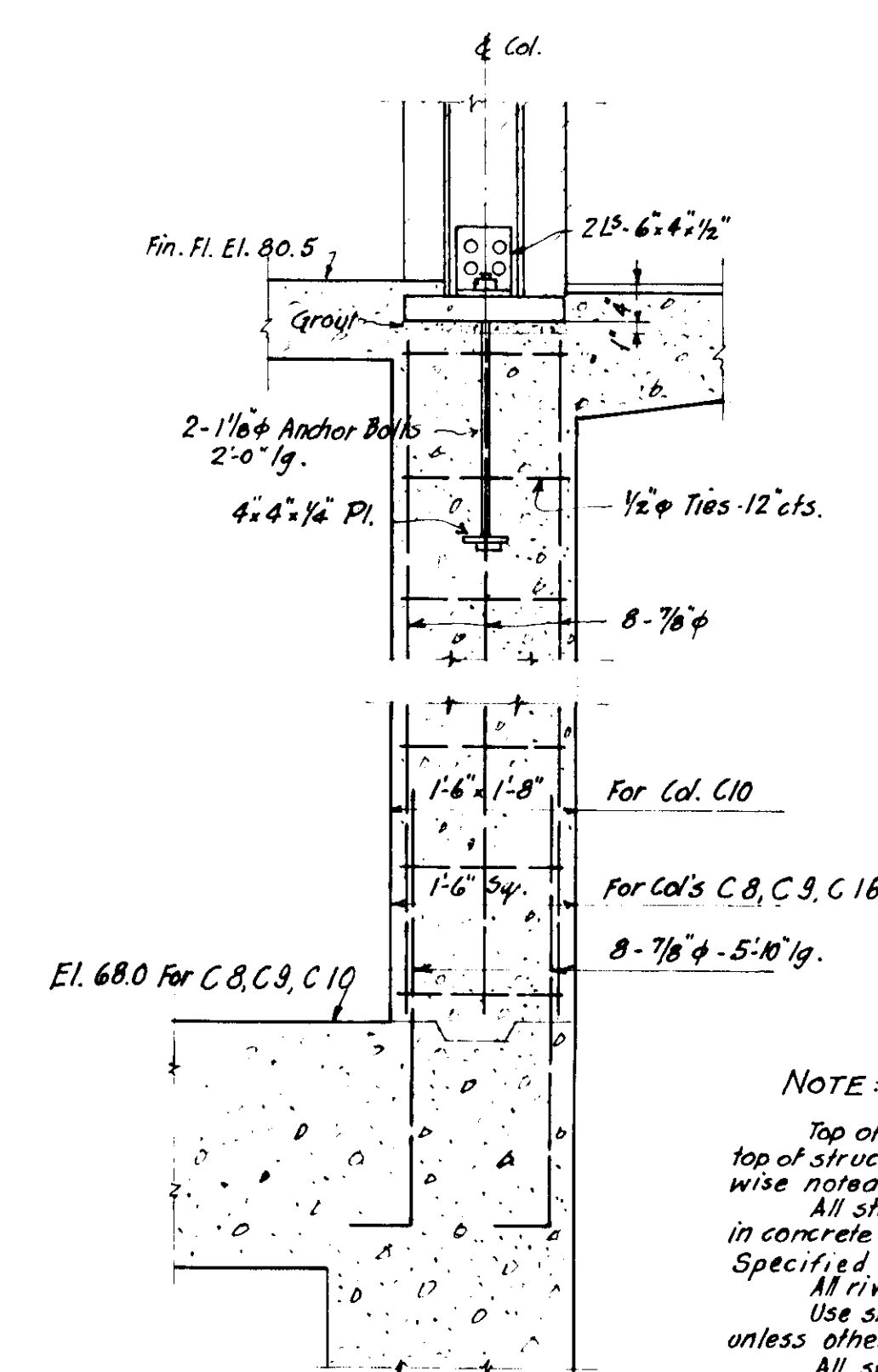
TYPICAL COLUMN BASE
FOR EXTERIOR COL'S.
SCALE 3/4" = 1'-0"



FIRST FLOOR FRAMING PLAN
SCALE 1/8" = 1'-0"

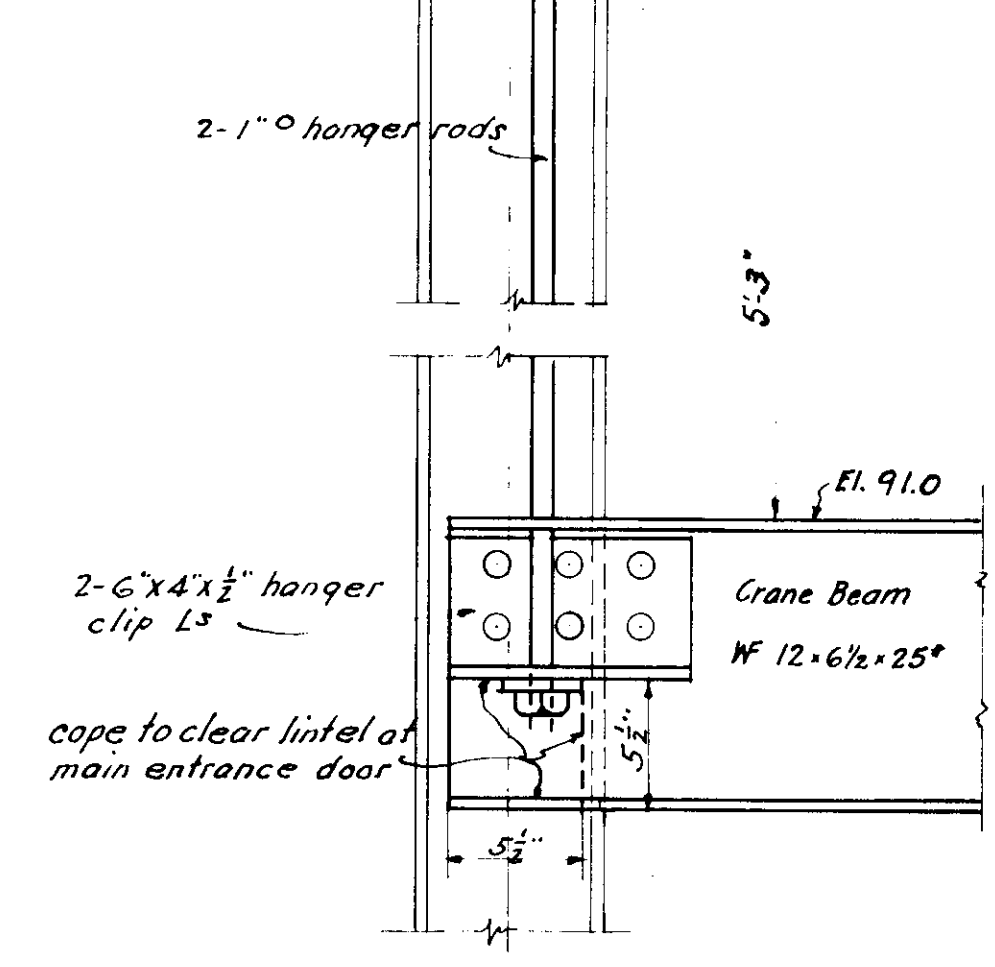


TYPICAL EXTERIOR COLUMN CONNECTIONS
FOR 2ND FLOOR BEAMS
SCALE 1 1/2" = 1'-0"



WALL COLUMN C10
COL. C8, C9 & C16
SIMILAR

2-5"x3 1/2"x3/8" L stiffeners
each side of hanger rods
Grind stiffeners to bear
on flanges



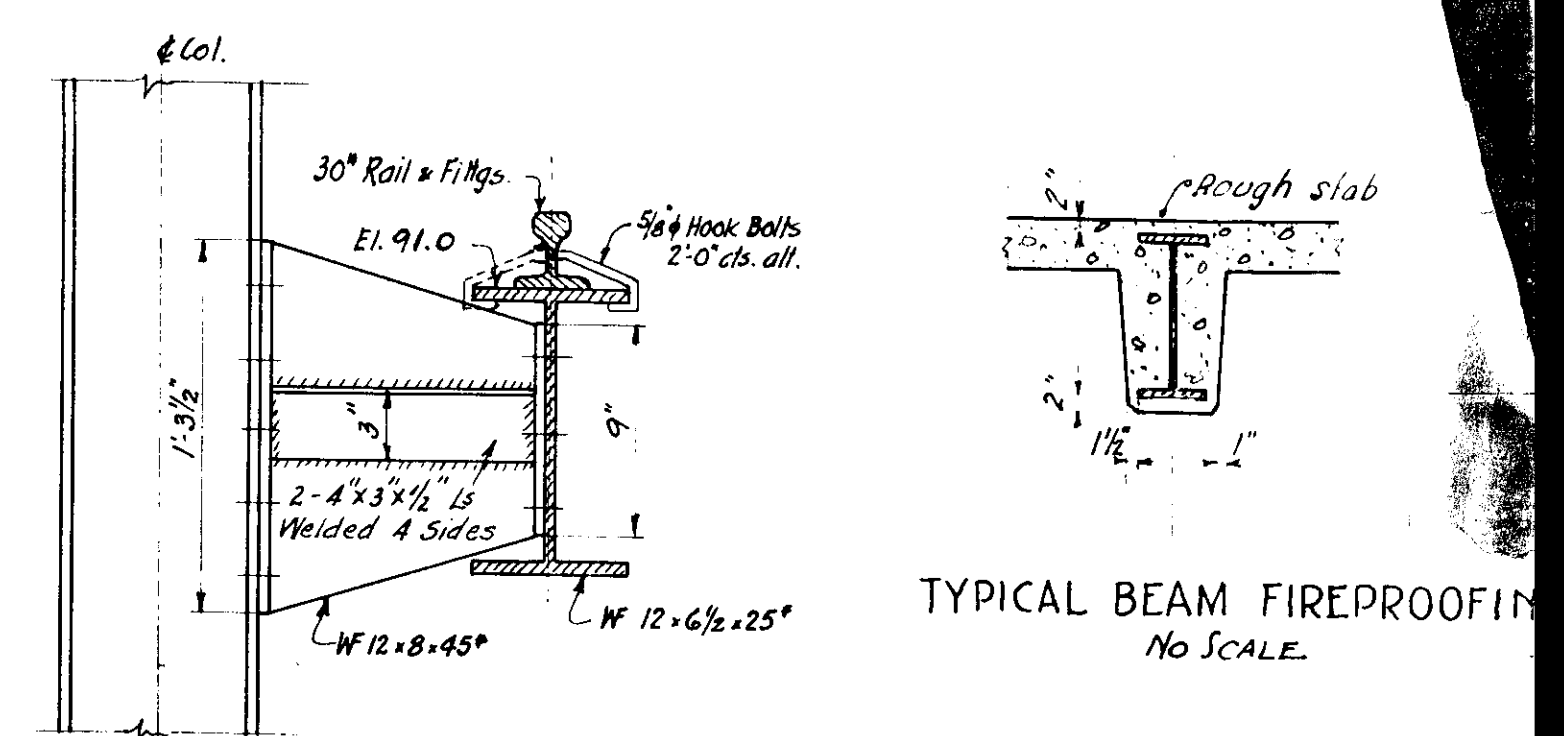
CRANE BEAM SUPPORT
AT NORTH & SOUTH END
SCALE 1 1/2" = 1'-0"

Mark.	Width.	Depth.	Reinforcing		Stirrups	
			Str. Bars.	St. Bars.	No. & Size	Spacing from face of Support
B1	18"	26"	3-7/8"	2-7/8"	10-1/2"	3-3-6-6-9
B2	12	26	2-3/4"	2-5/8"	8-3/8"	3-3-6-6
B3	8	12	2-1/2"	2-5/8"	8-3/8"	3-3-6-6
B4	12	24	2-3/4"	2-5/8"	8-3/8"	3-3-6-6
B5	12	18	2-3/4"	2-5/8"	6-3/8"	6-6-6
B6	12	16	3-1/2"	3-1/2"	6-3/8"	6-6-6
B7	8	12	2-1/2"	2-5/8"	8-3/8"	3-3-6-6
B8	12	20	2-3/4"	2-5/8"	8-3/8"	3-3-6-6
B9	12	24	2-3/4"	2-5/8"	10-1/2"	3-3-6-9-9
B10	14	24	2-3/4"	2-7/8"	16-1/2"	2@3'-3@6'-3@9'-9"
B11	16	32	5-1"	4-1"	30-1/2"	4@3'-4@6'-4@9'-3@12"

Mark	Size	Base Plate
C1	8" x 8" x 3/4"	12" x 15" x 1 1/2"
C2	8" x 8" x 40"	12" x 20" x 2 1/2"
C3	do.	do.
C4	do.	do.
C5	8" x 8" x 31"	12" x 15" x 1 1/2"
C6	do.	do.
C7	do.	do.
C8	8" x 8" x 40"	16" x 16" x 1 1/2"
C9	do.	do.
C10	8" x 8" x 48"	16" x 18" x 2"
C11	8" x 8" x 31"	12" x 15" x 1 1/2"
C12	8" x 8" x 35"	12" x 15" x 1 1/2"
C13	8" x 8" x 31"	do.
C14	8" x 8" x 40"	12" x 20" x 2 1/2"
C15	do.	do.
C15 1/2	8" x 8" x 31"	9" x 12" x 1"
C16	8" x 8" x 40"	16" x 16" x 1 1/2"
C17	8" x 8" x 31"	12" x 15" x 1 1/2"

Elev. Bottom of Base Plates: { 96.33' for C15
80.17' for others

NOTE:-
Top of structural steel shall be 2" below top of struct. concrete slabs unless otherwise noted.
All struct. beams and columns encased in concrete shall be wrapped or caged as specified under 10-1.
All rivets 7/8" unless otherwise shown. Use standard beam connections unless otherwise shown.
All steel columns to be milled at all splices and bases.
Lintels for exterior and interior openings not specifically shown or noted otherwise shall be 1L-3 1/2" x 3 1/2" x 3/8" for each 4" wall thickness. Lintels over openings in concrete walls shall have 1-3/4" x 8" bearing.
All slab depths shown are for struct. slabs only, where other than monolithic finish is called for.
All alternate main reinf. bars to be bent up at 1/4 point and extended over in adjacent slab 1/4 of the longer span, except and slabs which shall have all bent bars hooked.
Clear distance of reinf. bars from face of concrete shall be:
1" for floor slabs
2" for columns and 12" walls
2 1/2" for walls over 12" in thickness
3" for footings and bottom slabs.
Reinforcing of 12" concrete walls shall be 1/2" x 12" cts. both ways in both faces unless otherwise noted.



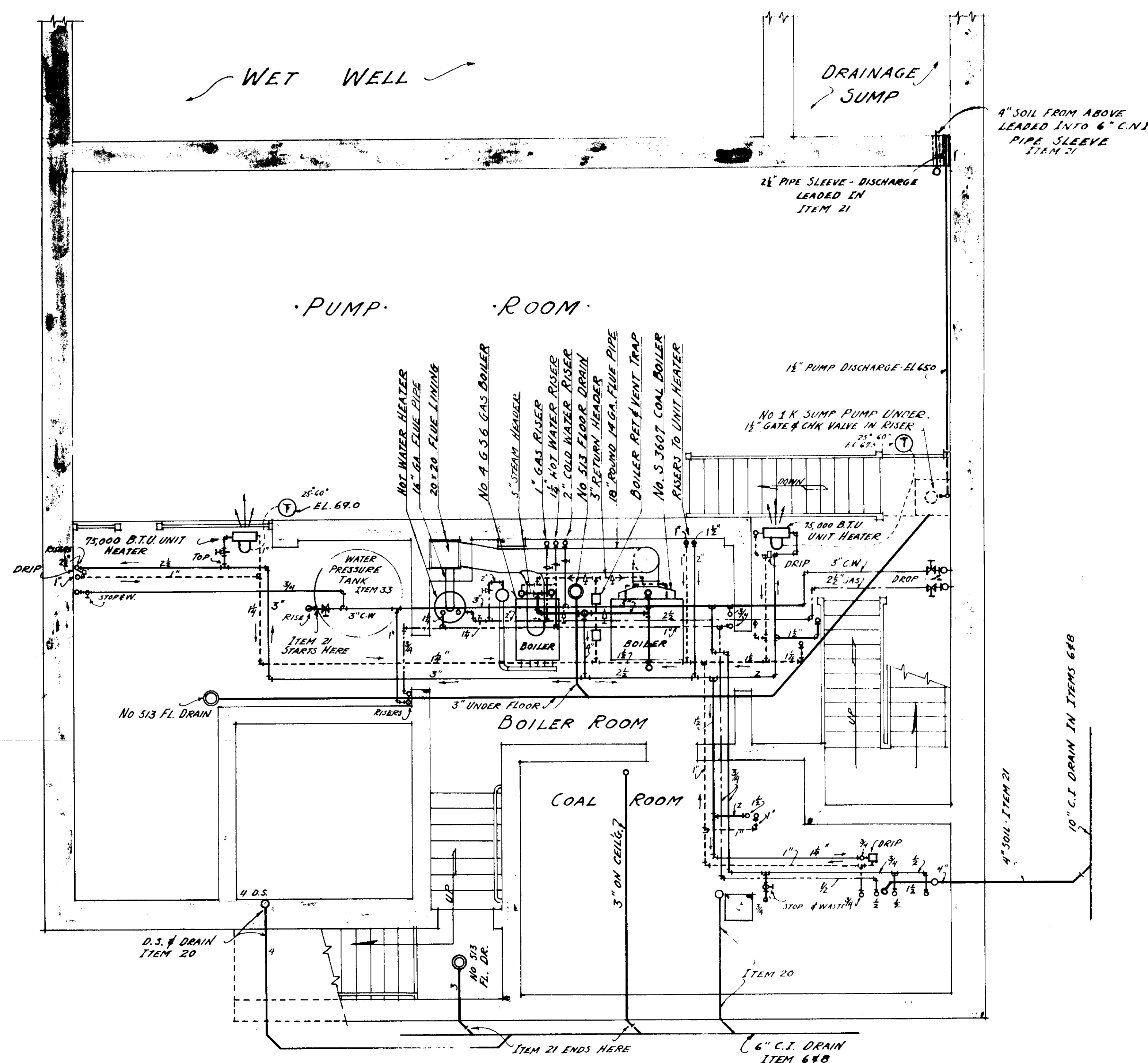
BRACKET FOR CRANE RAIL
FOR COL. C2, C3, C4, C8, C9 & C10
SCALE 1 1/2" = 1'-0"



CITY OF MASSILLON, OHIO
SEWAGE TREATMENT WORKS
MAIN BUILDING
STRUCTURAL PLANS & DETAILS
SCALE: AS SHOWN
NOVEMBER, 1935

Drawn by G.T.Z.
Traced by G.T.Z.
Checked by H.H.L.
307-12
30 SHEETS

Director of Public Service
City Engineer
Consulting Sanitary Engineer



MAIN BUILDING - BASEMENT PLAN - HEATING & PLUMBING
SCALE $\frac{1}{4}" = 1'-0"$

4" SOIL FROM ABOVE
LEADED INTO 6" C.I. PIPE SLEEVE
ITEM 21

10" C.I. DRAIN IN ITEMS 6 & 8
4" SOIL ITEM 21

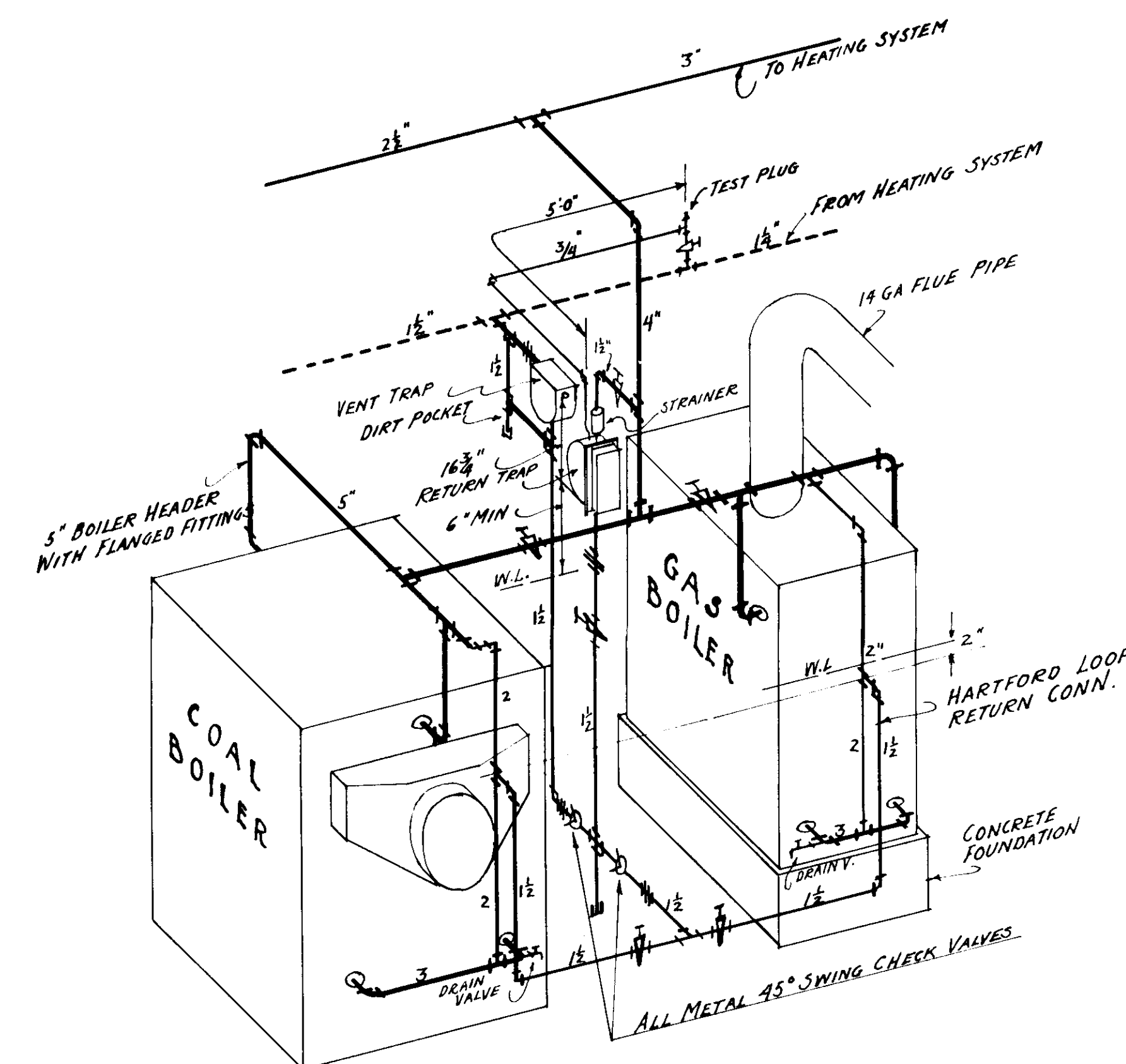


DIAGRAM OF BOILER CONNECTIONS
NOT TO SCALE

RAD. VALVES & TRAPS

VALVES	TRAPS
RAD. SIZE	RAD. SIZE
0 - 35 $\frac{1}{2}"$	0 - 40 $\frac{1}{2}"$
36 - 80 $\frac{3}{4}"$	41 - 100 $\frac{3}{4}"$
81 + 1"	100 + 1"

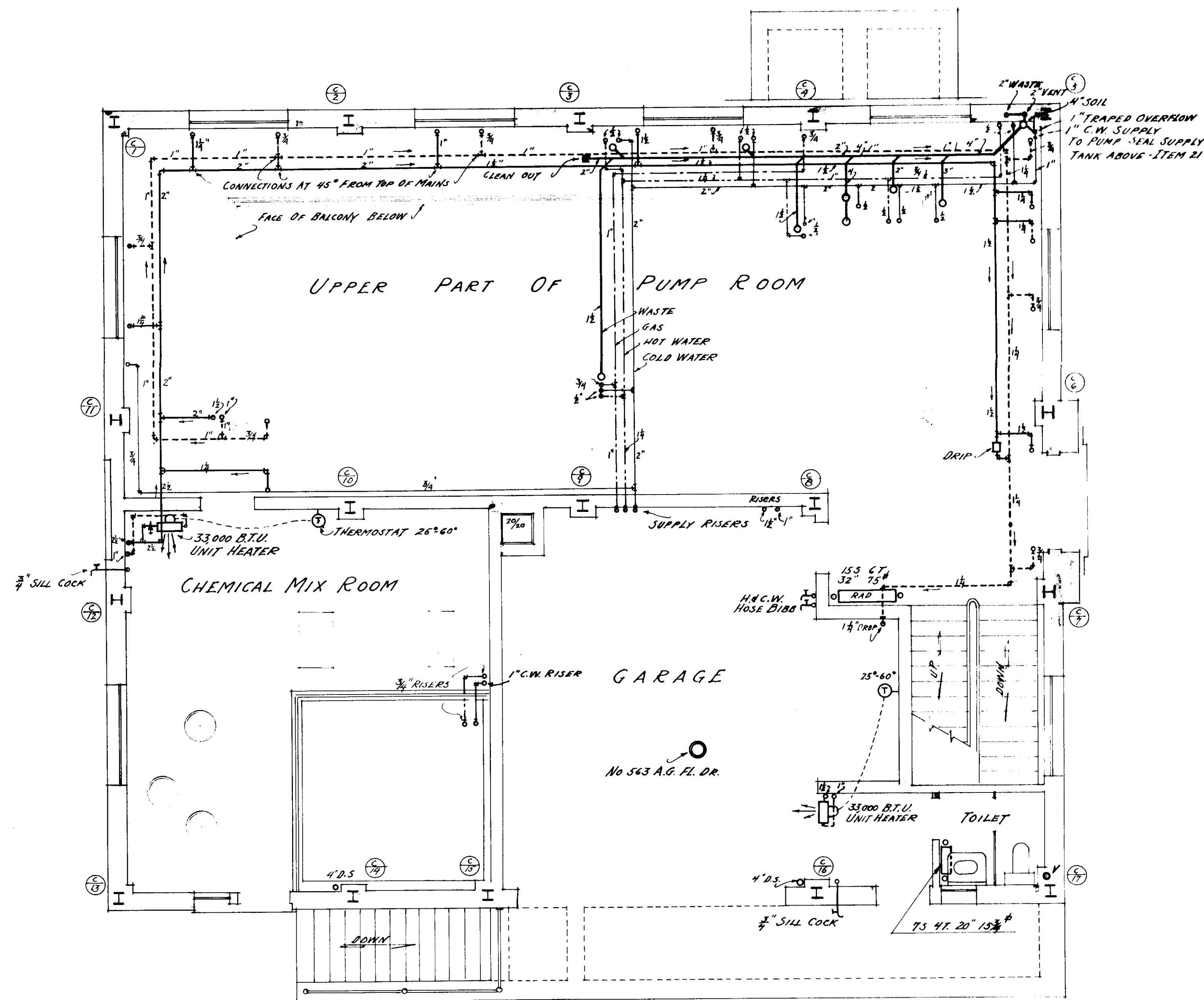
VERTICAL STUBS TO BE
SAME SIZE AS TRAP OR
VALVE BUT NOT LESS THAN $\frac{3}{4}"$

LEGEND

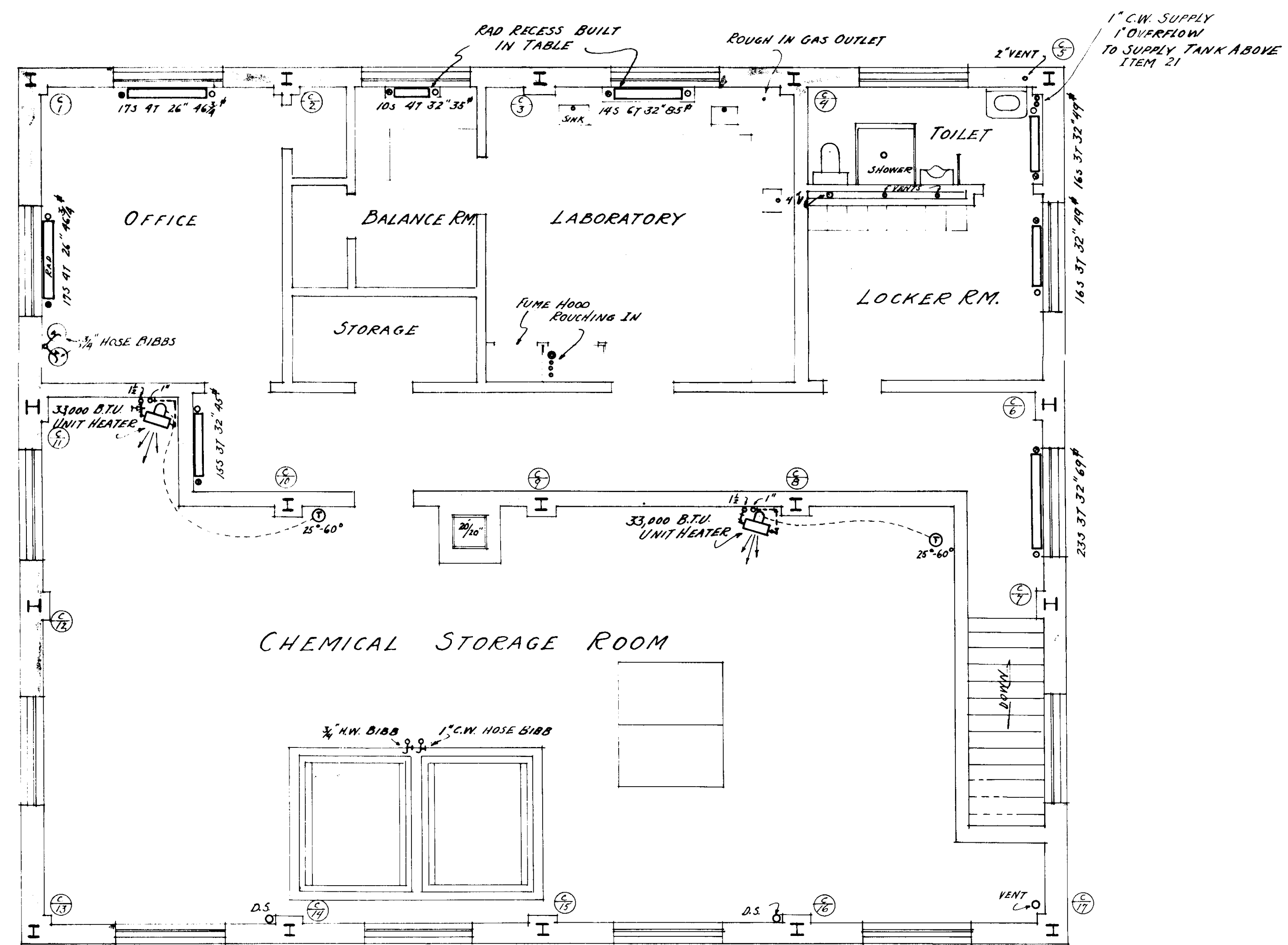
—	STEAM SUPPLY LINE
- - -	RETURN LINE
—	COLD WATER
—	HOT WATER
—	GAS PIPING
—	DRAIN or WASTE
CW	COLD WATER
HW	HOT WATER
—	GATE VALVE
—	GATE VALVE
⊙	THERMOSTAT

NOTES!
IN GENERAL ALL PIPING SHOWN ON THIS AND
SHEET NO. 14 IS ON THE CEILING EXCEPT
WHERE NOTED OTHERWISE





MAIN BUILDING - FIRST FLOOR PLAN - PLUMBING & HEATING
SCALE 1/4" = 1'-0"



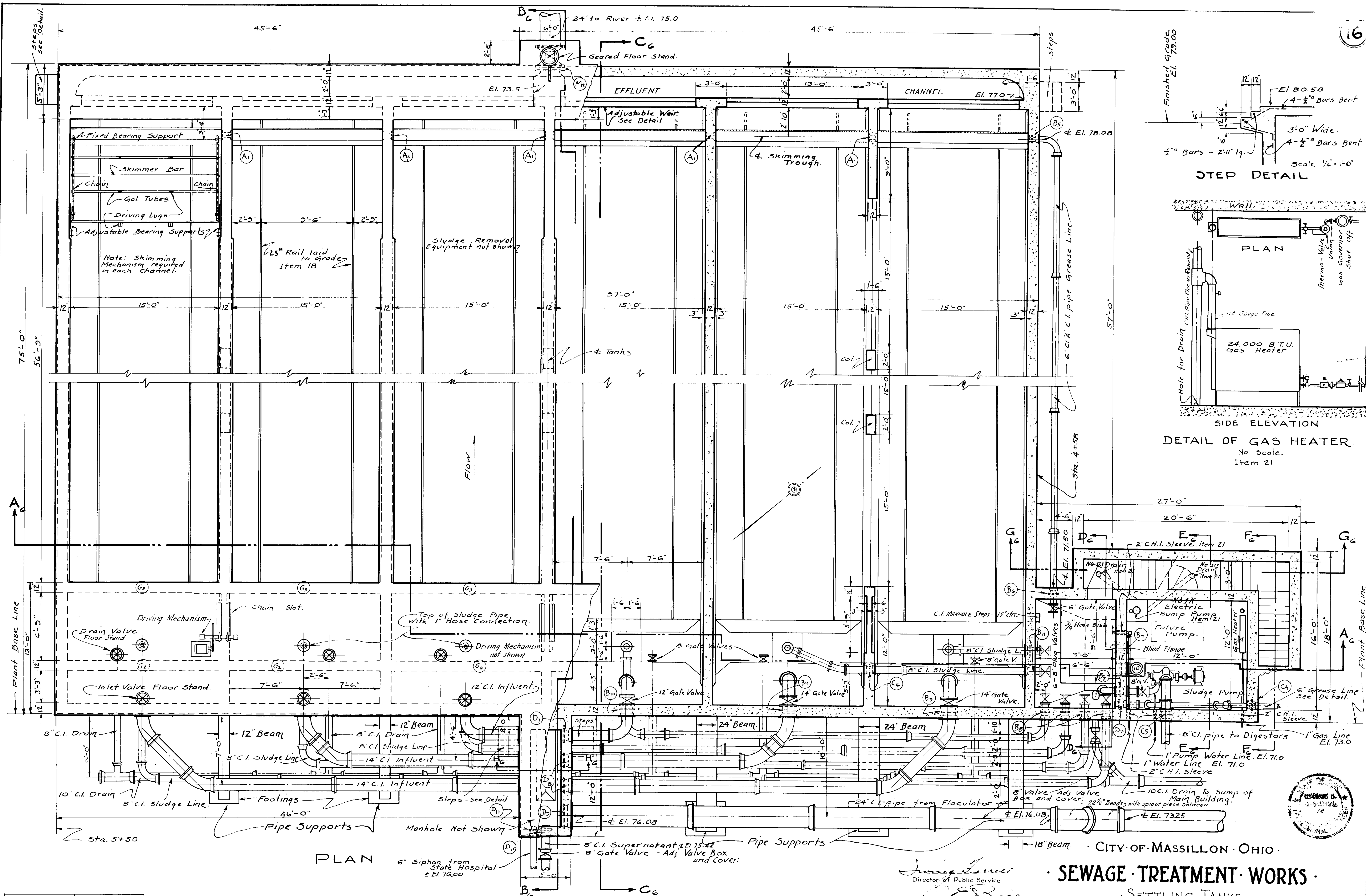
MAIN BUILDING - SECOND FLOOR PLAN - PLUMBING & HEATING
SCALE 1/4" = 1'-0"

Drawn by SCHALL
Traced by SCHALL
Checked by SCHALL
307-14
30 SHEETS

James J. Schall
Director of Public Service
City Engineer
Rogers & Cascoigne
Consulting Sanitary Engineers

CITY OF MASSILLON, OHIO
SEWAGE TREATMENT WORKS
MAIN BUILDING
HEATING & PLUMBING
SCALE 1/4" = 1'-0"
NOVEMBER, 1935





Drawn by H.H.M.-KJ
Traced by J.K.S.
Checked by H.H.M. 307-16
• 30 • SHEETS •

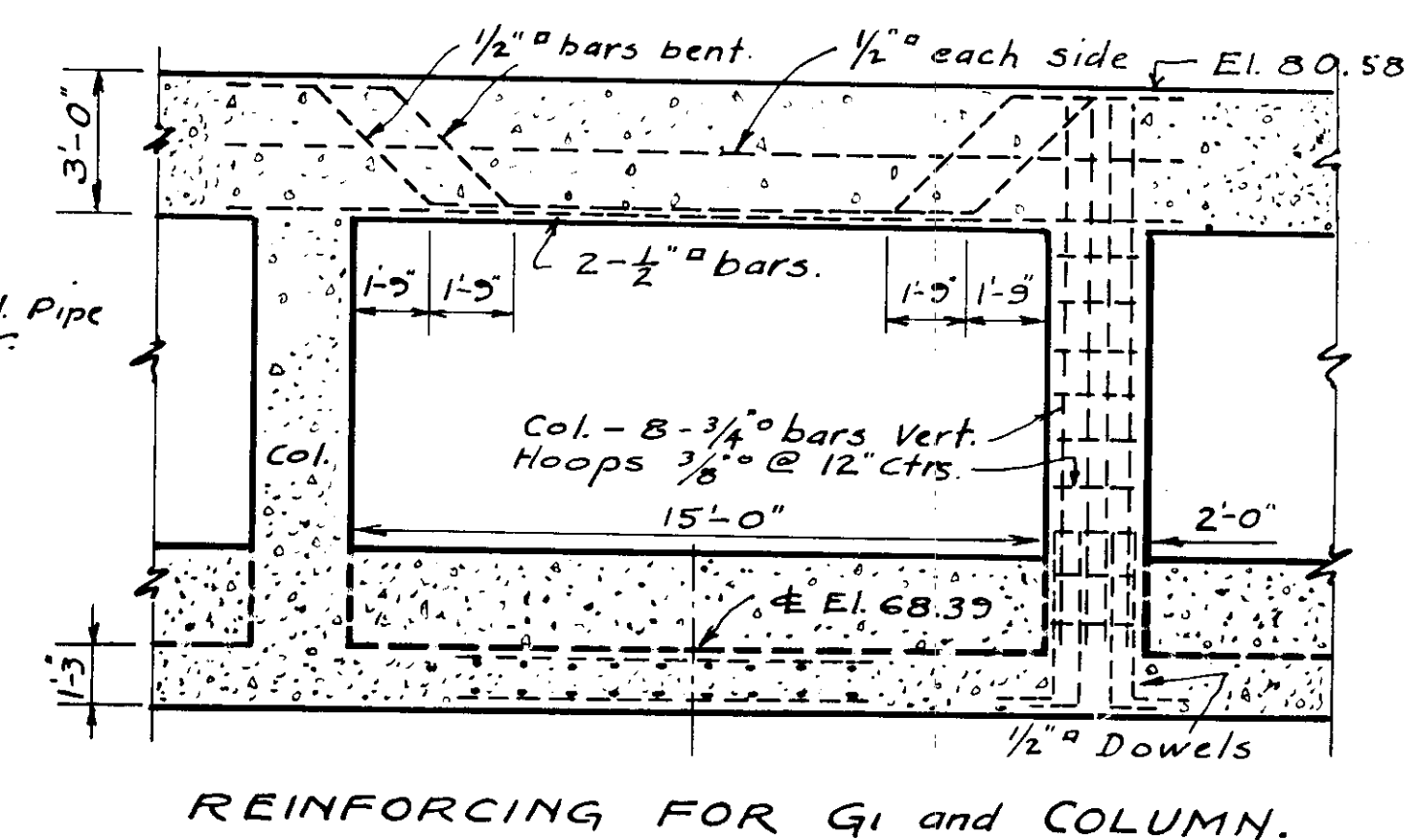
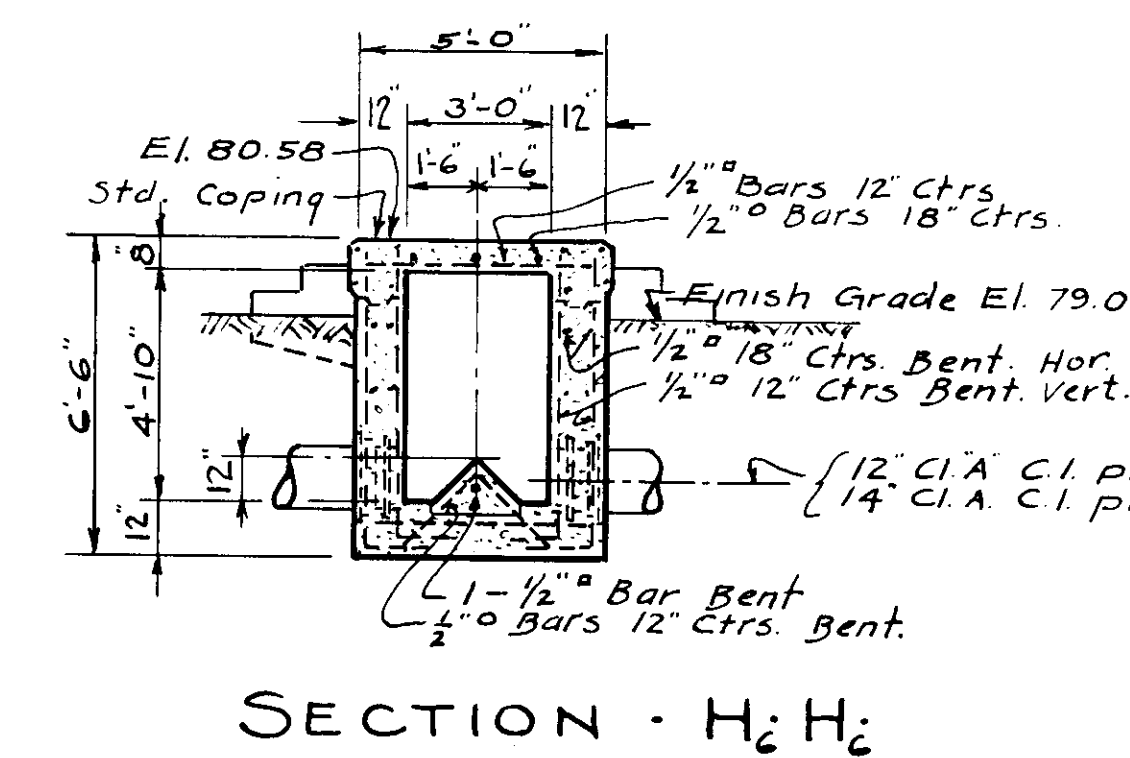
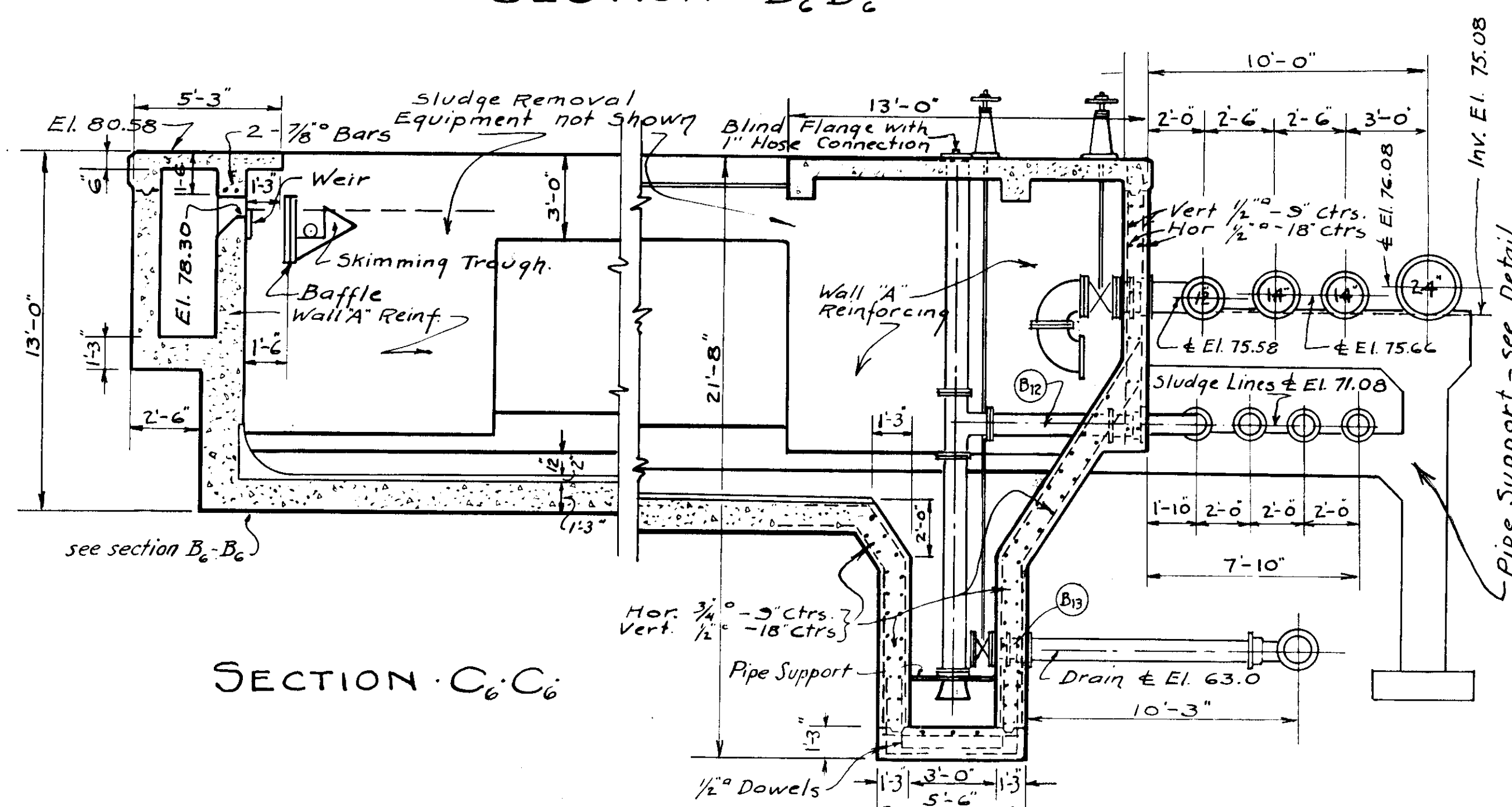
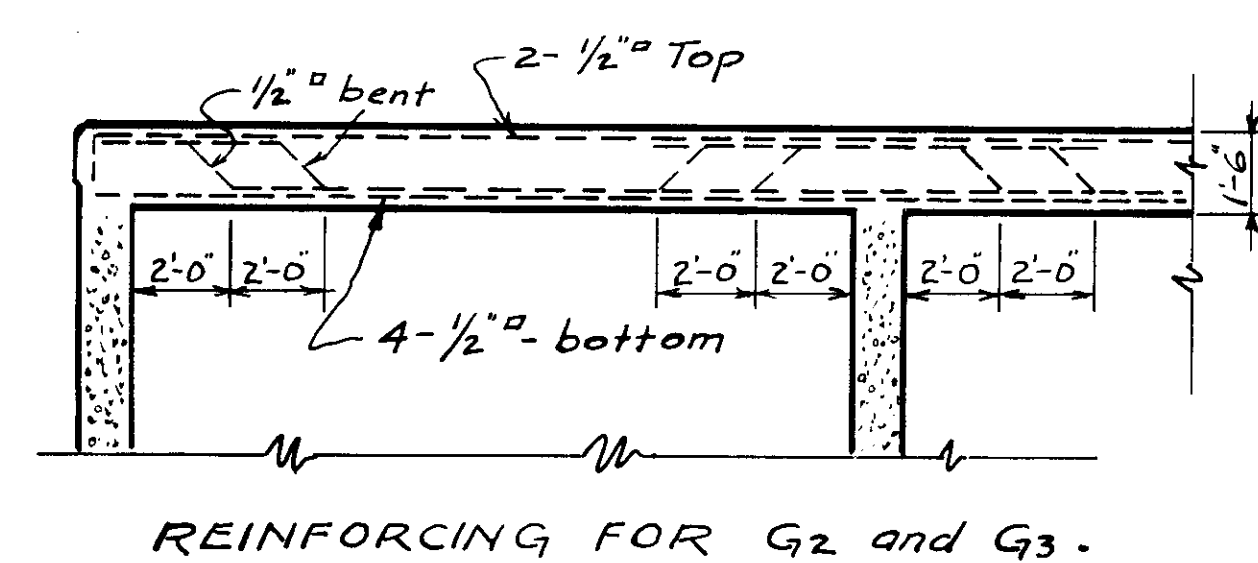
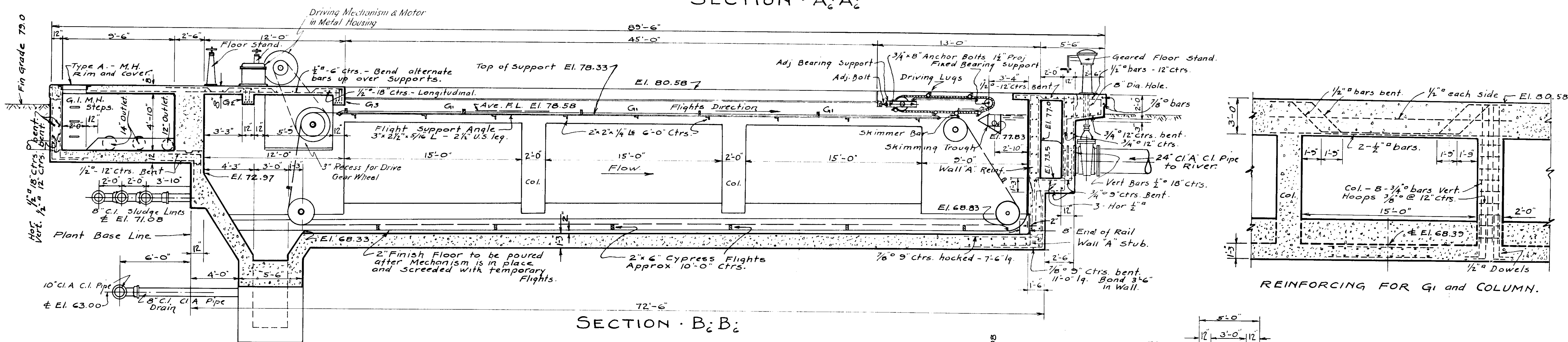
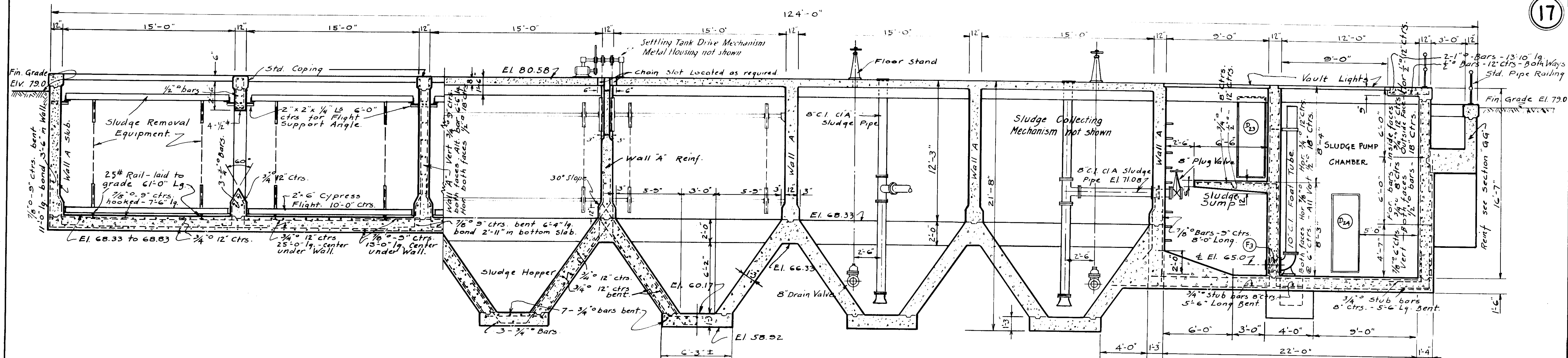
James Turner
Director of Public Service

E. E. Rice
City Engineer

Walter W. Carver
Consulting Sanitary Engineer

· SEWAGE · TREATMENT · WORKS ·
· SETTLING · TANKS ·
· PLAN ·

· SCALE · $\frac{1}{4}'' = 1' - 0''$ · NOVEMBER · 1935 ·



Drawn by · H.H.M. JKS Traced by · J.K.S. Checked by · <i>W.H.M.</i>	307-17 30 · SHEETS ·
---	--------------------------------

James L. Lessor
Director of Public Service

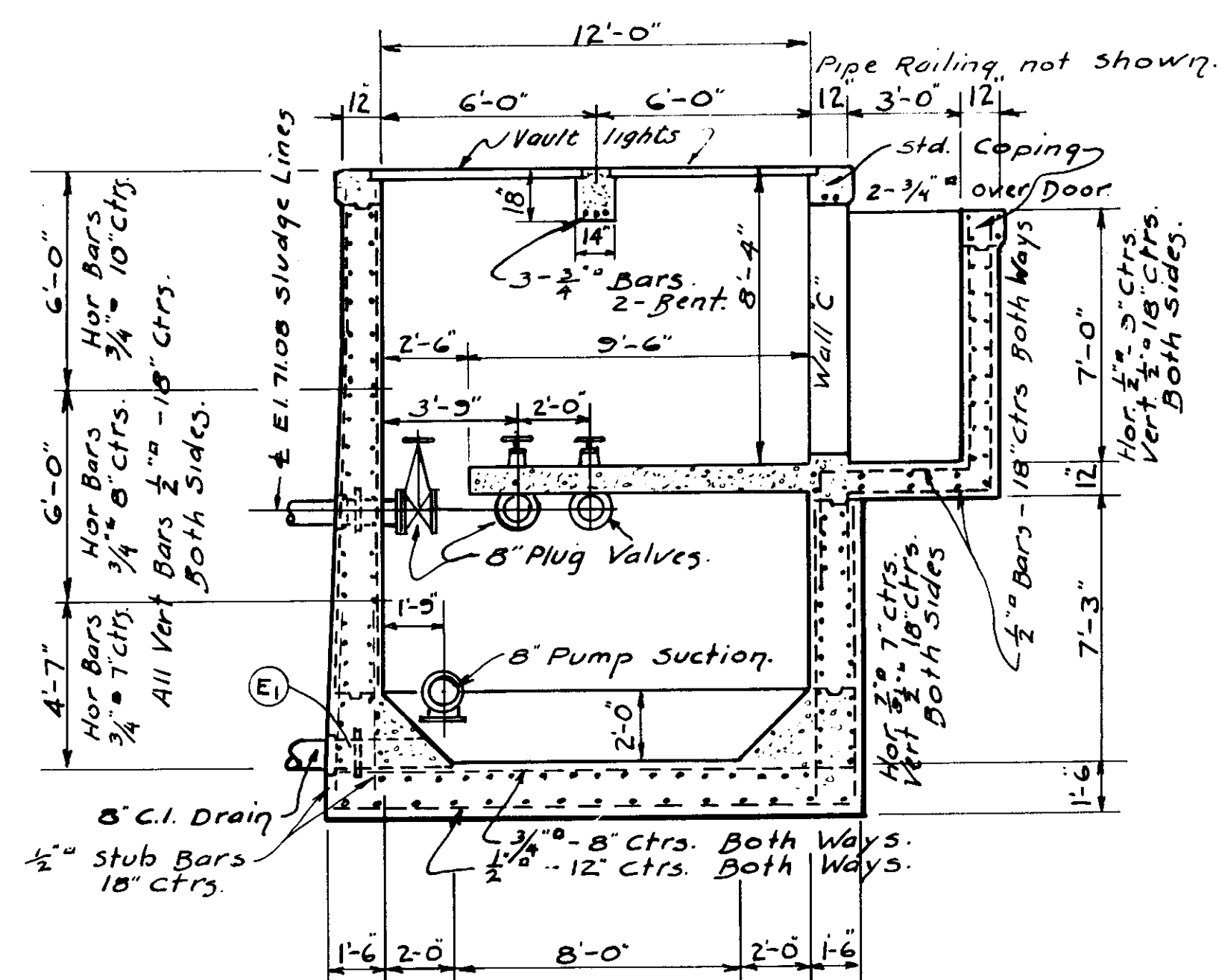
C. E. Rye
City Engineer

Walter B. Garcoiga
Consulting Sanitary Engineer

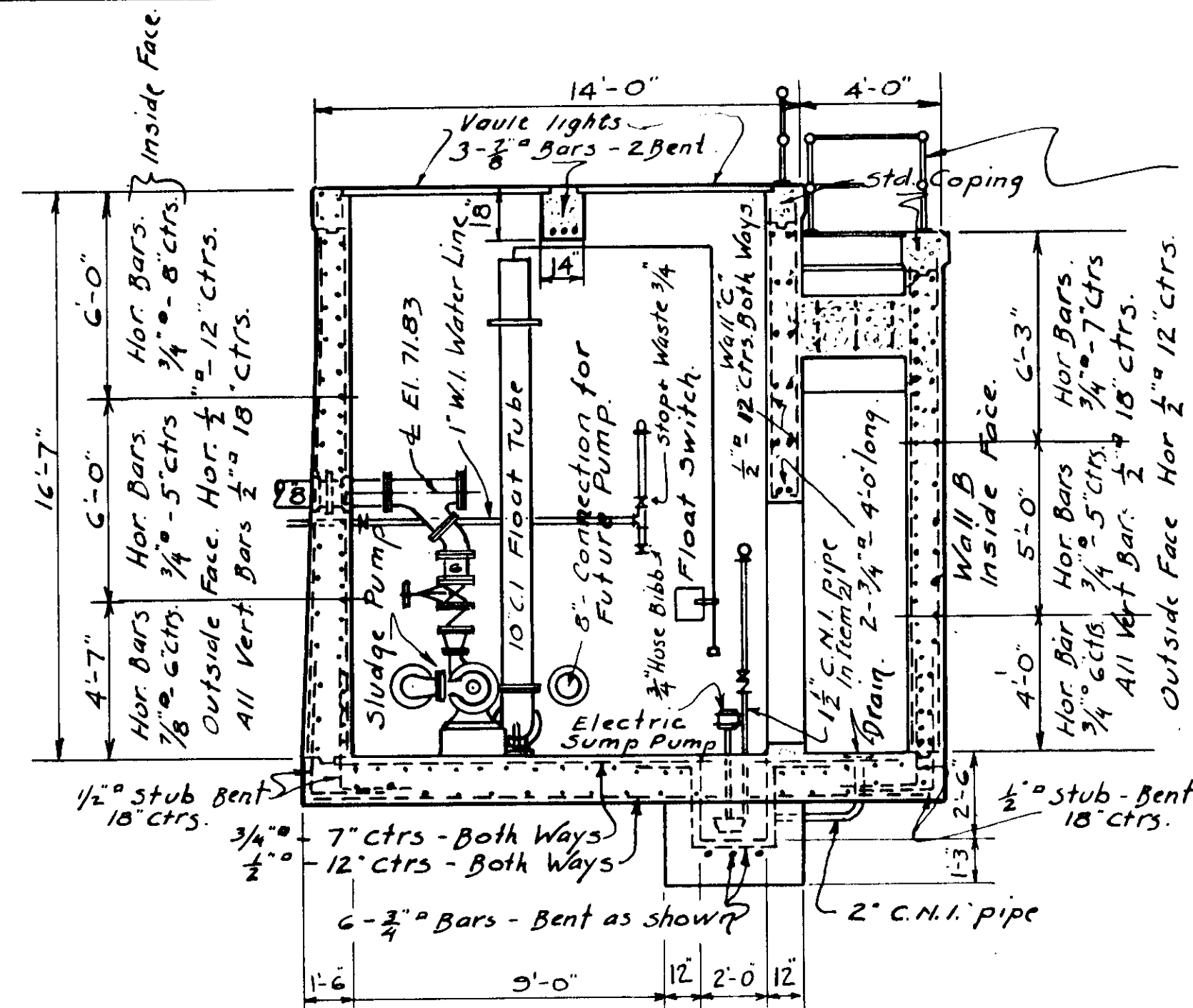
· CITY OF MASSILLON · OHIO ·
SEWAGE · TREATMENT · WORKS ·
· SETTLING · TANKS ·

• SCALE: $\frac{1}{4}" = 1'-0"$

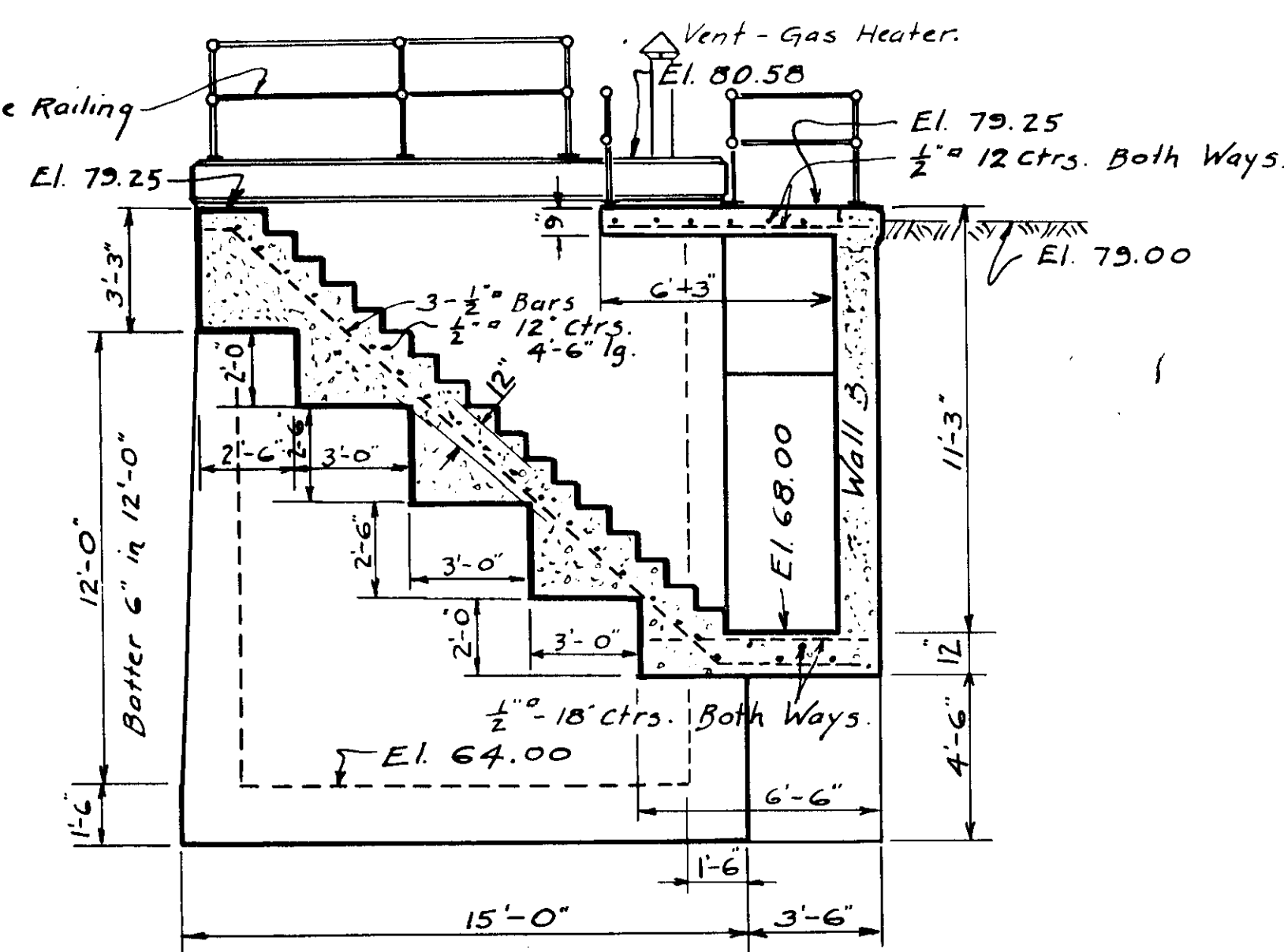
· NOVEMBER · 1935



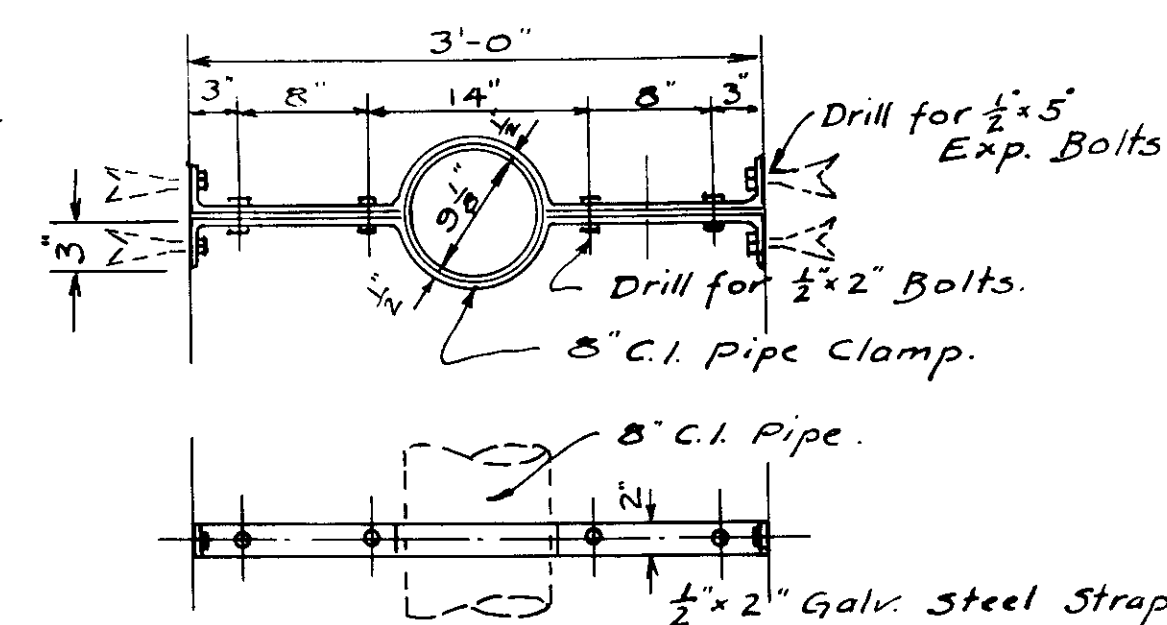
SECTION - D₁ D₂
Scale 1/4" = 1'-0"



SECTION - E: E:
scale 1/4" = 1'-0"



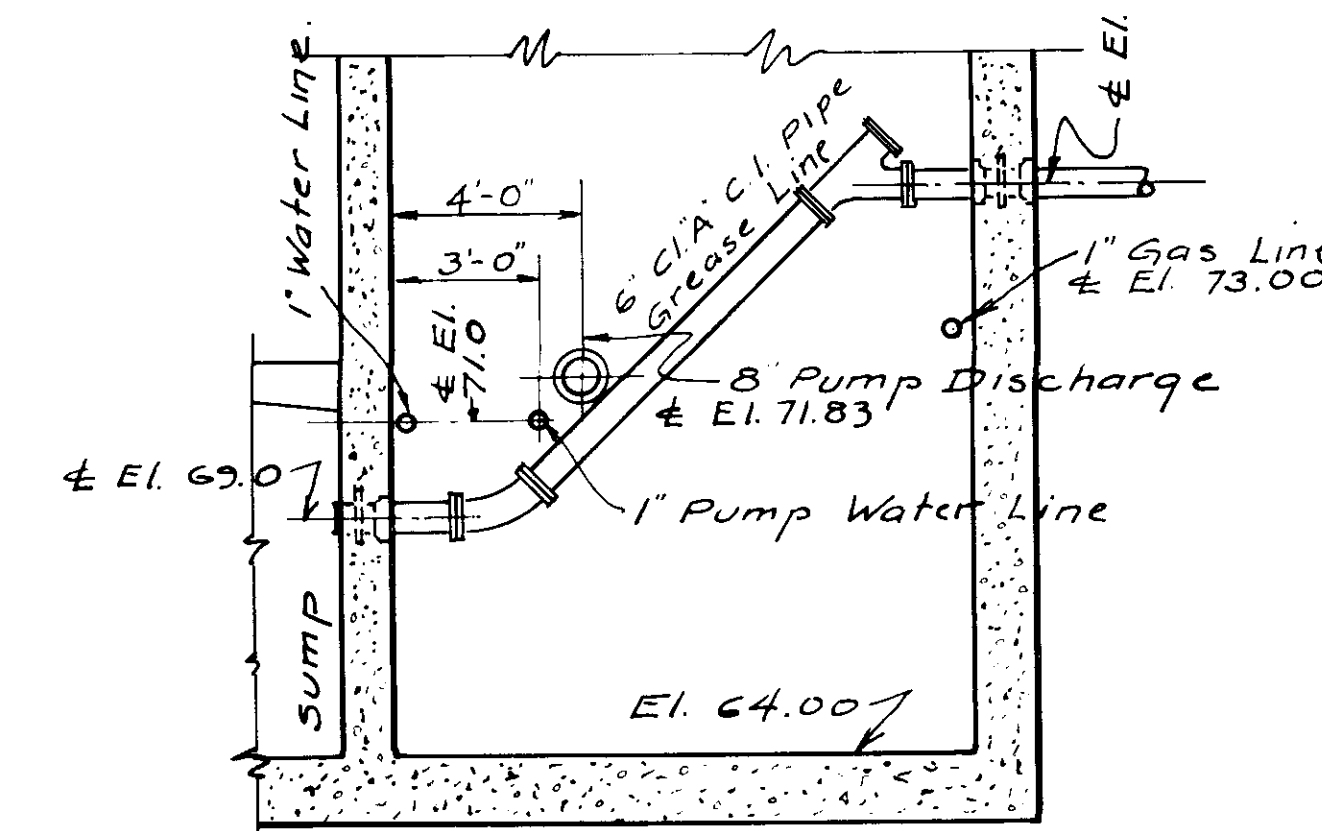
SECTION - F_c - F_c
Scale 1/4" = 1'-0"



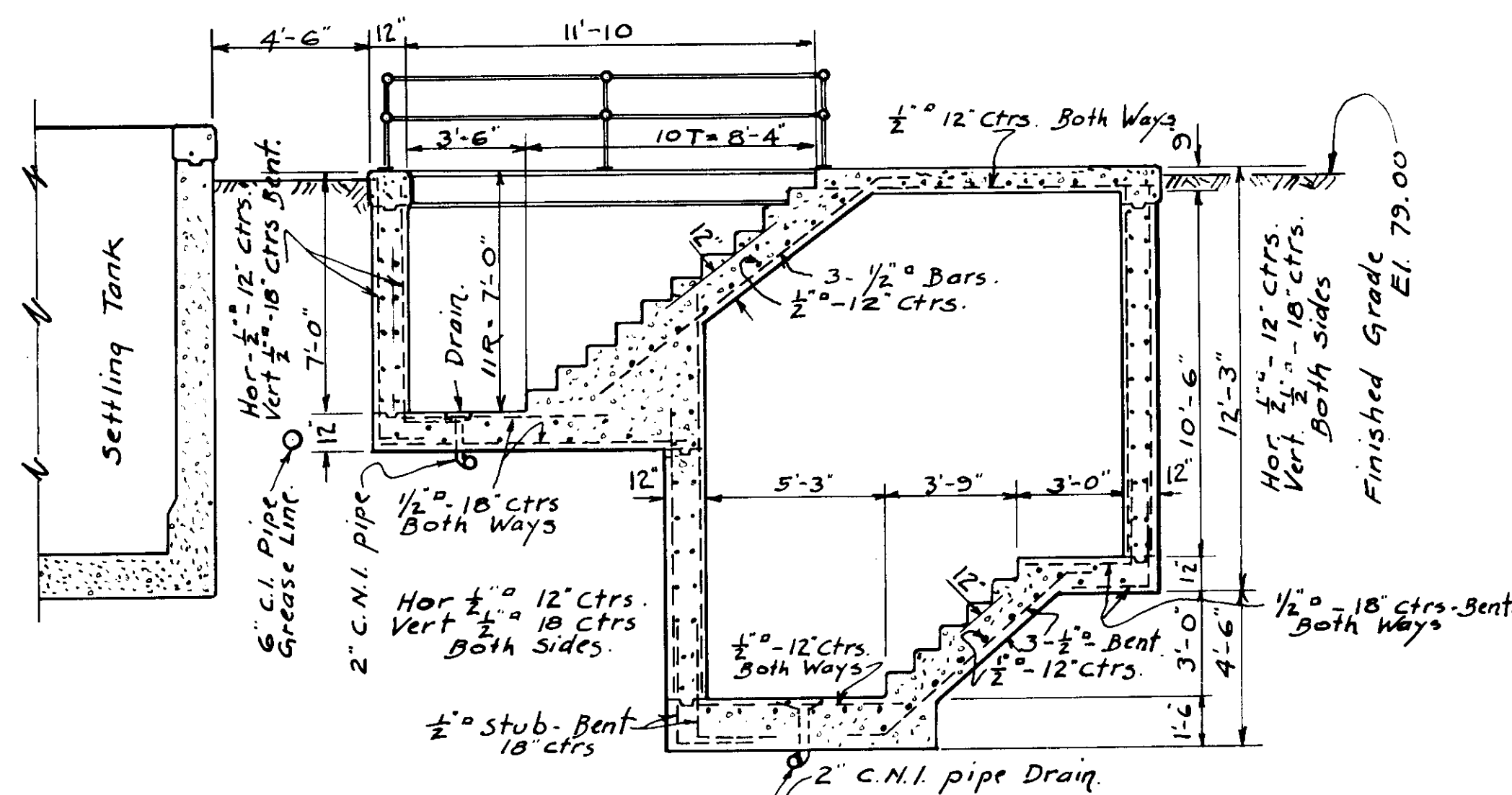
SLUDGE PIPE SUPPORT

6 REQUIRED

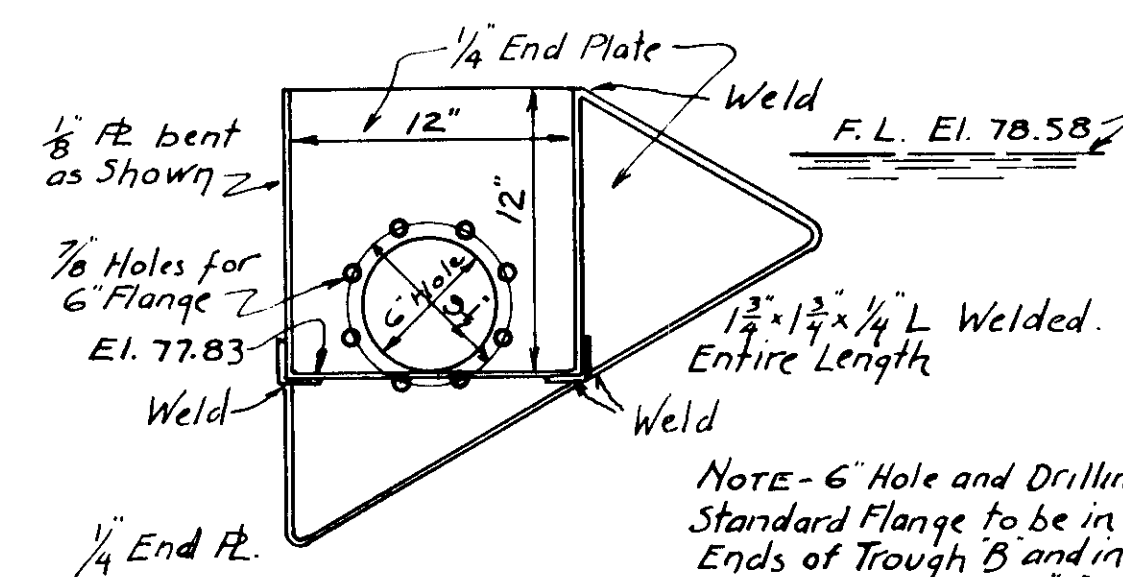
Scale 1"=1'-0"
Item 18



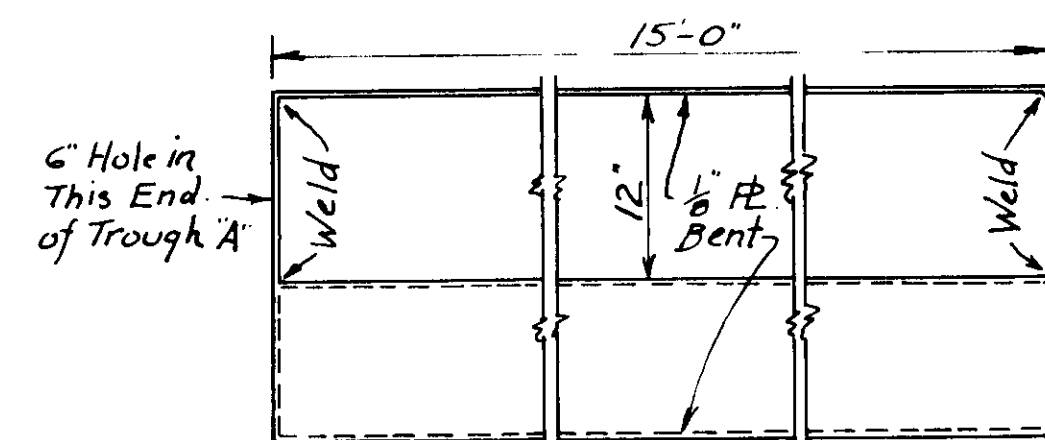
ELEVATION DETAIL
6" GREASE LINE FROM FLOCCULATOR
Scale 1/4" = 1'-0"



SECTION - G-G
Scale 1/4" = 1'-0"

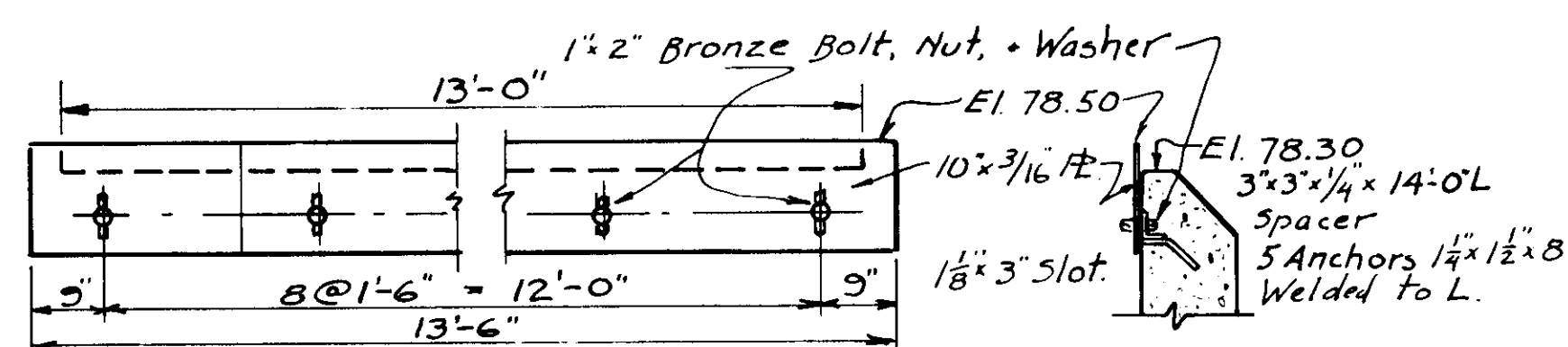


SECTION
Scale $1\frac{1}{2}" = 1'-0"$



SKIMMING · TROUGH · DETAILS

Item 18

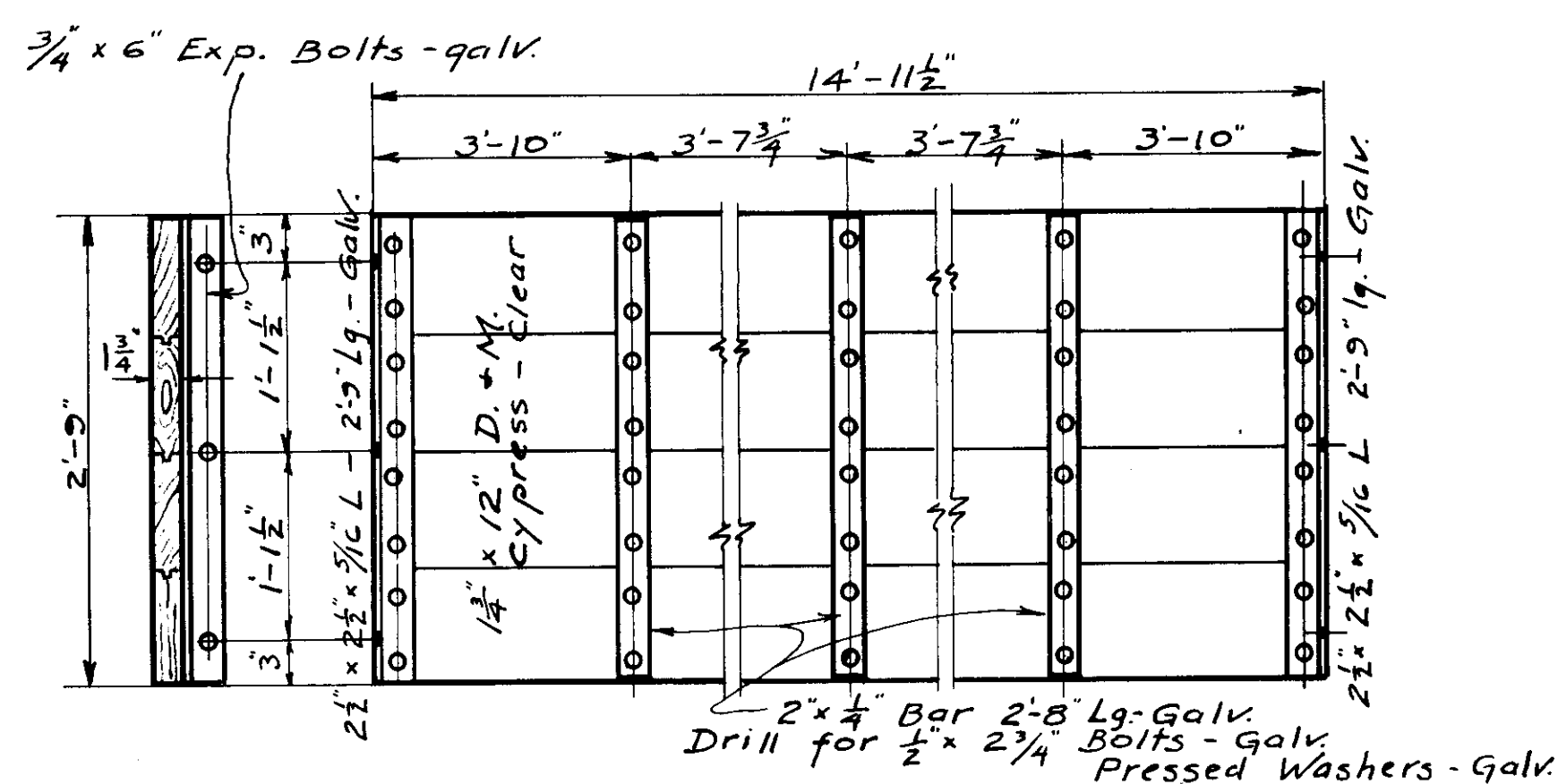


ELEVATION
DETAIL OF WEIR

6- REQUIRED
Scale 3/4"=1'-0"

Item 18

NOTE!
Weir plates to be cadmium
plated after fabrication

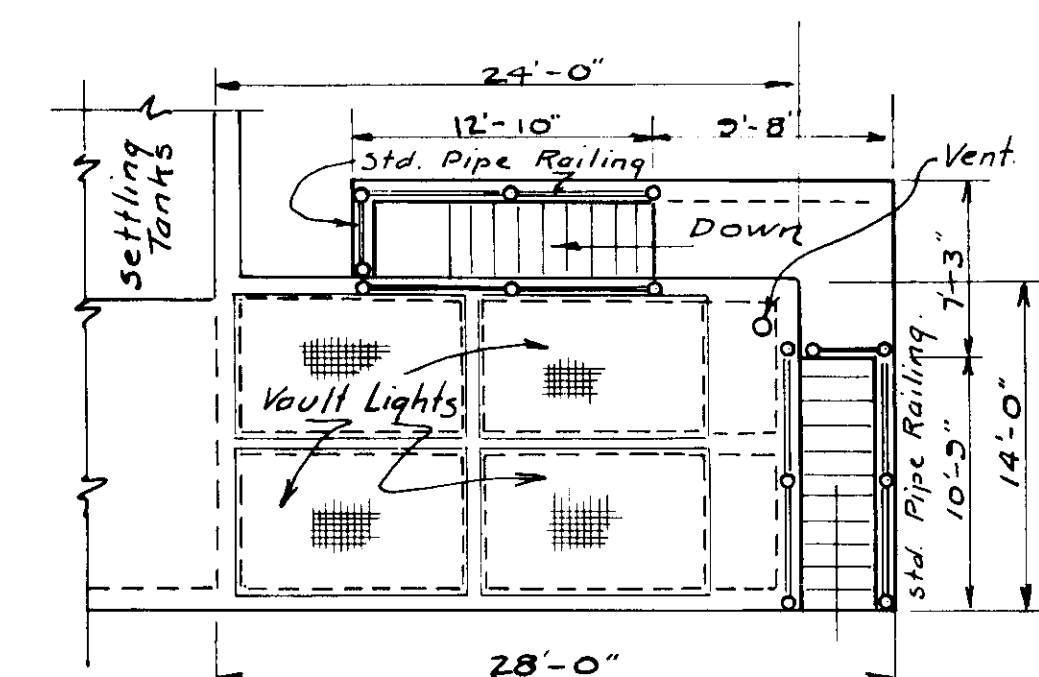


DETAIL OF BAFFLE BOARD

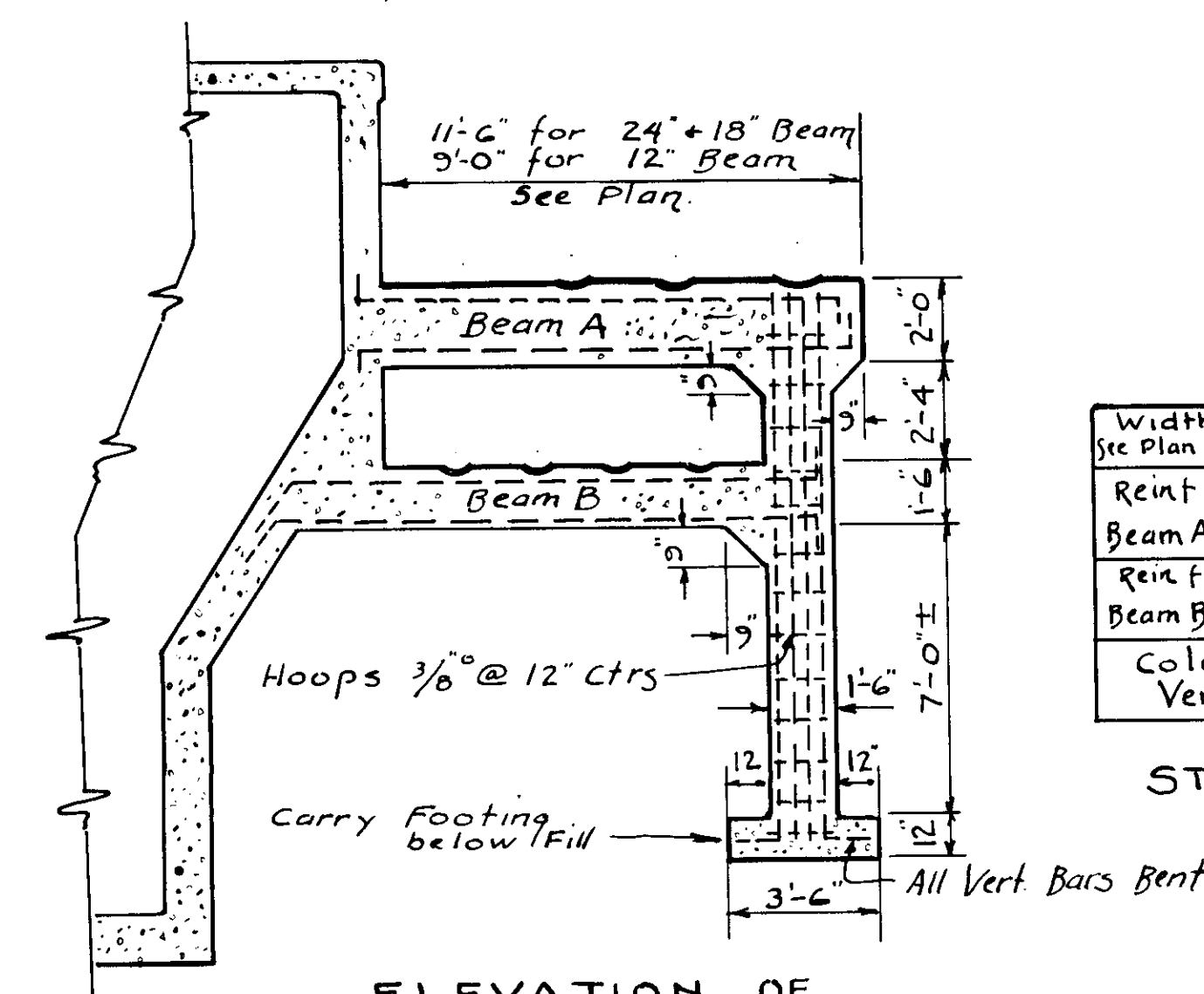
6-REQUIRED

No Scale

Note: Lumber Item 19.
Metal Work Item 18.



PLAN OF ROOF OF
SLUDGE PUMP CHAMBER
Scale $\frac{1}{8}'' = 1'-0''$



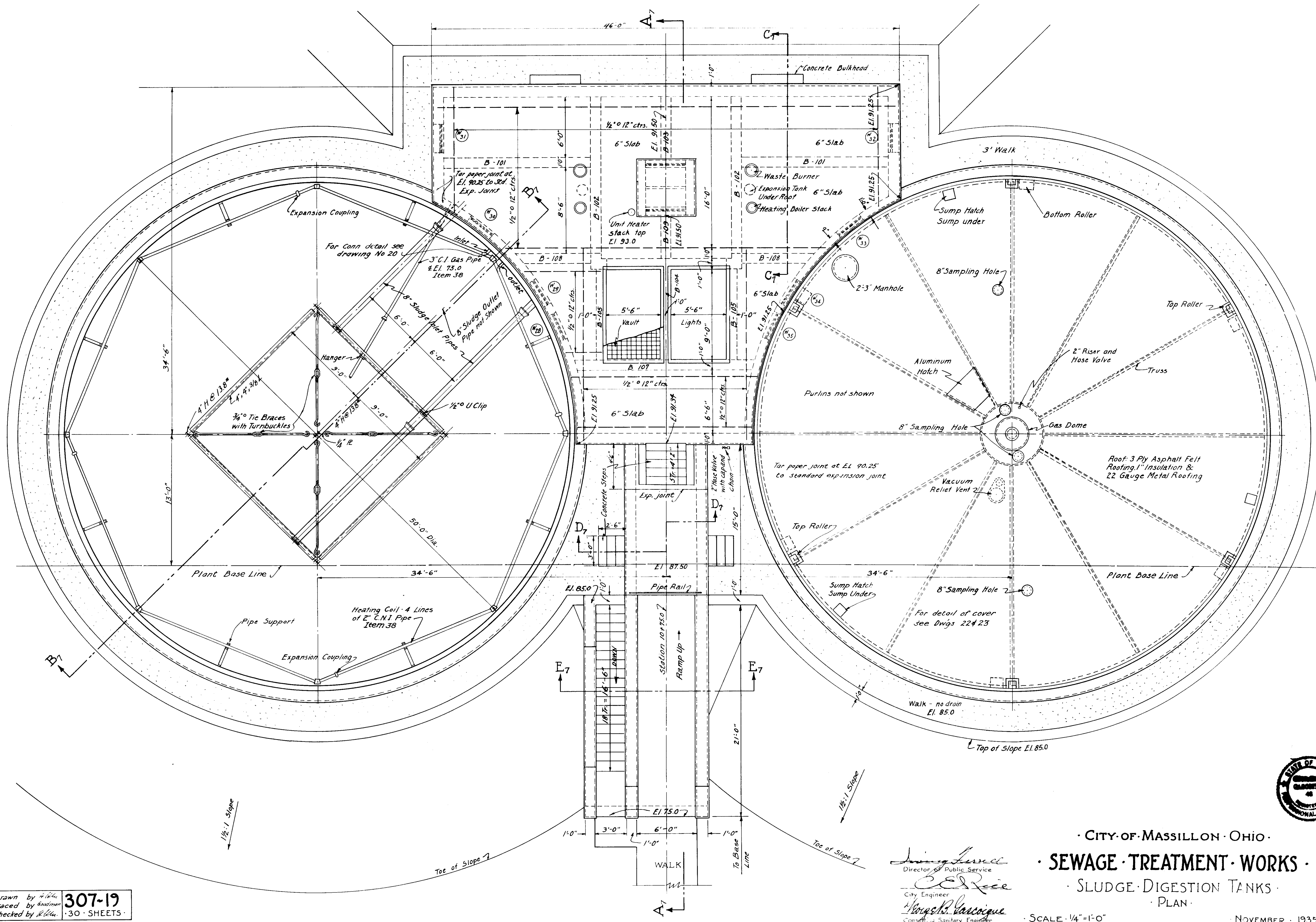
ELEVATION OF PIPE SUPPORTS

See Plan of Settling Tanks for
Plan & Width of Beam
and Column.
Scale $\frac{1}{4}'' = 1'-0''$

Width of Beam See Plan for Location		24"	18"	12"
Rein f	Top Bars	$5 - \frac{1}{2}''$	$5 - \frac{1}{2}''$	$4 - \frac{1}{2}''$
Beam A	Bottom Bars	$5 - 1''$	$5 - \frac{3}{8}''$	$4 - 3/8''$
Rein f	Top Bars	$5 - \frac{1}{2}''$	$5 - \frac{1}{2}''$	$4 - \frac{1}{2}''$
Beam B	Bottom Bars	$5 - 1''$	$5 - \frac{3}{8}''$	$4 - 3/8''$
Column Vert Bars		$16 - \frac{3}{4}''$	$12 - \frac{3}{4}''$	$10 - \frac{3}{4}''$

STEEL FOR BEAMS AND COLUMNS

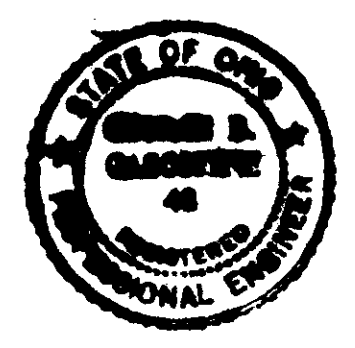


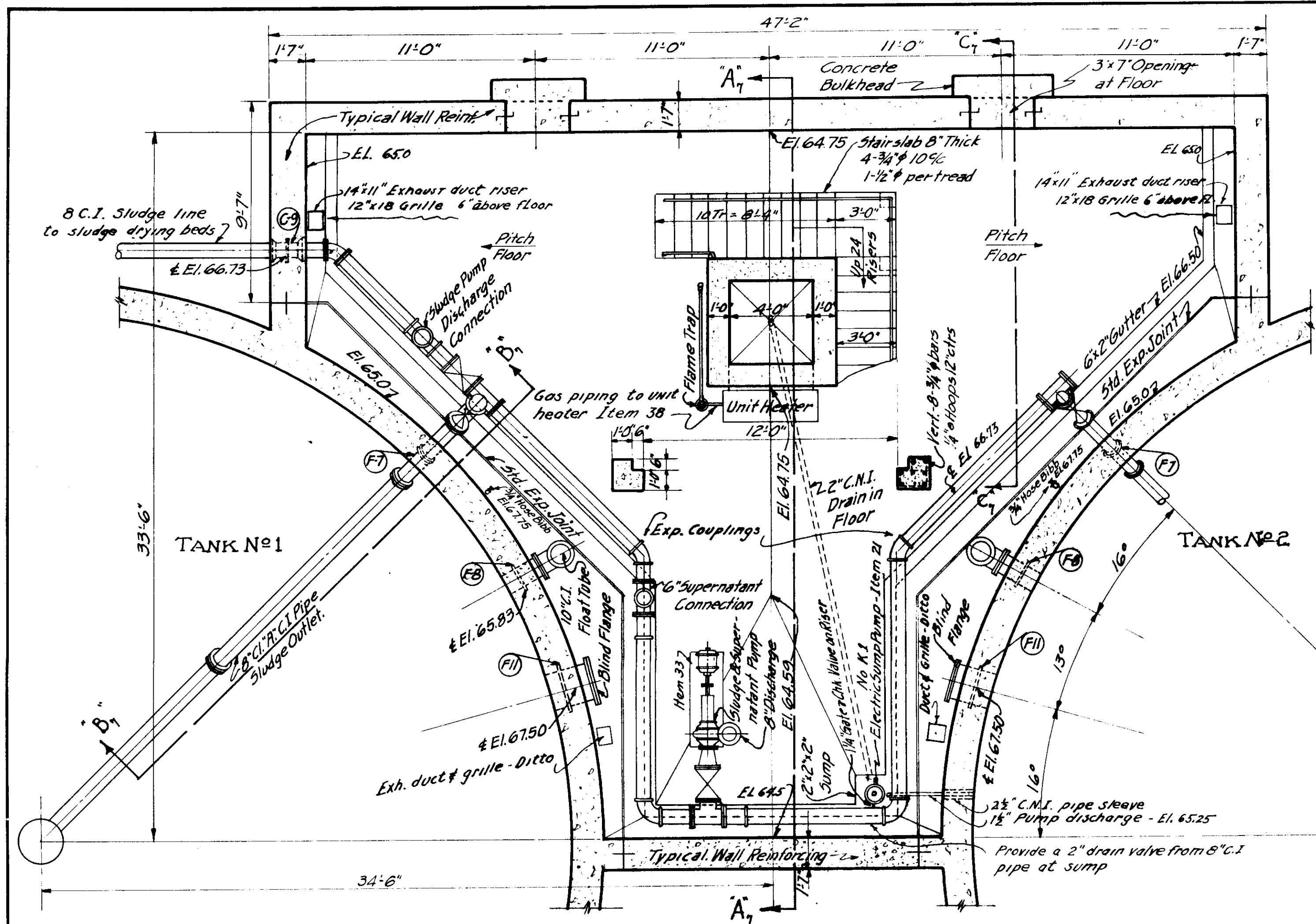


Drawn by *H. Miller*
Traced by *Goodman*
Checked by *R. Miller*
307-19
30 SHEETS

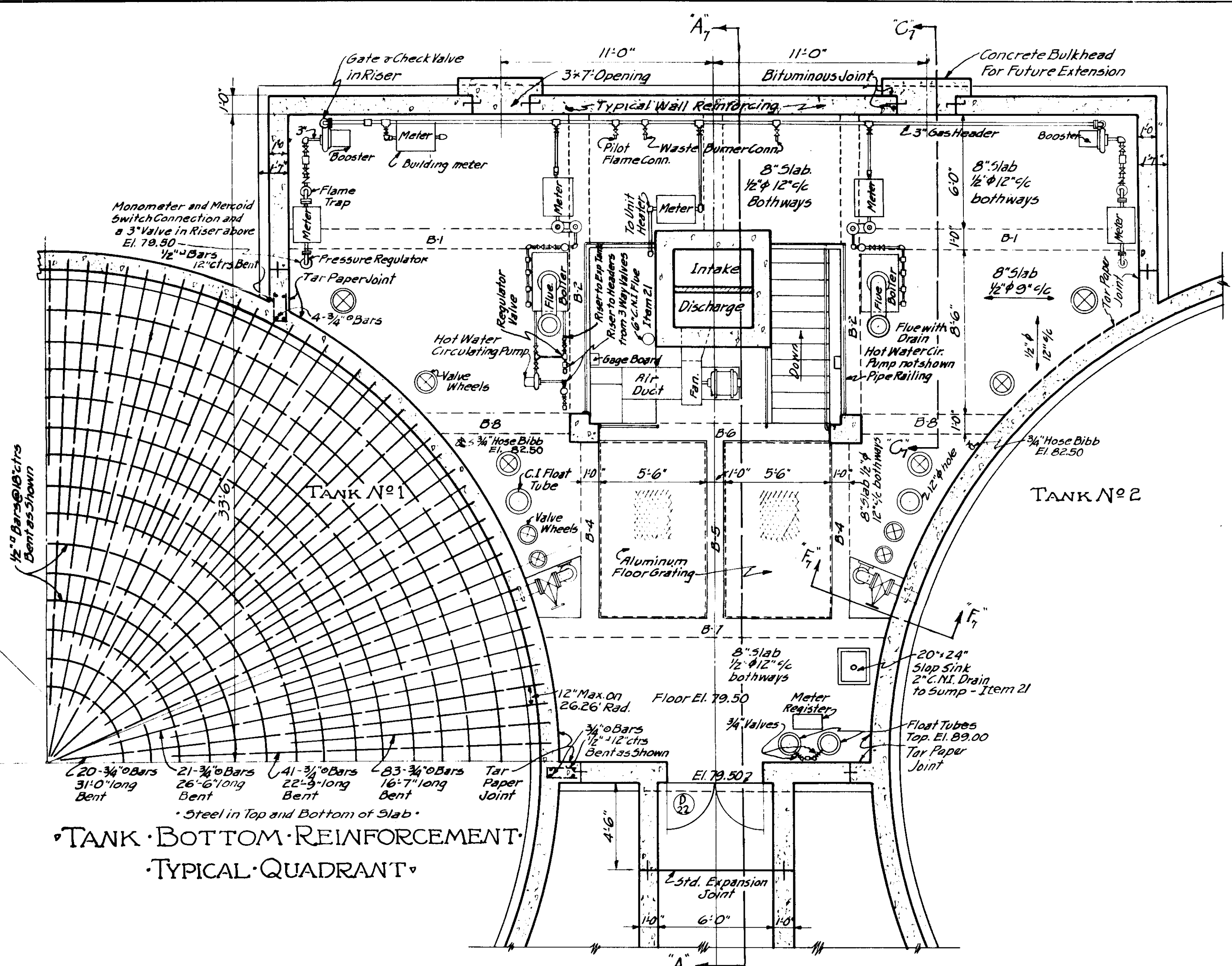
Livingston
Director of Public Service
Ed Rice
City Engineer
George B. Vancouche
Consulting Sanitary Engineer

CITY OF MASSILLON, OHIO.
SEWAGE TREATMENT WORKS
SLUDGE DIGESTION TANKS
PLAN
SCALE: 1/4" = 1'-0"
NOVEMBER, 1935

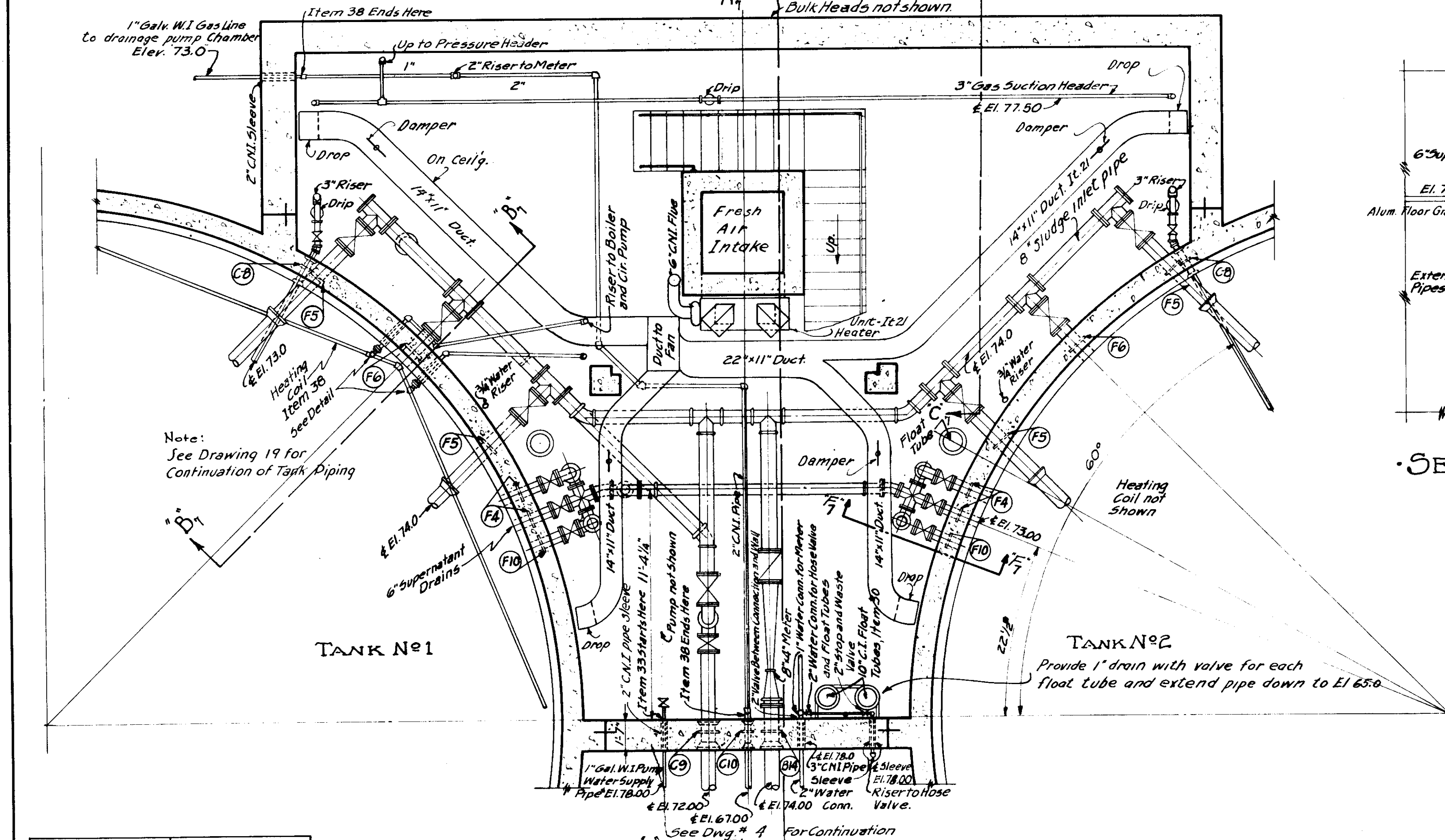




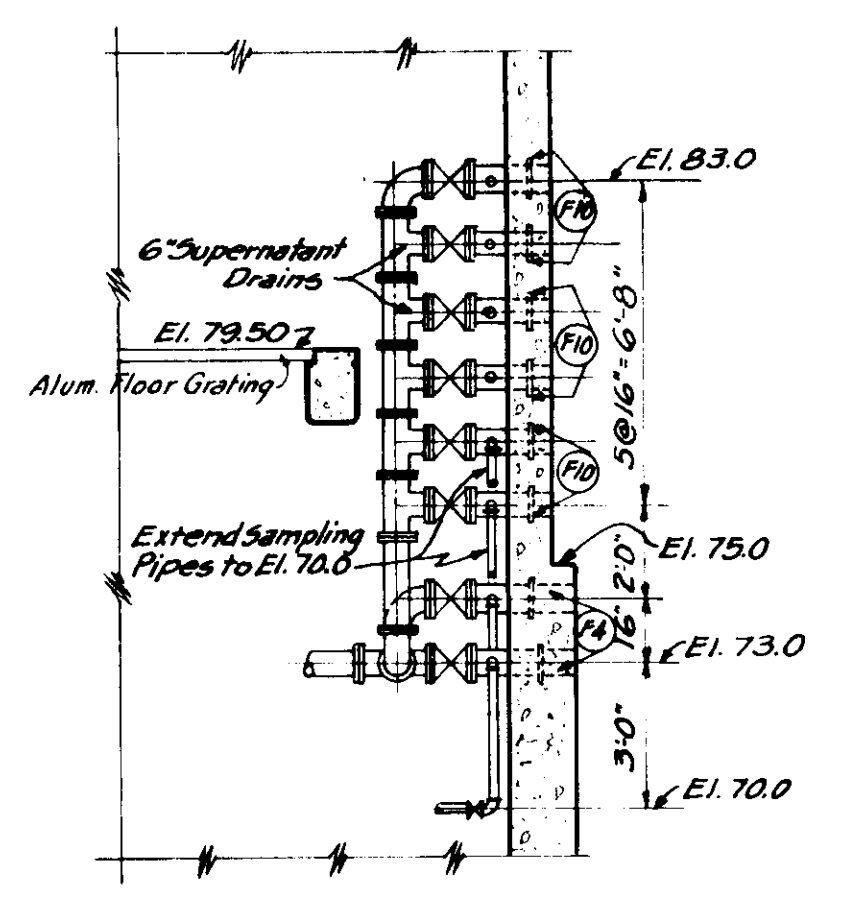
PLAN ELEV. 72.00
Scale 1/4" = 1'-0"



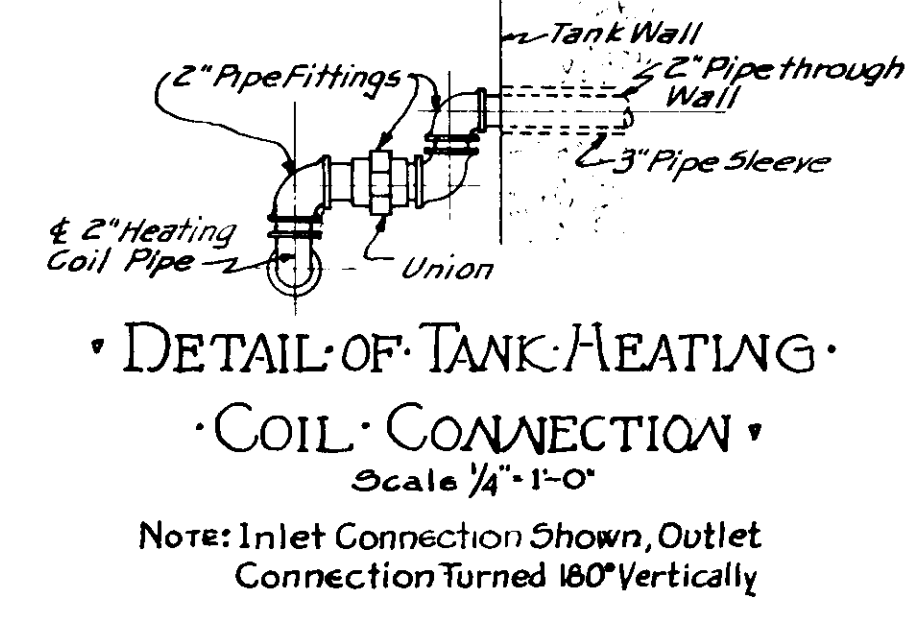
PLAN ELEV. 89.00
Scale 1/4" = 1'-0"



PLAN ELEV. 78.50
Scale 1/4" = 1'-0"

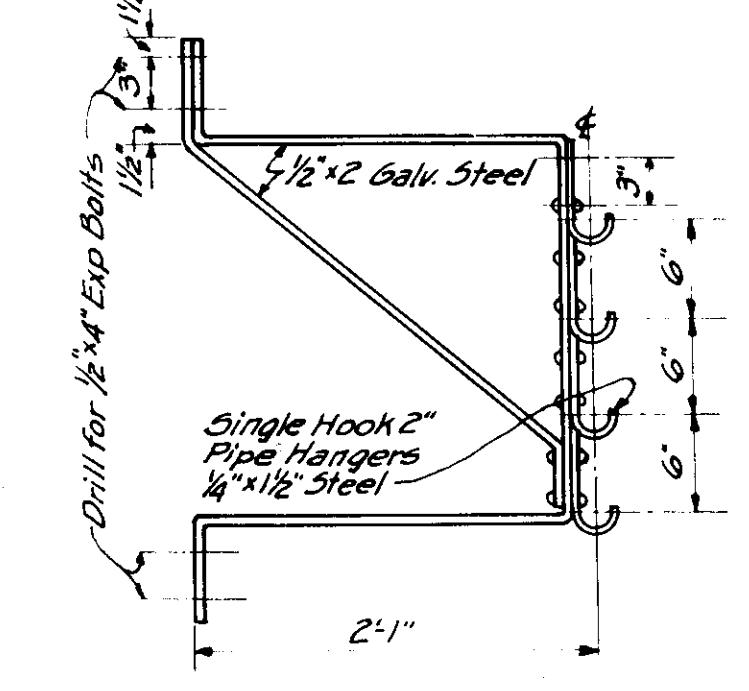


SECTION F-F
Scale 1/4" = 1'-0"



DETAIL OF TANK HEATING
COIL CONNECTION
Scale 1/4" = 1'-0"

Note: Inlet Connection Shown, Outlet Connection Turned 180° Vertically



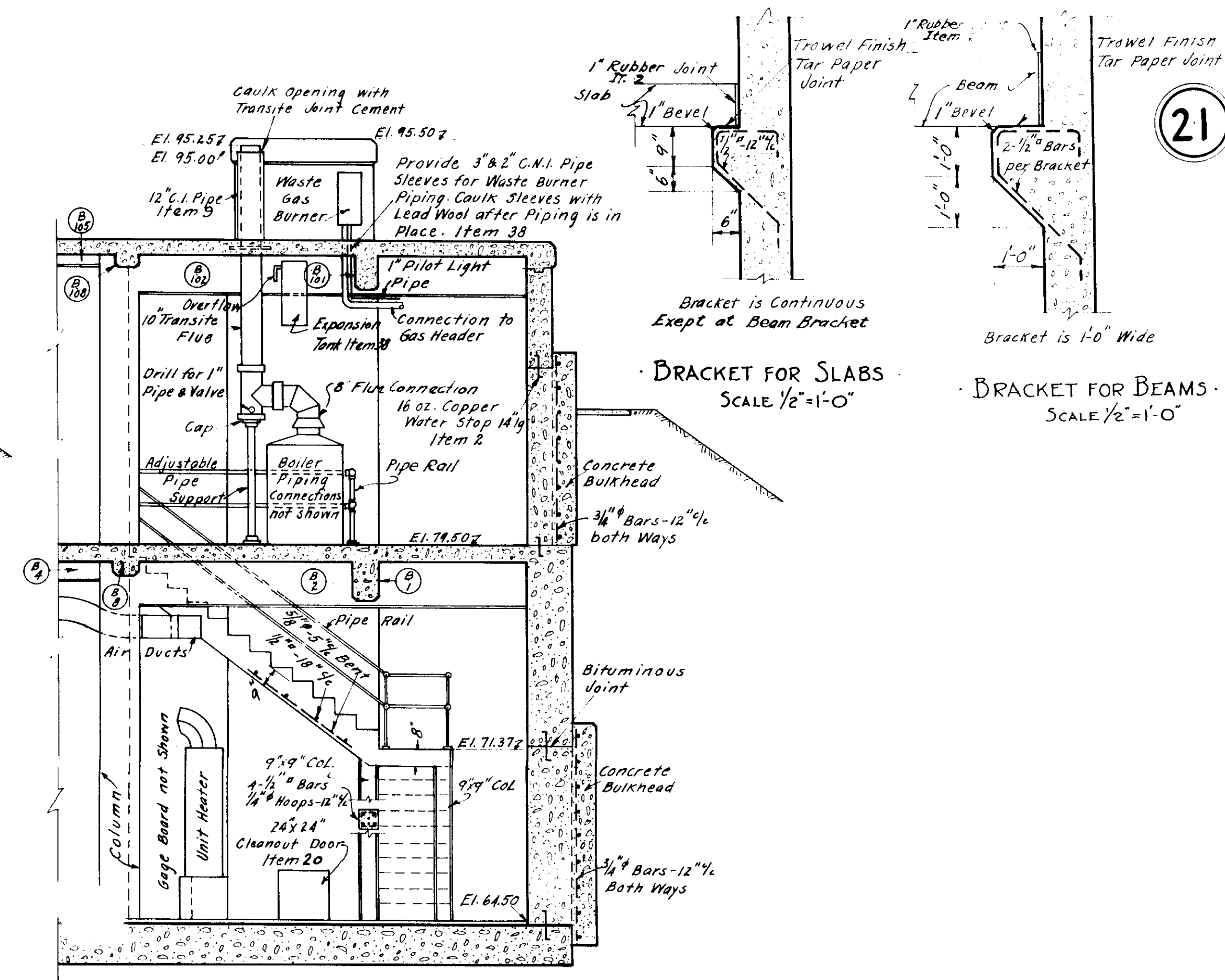
DETAILS OF
PIPE SUPPORT
Scale 1" = 1'-0"

Drawn by H.H.M.
Traced by A.J.B.
Checked by R.H.L.
307-20
30 SHEETS

Livingstone
Director of Public Service
City Engineer
George B. Larocque
Consulting Sanitary Engineer

CITY OF MASSILLON, OHIO
SEWAGE TREATMENT WORKS
SLUDGE DIGESTION TANKS
PLANS & DETAILS
SCALE 1/4" = 1'-0"
NOVEMBER 1935



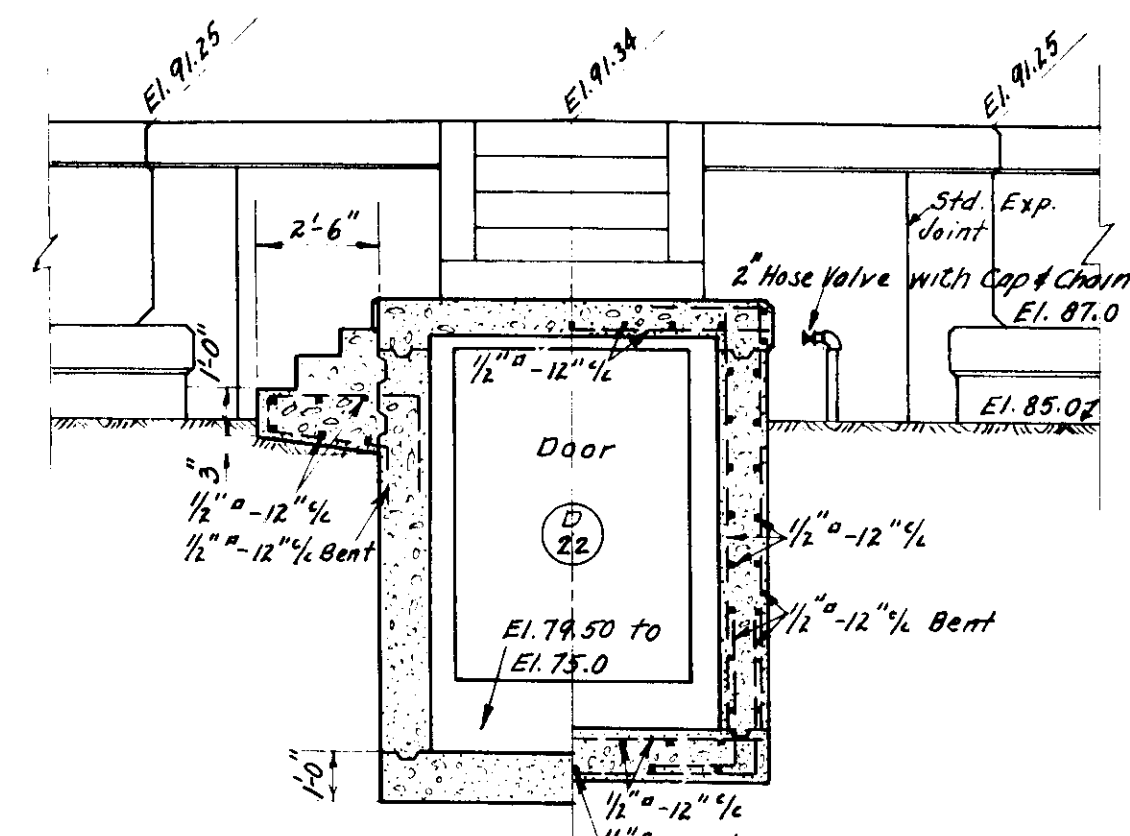


SECTION "C-C"
SCALE 1/4" = 1'-0"

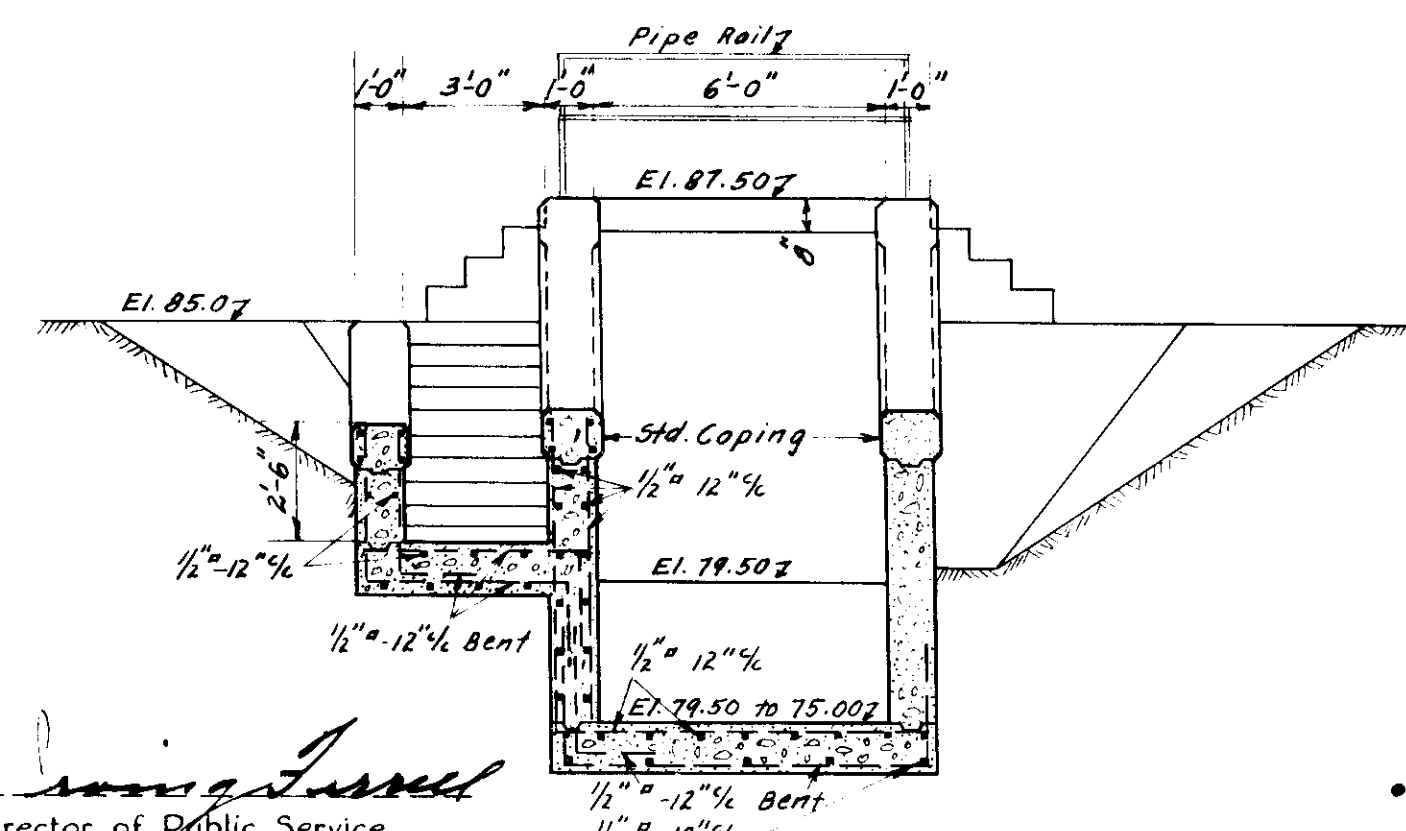
· BEAM · SCHEDULE

<i>Beam</i>	<i>W</i>	<i>D</i>	<i>L</i>	<i>X</i>	<i>Y</i>	<i>Z</i>	<i>Stirrups</i>
1	12"	27"	14'-6"	3- $\frac{1}{8}$ " ϕ	1- $\frac{1}{8}$ " ϕ	2- $\frac{1}{8}$ " ϕ	5 $\frac{1}{8}$ " ϕ @ 12", 13"
2	12"	30"	15'-6"	4- $\frac{1}{8}$ " ϕ	2- $\frac{1}{8}$ " ϕ	2- $\frac{1}{8}$ " ϕ	5 $\frac{1}{8}$ " ϕ 3', 12 @ 15", 3"
3	12"	12"	6'-0"	3- $\frac{1}{2}$ " ϕ	1- $\frac{1}{2}$ " ϕ	2- $\frac{1}{2}$ " ϕ	—
4	12"	18"	9'-0"	3- $\frac{3}{8}$ " ϕ	1- $\frac{3}{8}$ " ϕ	2- $\frac{3}{8}$ " ϕ	—
5	12"	18"	9'-0"	3- $\frac{3}{8}$ " ϕ	1- $\frac{3}{8}$ " ϕ	2- $\frac{3}{8}$ " ϕ	—
6	12"	24"	12'-0"	3- $\frac{3}{8}$ " ϕ	1- $\frac{3}{8}$ " ϕ	2- $\frac{3}{8}$ " ϕ	5 $\frac{1}{8}$ " ϕ 9", 7' @ 18", 9"
7	12"	36"	18' $\pm$	4- $\frac{1}{8}$ " ϕ	2- $\frac{1}{8}$ " ϕ	2- $\frac{1}{8}$ " ϕ	5 $\frac{1}{8}$ " ϕ 6', 9', 15', 24', 24'
8	12"	15"	7' $\pm$	3- $\frac{3}{8}$ " ϕ	1- $\frac{3}{8}$ " ϕ	2- $\frac{3}{8}$ " ϕ	1 $\frac{1}{2}$ " ϕ 6', 9', 12"
101	12"	21"	14'-6"	4-3 $\frac{1}{8}$ " ϕ	2-3 $\frac{1}{8}$ " ϕ	2-3 $\frac{1}{8}$ " ϕ	—
102	12"	27"	15'-6"	4- $\frac{1}{8}$ " ϕ	2- $\frac{1}{8}$ " ϕ	2- $\frac{1}{8}$ " ϕ	3 $\frac{3}{8}$ " ϕ 9', 7' @ 24", 9"
103	12"	9"	6'-0"	3- $\frac{1}{2}$ " ϕ	1- $\frac{1}{2}$ " ϕ	2- $\frac{1}{2}$ " ϕ	—
104	12"	15"	9'-0"	4- $\frac{1}{2}$ " ϕ	2- $\frac{1}{2}$ " ϕ	2- $\frac{1}{2}$ " ϕ	—
105	12"	12"	9'-0"	4- $\frac{1}{2}$ " ϕ	2- $\frac{1}{2}$ " ϕ	2- $\frac{1}{2}$ " ϕ	—
106	12"	21"	12'-0"	3- $\frac{3}{8}$ " ϕ	1- $\frac{3}{8}$ " ϕ	2- $\frac{3}{8}$ " ϕ	3 $\frac{3}{8}$ " ϕ 8', 8 @ 6", 8"
107	12"	30"	18' $\pm$	4- $\frac{1}{8}$ " ϕ	2- $\frac{1}{8}$ " ϕ	2- $\frac{1}{8}$ " ϕ	5 $\frac{1}{8}$ " ϕ 10', 13 @ 6", 10"
108	12"	12"	7' $\pm$	4- $\frac{1}{2}$ " ϕ	2- $\frac{1}{2}$ " ϕ	2- $\frac{1}{2}$ " ϕ	—
109	12"	9"	4'-0"	3- $\frac{1}{2}$ " ϕ	1- $\frac{1}{2}$ " ϕ	2- $\frac{1}{2}$ " ϕ	—

W = Width of Stem X = Total Bars
D = Total Depth Y = Straight Bars
L = Clear Span Z = Trussed Bars



SECTION D₇-D₇
SCALE 1/4"=1'-0"



SECTION "E₇"-E₇"
SCALE 1/4" = 1'-0"

SECTION "B₇"-B₇"
SCALE 1/4" = 1'-0"

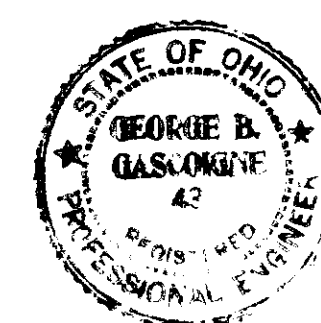
Drawn by H.H.M.
Traced by W.B.M.
Checked by *[Signature]*

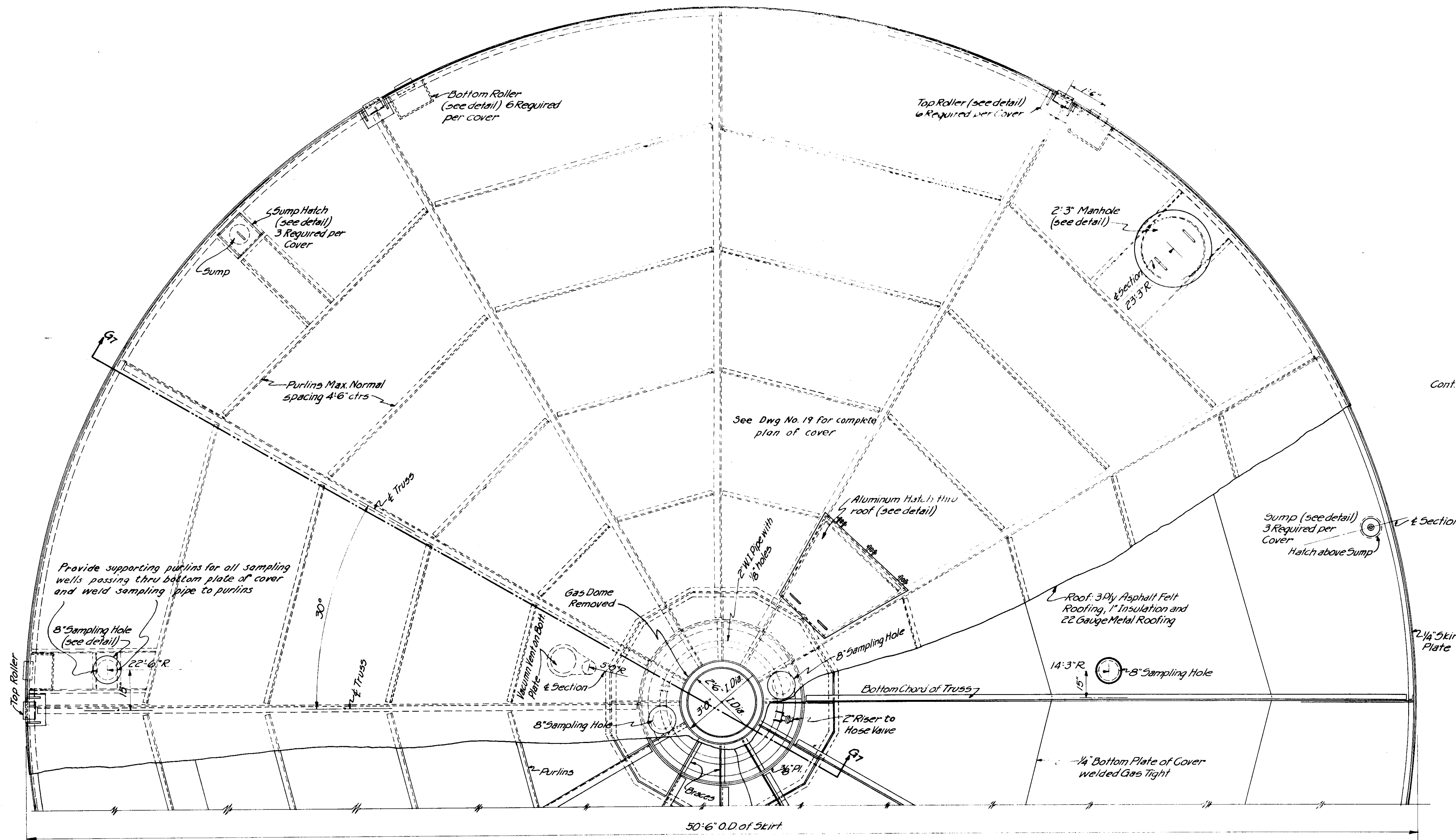
307-21
· 30 · SHEETS ·

· CITY OF MASSILLON · OHIO ·
· SEWAGE TREATMENT WORKS ·
· SLUDGE DIGESTION TANKS ·
· SECTIONS ·

• SCALE • $\frac{1}{4}" = 1'-0"$

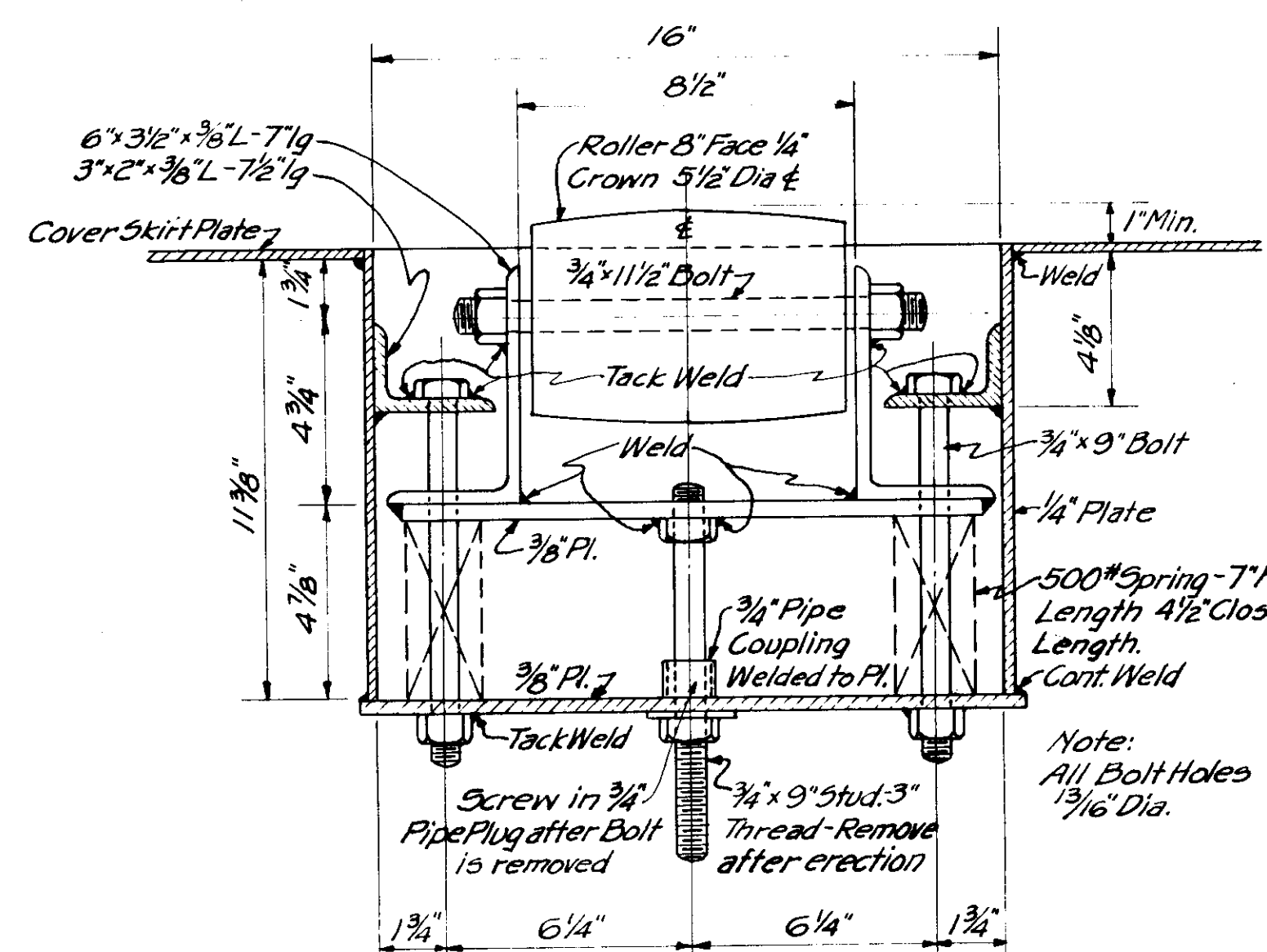
· NOVEMBER · 1935



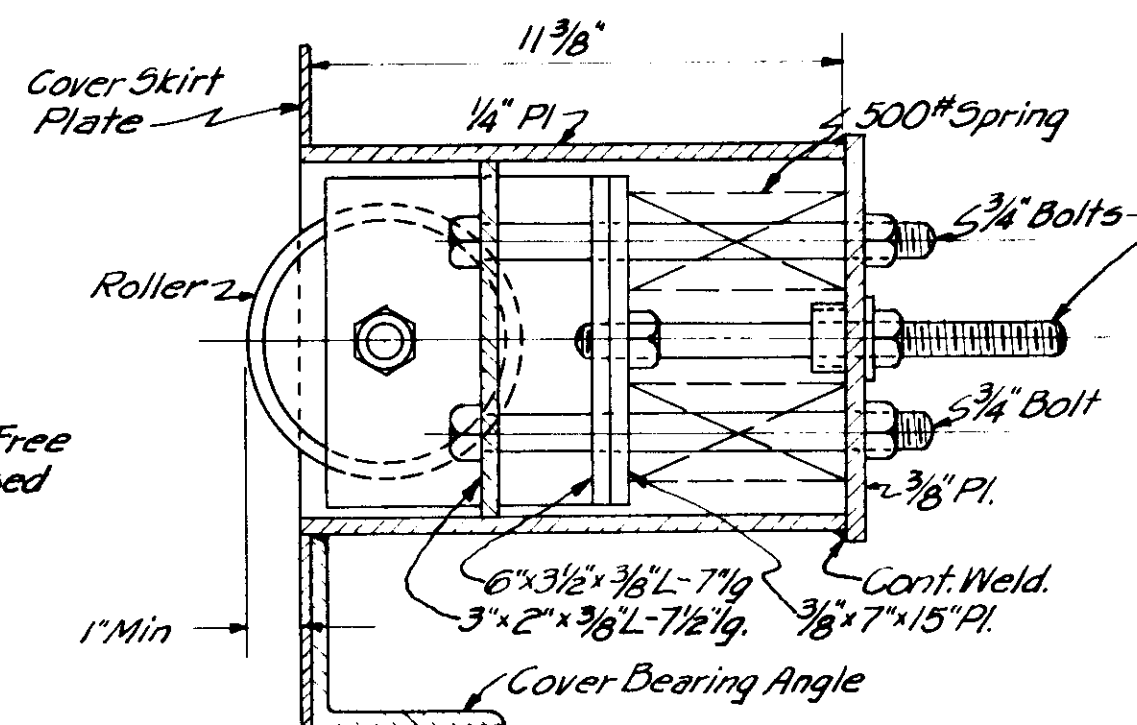


△ PARTIAL PLAN OF FLOATING COVER △

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



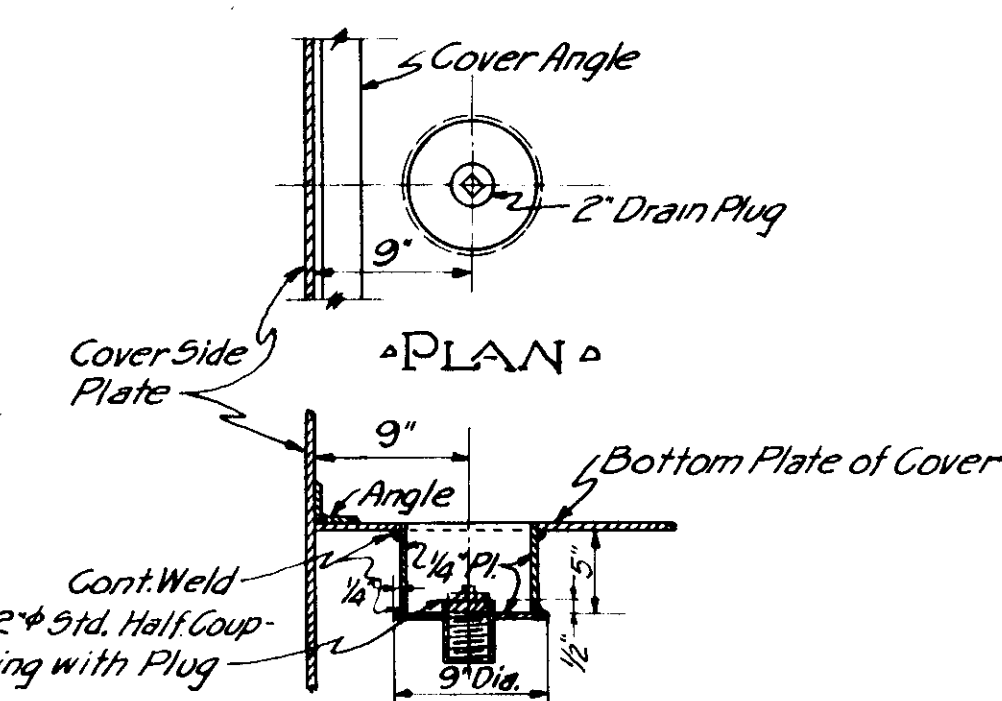
△ PLAN △



△SECTION△

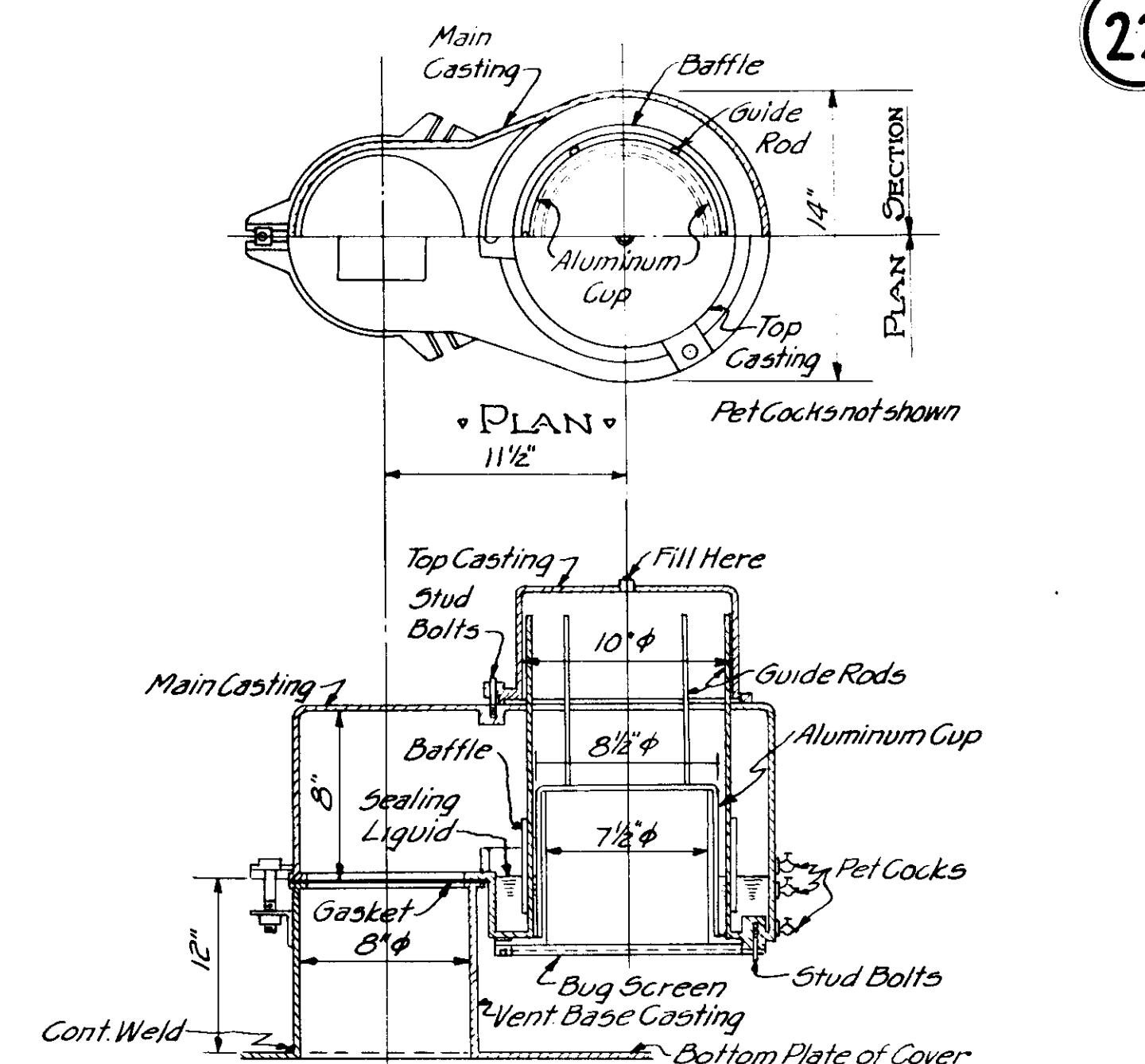
△BOTTOM·ROLLER·DETAIL△

• 6 Required Per Cover •
• Scale: 3"=1'-0" •



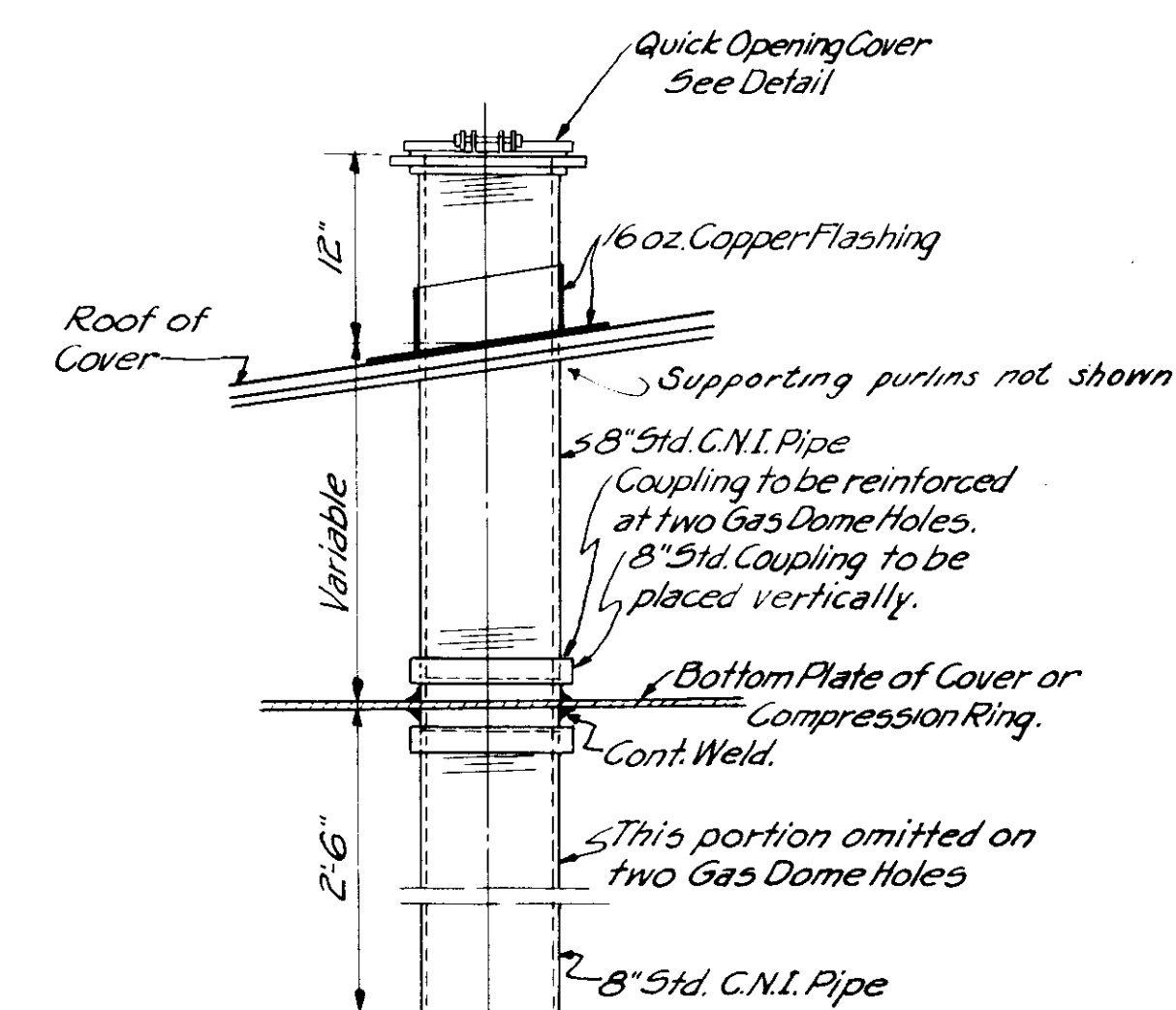
SECTION
DRAINAGE SUMP DETAIL

• 3 Required Per Cover •
• No Scale •



△ & SECTION ▽
△ VACUUM VENT DETAIL △

• 1 Required Per Cover •
• No Scale •



◊ SAMPLING WELL DETAIL ◊

- 4 • Required Per Cover •
- Scale: 1"=1'-0" •

Drawn by H.H.M.
Traced by A.J.B.
Checked by *[Signature]* 307-22
30 SHEETS

Livingston
Director of Public Service

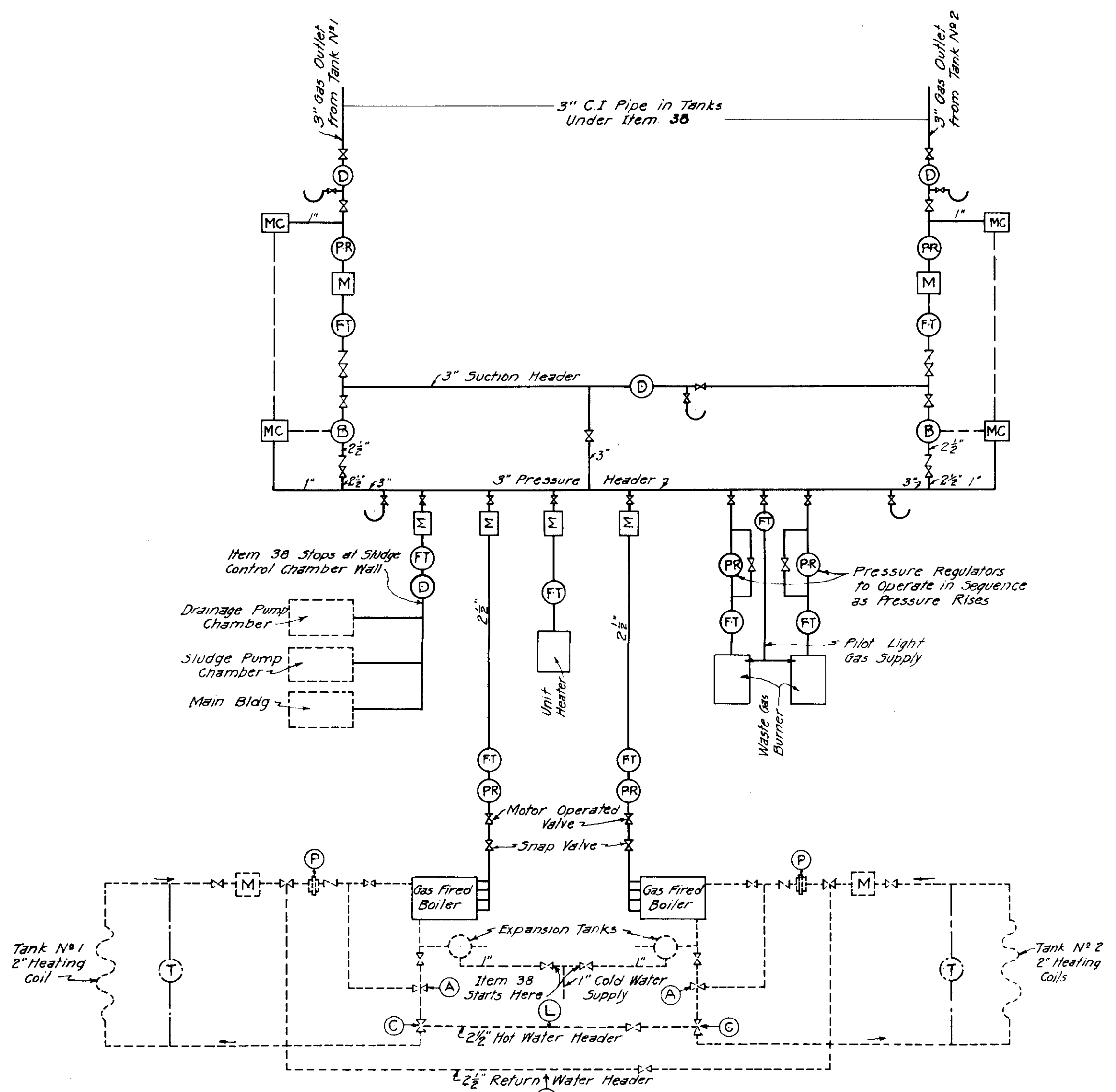
C. E. Rice
City Engineer

George B. Casco
Consulting Sanitary Engineer

· CITY OF MASSILLON · OHIO ·
· SEWAGE · TREATMENT · WORKS ·
· SLUDGE · DIGESTION · TANK ·
· FLOATING · COVER · DETAILS ·

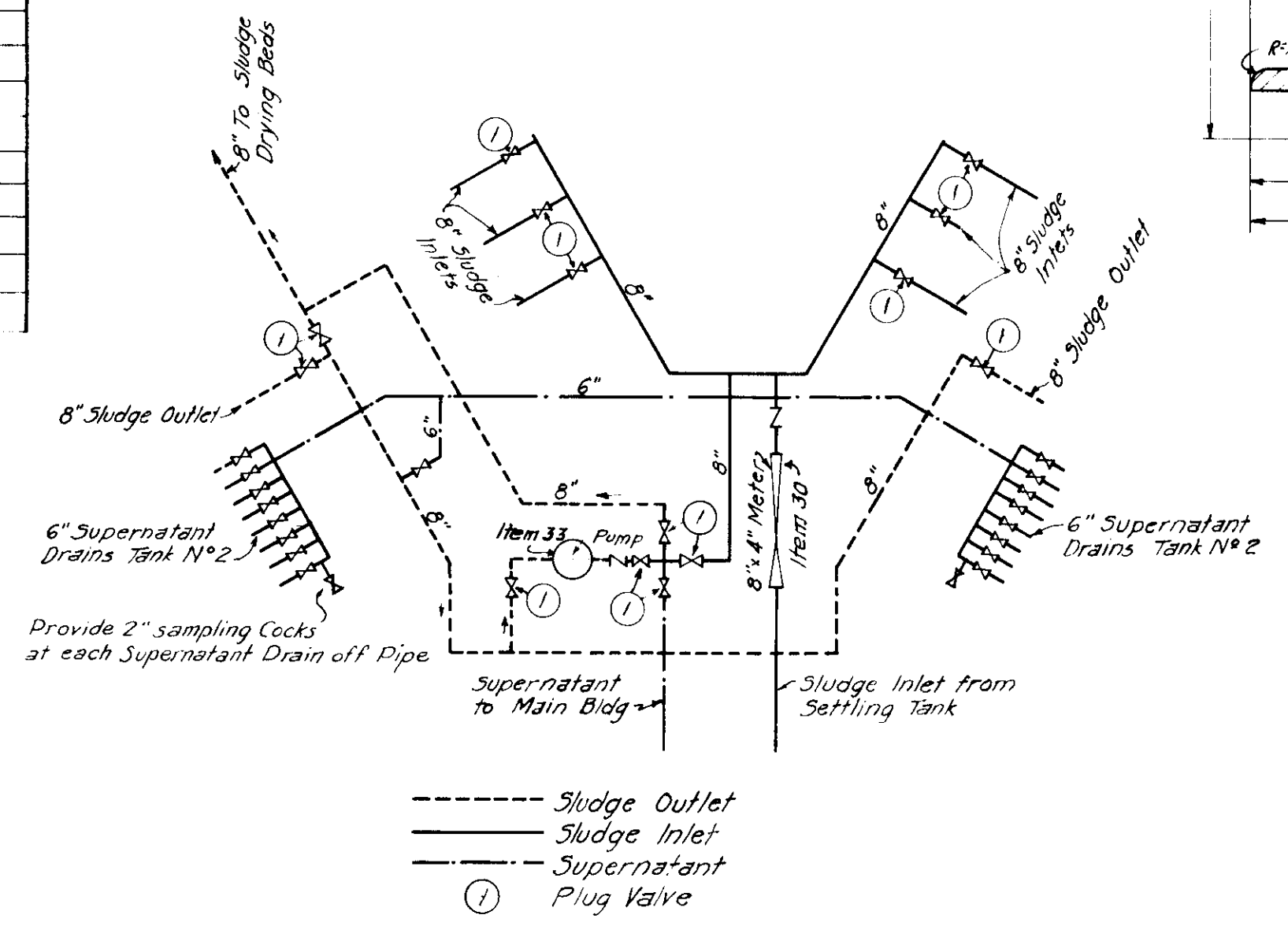
· SCALE · AS · SHOWN ·

· NOVEMBER · 1935 ·

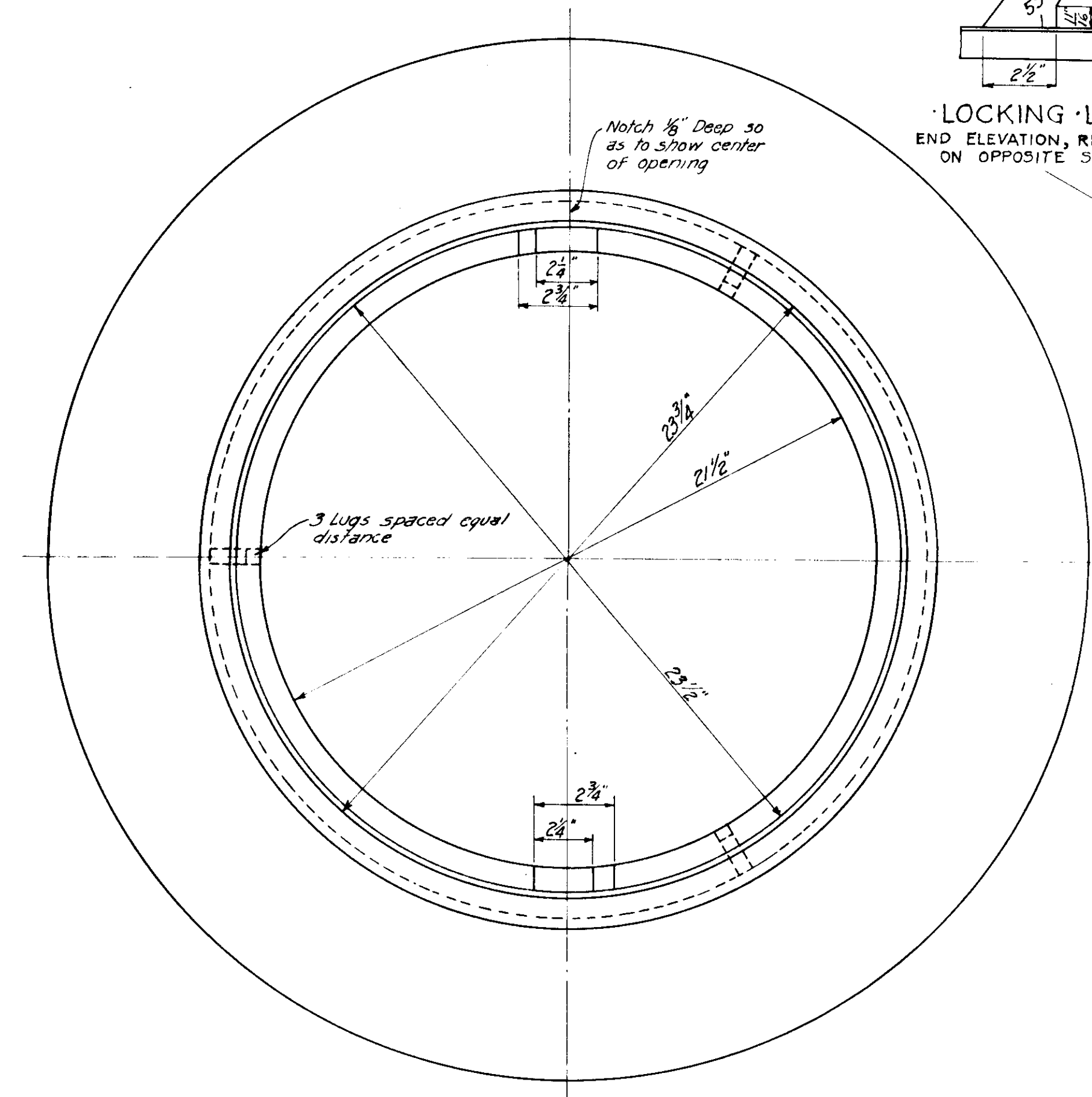


SCHEMATIC DIAGRAM OF GAS PIPING
& SLUDGE HEATING PIPING
Item 38 Except as Noted

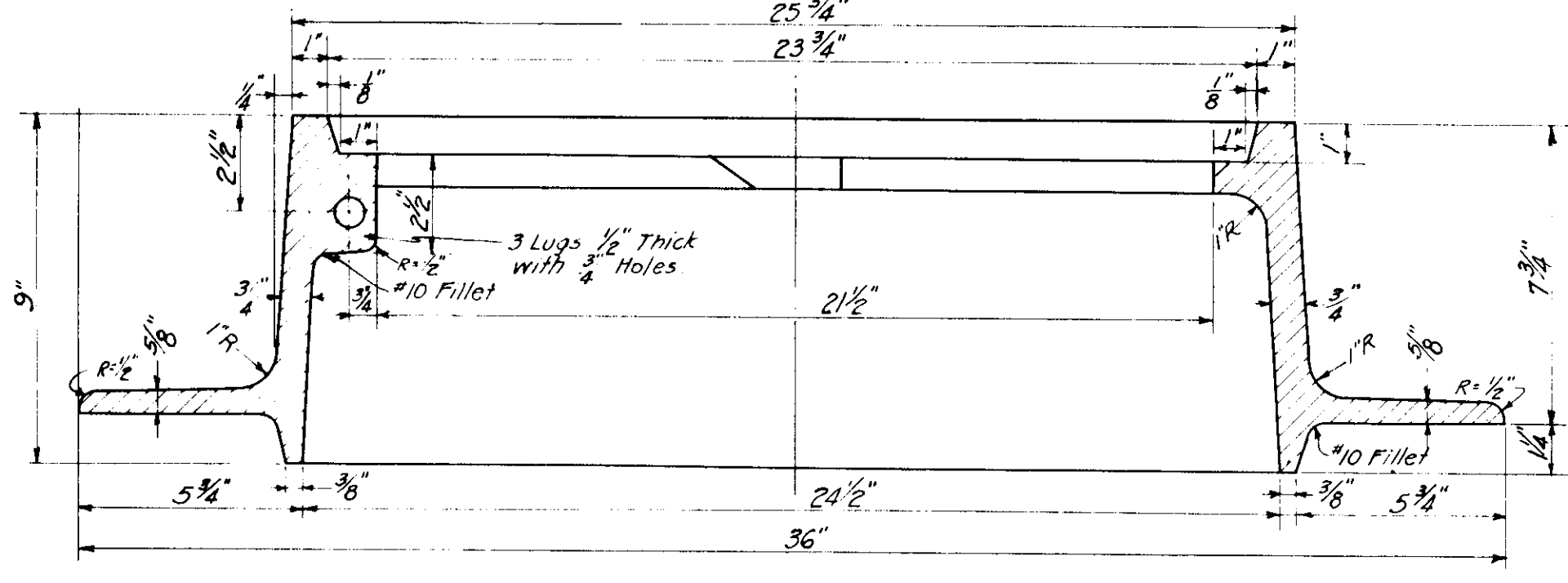
LEGEND	
GAS	WATER
D Condensate Trap	P Circulating Pump
J Manometer	M Hot Water Meter
PR Pressure Regulator	T Bi-recording Thermometer
M Gas Meter	Wiring (Dash Line)
FT Flame Trap	Z Check Valve
B Booster	3 Way Valve & Regulator
MC Mercoid Control Switch	3 Way Valve
Wiring (Dash Line)	L Indicating Thermometer
Gate Valve (Except as Noted)	
Z Check Valve	



SCHEMATIC DIAGRAM
OF SLUDGE PIPING



PLAN

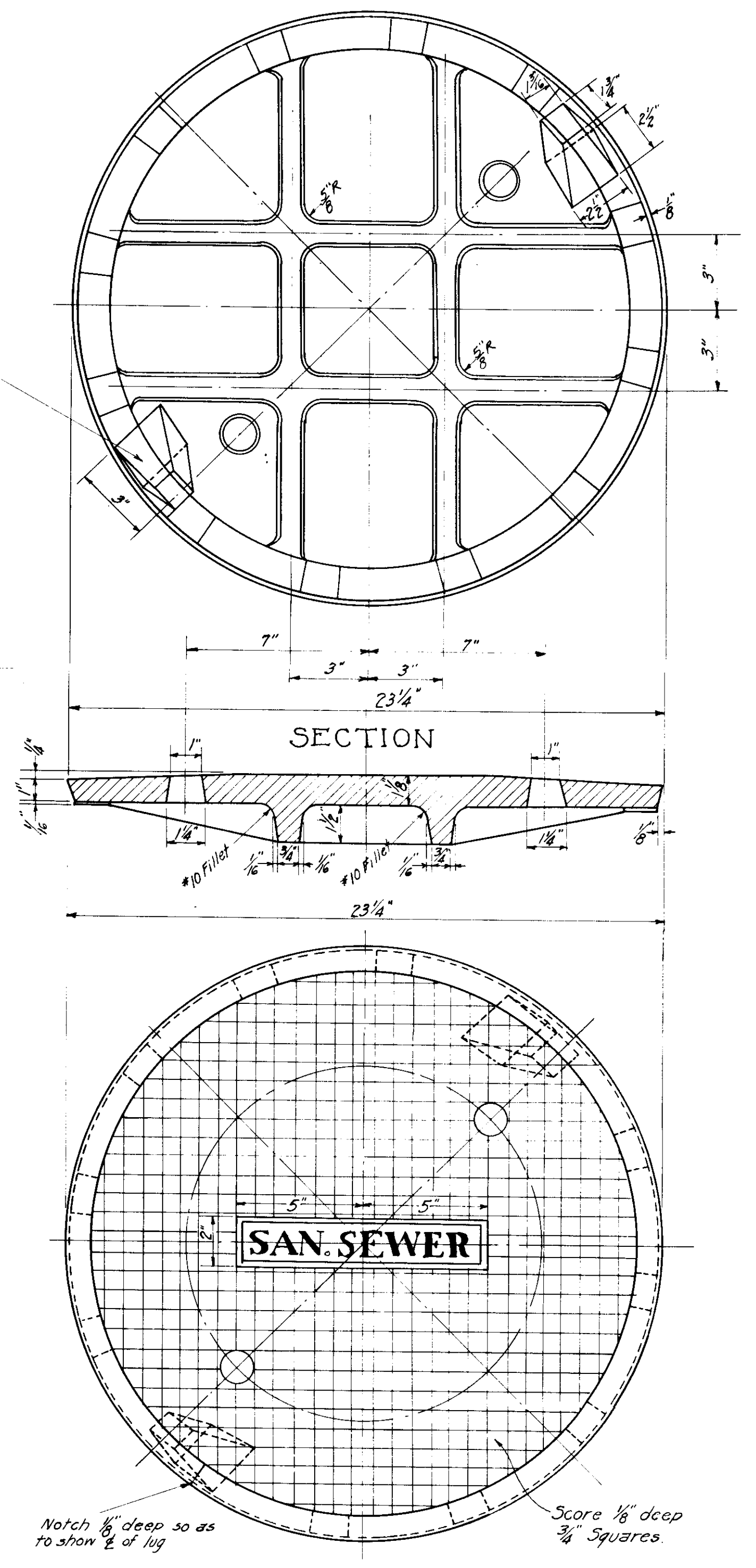


SECTION
RIM

MASSILLON
ST'D MANHOLE RIM & COVER

NO SCALE.
ITEM 18 - 76 REQUIRED.

Note: Contractor shall deliver these
manhole rims & covers to a storage
point as directed.



TOP VIEW
COVER

Director of Public Service
City Engineer
Consulting Sanitary Engineer

CITY OF MASSILLON - OHIO -
SEWAGE - TREATMENT - WORKS -
SLUDGE - DIGESTION - TANKS -
SCHEMATIC - DIAGRAMS -

SCALE - AS SHOWN

NOVEMBER - 1935

Technical drawing showing a cross-section of a door opening in a sludge bed. The drawing includes the following dimensions and labels:

- Top left: $10' \cdot 254 \frac{1}{2}''$
- Top right: $2 \cdot 64 \frac{1}{2} \cdot 15 \cdot 7$
- Right side: $5 \frac{1}{2}'' R.$
- Below the right side: First Truss
- Bottom right: Monorail Track
- Bottom left: $7 \frac{3}{4}''$
- Bottom center: $1 \frac{1}{8}''$
- Bottom left note: Cut 4" L and wood sill to permit placing of $10' \cdot 1$ at top of door opening in sludge bed.

Building Truss
2" x 4" x 1/2" L3

1/2"

1/2" Bolts

Lock Washers

8 1/2"

Monorail Track

5 7/8"

Loaden #5035 Clamp or Equal

10" 25.4" I beam

6" 12.5" I

3/4" x 1/2" L

Cope

6"

3"

SECTION A-A

DETAIL "B"

Scale: 1" = 1'0"

• STD •
• STD •

1 1/2

45 Deg

All treads to be antislip finish.
Use 1/4 inch aggregate
per sq ft of surface.
Wood Trowel Finish

• STD • CONCRETE STAIRS

No Scale

· STD · CONCRETE STAIRS
No Scale

·STD·CONCRETE·COPING· RIM COVER
·STD·CONSTRUCTION·JOINT· ·MAN·HOLE·RIM·&·COVER· TYPE 'A' ·
No Scale Scale 1"=1'-0"

ST'D EXPANSION JOINT
Scale: 1½" = 1'-0"

· ST'D. PIPE · RAIL · BASE ·
Half Size

[illegible]

· ALUMINUM FLOOR GRATING SUPPORTS ·
No Scale

ALUMINUM FLOOR GRATING SCHEDULE ITEM 26A				
APPROXIMATE QUANTITY	SPAN FEET	DEPTH INCHES	BEARING BARS	
			THICKNESS INCHES	MAX. SPACING CENTERS
99 D ¹	5'-6"	2	3/16	15/16

Note: For Steel Floor Grating see Sludge Beds Dwg. 26

SECTION A-A
DETAIL OF MANHOLE
Scale: 1/2" = 1'-0"

·DETAIL·OF·
·UNDERDRAIN

·ALUMINUM·PLATE·COVER·
No Scale

ALUMINUM COVER PLATE SCHEDULE				
LOCATION	Nº	L.	W.	T.
BY-PASS CHAMBER	1	7'-0"	2'-0"	1/4"*
" " "	1	7'-6"	2'-0"	1/4"*
" " "	2	5'-10"	0'-10"	1/4"

* No Deduction made for Floor Stand
Bearing Plate.

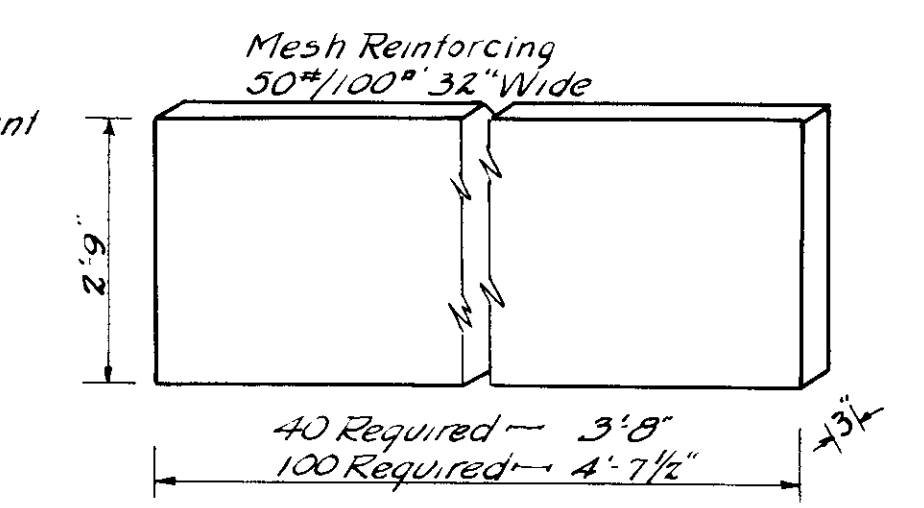
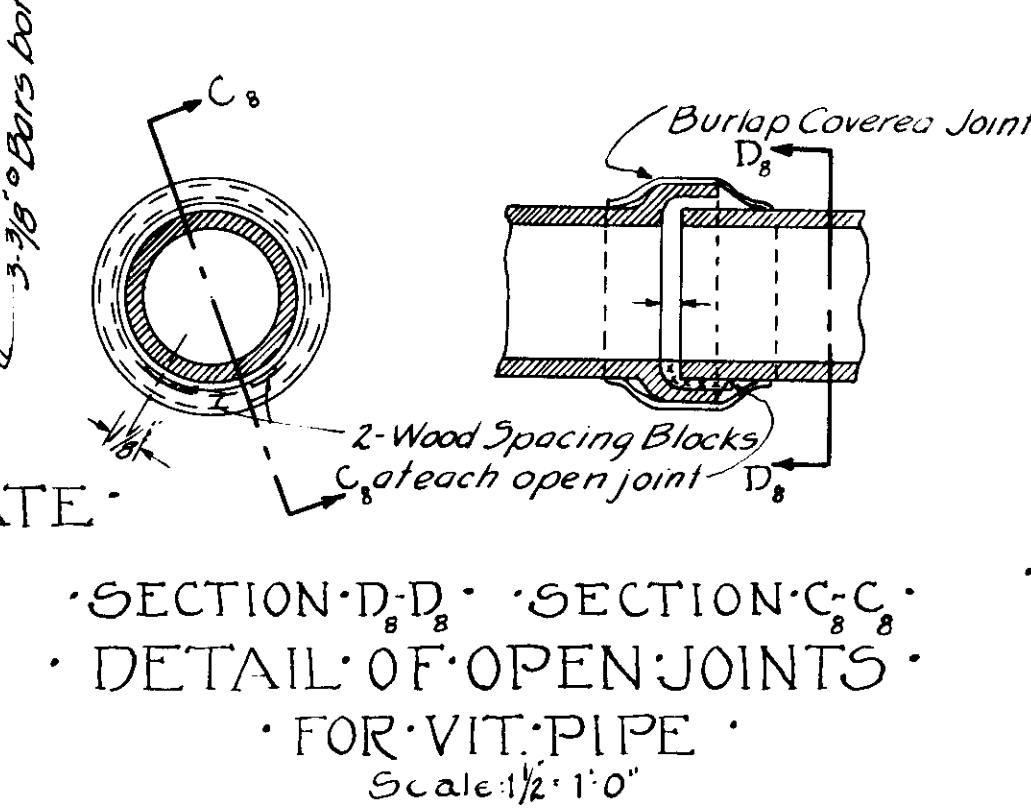
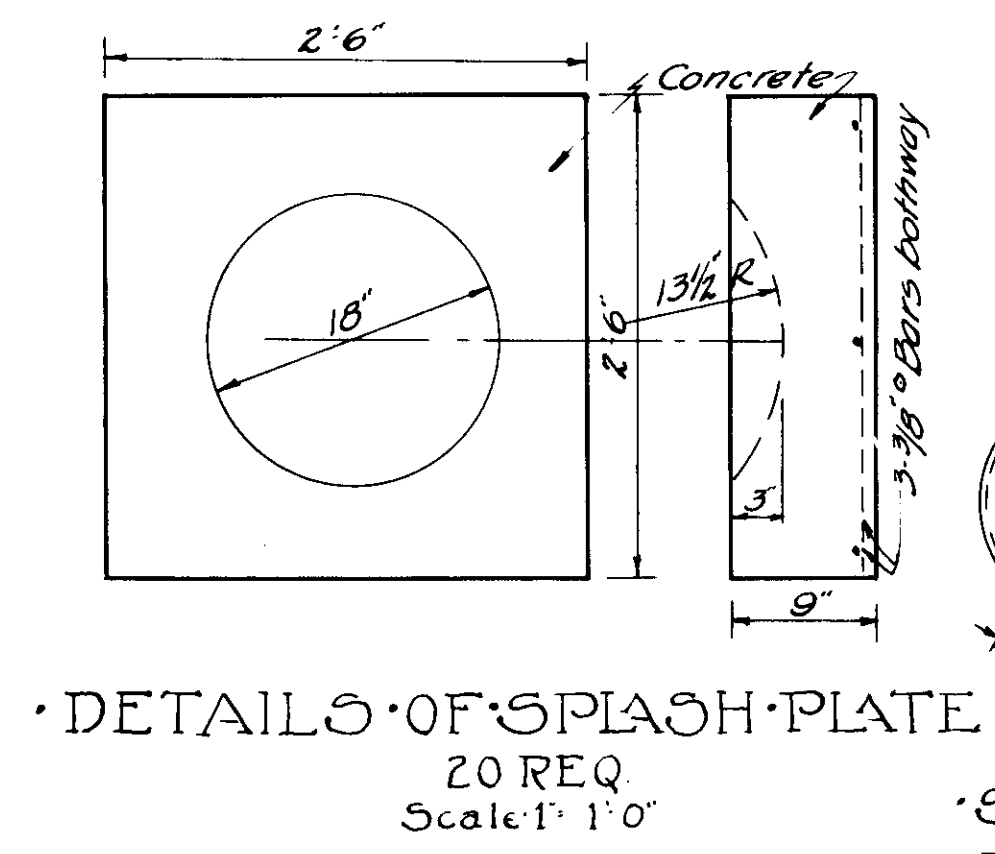
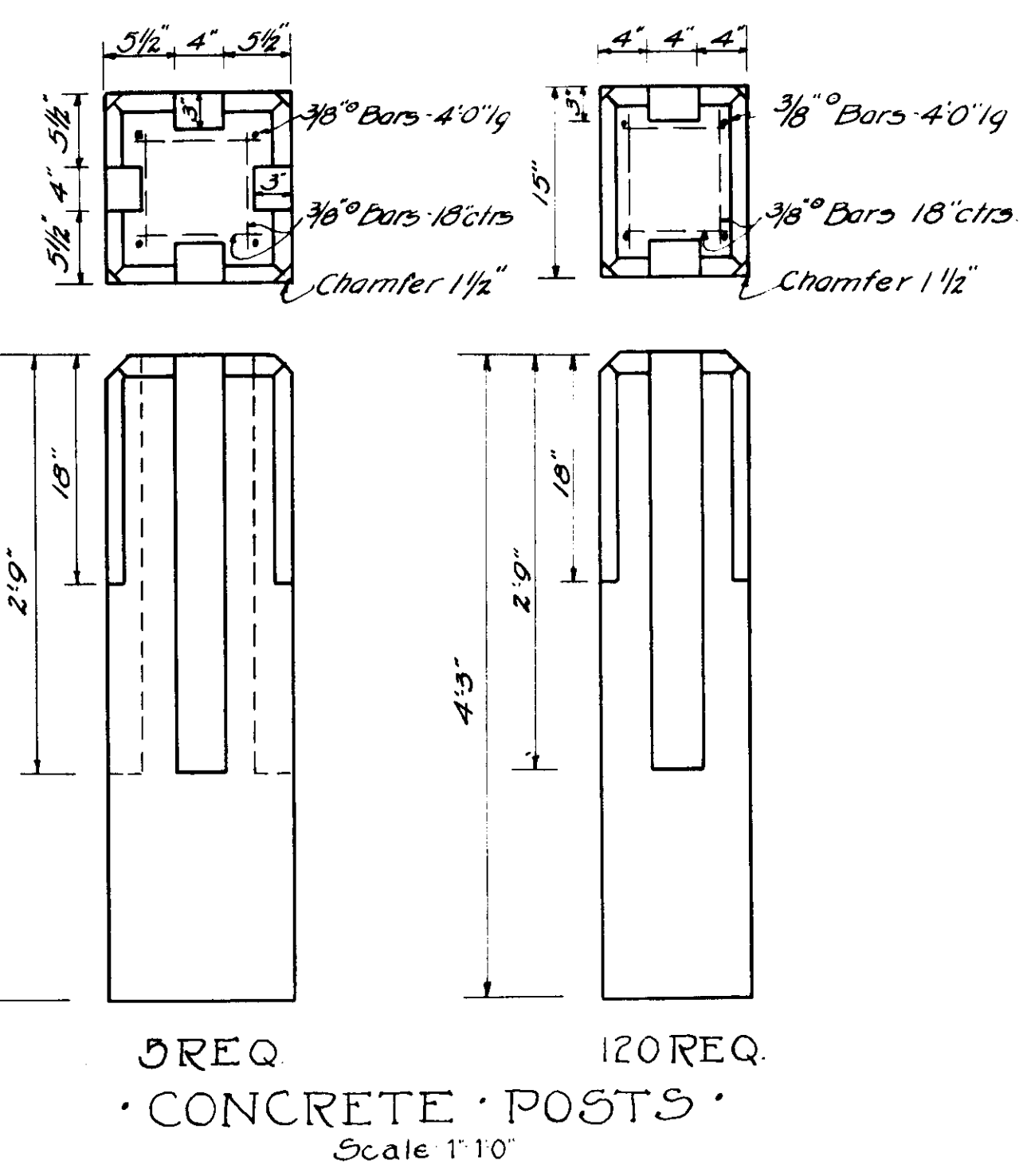
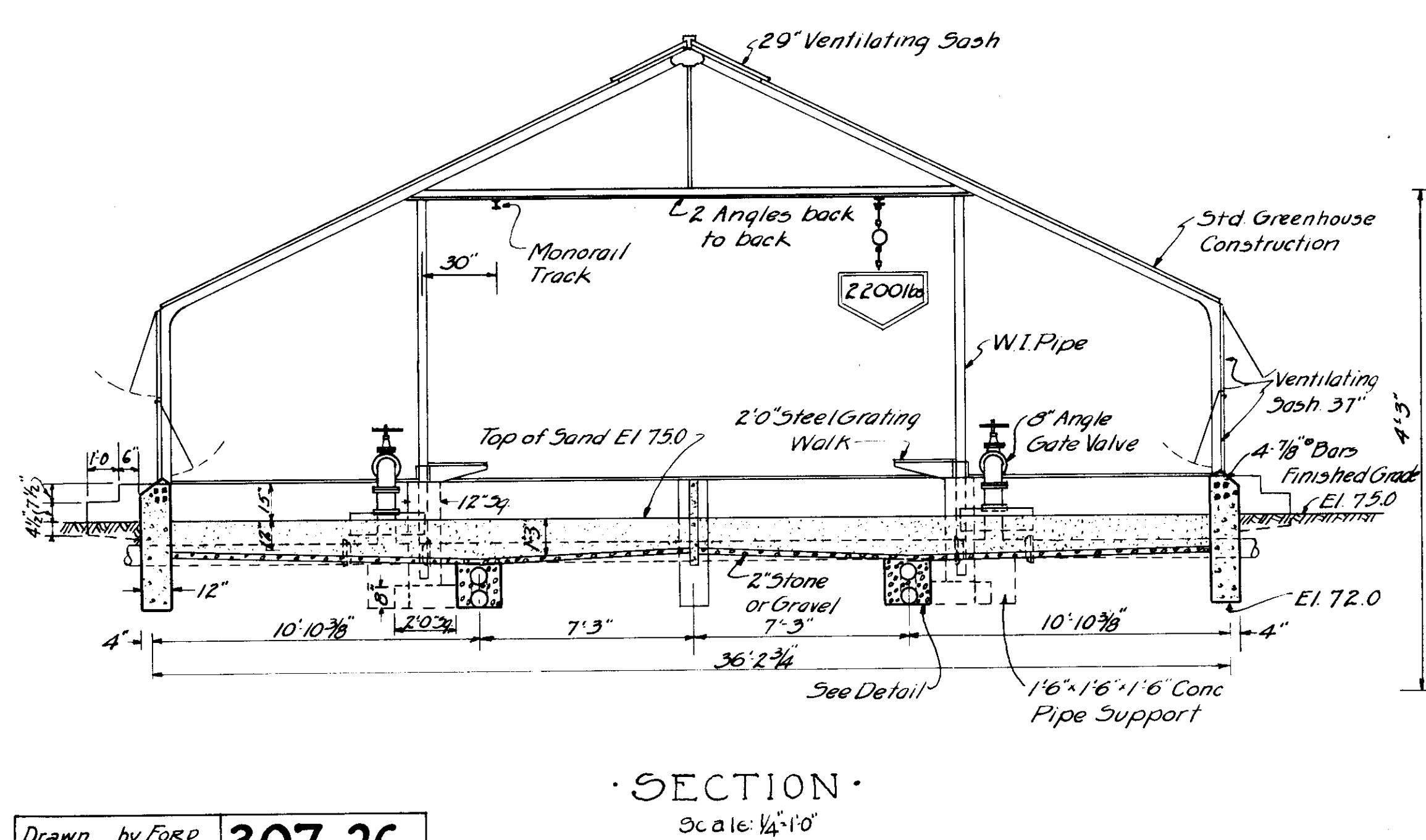
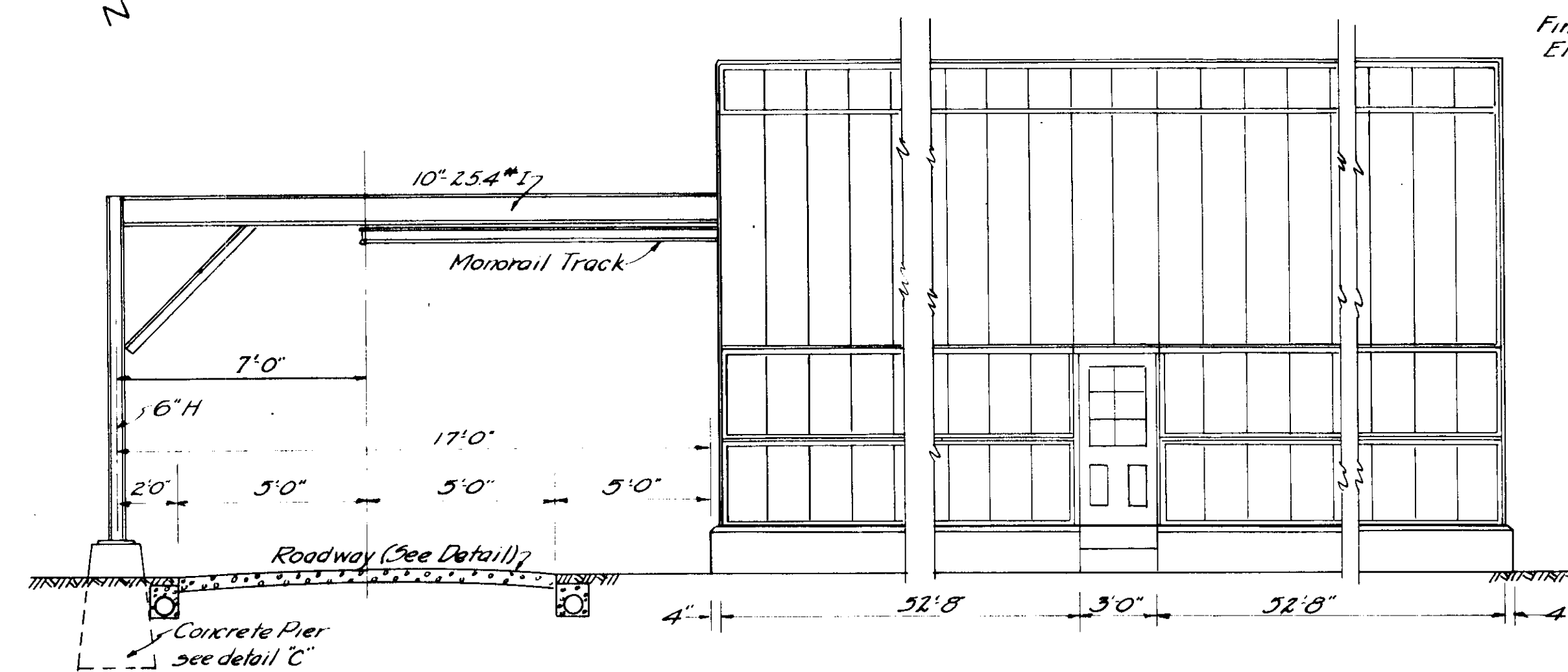
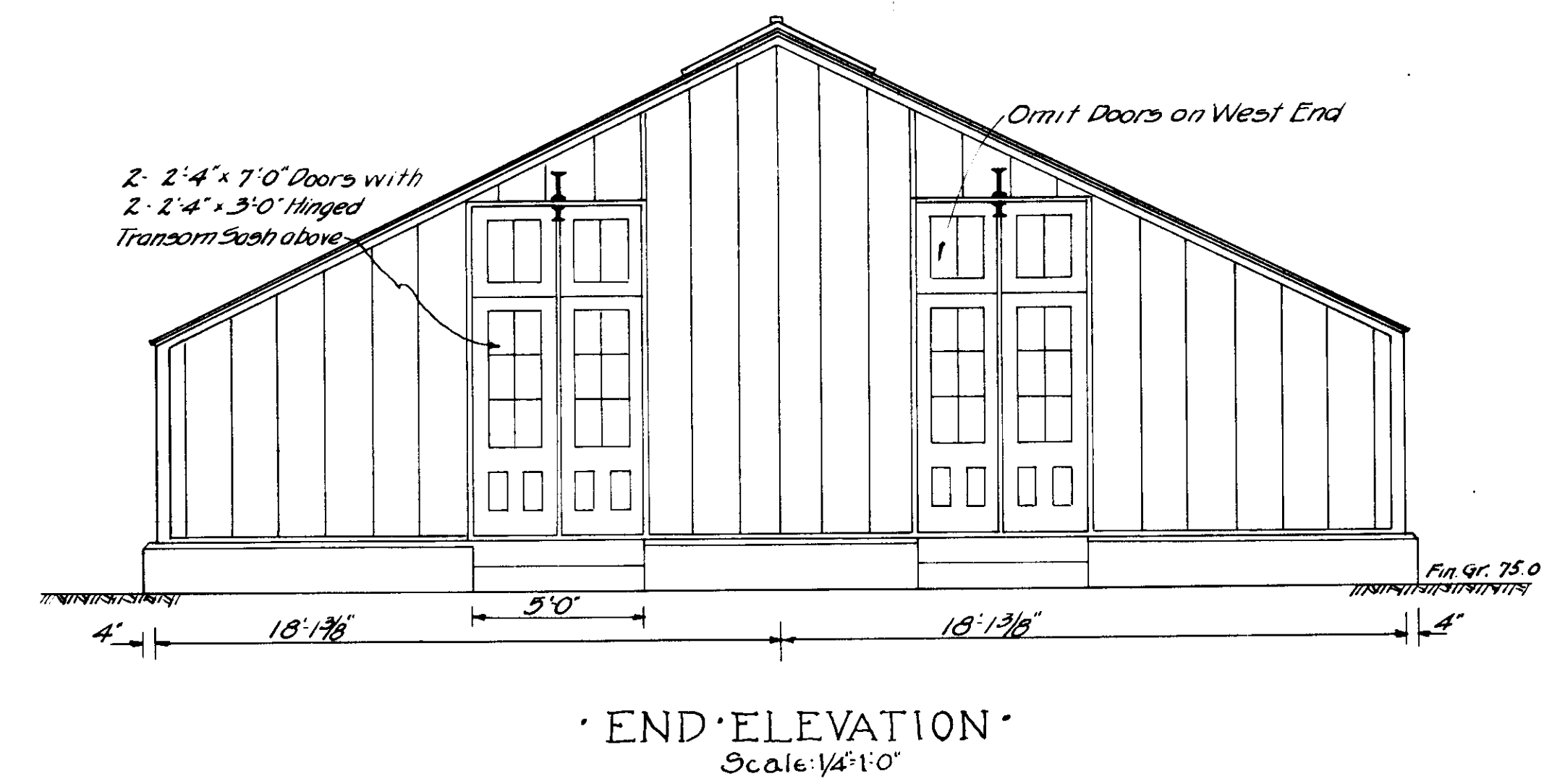
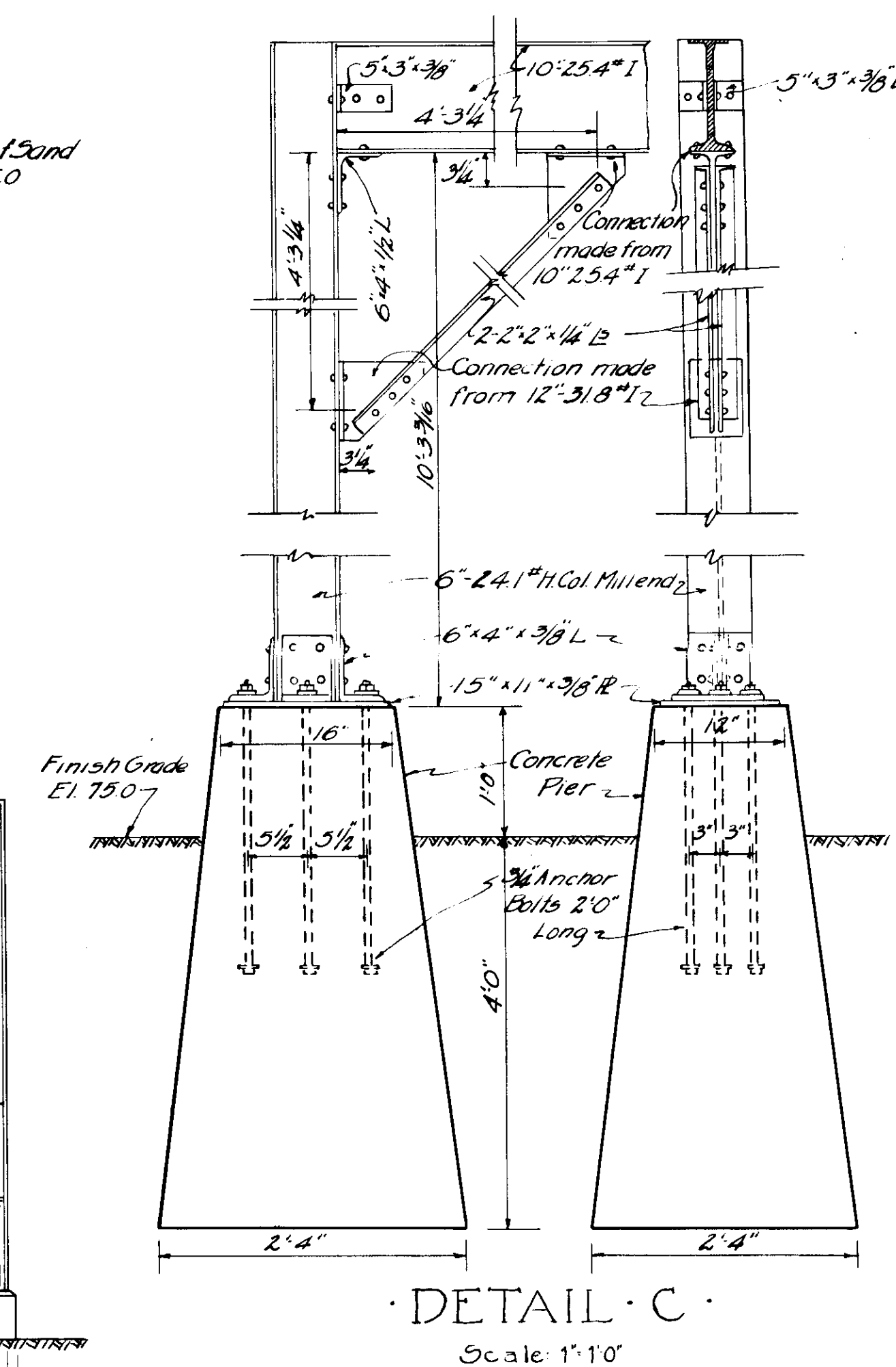
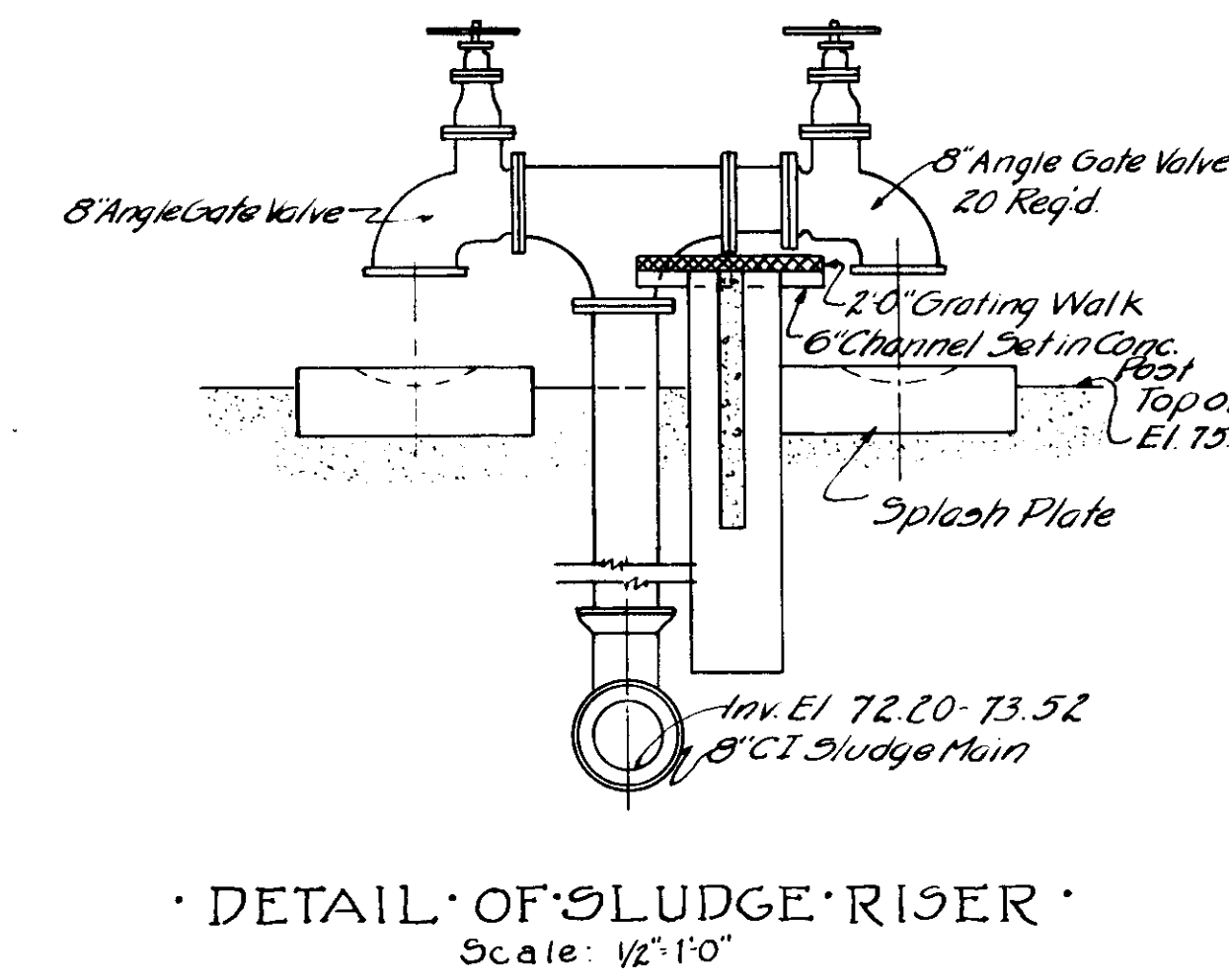
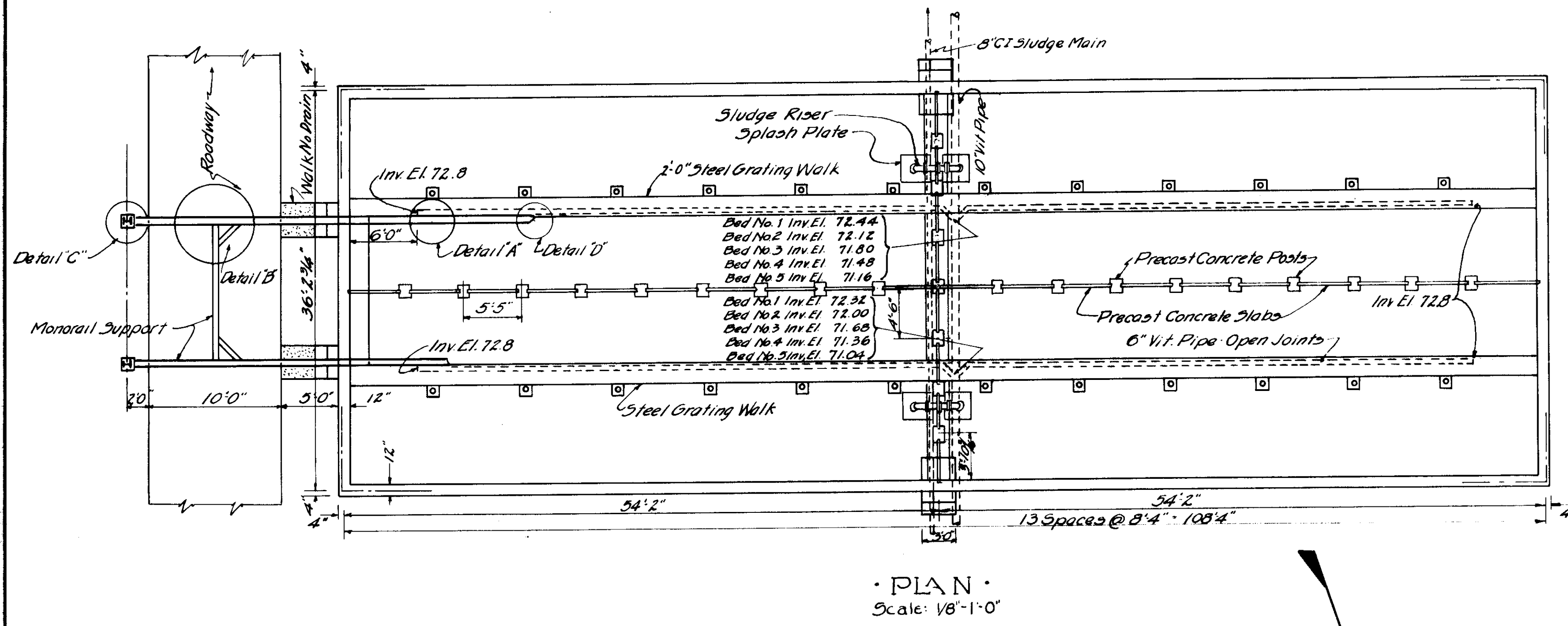
· STD · PIPE · RAILING ·
No Scale

· CITY OF MASSILLON · OHIO ·

• SEWAGE • TREATMENT • WORKS •
• COVERED • SLUDGE • DRYING • BEDS •
• LAYOUT & MISCELLANEOUS DETAILS •

· SCALE · AS · SHOWN

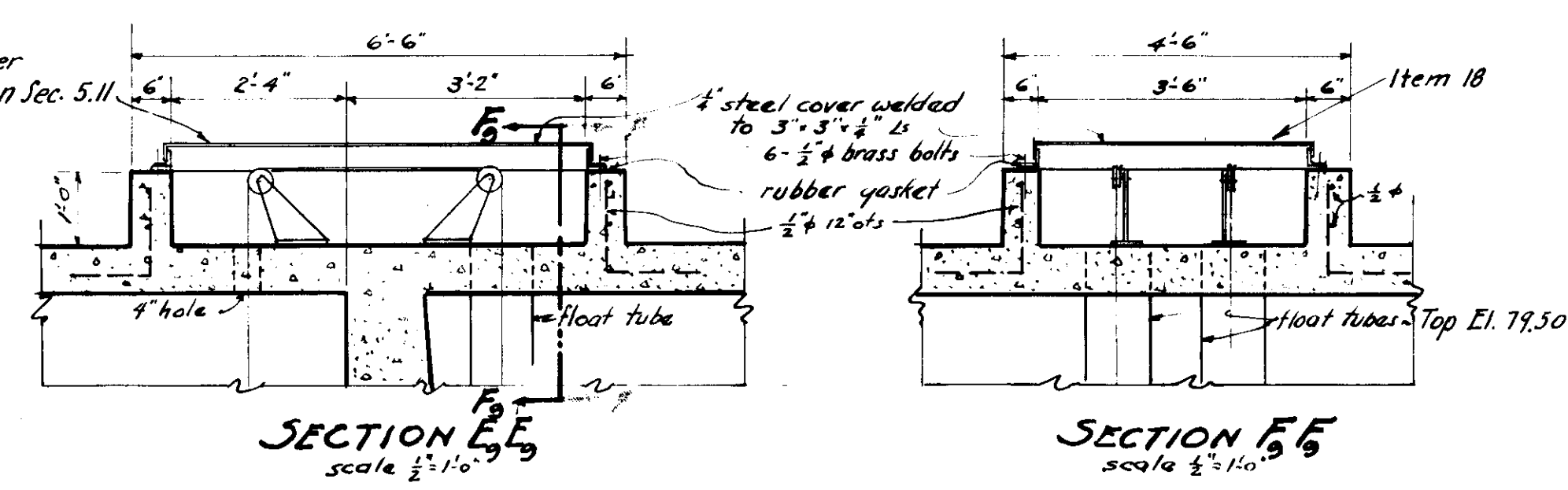
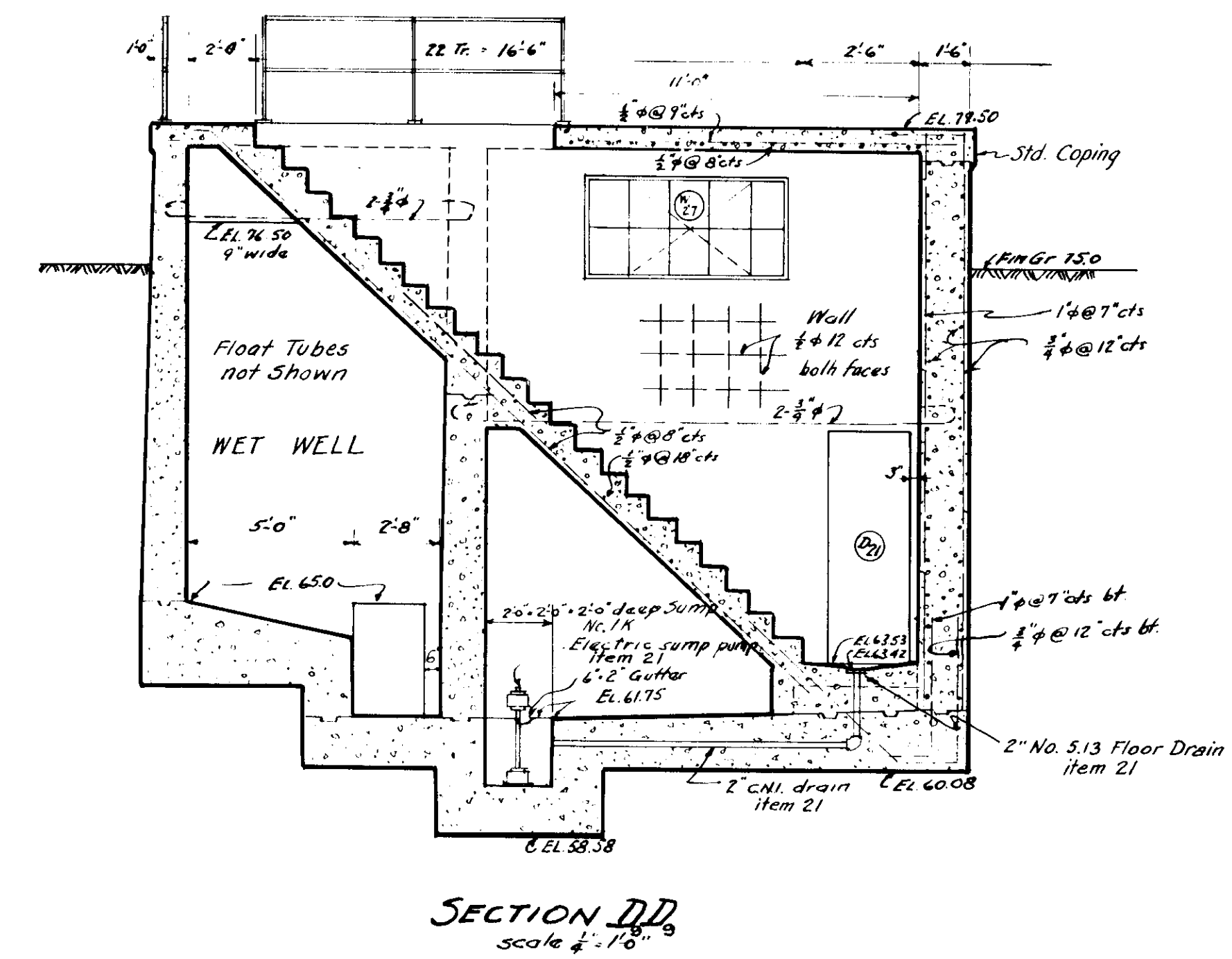
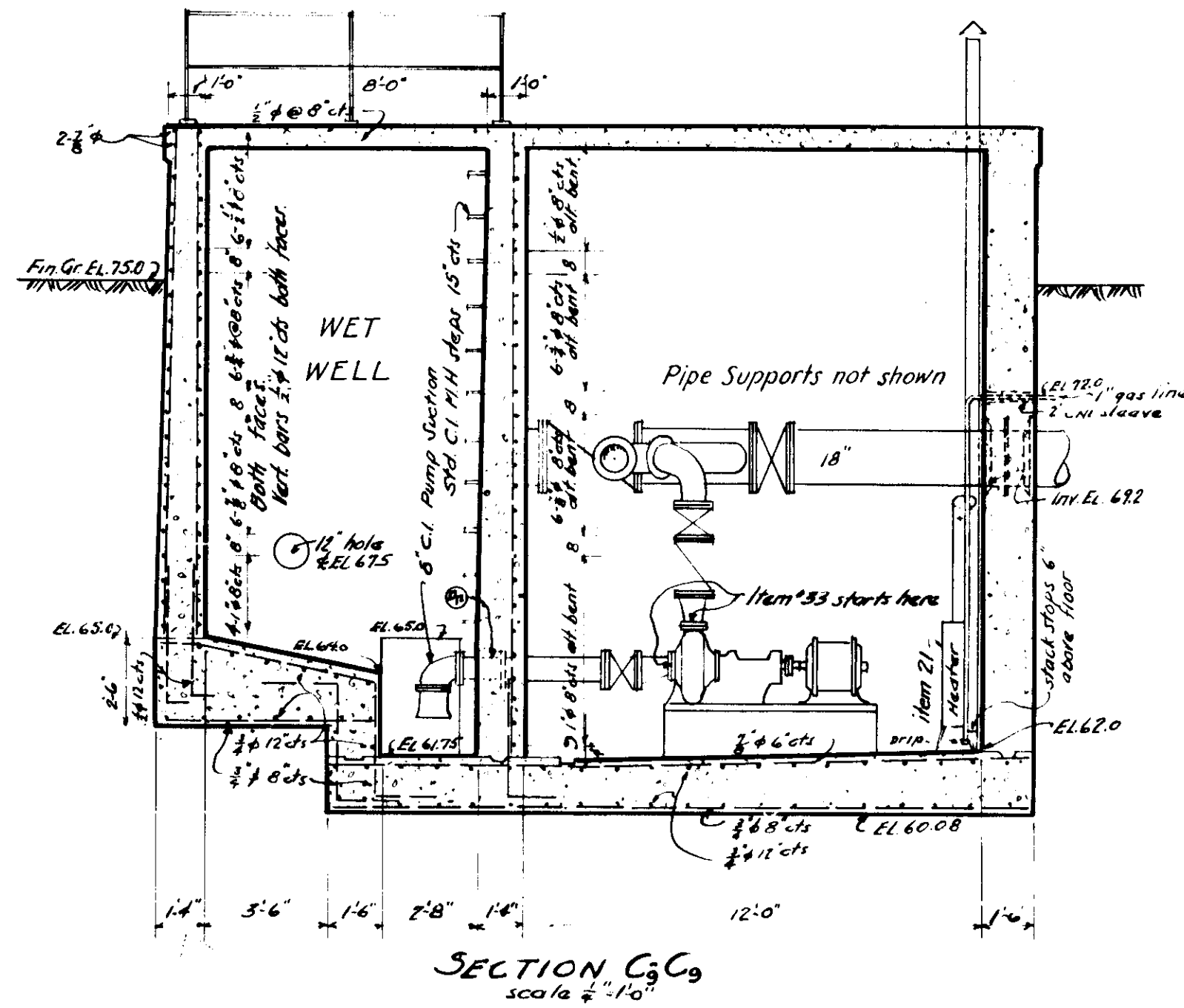
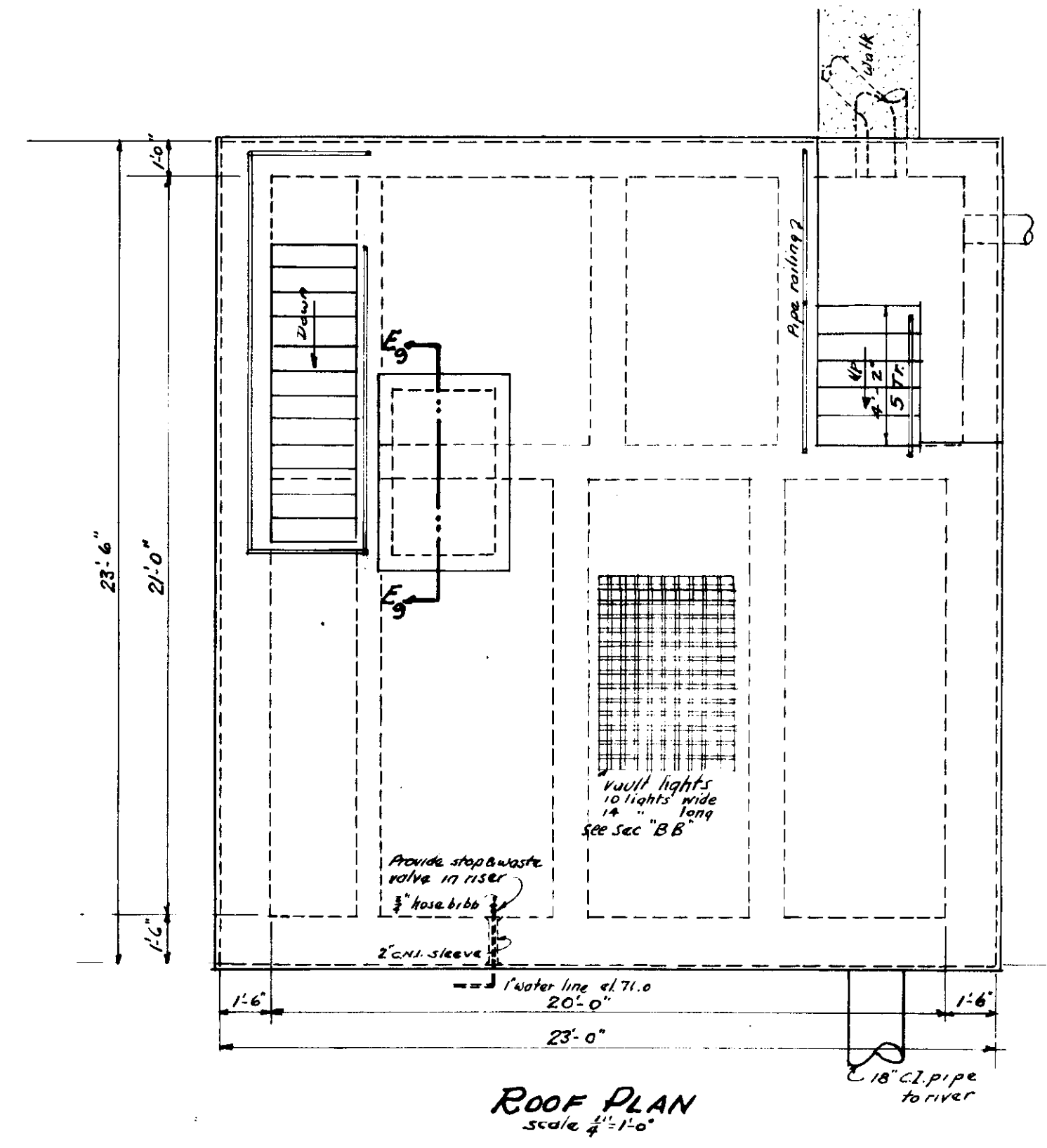
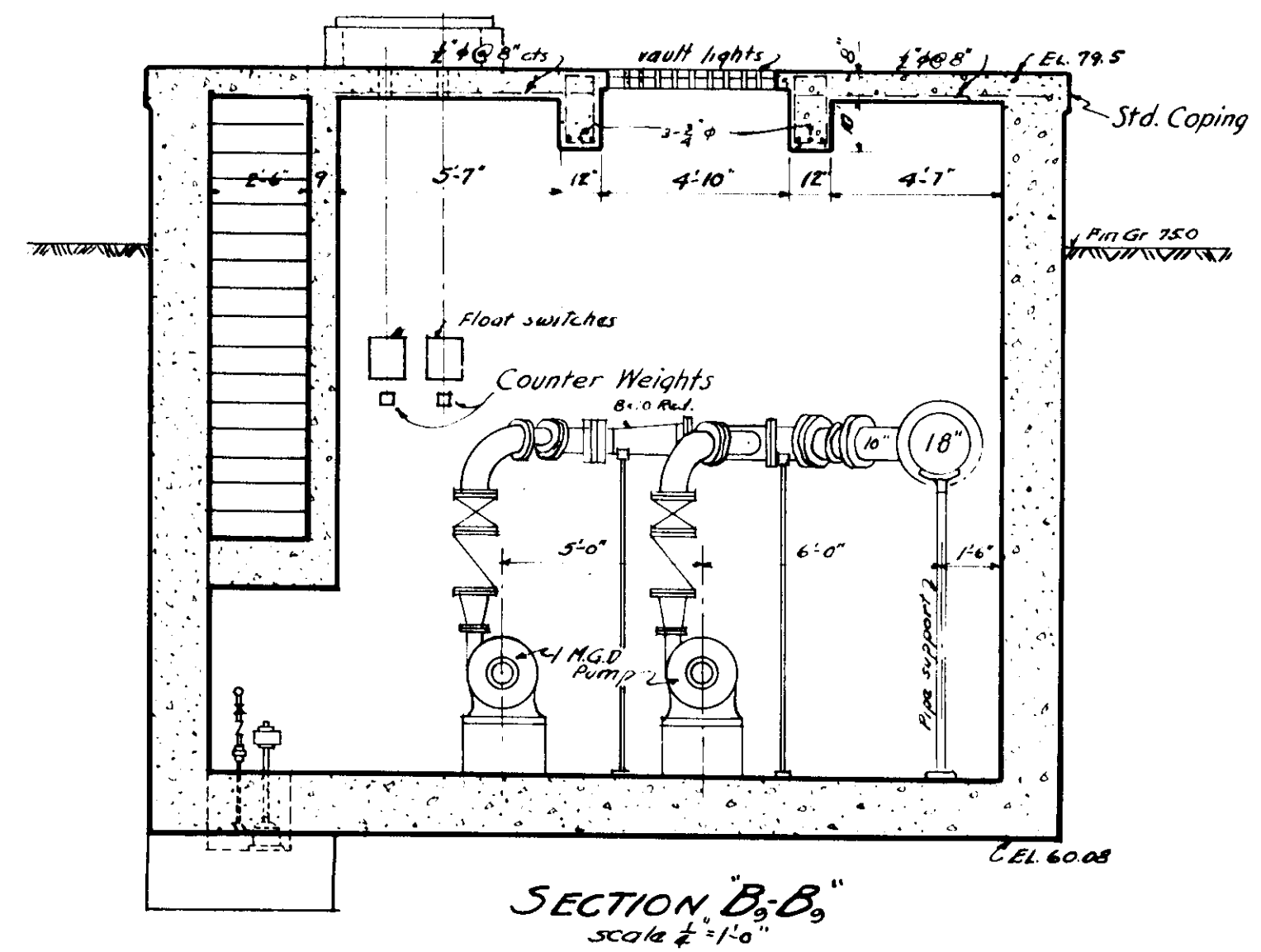
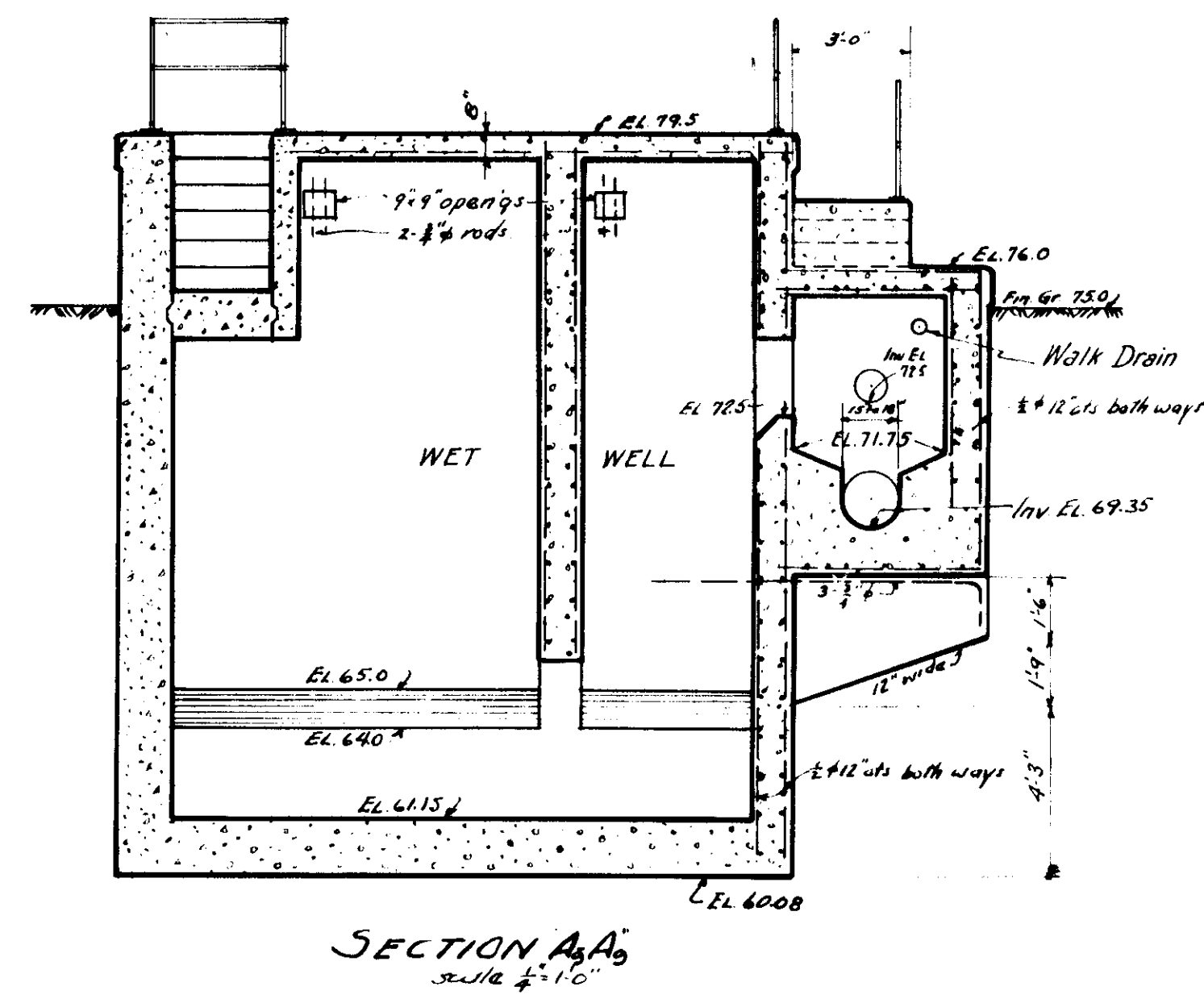
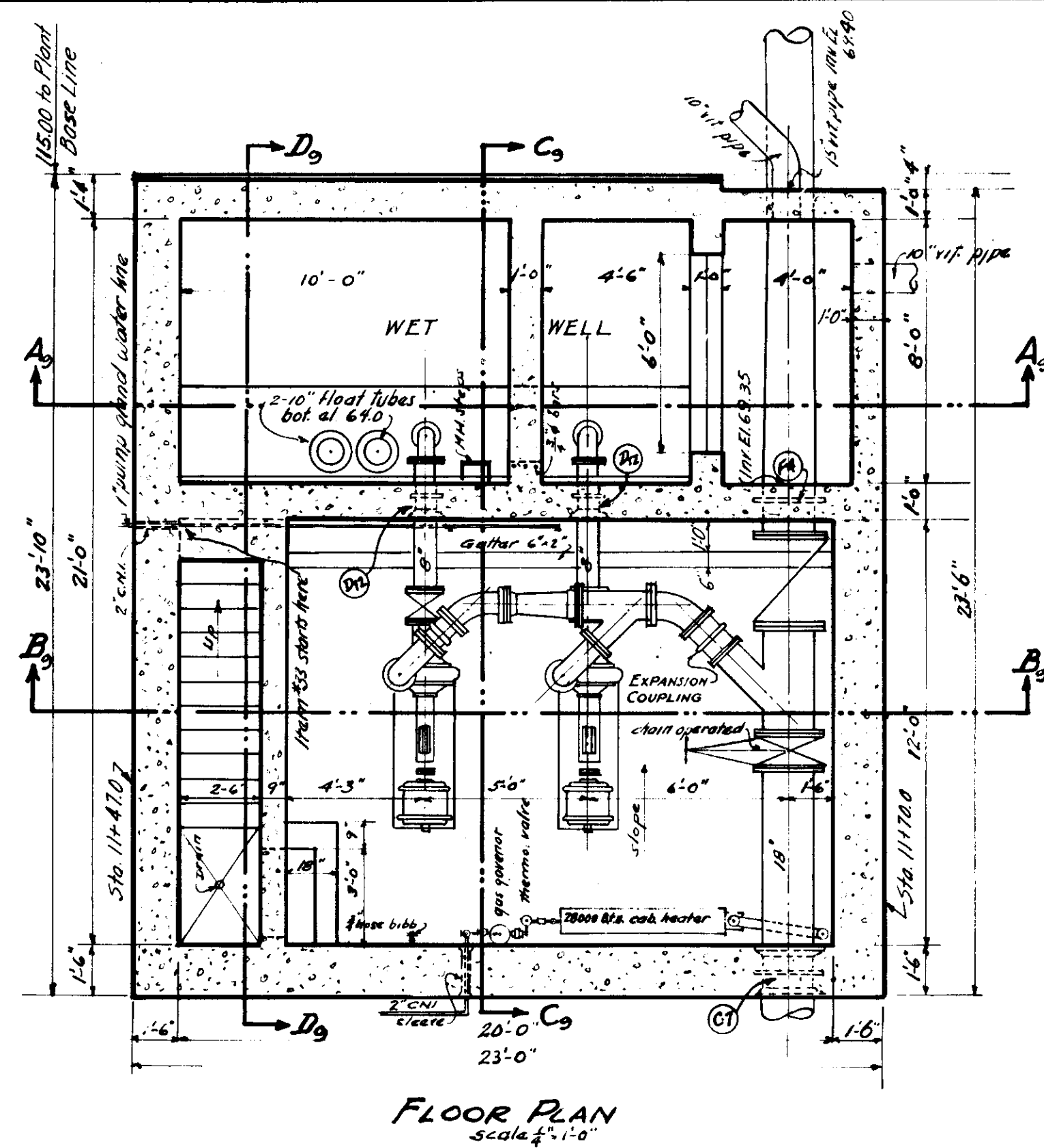
• NOVEMBER • 1935 •



Drawn by Ford
Traced by Ford
Checked by R.H.L.
307-26
30 SHEETS

Director of Public Service
City Engineer
Consulting Sanitary Engineer

CITY OF MASSILLON, OHIO
SEWAGE TREATMENT WORKS
COVERED SLUDGE DRYING BEDS
PLANS, SECTIONS & DETAILS
SCALE AS SHOWN
NOVEMBER, 1935

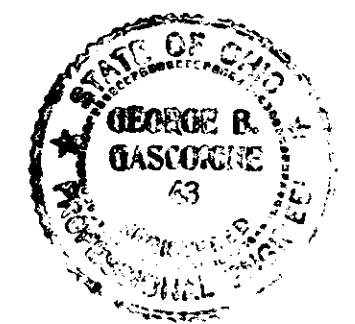


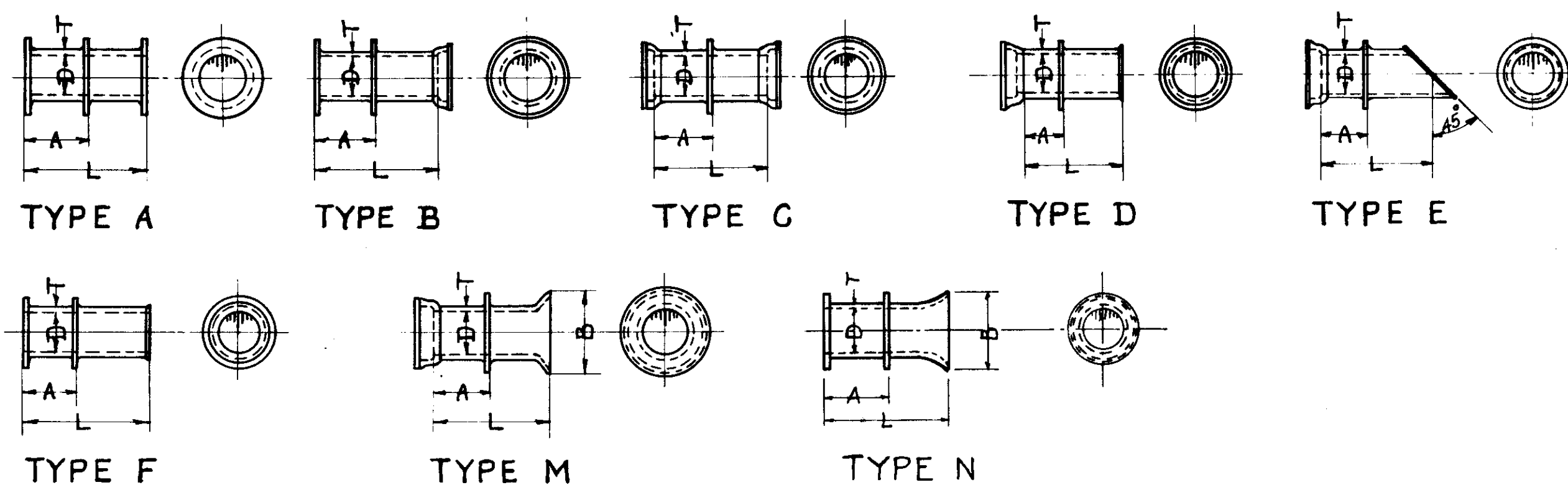
Cadmium Plate Cover after welding as per Specification Sec. 5.11

Drawn by Maseley
Traced by Brown
Checked by Maseley
307-27
30 SHEETS

Director of Public Service
City Engineer
Consulting Sanitary Engineer

CITY OF MASSILLON - OHIO -
SEWAGE TREATMENT WORKS
DRAINAGE PUMP CHAMBER
PLANS & SECTIONS
SCALE AS SHOWN
NOVEMBER 1935

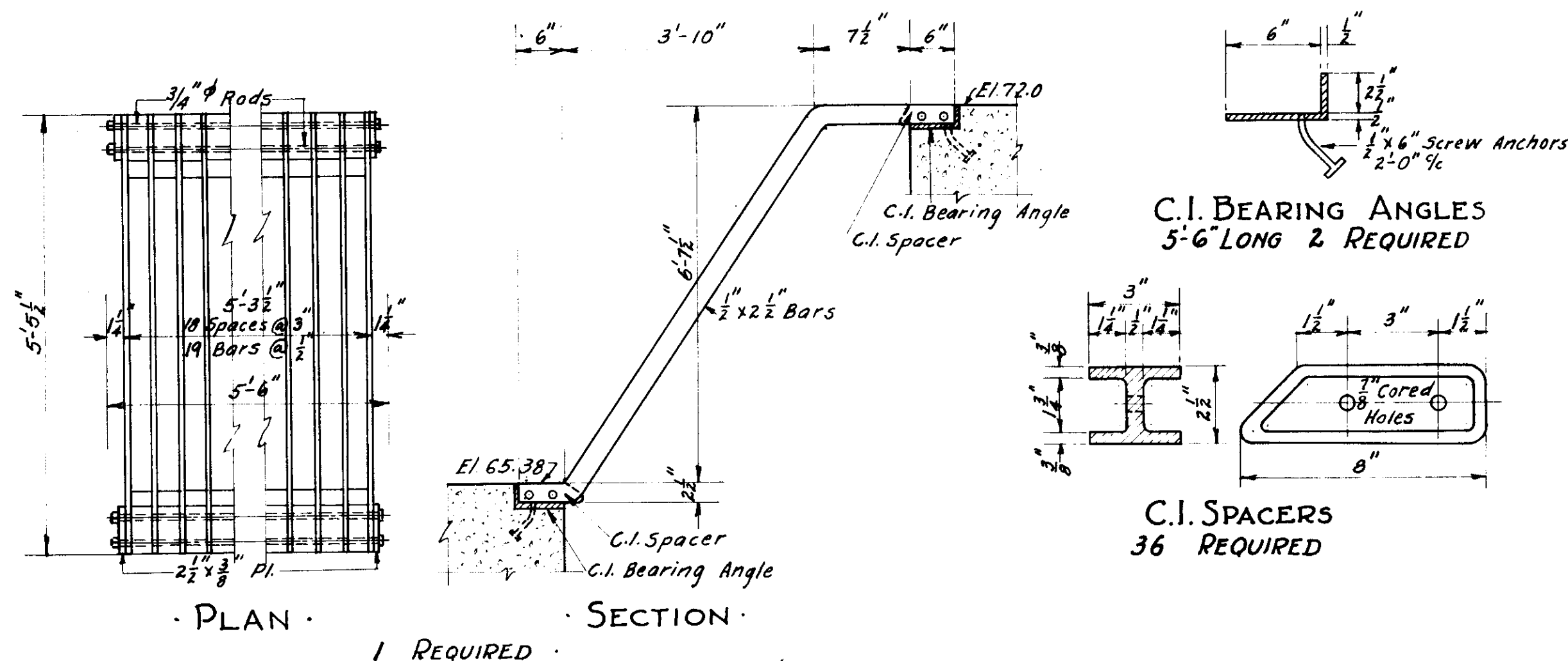




PIPE							CASTINGS							
LOCATION	MARK	Nº	CLASS	D	L	A B	LOCATION	MARK	Nº	CLASS	D	L	A	B
Main Building	F ₁	1	D*	12"	1'-9"	0'-10½"	Settling Tanks	D ₇	2	D	12"	0'-8"	0'-6"	
"	B ₁	3	D	12"	1'-11"	1'-4½"	"	D ₈	4	B	14"	0'-8"	0'-6"	
"	B ₂	1	D	10"	1'-11"	1'-4½"	"	D ₉	1	B	24"	0'-8"	0'-6"	
"	B ₃	1	D	8"	1'-11"	1'-4½"	"	D ₁₀	1	D	8"	0'-8"	0'-6"	
"	D ₁	1	D	10"	1'-5"	0'-8½"	"	B ₁₂	4	D	8"	5'-4"	4'-4"	
"	C ₁	1	D	4"	1'-1"	0'-7"	"	B ₁₃	6	D*	8"	0'-11"	0'-6"	
"	C ₂	1	D	3"	1'-2"	0'-7"	"	E ₁	1	D	8"	2'-10"	2'-4"	
"	C ₃	2	B	20"	1'-7"	0'-7"	"	D ₁₁	2	D	6"	0'-8"	0'-5"	
"	B ₄	1	D	8"	1'-11"	1'-2½"								
"	D ₂	1	B	20"	0'-8"	0'-4"								
"	F ₂	1	D	8"	1'-6"	1'-0"								
"	D ₃	1	B	30"	1'-5"	0'-8½"								
							Drainage Pump Chamber	D ₁₂	2	D	8"	1'-6"	1'-0"	
							"	F ₄	1	B	18"	1'-6"	1'-0"	
							"	C ₇	1	B	18"	0'-10"	0'-5"	
							"							
Fluclulators	D ₄	1	B	30"	0'-8"	0'-4"								
"	D ₅	1	D	6"	0'-9"	0'-4"								
"	M ₁	3	B	16"	0'-8"	0'-4"	22"	Sludge Digestion Tanks	C ₈	2	D	3"	0'-11"	0'-5½"
"	D ₆	1	D	10"	0'-8"	0'-4"		"	F ₅	4	D	8"	4'-6"	2'-3"
							"	F ₆	2	D	8"	2'-3"	1'-6"	
							"	F ₇	2	D	8"	4'-0"	1'-6"	
Settling Tanks	N ₁	1	B	24"	1'-0"	0'-6"	30"	"	F ₈	2	D	10"	2'-0"	1'-3"
"	A ₁	5	D*	6"	1'-0"	0'-6"		"	F ₉	4	D	6"	2'-0"	1'-0"
"	B ₅	1	D*	6"	0'-8"	0'-4"		"	F ₁₀	12	D	6"	1'-6"	1'-0"
"	B ₆	1	D	6"	1'-1"	0'-10"		"	F ₁₁	2	B	20"	2'-0"	1'-3"
"	C ₄	1	D	6"	0'-8"	0'-4"		"	C ₉	2	D	8"	0'-11"	0'-5½"
"	C ₅	1	D	8"	0'-6"	0'-3"		"	B ₁₄	1	D	8"	1'-6"	1'-2"
"	B ₇	2	D	8"	0'-8"	0'-6"		"	C ₁₀	1	D	3"	1'-0"	0'-6"
"	B ₈	4	D	8"	1'-5"	1'-0½"								
"	B ₉	4	B*	14"	0'-8"	0'-5"								
"	B ₁₀	2	D	12"	0'-8"	0'-5"								
"	B ₁₁	2	D	8"	1'-2"	0'-10"		Manhole	D ₁₃	1	D	8"	0'-5"	0'-3"
"	C ₆	1	D	6"	0'-4"	0'-2"								
"	F ₃	1	D*	10"	1'-0"	0'-6"								

* Drill & Tap for Standard Studs

Note: All dimensions to be used for estimating purposes only and are to be verified in the field for construction. Thickness T for Castings to be the same as for Class of Pipe indicated. All Bells & Spigots to conform to A.W.W.A. Standards. All Flanges & Drilling to conform to 12S1b American 1928 Standard.

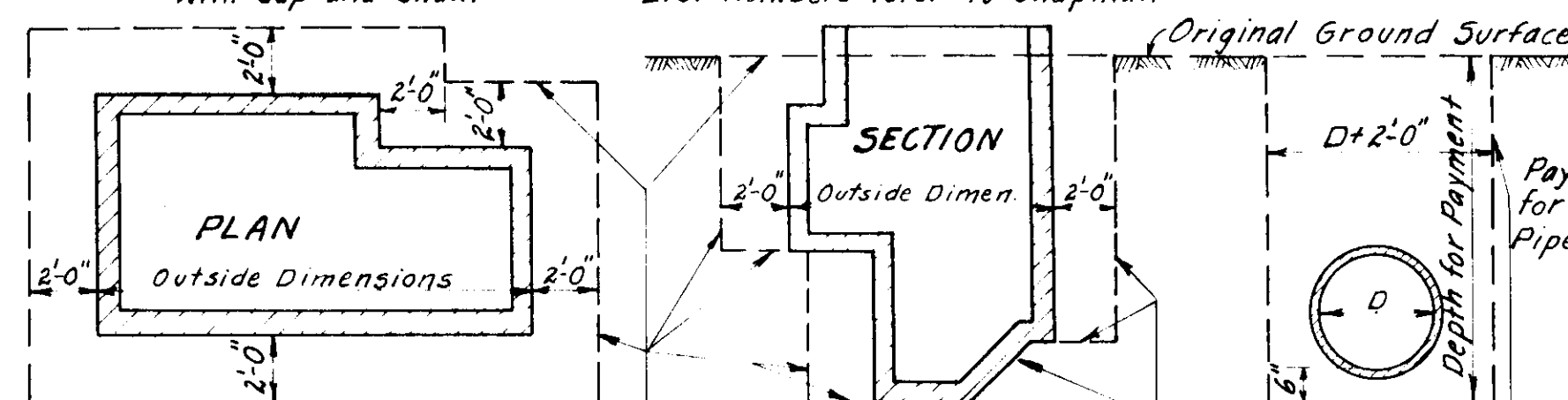


BAR SCREEN & C.I. SUPPORTS
· NO SCALE ·
ITEM 18

VALVE					SCHEDULE					
ITEM	APPROX. NUMBER REQUIRED		SIZE INCHES	TYPE END	OPERATION	TYPE OF VALVE	EXTENSION STEM	REFERENCE MANUFACTURERS LIST OR EQUAL	PRESSURE LBS. PER SQ. IN.	
	SCHEDULE								WORKING	TEST
13 A	6	6	3/4"	Screw	Tee	Hose Bib		Crane 803	150	300
	1	1	1"	"	Wheel	Gate		List 1	"	"
13 C	18	18	2"	"	"	"		"	"	"
	4	4	2"	"	Nut	"		"	"	"
	1	1	2"	"	Tee	Stop & Waste		Crane 806		
	1	1	2"	"	Wheel	Hose Gate*		List 7	150	300
D	1	1	3"	"	"	Gate		List 1	"	"
E	1	1	4"	Flange	Wheel	Gate		List 59 1/2	"	"
B	1	1	1 1/2"	"	"	"		"	"	"
F	11	11	6"	Flange	Wheel	Gate		List 58 1/2	150	300
	2	2	6"	Hub	Nut	"		"	150	"
	8	8	6"	"	Wheel & Chain	"		"	150	"
	1	1	6"	"	"	Check		List 23	150	"
13 G	11	11	8"	Flange	Wheel	Plug		"	"	"
	6	6	8"	"	"	"	9'0"	"	"	"
	3	3	8"	"	Wheel & Chain	"		"	"	"
	7	7	8"	"	Wheel	Gate		List 58 1/2	150	300
	4	4	8"	Hub	Nut	"		"	"	"
	20	20	8"	Flange	Wheel	Angle Gate		List 24	10	20
	4	4	8"	"	"	Check		List 23	150	300
	1	1	8"	"	Wheel & Chain	Gate		List 58 1/2	150	"
6	6	8"	"	Floor Stand	"	17'6"	"	150	"	
13 H	1	1	10"	Hub	Nut	Gate		List 58 1/2	30	70
	1	1	10"	Flange	Wheel	"		"	"	"
	1	1	10"	"	Wheel & Chain	"		"	"	"
	1	1	10"	"	"	Check		List 23	150	300
13 I	2	2	12"	Flange	Wheel	Gate		List 58 1/2	30	70
	2	2	12"	"	Wheel & Chain	"		"	"	"
	2	2	12"	"	"	Check		List 23	150	300
	2	2	12"	"	Floor Stand	Gate	5'0"	List 58 1/2	30	70
13 J	4	4	14"	Flange	Floor Stand	Gate	5'0"	List 58 1/2	30	70
13 K	3	3	16"	Hub	Nut	"		"	"	"
13 L	1	1	18"	Flange	Wheel & Chain	"		"	"	"
	1	1	18"	"	"	Check		List 23	150	300
13 M	2	2	20"	"	Floor Stand	Gate	10'6"	List 58 1/2	30	70
	1	1	20"	"	"	"	5'0"	"	"	"
13 N	1	1	24"	"	Secured "	"	5'7"	"	"	"
	3	3	24"	Hub	Nut	"		"	"	"

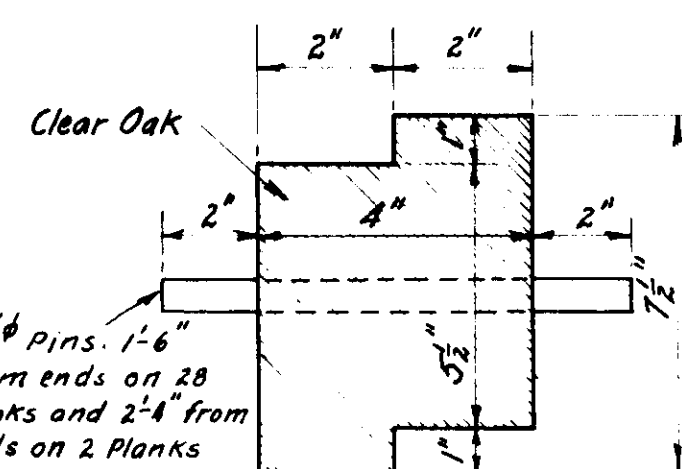
* With Cap and Chain

List Numbers refer to Chapman



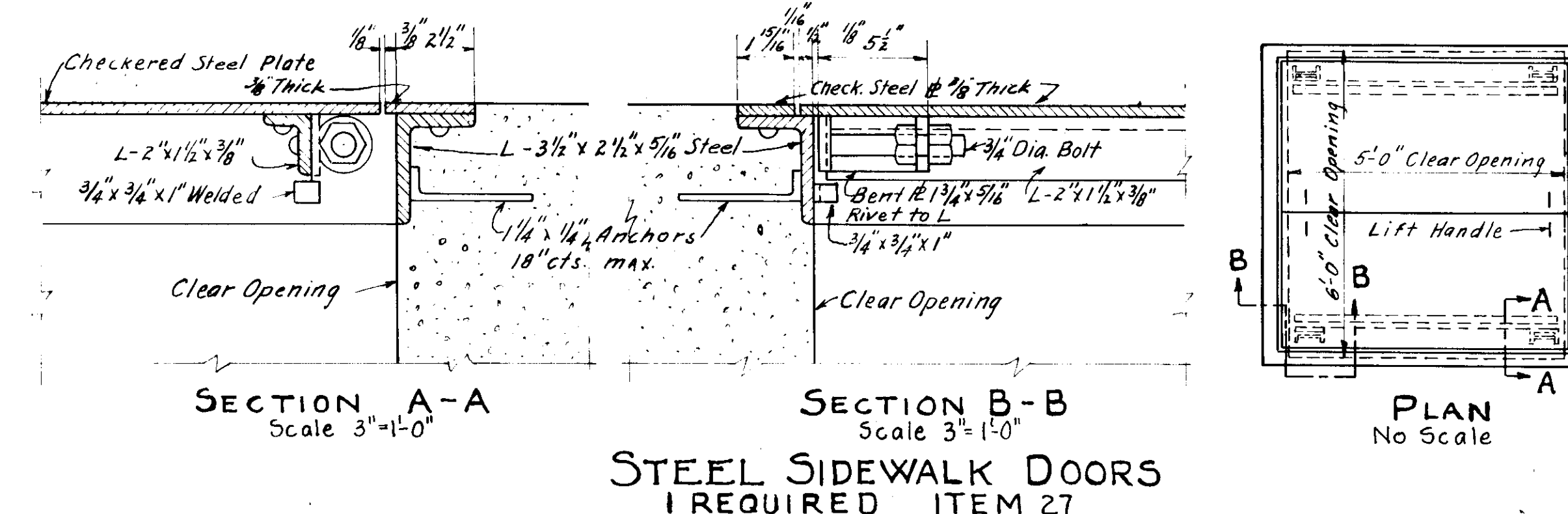
Plan and Section show Typical excavation payment limits for all structures, manholes, chambers, and Concrete Conduits

TYPICAL LIMITS FOR EXCAVATION PAYMENT
No Scale

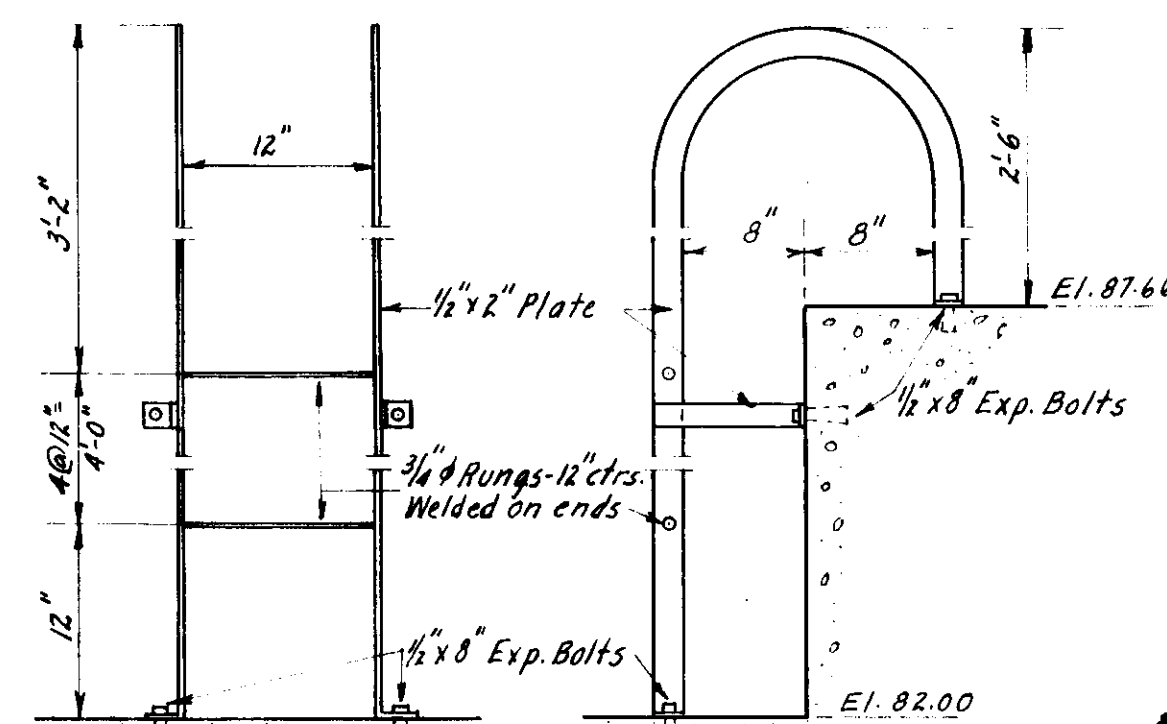


STOP PLANKS
5'-9½" LONG - 30 REQUIRED
ITEM 19

SLUICE GATE SCHEDULE									
ITEM	SIZE	NO.	LENGTH OF STEM	TYPE OF OPERATION	STEM	OPENS	END	PRESSURE & DIRECTION	CHAPMAN TABLE OR EQUAL
15 A	12"x12"	1	21'-0"	Floor Stand	Non Rising	Up	Flanged	20' Unseating	10
15 B	6"	1	16'-3"	Elec. Floor Stand	Rising	Up	Flanged	25' Unseating	7
	6"	1	14'-0"	Elec. Floor Stand	Rising	Up	Flanged	25' Unseating	7



STEEL SIDEWALK DOORS
1 REQUIRED ITEM 27



DETAIL OF LADDER
NO SCALE
REQUIRED ITEM 18

Drawn by W.B.M.
Traced by W.B.M.
Checked by *W.B.M.*

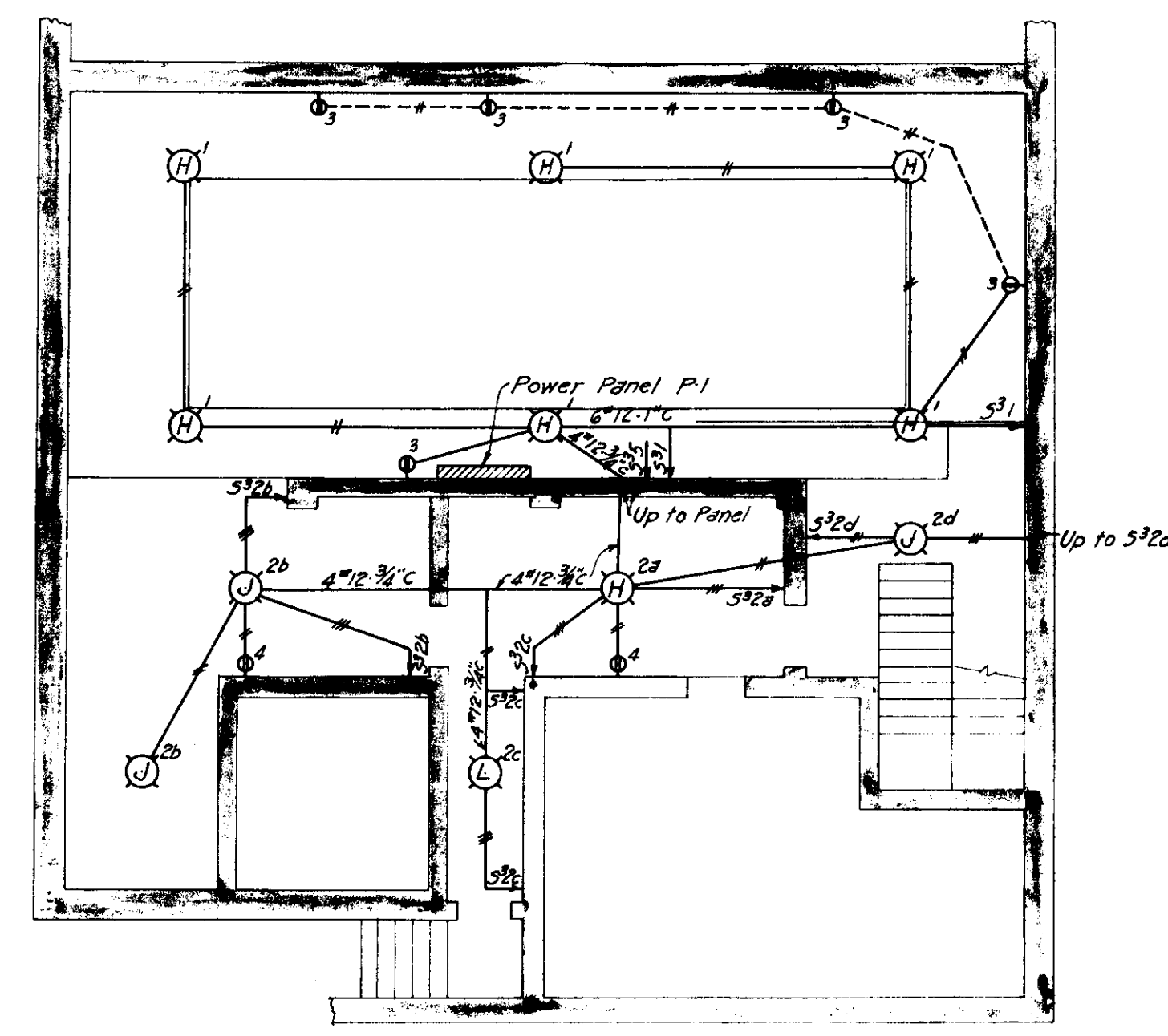
307-28
• 30 • SHEETS •

· CITY OF MASSILLON · OHIO ·

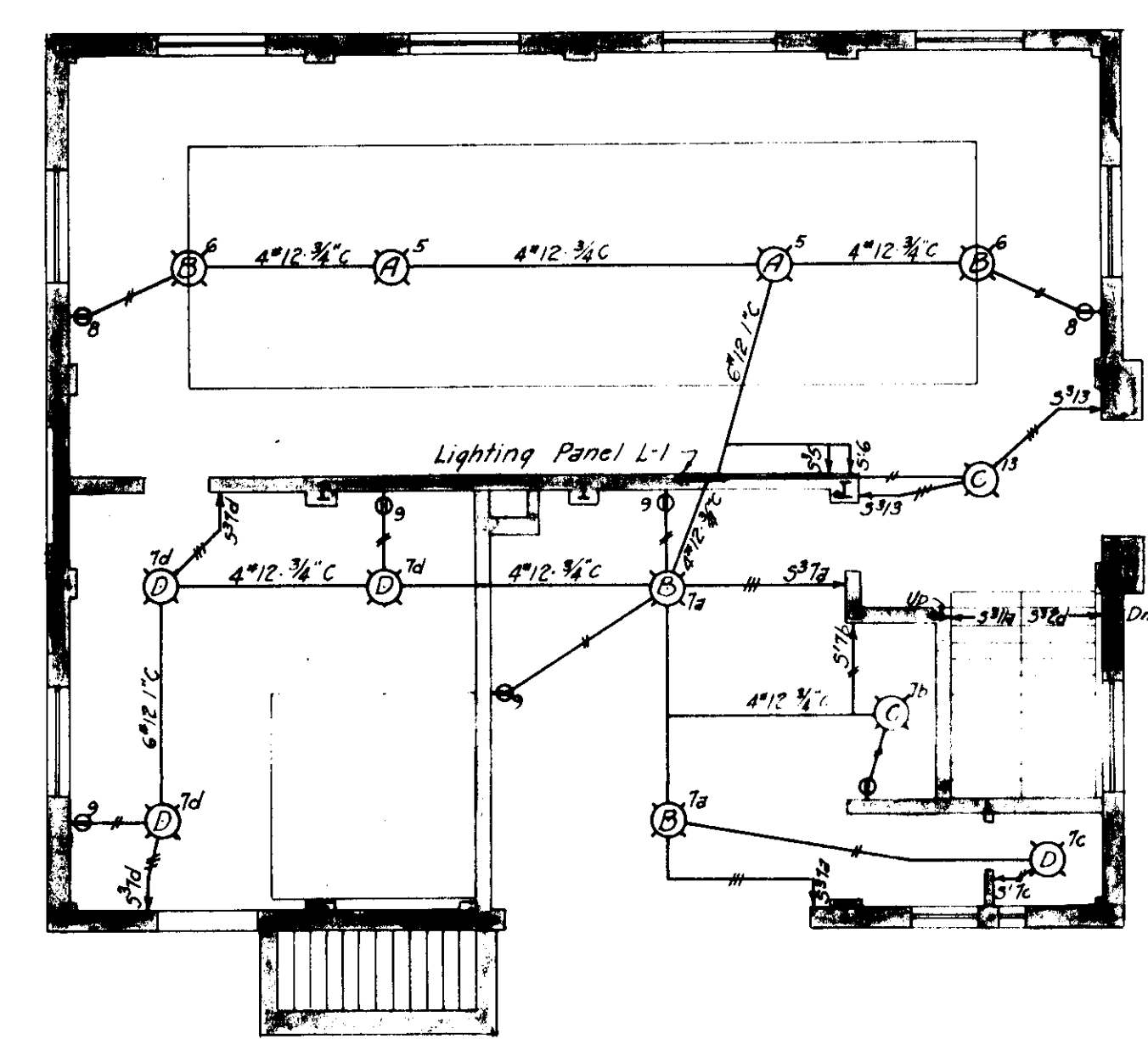
· SEWAGE · TREATMENT · WORKS ·
· MISCELLANEOUS · DETAILS ·

SCALE - AS SHOWN -

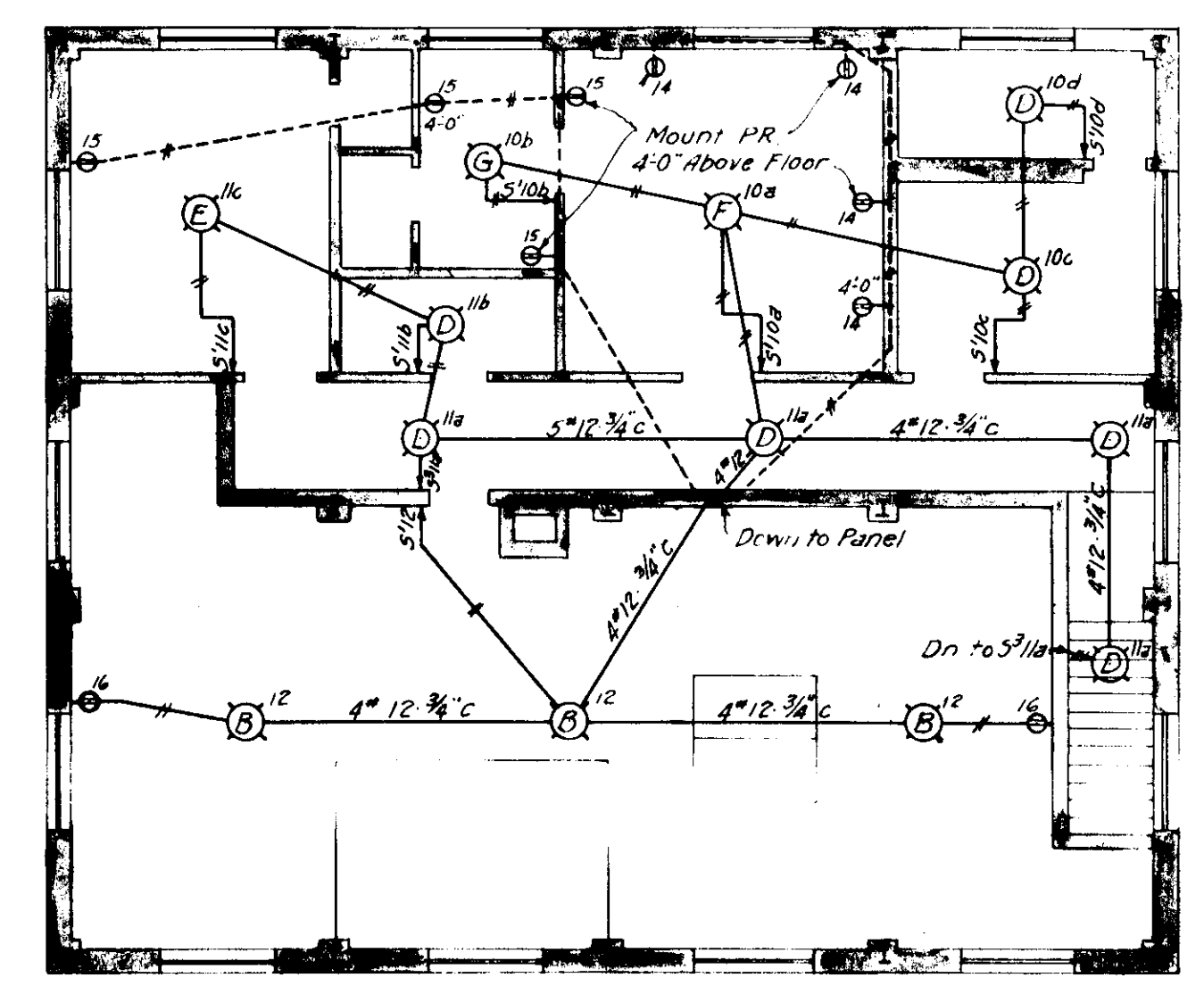
• NOVEMBER • 1935 •



BASEMENT

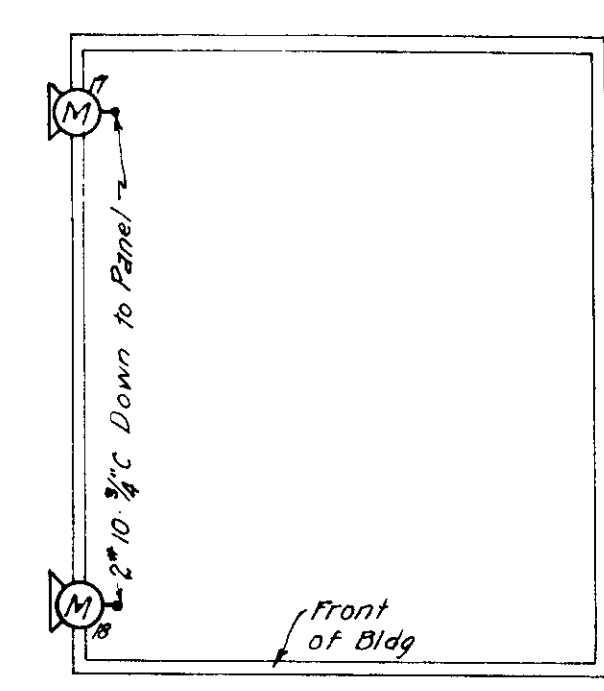


FIRST FLOOR



SECOND FLOOR

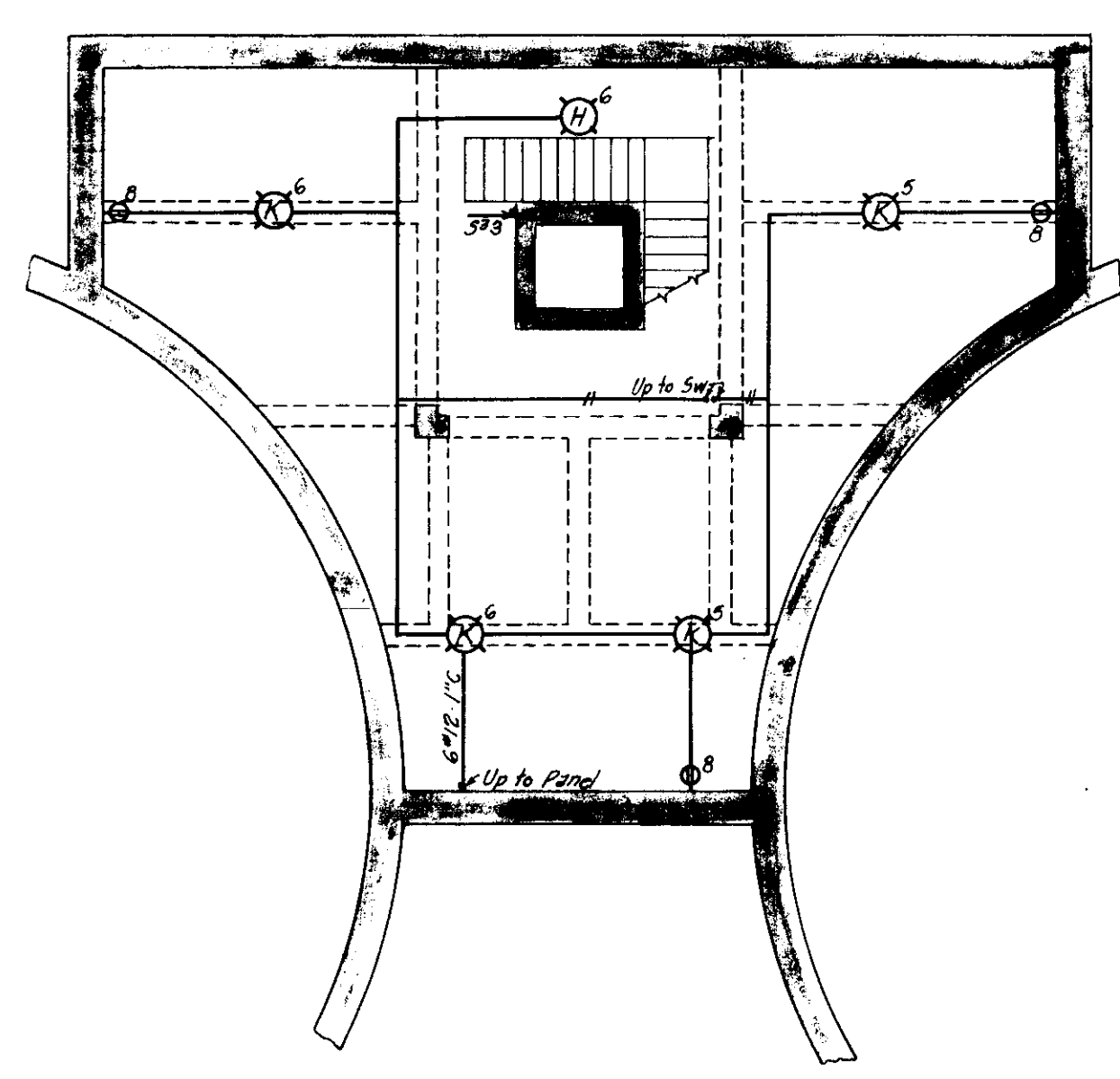
MAIN BUILDING LIGHTING
Scale: 1/8" = 1'-0"



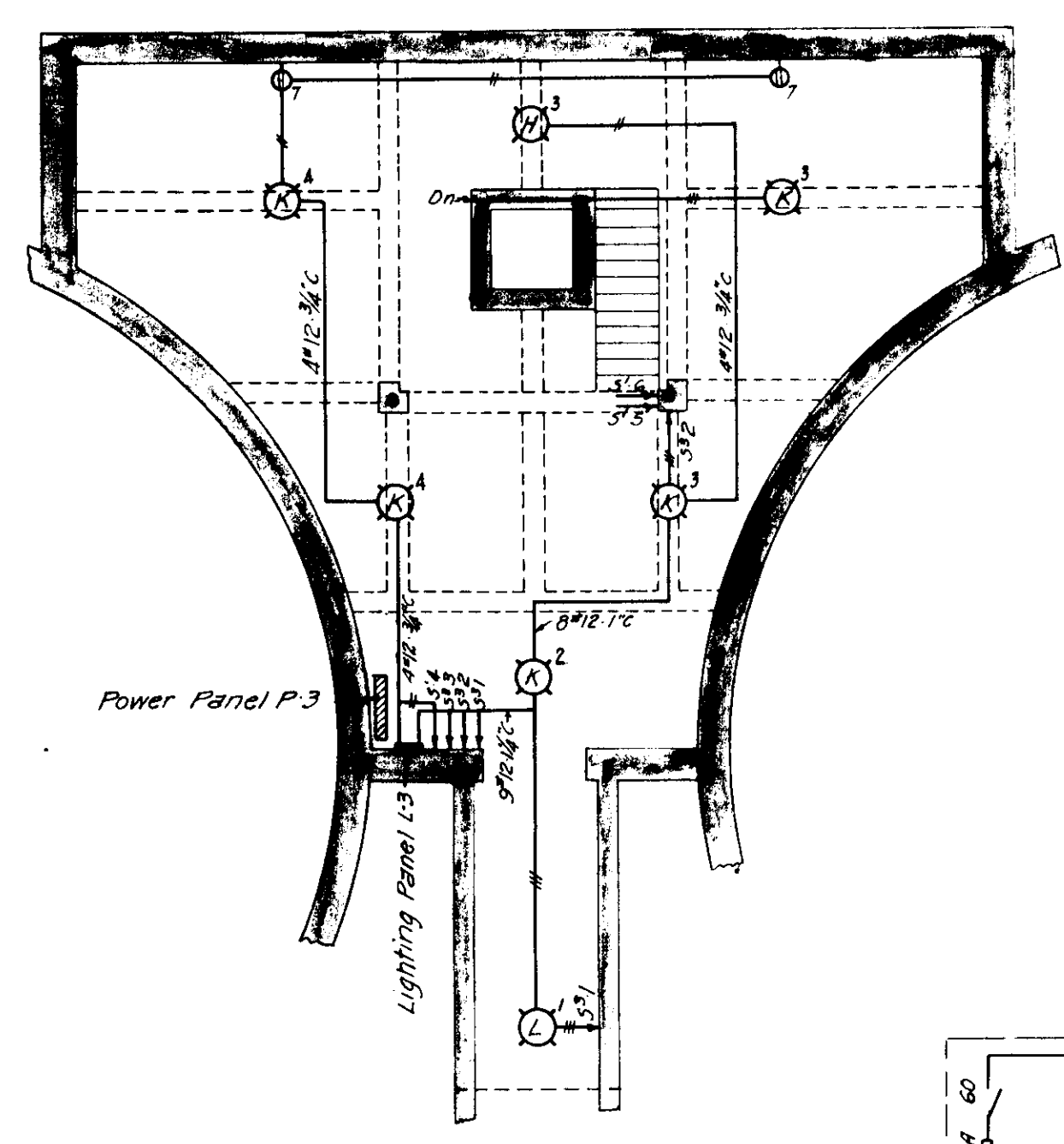
ROOF
Scale: 1/8" = 1'-0"

ELECTRIC SYSTEM SYMBOLS

Ⓟ	Lighting Outlet "B" denotes Fixture-Tercircuit No. & "a" branch
Ⓢ	Duplex Plug Receptacle
Ⓛ	Single Pole Switch
Ⓢ	Three Way Switch
Ⓛ	Floodlight
Ⓢ	No. of No. 12 wire in 3/4" Conduit for Lighting Circuits
Ⓢ	Air Circuit Breaker
Ⓢ	Trip Device
Ⓢ	Knife Switch - Numeral Denotes Current Rating
Ⓢ	Enclosed Renewable Cartridge Fuse - 150A - Current Rating
Ⓢ	Full Voltage Magnetic Starter
Ⓢ	Reduced Voltage Starter
Ⓢ	Reversing Switch
Ⓢ	Float Switch
Ⓢ	Pressure Switch
Ⓢ	Thermostat
Ⓢ	Motor Operated Gas Valve
Ⓢ	Push Button Station "Stop"
Ⓢ	Push Button Station "Start" - Stop
Ⓢ	Power Circuit Control Cable No. 1/2" No. of conductors as shown. LC denotes lead covered

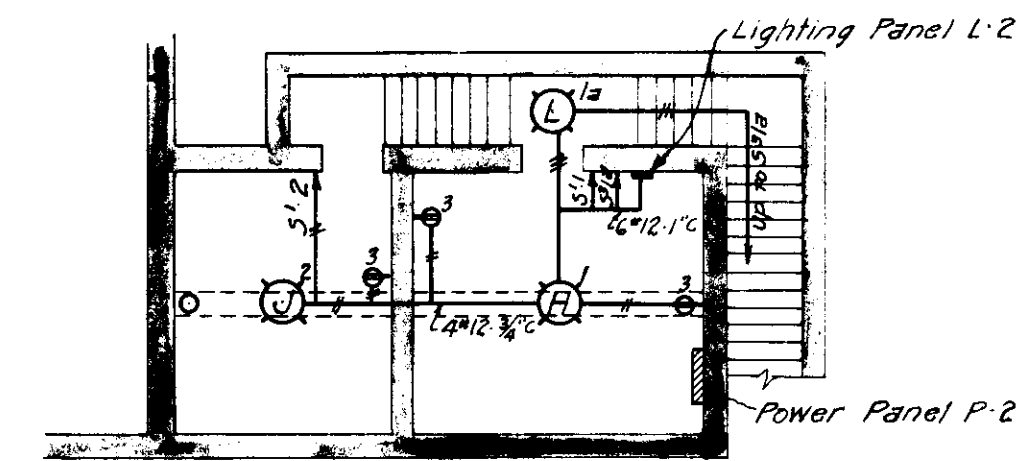


BASEMENT

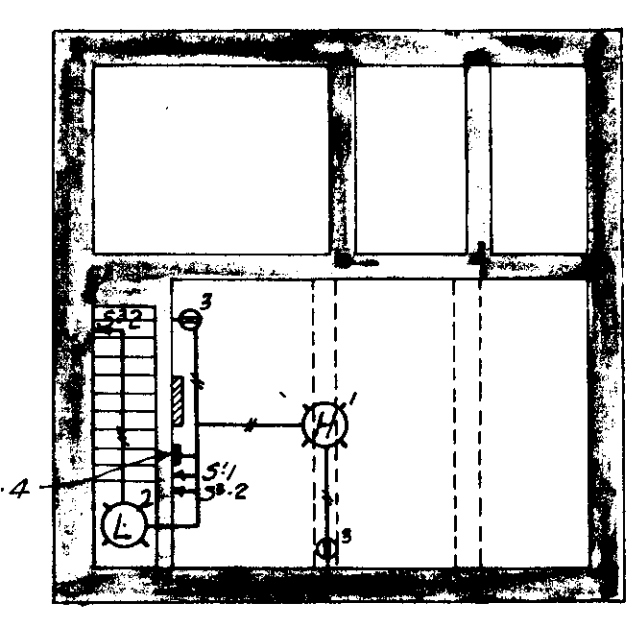


MAIN FLOOR

CONTROL CHAMBER LIGHTING

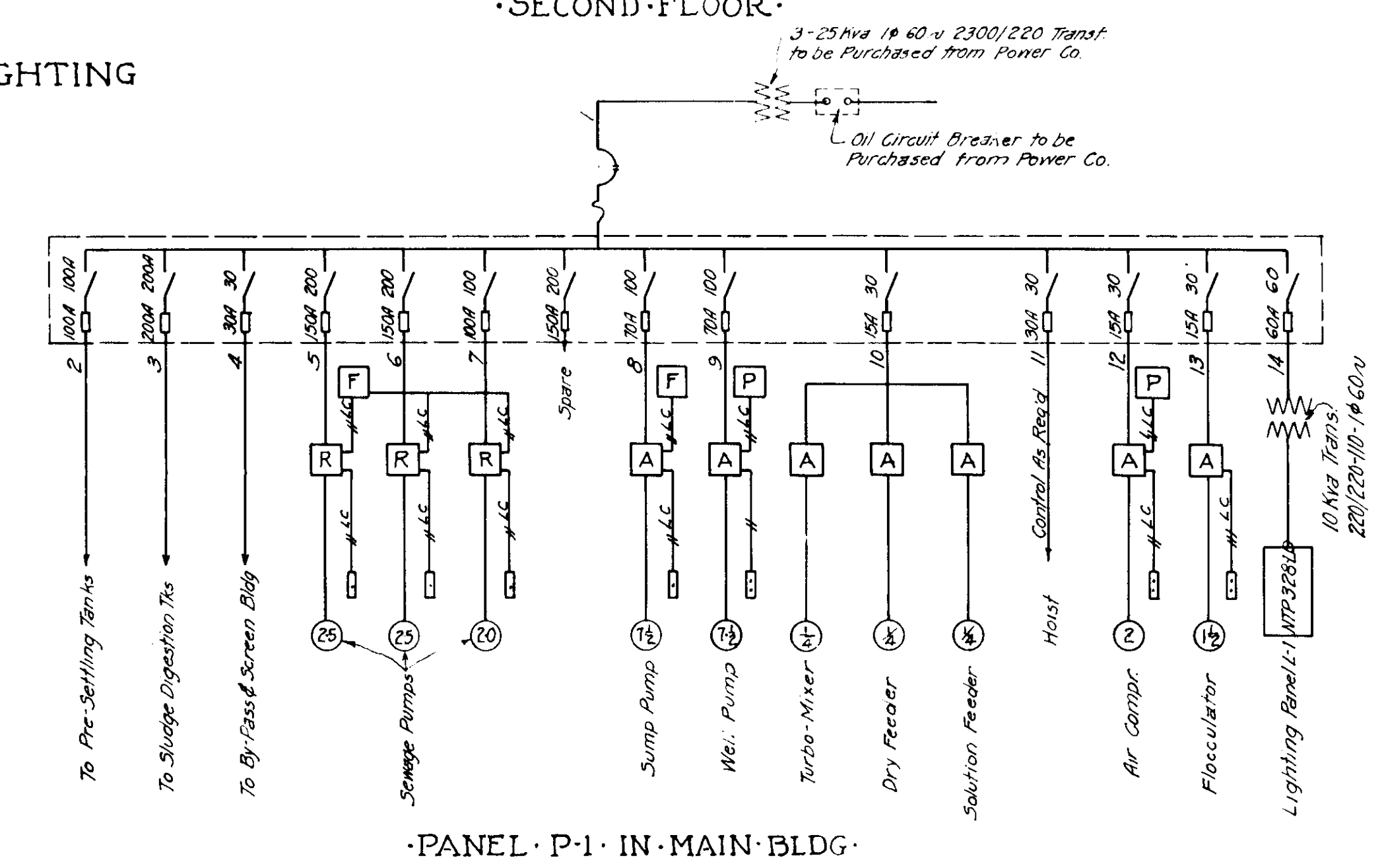


SLUDGE PUMP CHAMBER

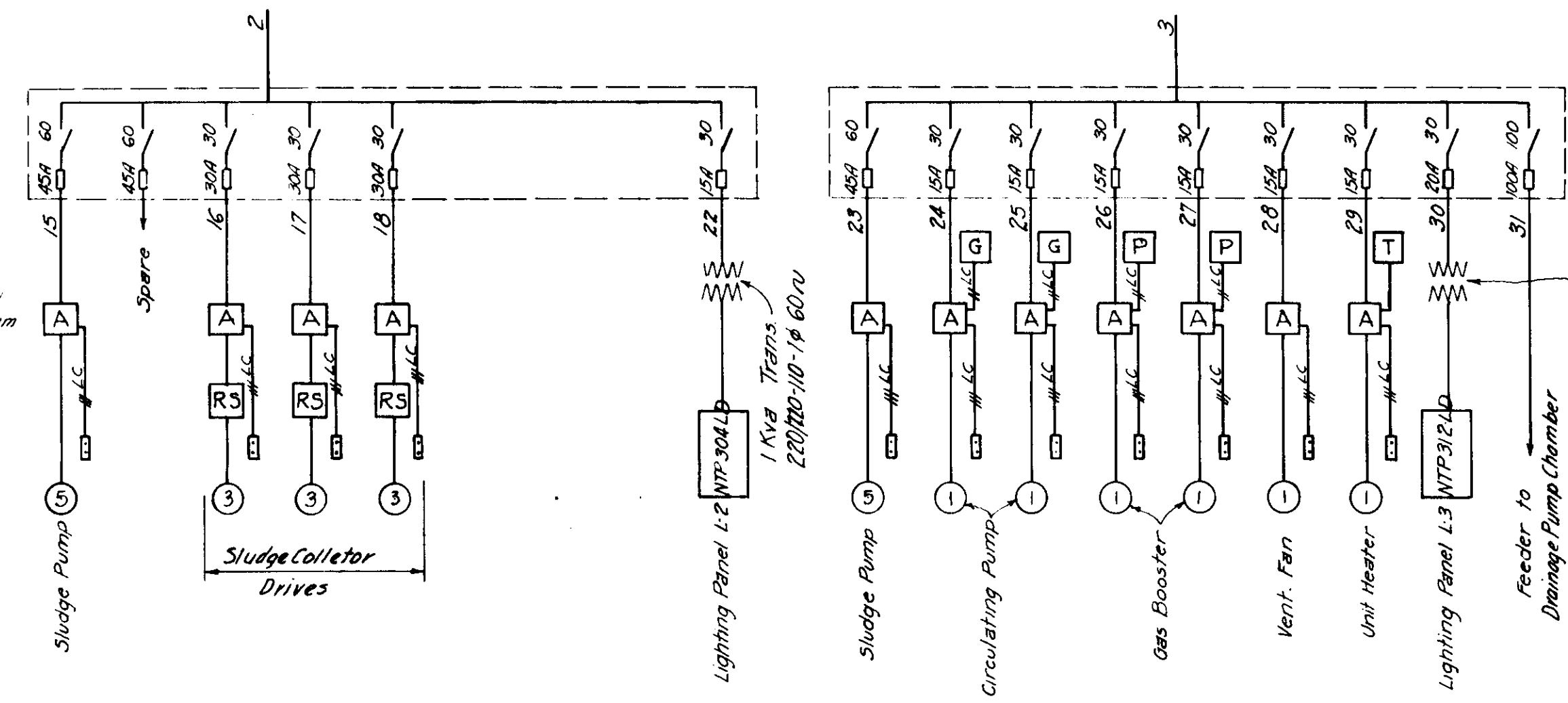


DRAINAGE PUMP CHAMBER

WIRING DIAGRAM
DRAINAGE PUMP CHAMBER



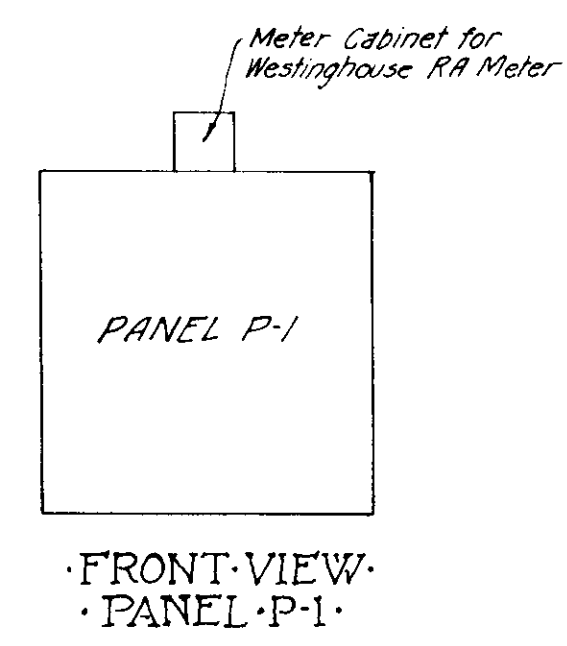
PANEL P-1 IN MAIN BLDG.



PANEL P-2 IN PRE-SETTLING TANKS
PANEL P-3 IN CONTROL CHAMBER
SCHEMATIC POWER WIRING DIAGRAMS

LIGHTING FIXTURE SCHEDULE

Mark	Wattage	Lamp	Fixture	Mfg	Catalog No	Description
A	500	500	Benjamin	9166	9166	Aluminum High Bay Unit
B	200	200	"	26538	26538	RLM Std. Dome
C	150	150	"	26555	26555	RLM Std. Dome
D	100	75-100	"	26552	26552	RLM Std. Dome
E	300	300-500	"	26306	26306	Glasssteel Diffuser
F	500	300-500	"	26306	26306	Glasssteel Diffuser
G	200	150-200	"	26304	26304	Glasssteel Diffuser
H	200	200	"	6502	6502	V.P. Unit No Guard
J	100	100	"	6500	6500	V.P. Unit No Guard
K	300	"	"	6503	6503	V.P. Unit No Guard
L	100	50-100	"	7123C	7123C	V.P. Unit - Aluminum Body & Guard
M	1000	150-1000	"	5875	5875	Floodlight - Shipped Glass

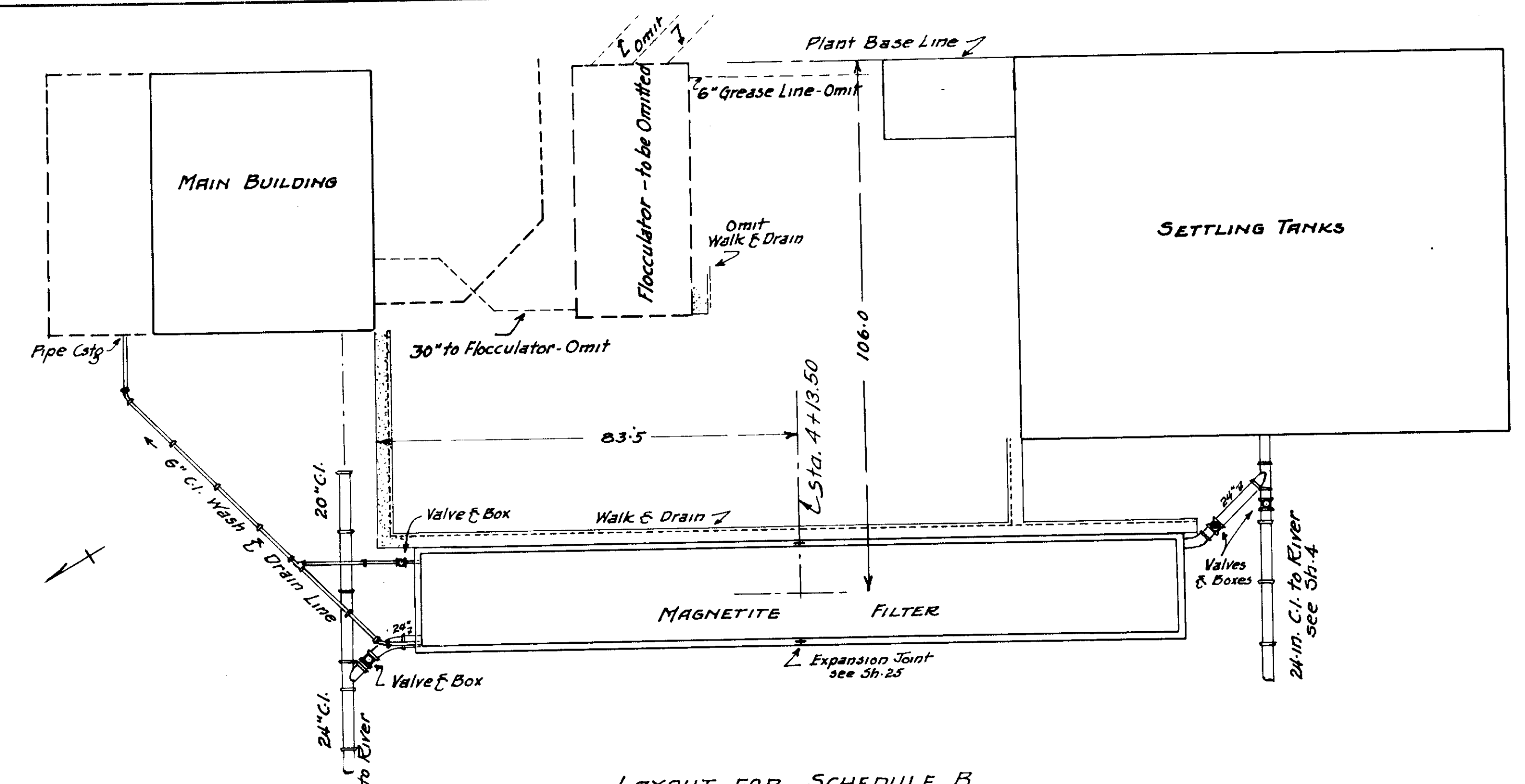


FRONT VIEW
PANEL P-1

CONDUIT & CABLE LIST

Circuit Number	Nº	CABLE Size	Insulation	Conduit Size
1	6	300,000cm		2-3"
2	3/C	#1		2"
3	3/C	#4/0		2 1/2"
4	3/C	#8		1"
5 & 6	3/C	#2		1 1/2"
7	3/C	#4		1 1/2"
8 & 9	3/C	#8		1"
10 to 13 Incl	3/C	#12		1"
14	2/C	#4		1 1/2"
15 to 18 Incl	3/C	#12		1"
22	2/C	#12		3/4"
23	3/C	#12		1"
24 to 29 Incl	3/C	#12		1"
30	2/C	#12		3/4"
31	3/C	#4		1 1/2"
32 & 33	3/C	#8		1"
34	2/C	#12		3/4"

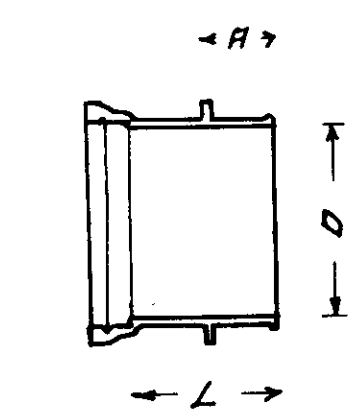
Circuits 19 to 21 Incl. Omitted



PAYMENTS: In the work covered by this sheet, payments for work done will be as follows:
Excavation will be paid for under - Item 1
Concrete Item 2
Reinforcement Item 3
Expansion Joints Item 4
C.I. Pipe and Fittings Item 5-12
Valves Item 13
Vitrified Pipe Item 29
Valve Boxes Item 32
Walks Item 45
All other work will be paid for as Item 55

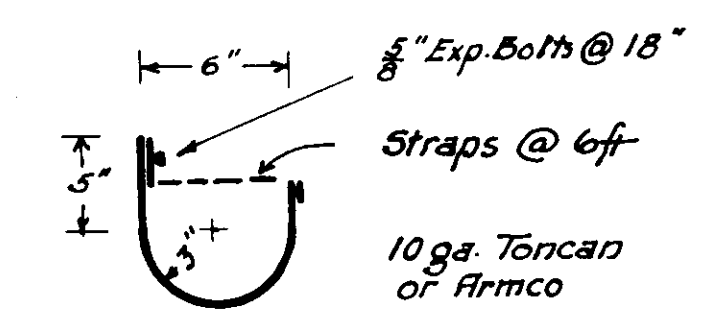
NOTE: THE INSTALLATION OF THIS SHEET PERTAINS TO SCHEDULE B AND SHOWS THE LOCATION AND MAIN STRUCTURAL REQUIREMENTS FOR A MAGNETITE FILTER. DETAILS ARE SUBJECT TO MANUFACTURER'S DESIGNS AS APPROVED BY THE ENGINEER.

LAYOUT FOR SCHEDULE B
Including Magnetite Filter
Digestion Tanks and Drying Beds are as on Sheet 4
SCALE 1" = 20'

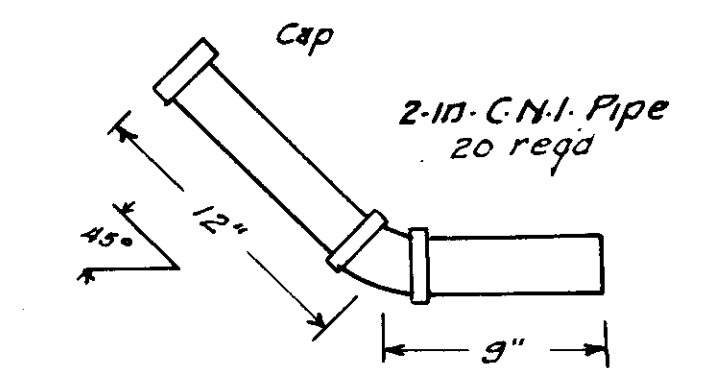


PIPE CASTINGS

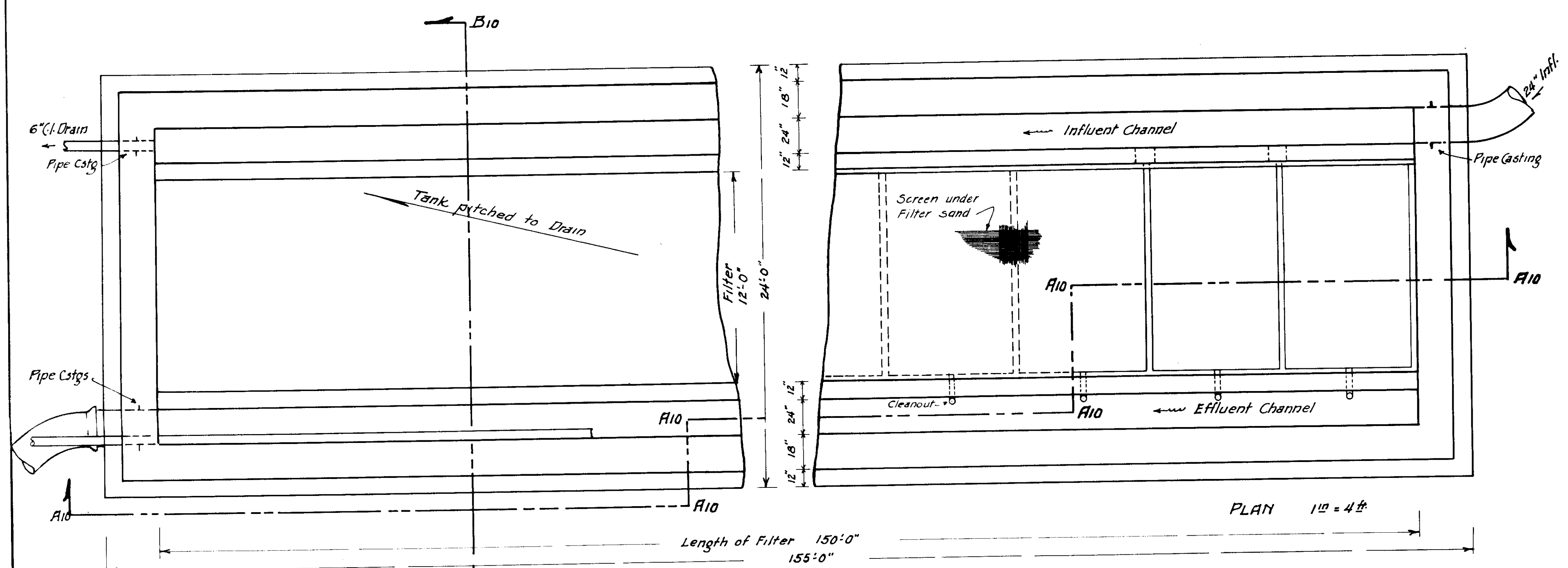
LOCATION	No.	CLASS	D	L	A
Wet Well	1	D	6 ins.	21 ins.	10 ins.
Filter	2	D	6 ins.	18 ins.	9 ins.
Filter	2	A	24 ins.	18 ins.	9 ins.



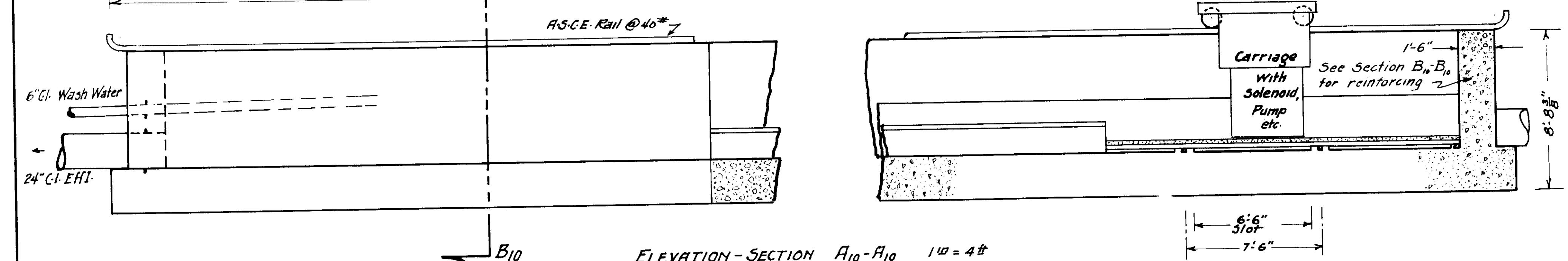
SCUPPER
Scale 1 1/2" = 1'
Item 55



CLEANOUTS
Scale 1 1/2" = 1'
Item 55

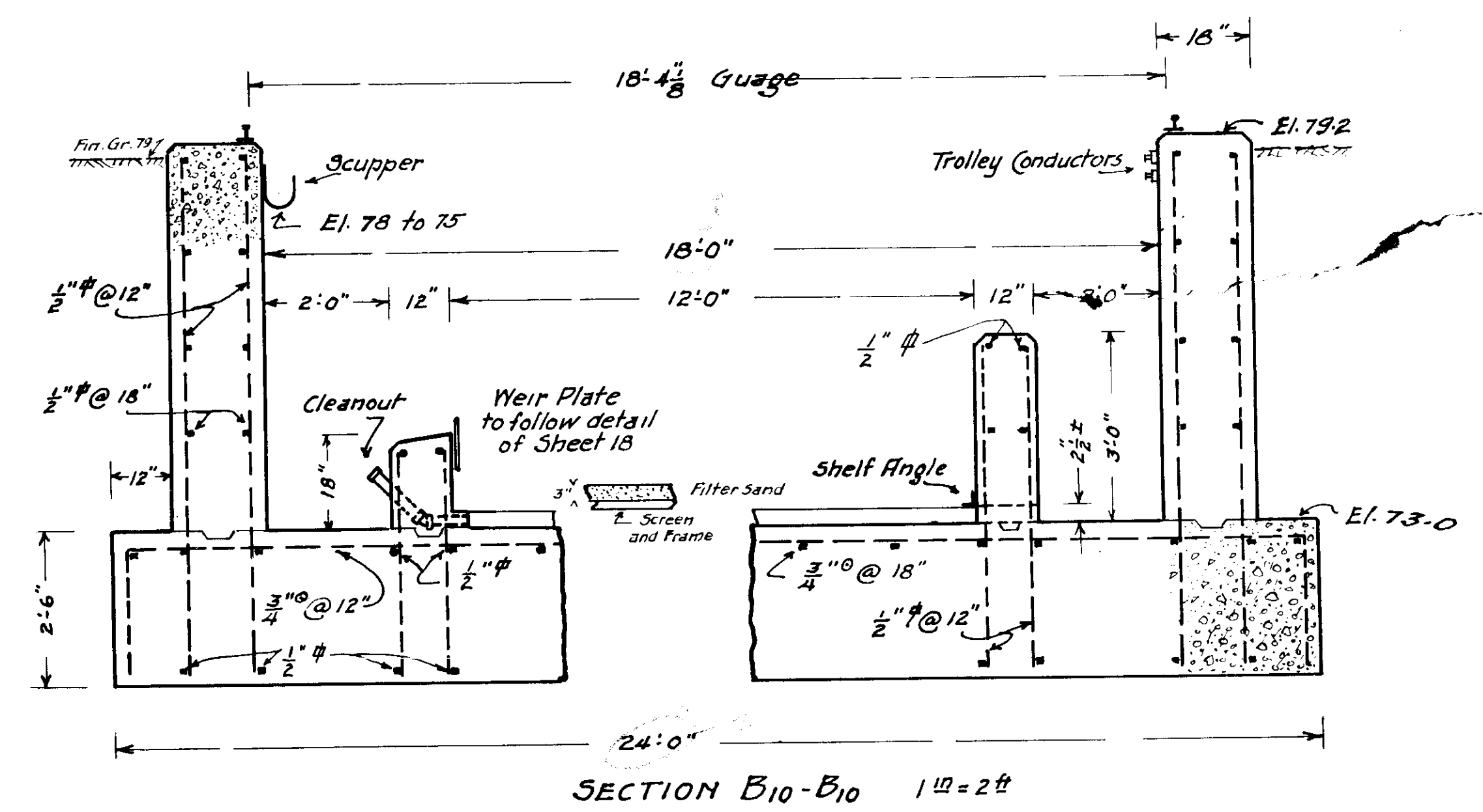


PLAN 1" = 4'



ELEVATION-SECTION A10-A10 1" = 4'

MAGNETITE FILTER



SECTION B10-B10 1" = 2'

Drawn by FCT
Traced by FCT
Checked by FCT
307-30
30 SHEETS

Livingston
Director of Public Service
W. H. Rice
City Engineer
George B. Cassin
Consulting Sanitary Engineer

CITY OF MASSILLON, OHIO
SEWAGE TREATMENT WORKS
MAGNETITE FILTER

SCALE: As Shown

NOVEMBER 1935

