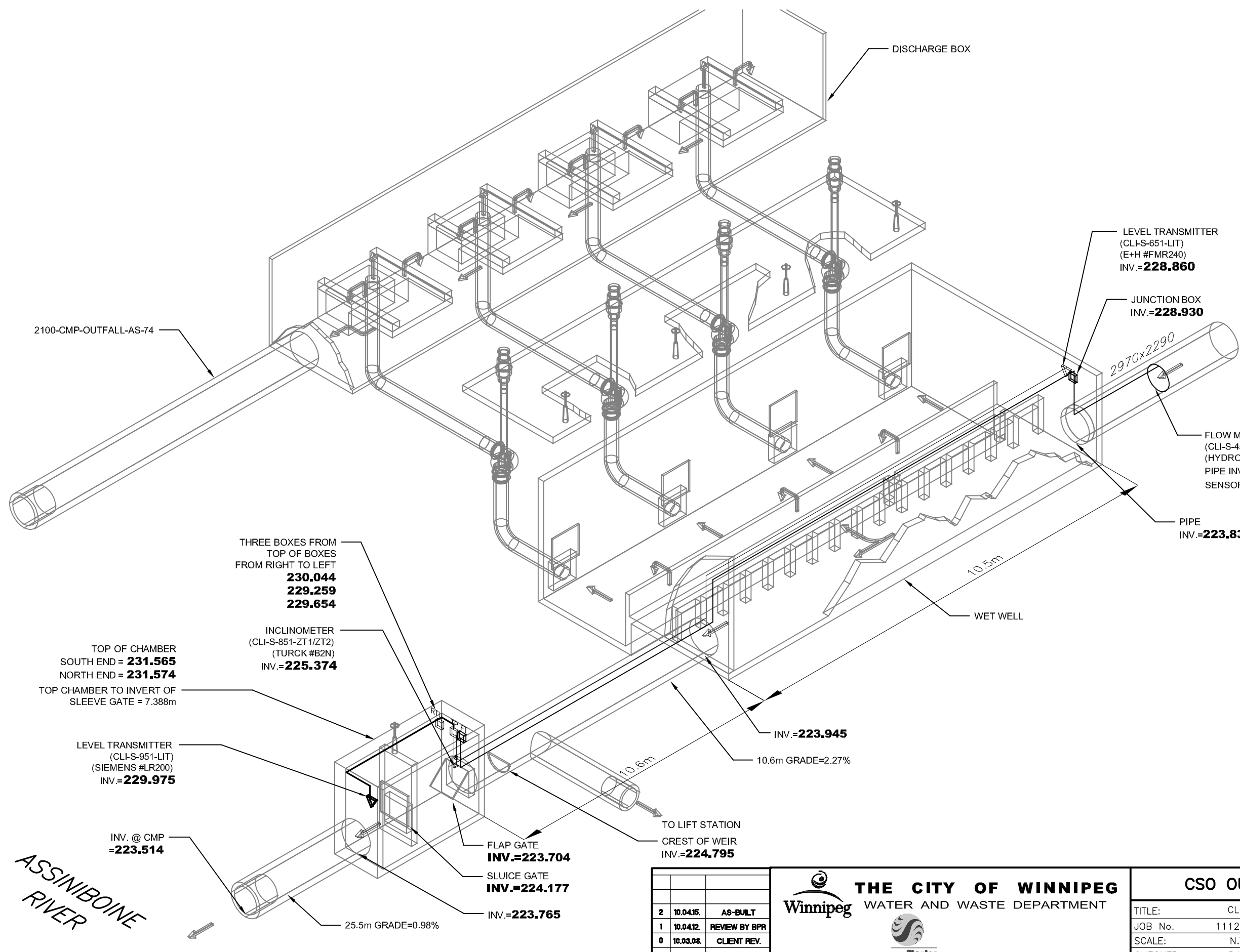


APPENDIX A – HISTORICAL DRAWINGS



NOTES

1. CONDUIT FOR ADFM PRO 20 SHALL BE 53mmC ALL OTHER CONDUIT SHALL BE 27mmC EXCEPT AS NOTED
2. ALL CONDUIT SHALL HAVE A MINIMUM BEND RADIUS OF 6".

HYDROVISION #Q-EYE FLOW METER
 ENDRESS+HAUSER #FMX 240
 HYDROSTATIC LEVEL TRANSMITTER
 SIEMENS #LR200 RADAR LEVEL TRANSMITTER
 TURCK #B2N INCLINOMETER
 FLOOD LEVEL = 229.04

BOLD ELEVATIONS FROM STANTEC

TBM Description, Elevation = 230.977
 Center Punch on N Rim of MH, 8.45m S of the N PL of Wolseley Av and 2.3m E of W PL of Clifton ST

2100-CMP-OUTFALL-AS-74

DISCHARGE BOX

LEVEL TRANSMITTER
 (CLI-S-651-LIT)
 (E+H #FMR240)
 INV.=**228.860**

JUNCTION BOX
 INV.=**228.930**

FLOW METER
 (CLI-S-451-VE/FE)
 (HYDROVISION #Q-EYE)
 PIPE INV. **(NOT AVAILABLE)**
 SENSOR INV.= **223.865**

PIPE
 INV.=**223.830**

THREE BOXES FROM
 TOP OF BOXES
 FROM RIGHT TO LEFT
230.044
229.259
229.654

INCLINOMETER
 (CLI-S-851-ZT1/ZT2)
 (TURCK #B2N)
 INV.=**225.374**

TOP OF CHAMBER
 SOUTH END = **231.565**
 NORTH END = **231.574**
 TOP CHAMBER TO INVERT OF
 SLEEVE GATE = 7.388m

LEVEL TRANSMITTER
 (CLI-S-951-LIT)
 (SIEMENS #LR200)
 INV.=**229.975**

INV. @ CMP
 =**223.514**

10.5m

WET WELL

INV.=**223.945**

10.6m GRADE=2.27%

10.6m

TO LIFT STATION
 CREST OF WEIR
 INV.=**224.795**

FLAP GATE
 INV.=**223.704**

SLUICE GATE
 INV.=**224.177**

INV.=**223.765**

25.5m GRADE=0.98%

ASSINIBOINE
 RIVER

REV	DATE	NOTE
2	10.04.15.	AS-BUILT
1	10.04.12.	REVIEW BY BPR
0	10.03.08.	CLIENT REV.

THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT

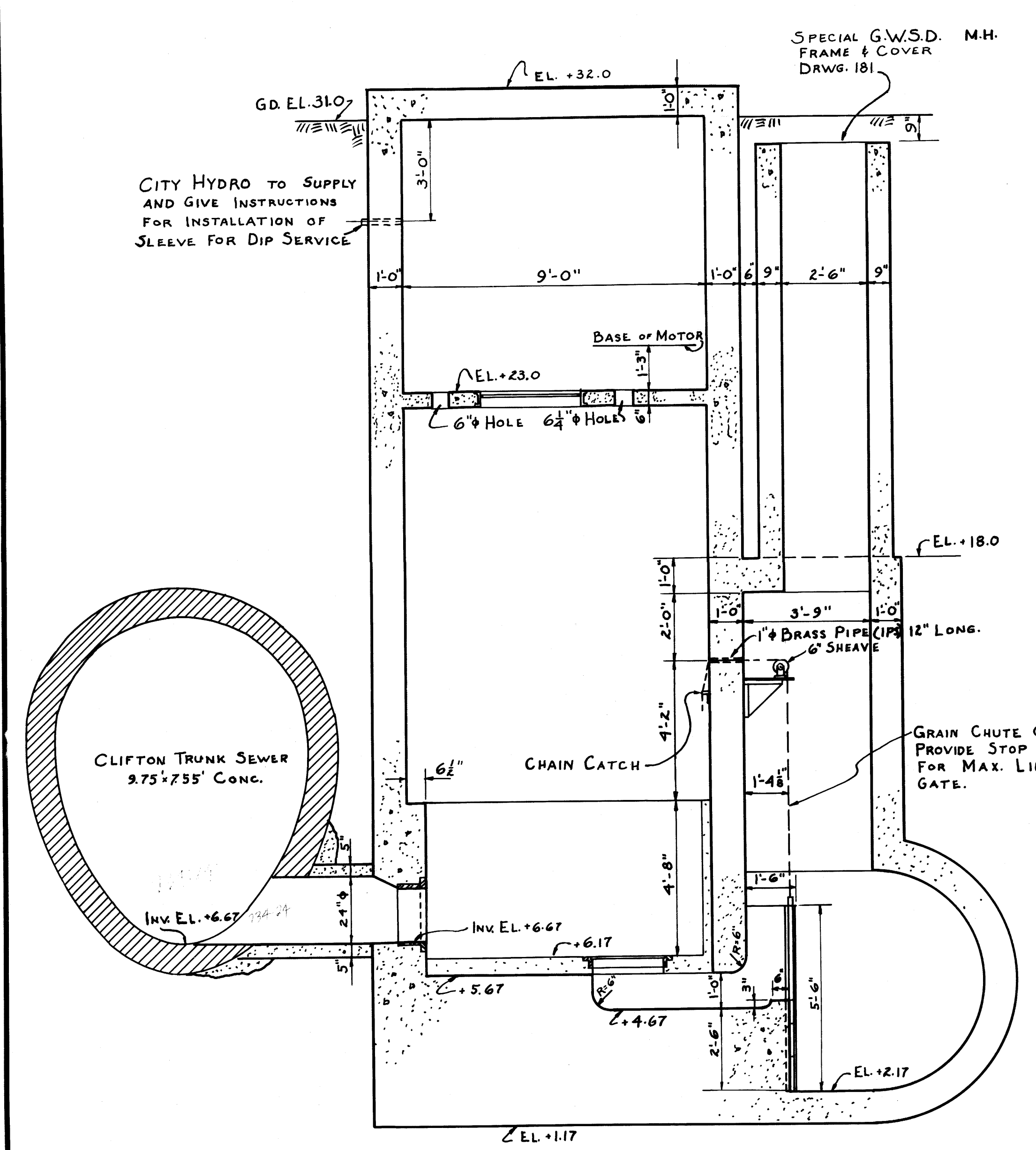
CSO OUTFALL MONITORING	
TITLE:	CLIFTON ELECTRICAL SITE PLAN
JOB No.	111211190
SCALE:	N.T.S.
CHECKED:	D.W.D.
DATE:	MAR. 19, 2009
DWG. No.	E-101

REF. or DRAWING No. 203A

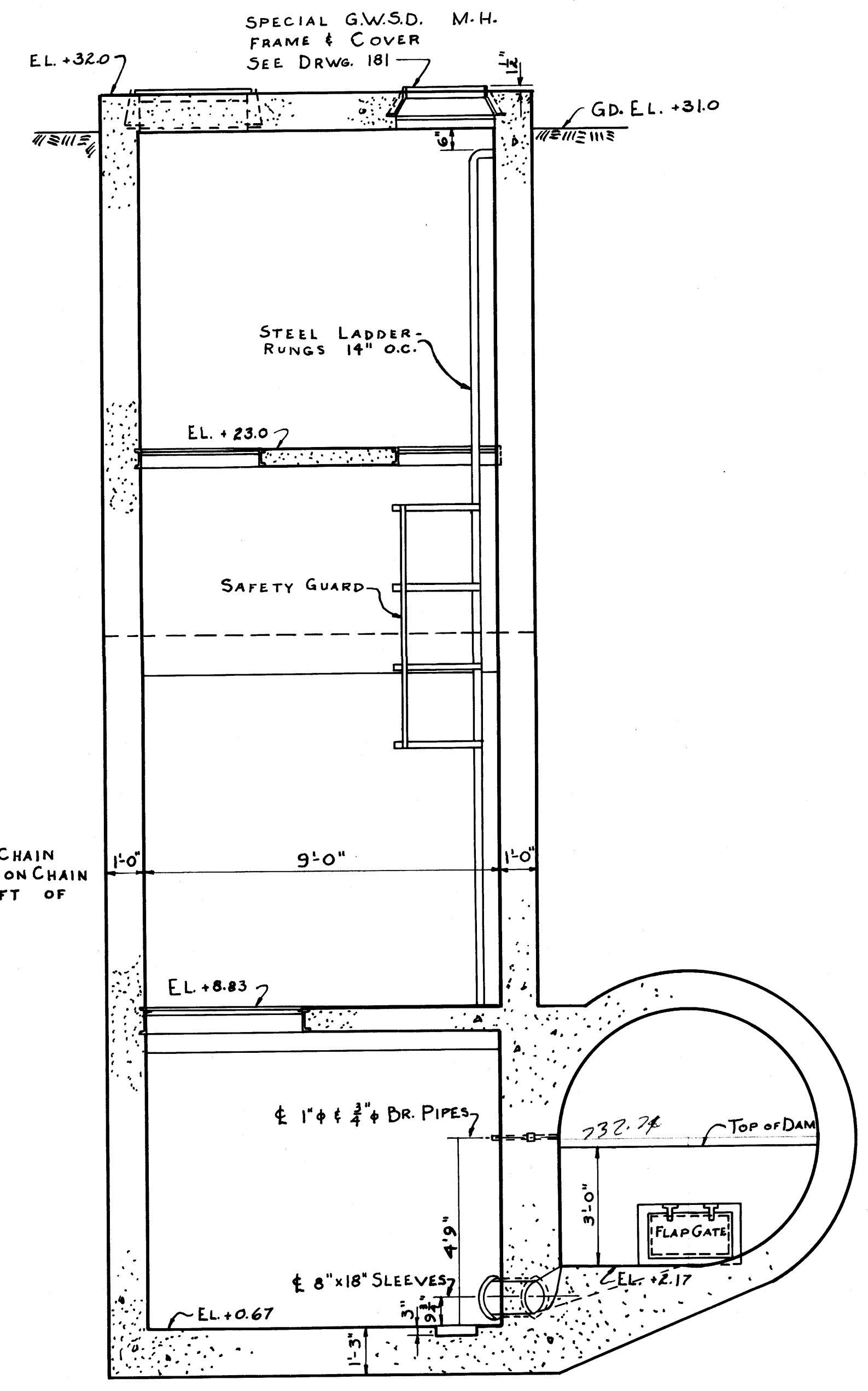
DETAILS

file #

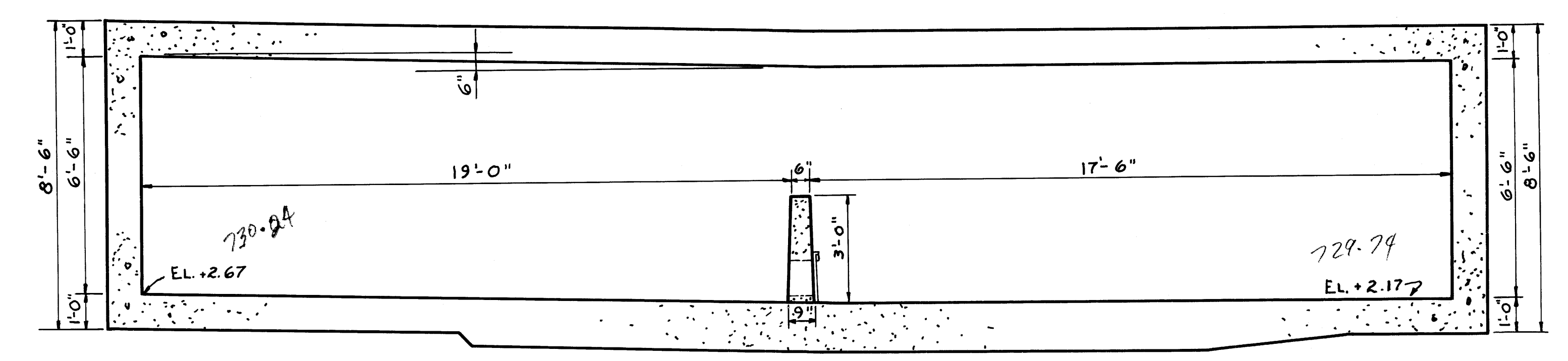
SP 10025



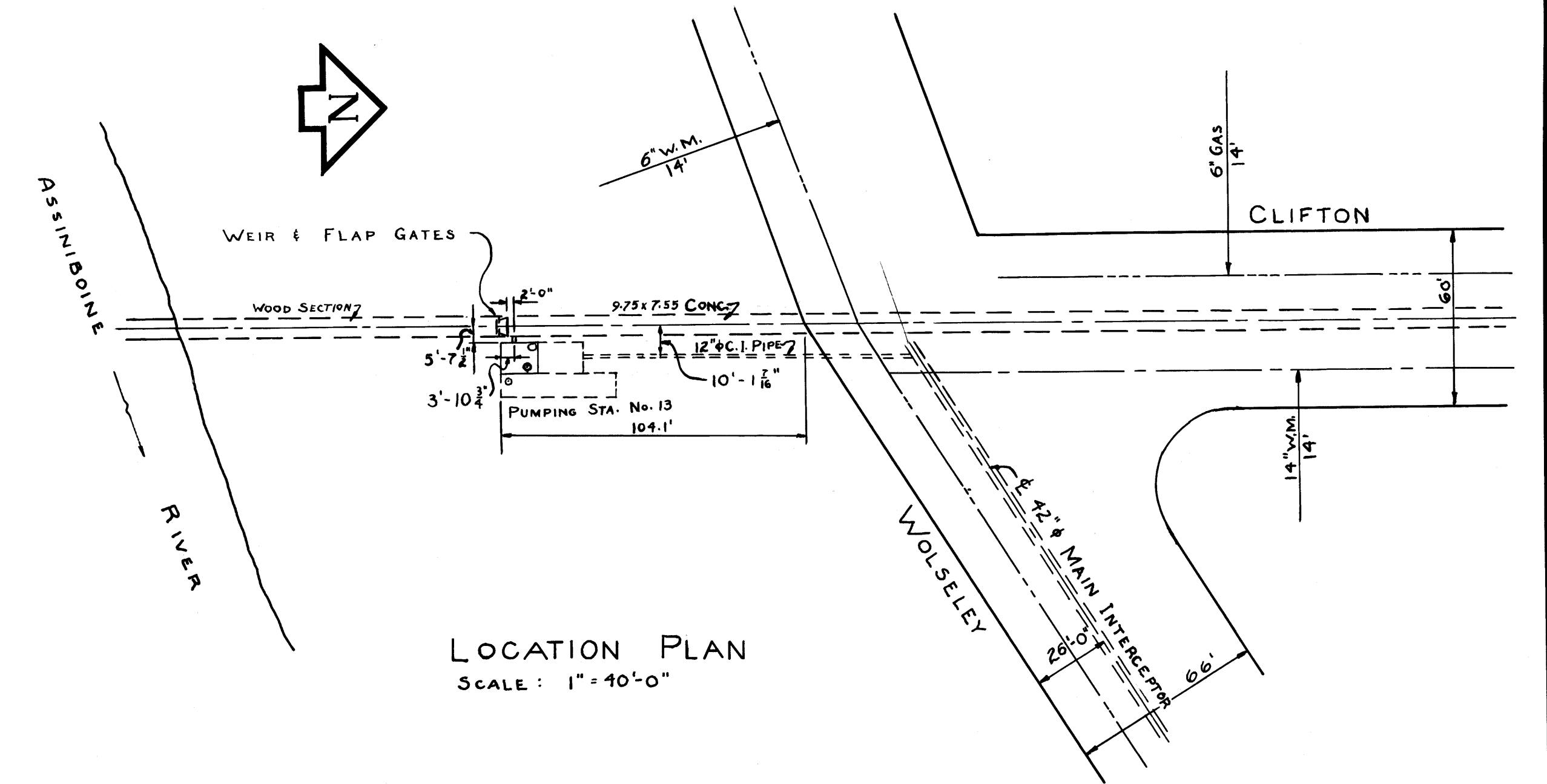
SECTION G-G



SECTION H-H



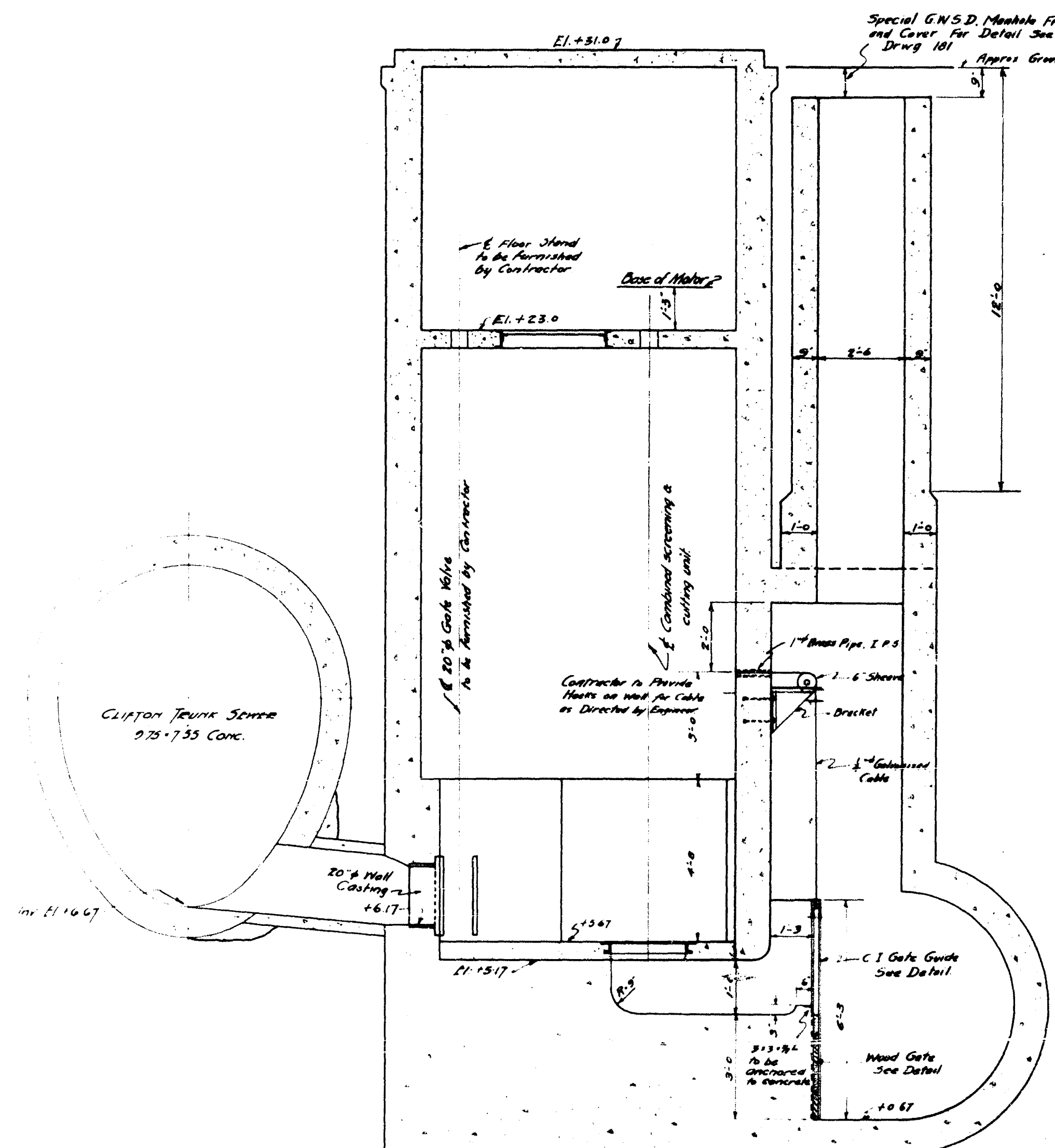
SECTION F-F



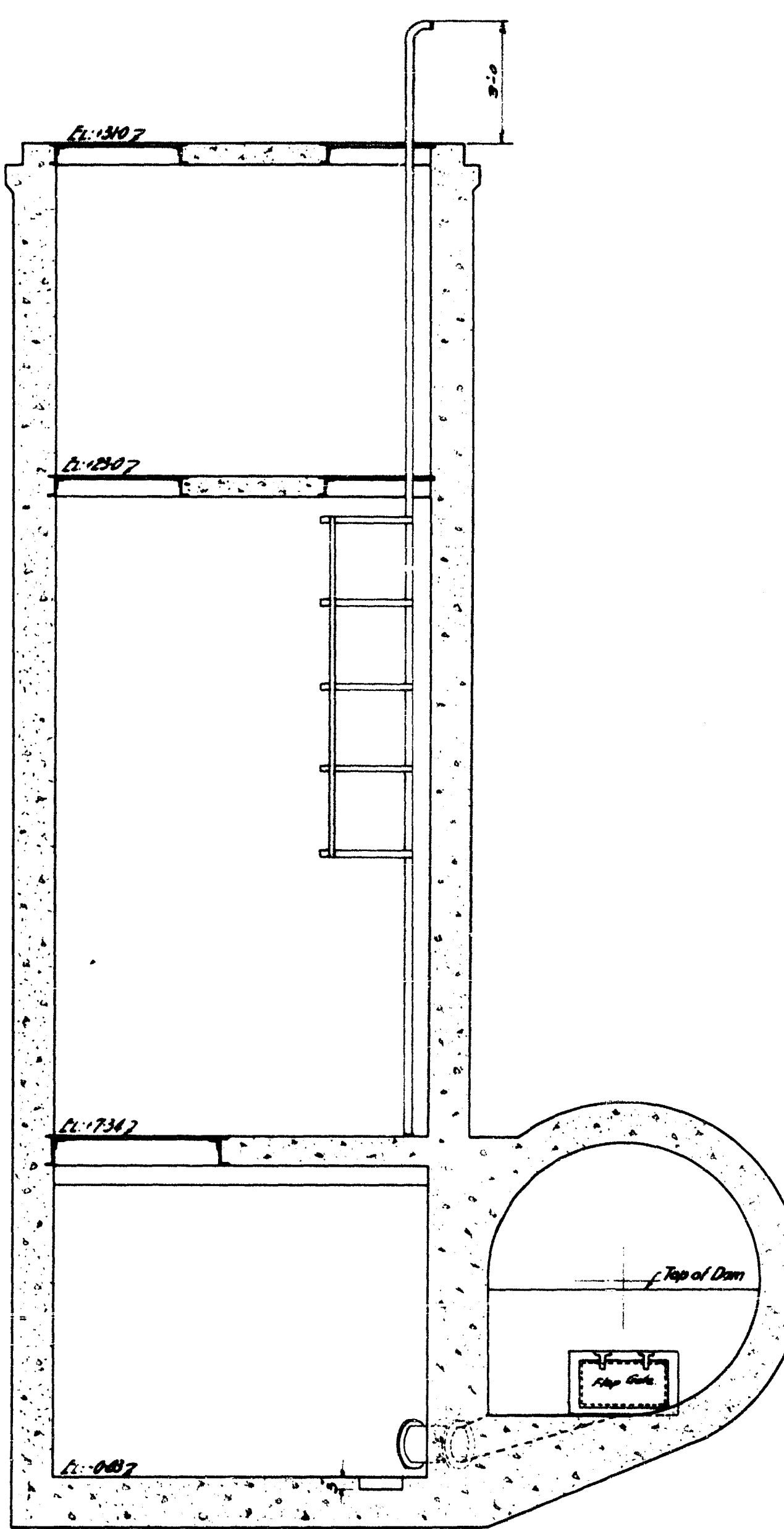
LOCATION PLAN
SCALE: 1" = 40'-0"

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	DRAWING NO. CHANGED FROM 203 TO 203A	19 MAY 37	F.S.A.
2	SEAL WATER TANK LOCATION GIVEN	26 JULY 37	H.A.
3			
4			
5			
6			
7			
8			

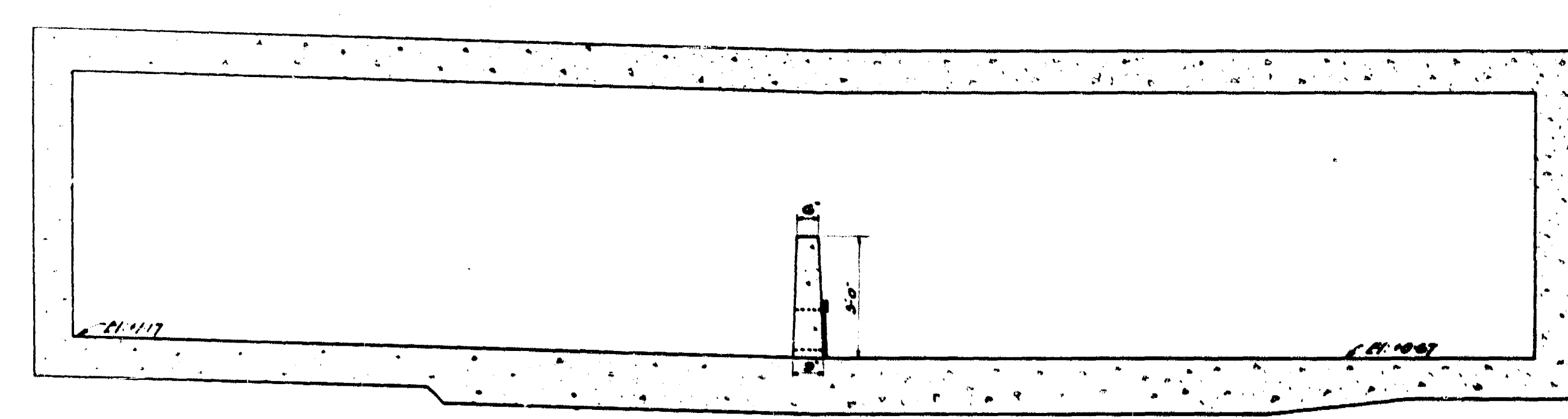
THE METROPOLITAN CORPORATION OF GREATER WINNIPEG			
WATERWORKS & WASTE DISPOSAL DIVISION			
SEWAGE DISPOSAL DEPARTMENT			
CLIFTON ST. PUMPING STATION			
NO. 13 SHEET 2 OF 2			
REDRAWN FROM ORIGINAL 11 MAY 61 R.W.			
APPROVED BY	DESIGNED BY	CHECKED BY	DRAWING NO.
			203A
	DATE	DATE	SCALE
	25 FEB 37		3/8 IN. = 1 FT.
CHIEF ENGINEER			AND AS NOTED



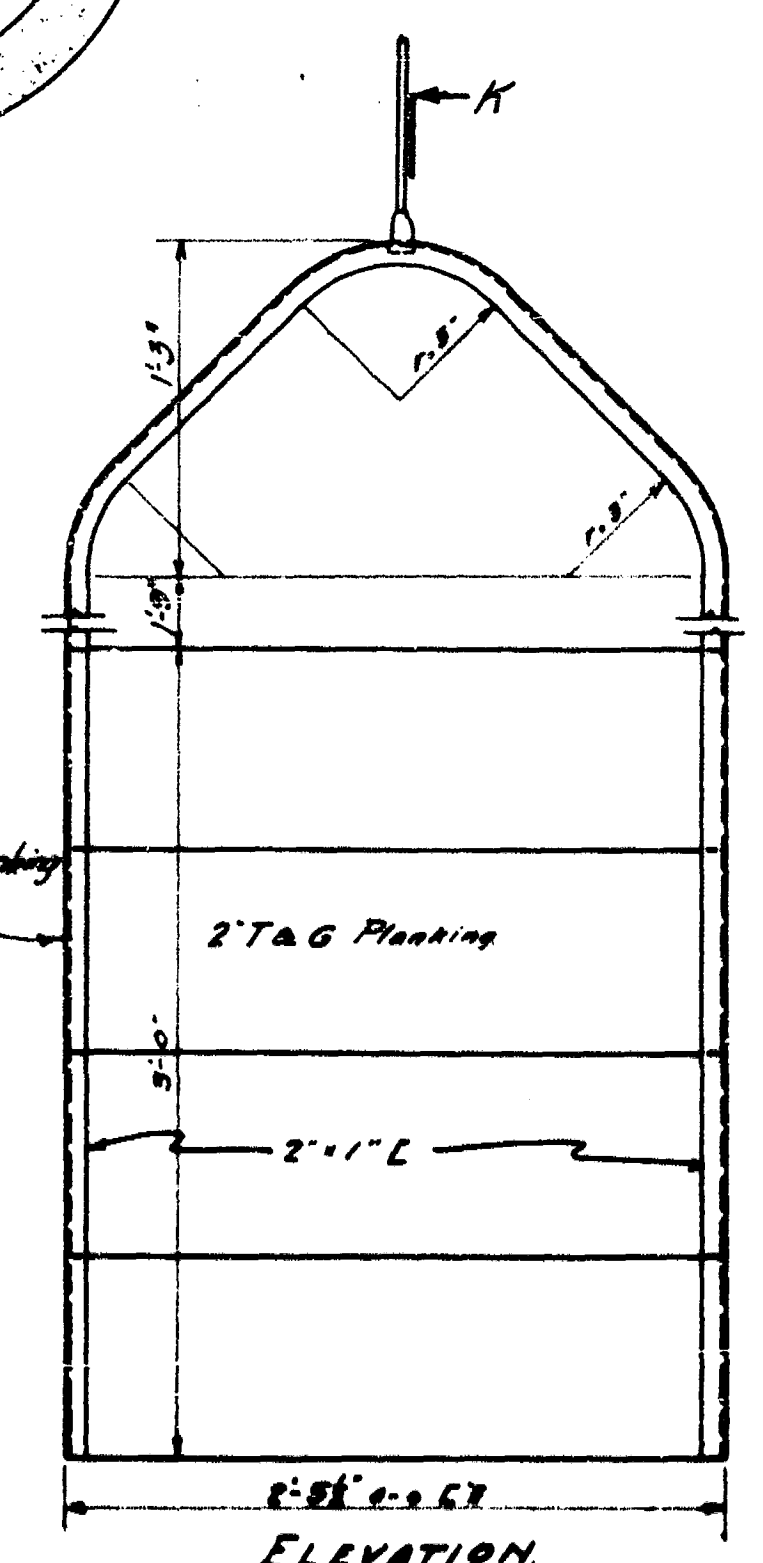
SEC. G-G



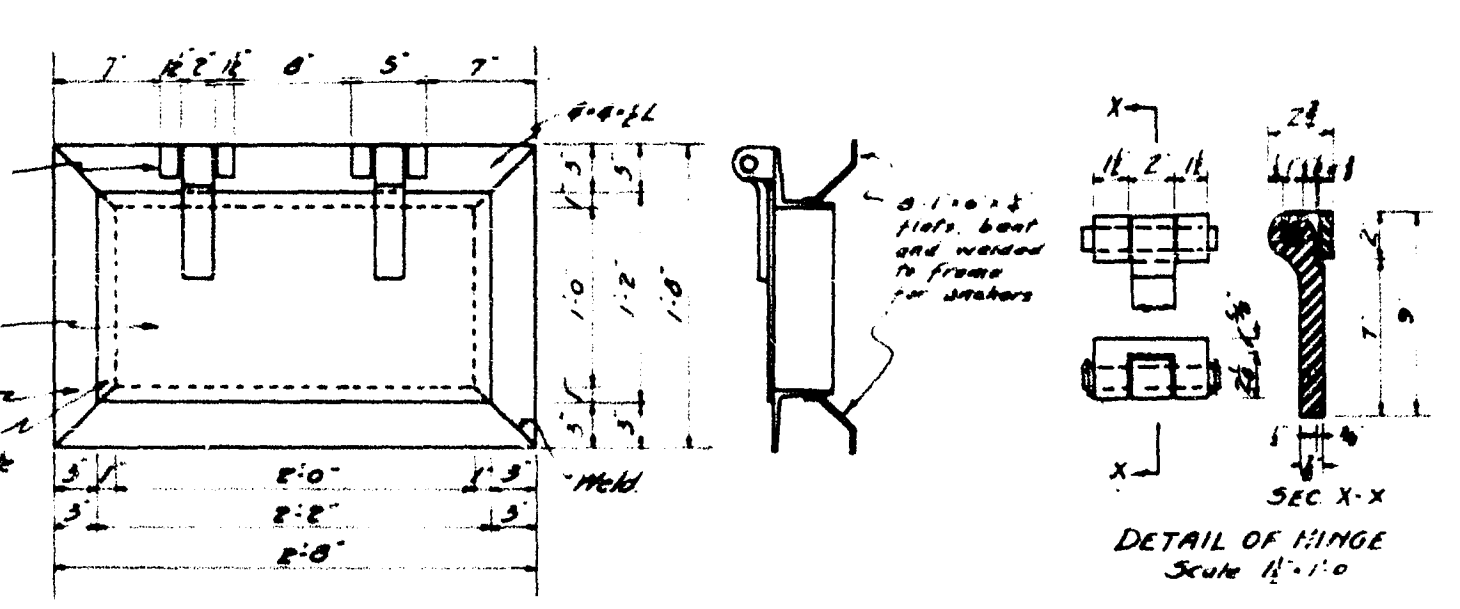
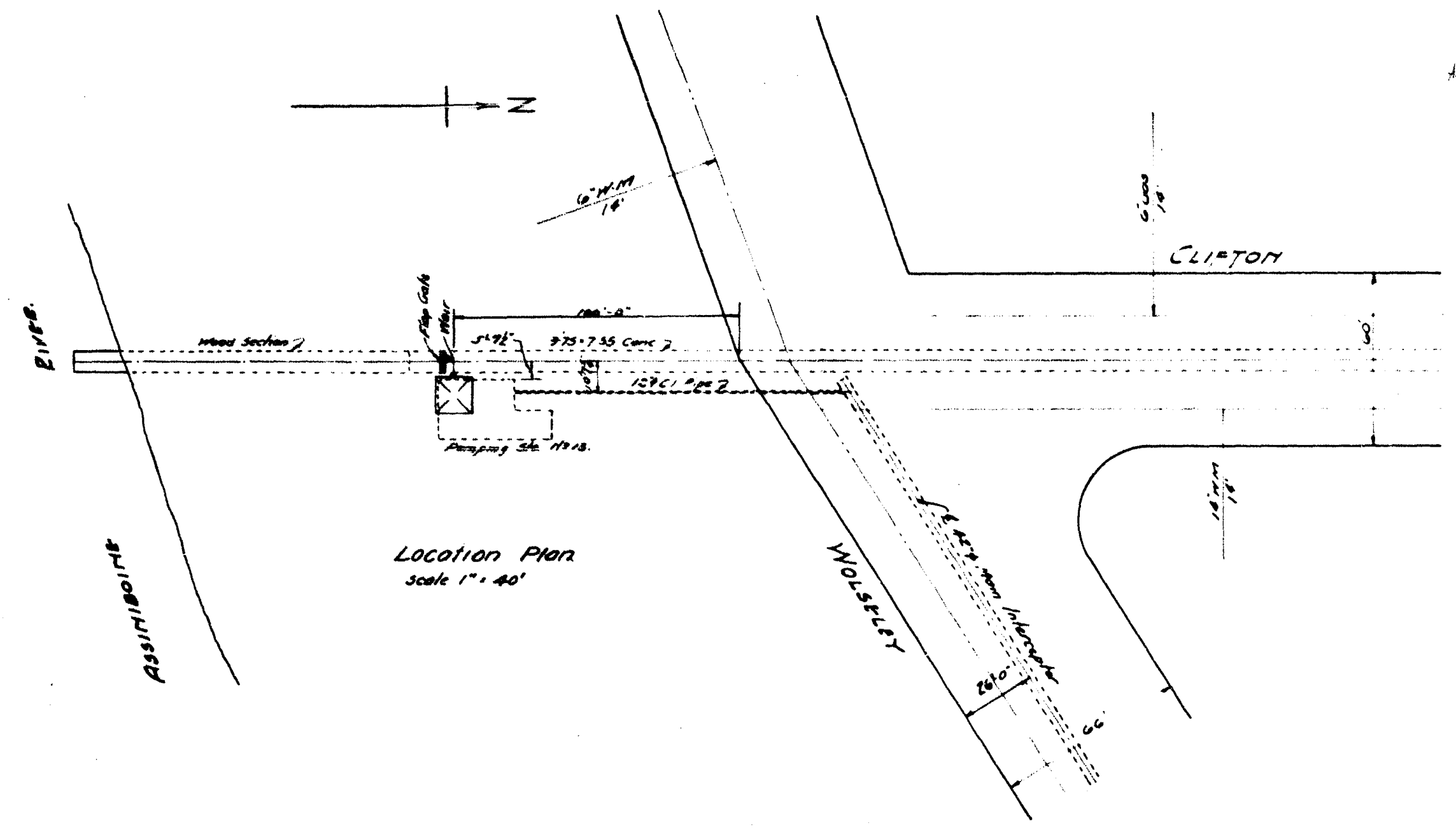
SEC. H-H



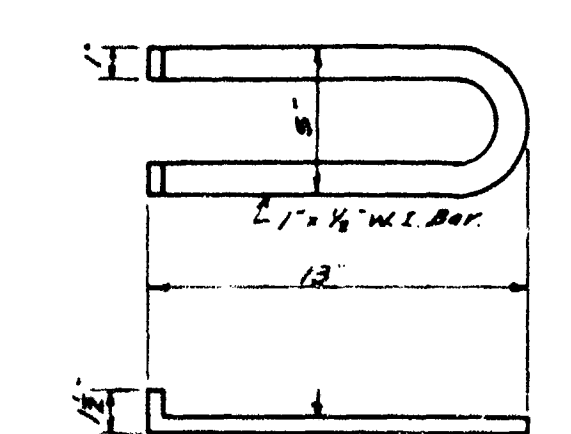
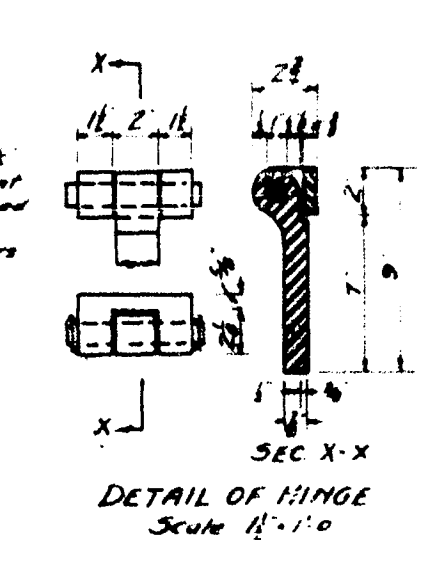
SEC. F-F



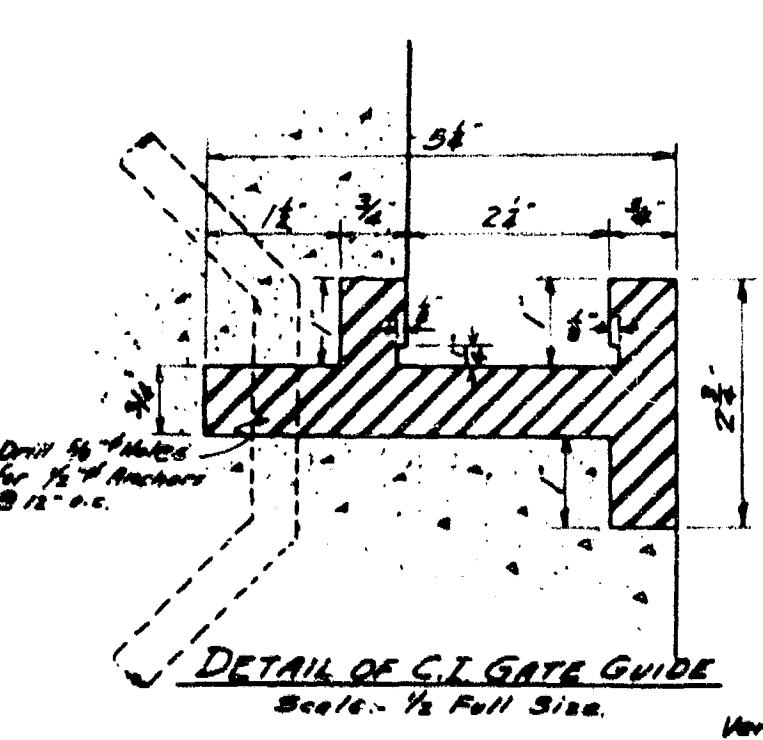
DETAIL OF WOOD STOP GATE
Scale: 1/2" = 1'-0"



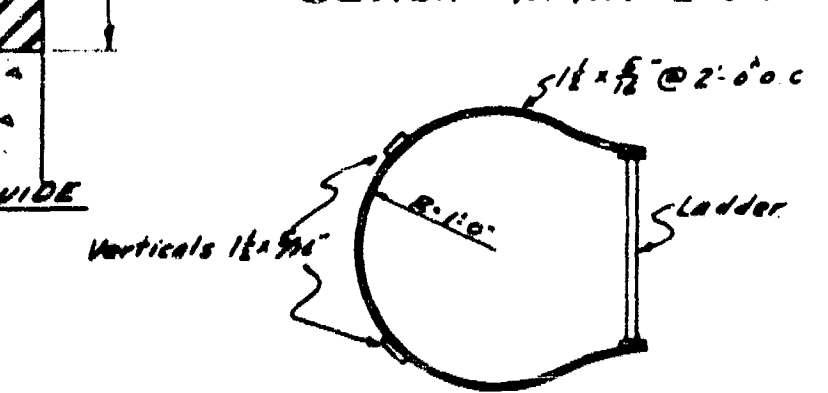
DETAIL OF FLAP GATE FOR SUMP
Scale: 1" = 1'-0"



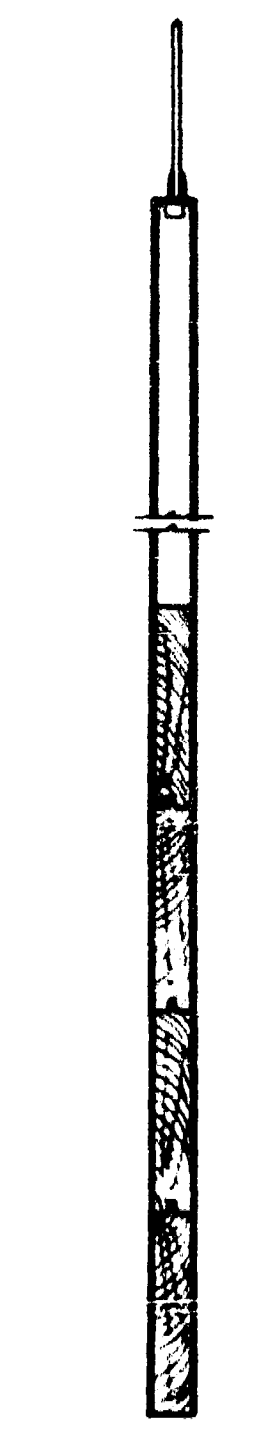
SEWER MANHOLE STEP



DETAIL OF C.I. GATE GUIDE
Scale: 1/2 Full Size



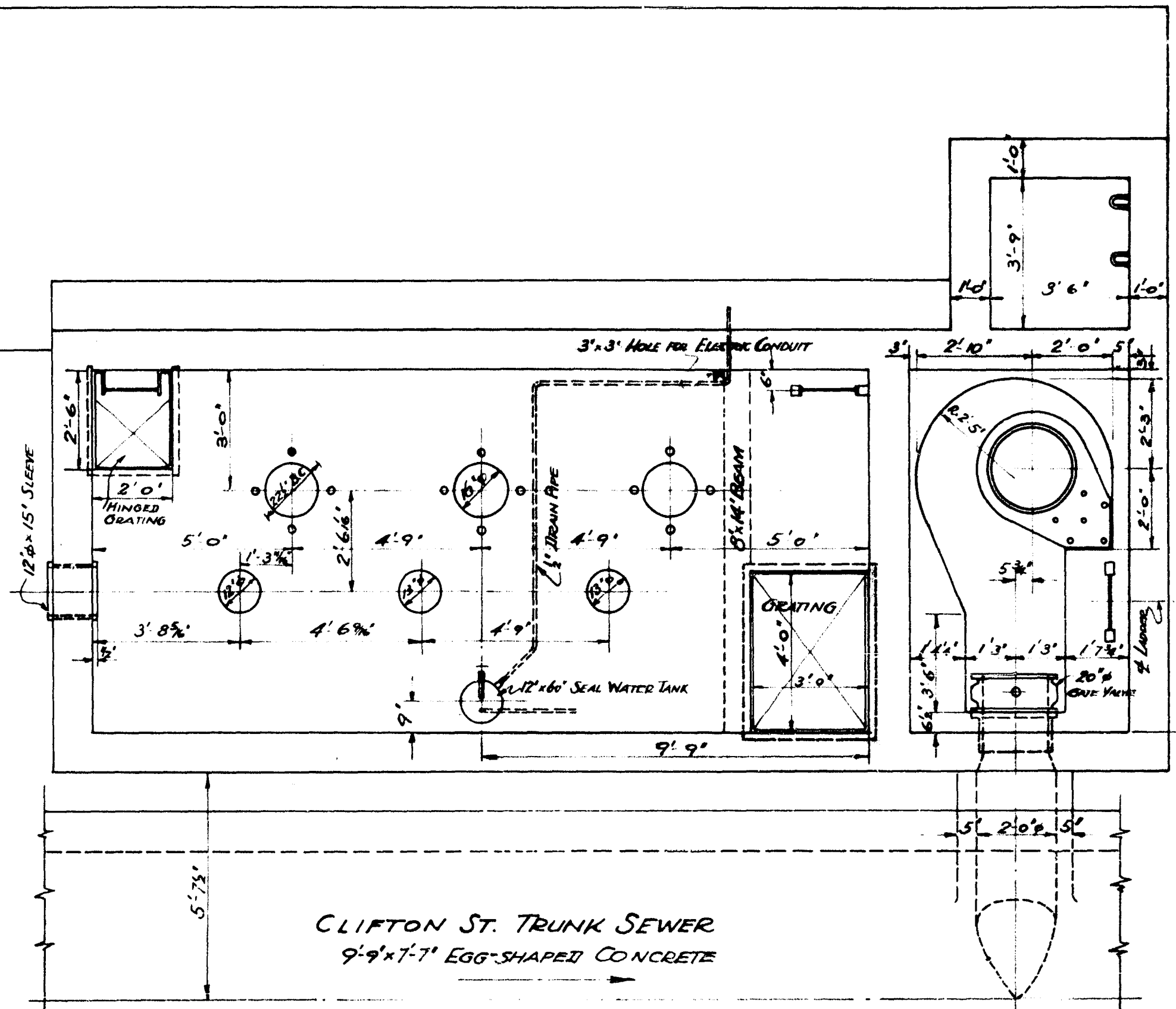
DETAIL OF SAFETY GUARD ON LADDER INTO MOTOR CHAMBER



SEC. K-K

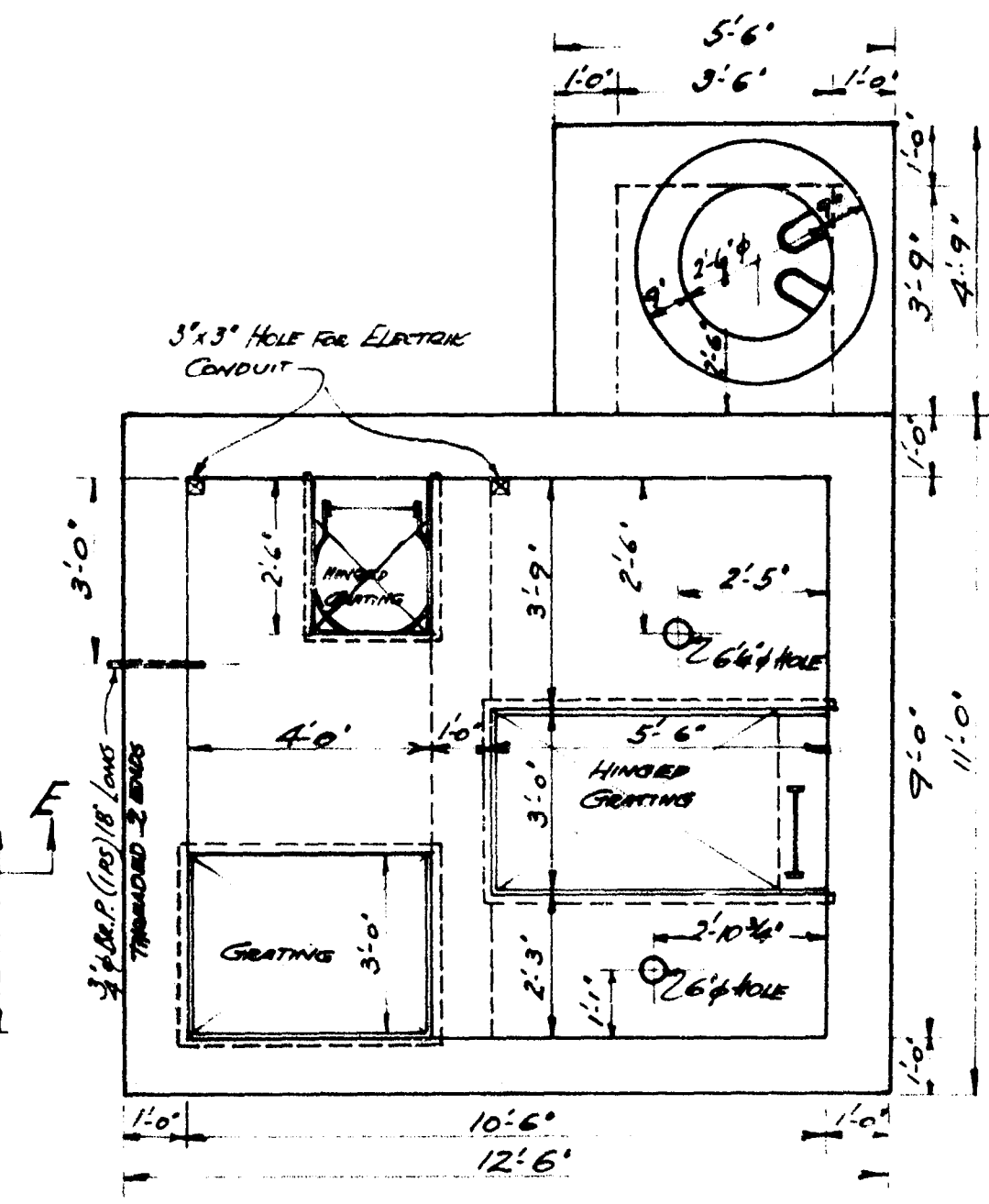
APPROVED
W. G. Leach

GREATER WINNIPEG SANITARY DISTRICT			
W. G. LEACH Consulting Engineer	APPROVED	DATE	TITLE: CLIFTON PUMPING STATION SHEET NO. 272
W. B. BUSH, District Engineer	Checked By: [Signature]	Traced By: [Signature]	Scale: 1/2" = 1'-0" (as noted on Tab 4-3)
C. S. LAURIE, District Engineer	Checked By: [Signature]	Approved By: [Signature]	205
NOTED: THIS IS THE CONTRACT DRAWING FOR CONSTRUCTION DRAWING. SEE DRAWING NO. 203A, P. 2.			DATE: []

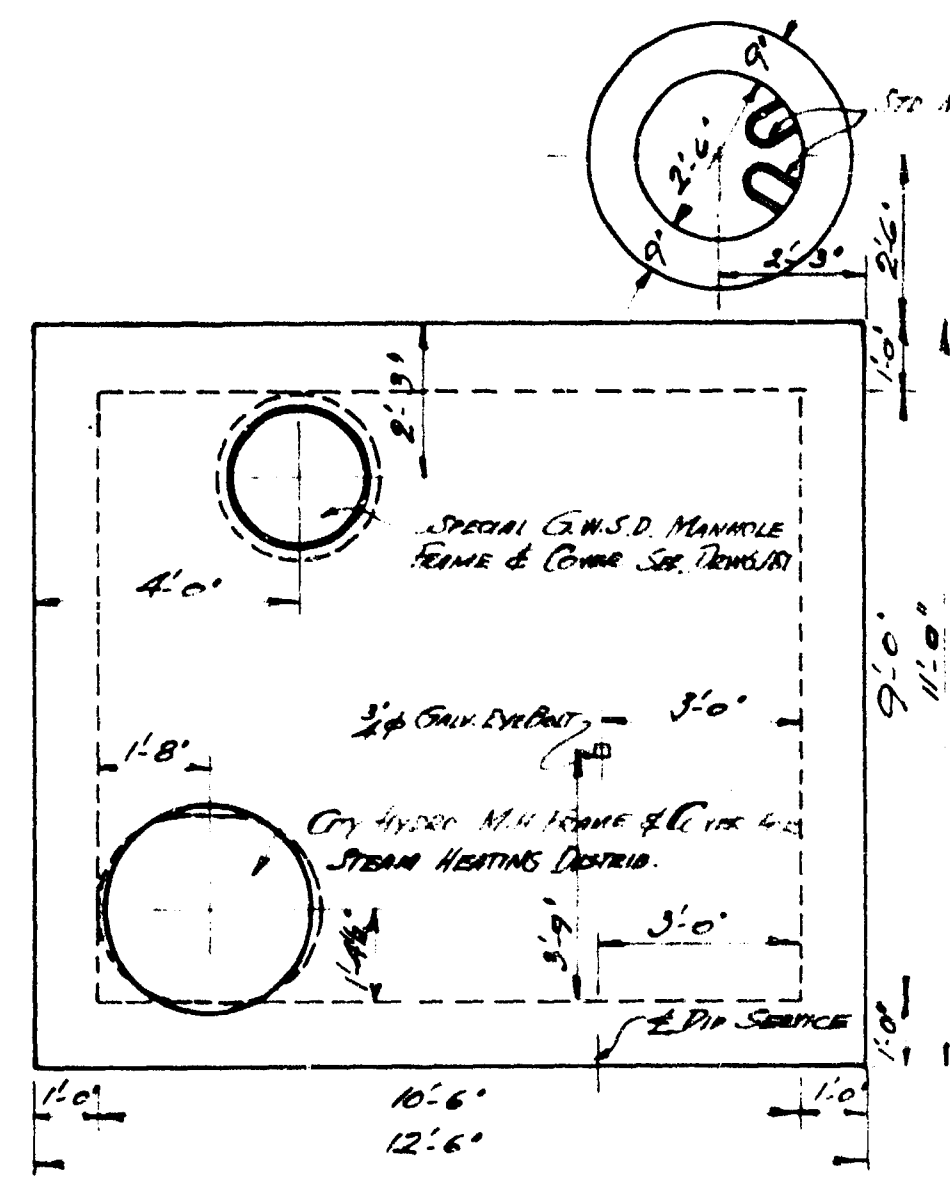


SECTION B-B

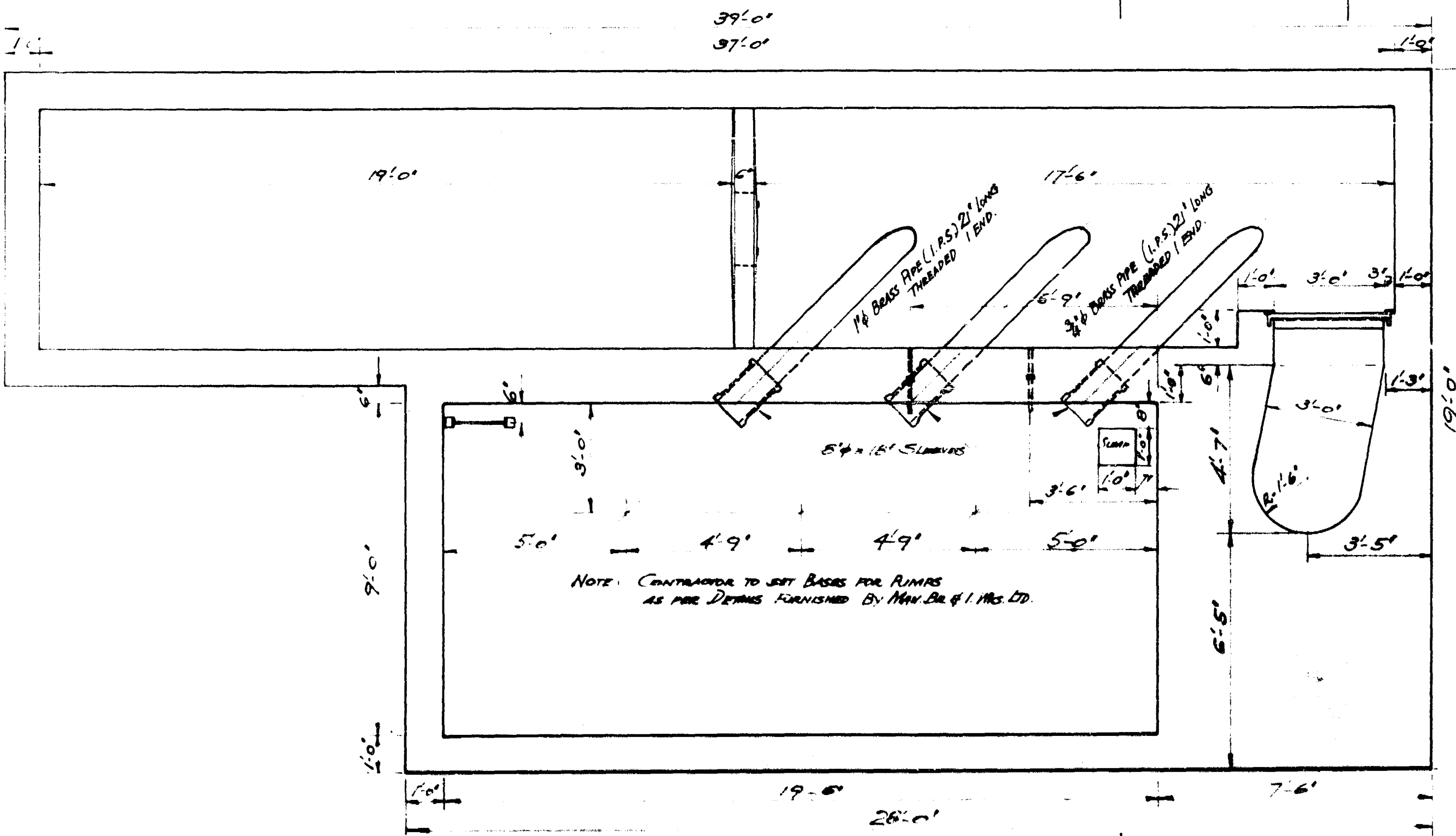
CLIFTON ST. TRUNK SEWER
9'9" x 7'7" EGG-SHAPED CONCRETE



SECTION C-C

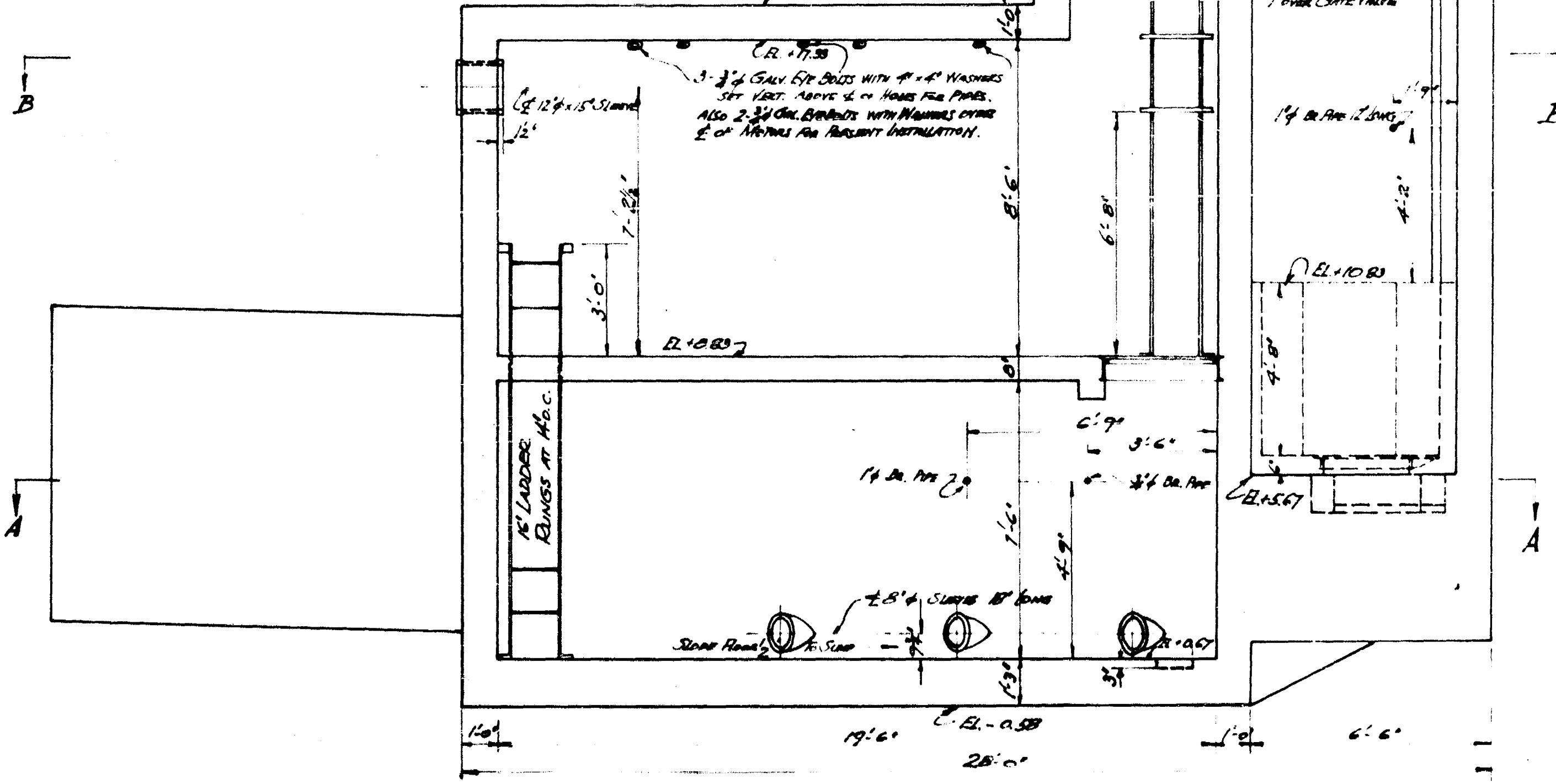


SECTION D-D



SECTION A-A

NOTE: CONTRACTIONS TO SET BASES FOR PUMPS
AS PER DETAILS FURNISHED BY MAN. CO. #1 M.S. LTD.

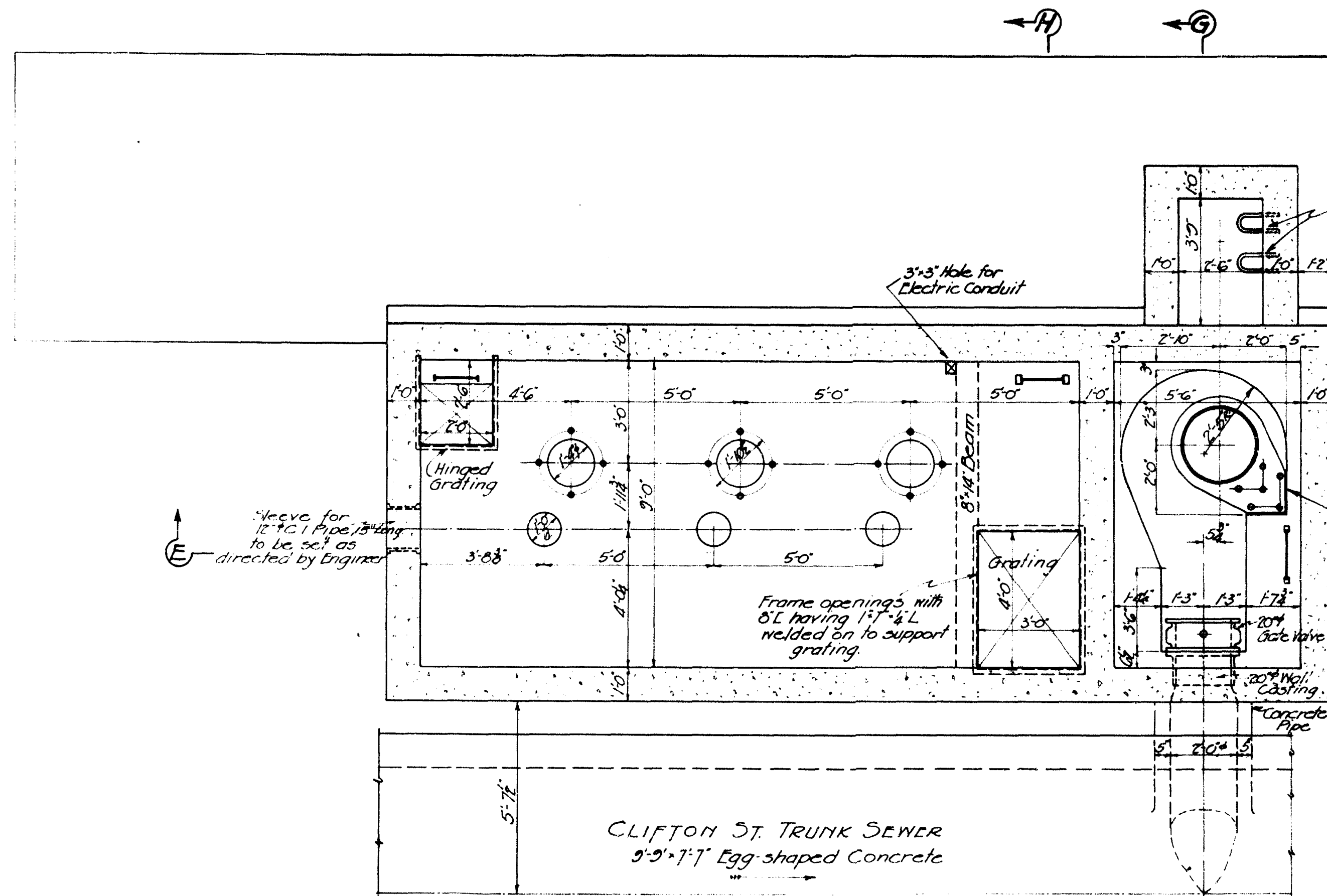


SECTION E-E

NOTE:
SEE DRAWING NO. 24 FOR DETAILS OF SEAL WATER TANK

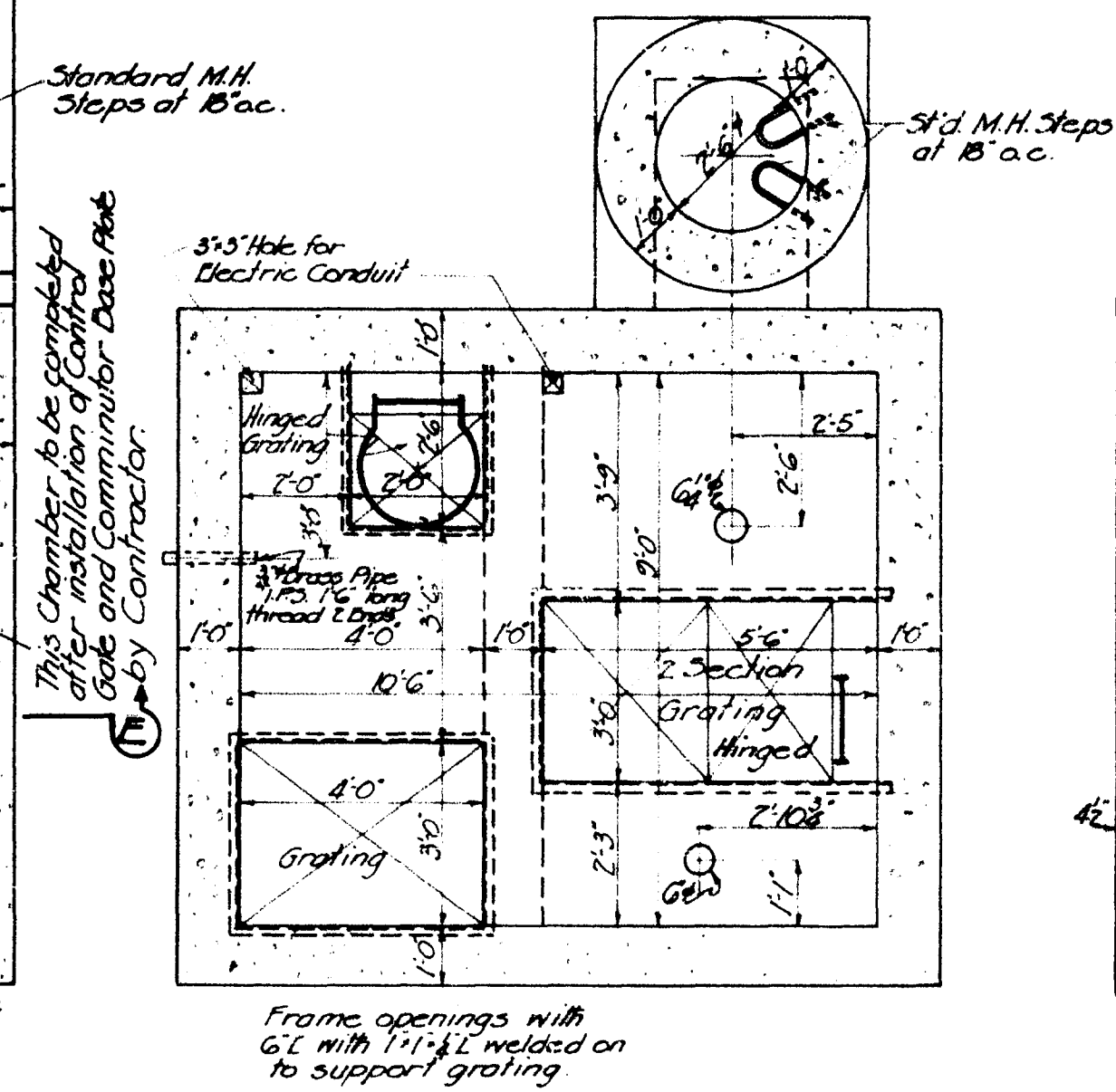
NOTE: MAY 19, 1937 DWG. NO. CHANGED FROM NO. 202 TO NO. 202 A K.S.D.
JULY 26, 1937 SEAL WATER TANK LOCATION CHANG. K.S.D.

GREATER WINNIPEG SANITARY DISTRICT			
DRAWN K.S.A.	DATE APR 25, 1937	TITLE CLIFTON ST. PUMPING	DWG. NO. 202 A
TRACED K.S.A.	CHECKED K.S.A.	STA. NO. 13	SCALE 1" = 1'
APPROVED K.S.A.	SUPV. K.S.A.		

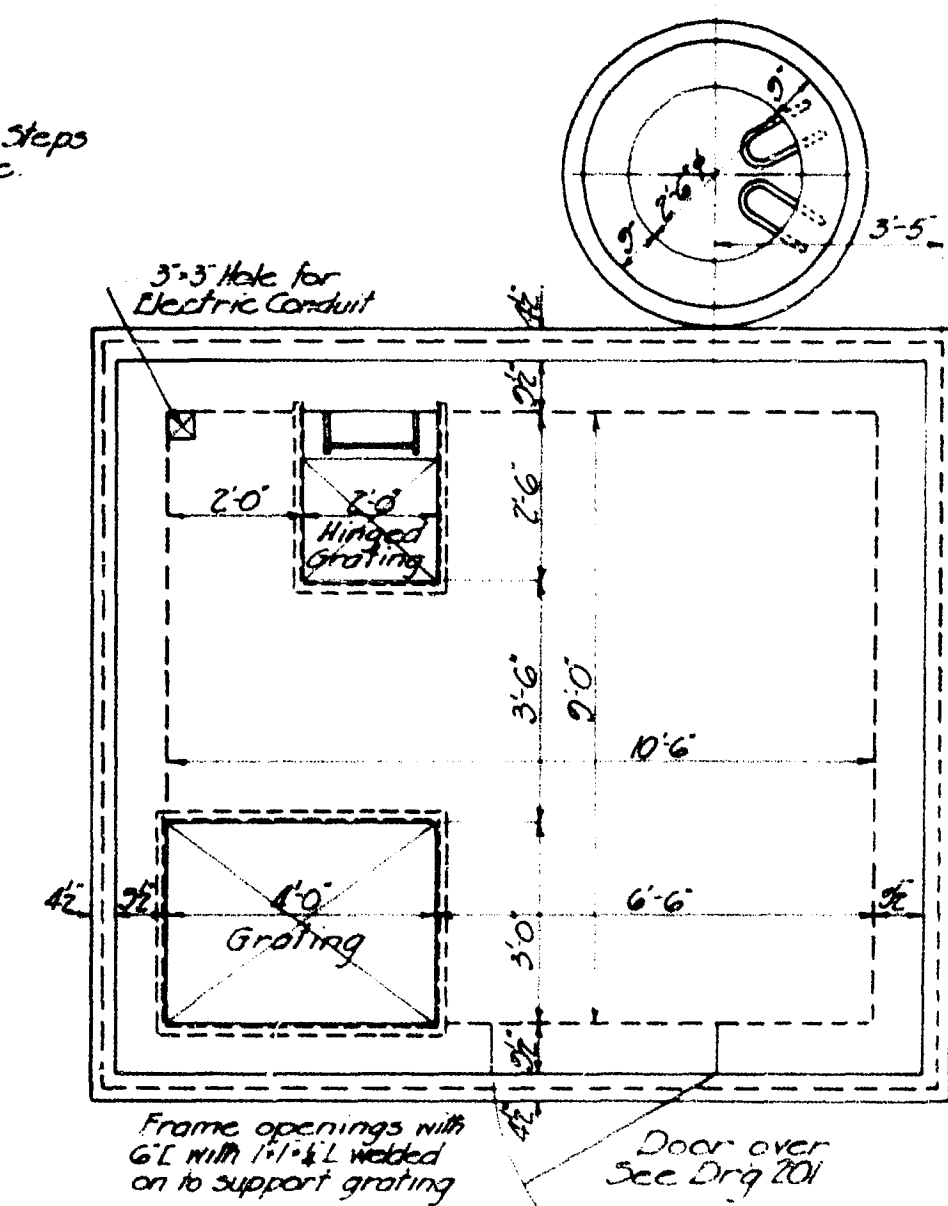


CLIFTON ST. TRUNK SEWER
3'-3" x 7'-7" Egg-shaped Concrete

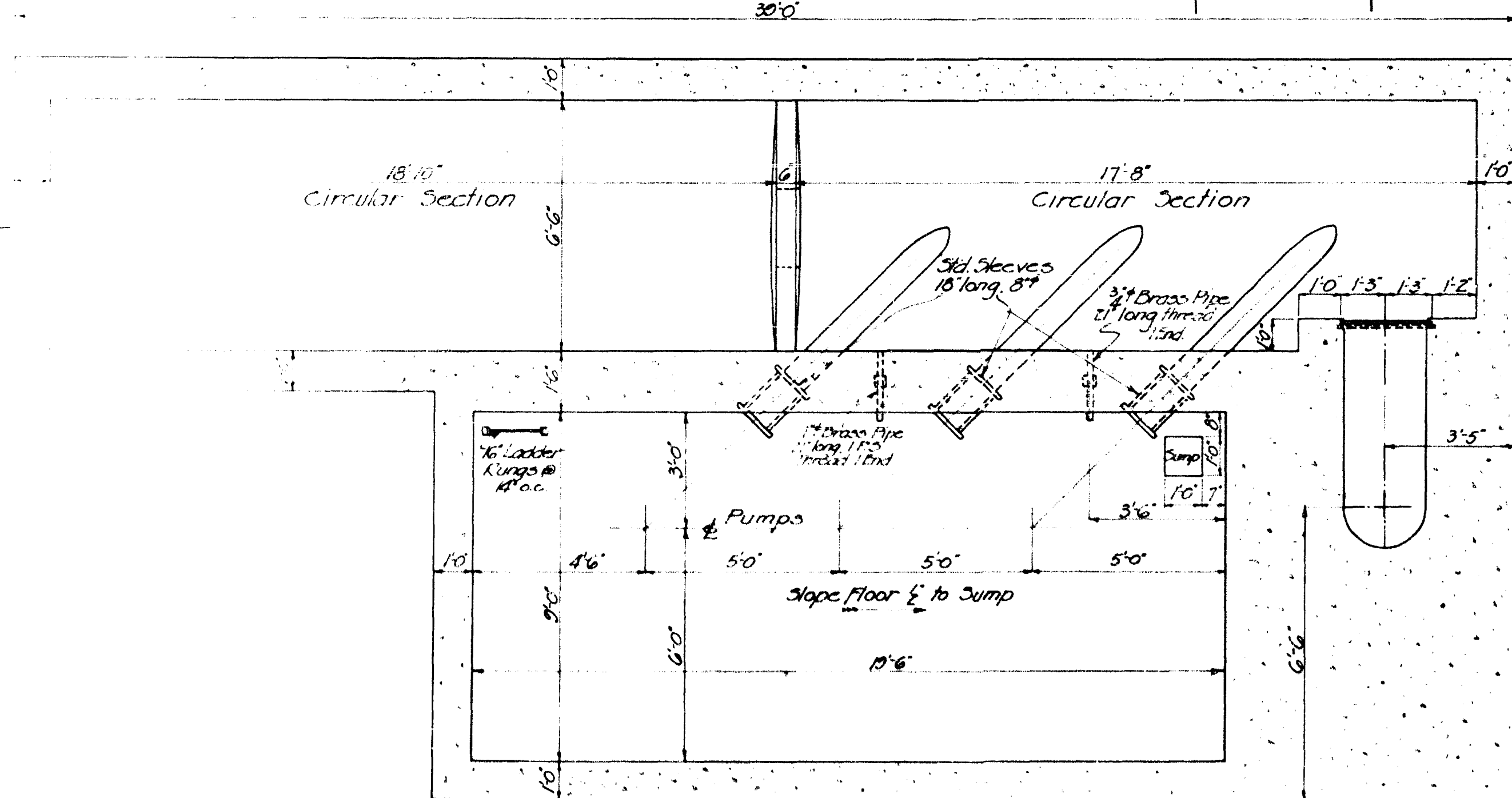
MOTOR ROOM FLOOR
SECTION B-D



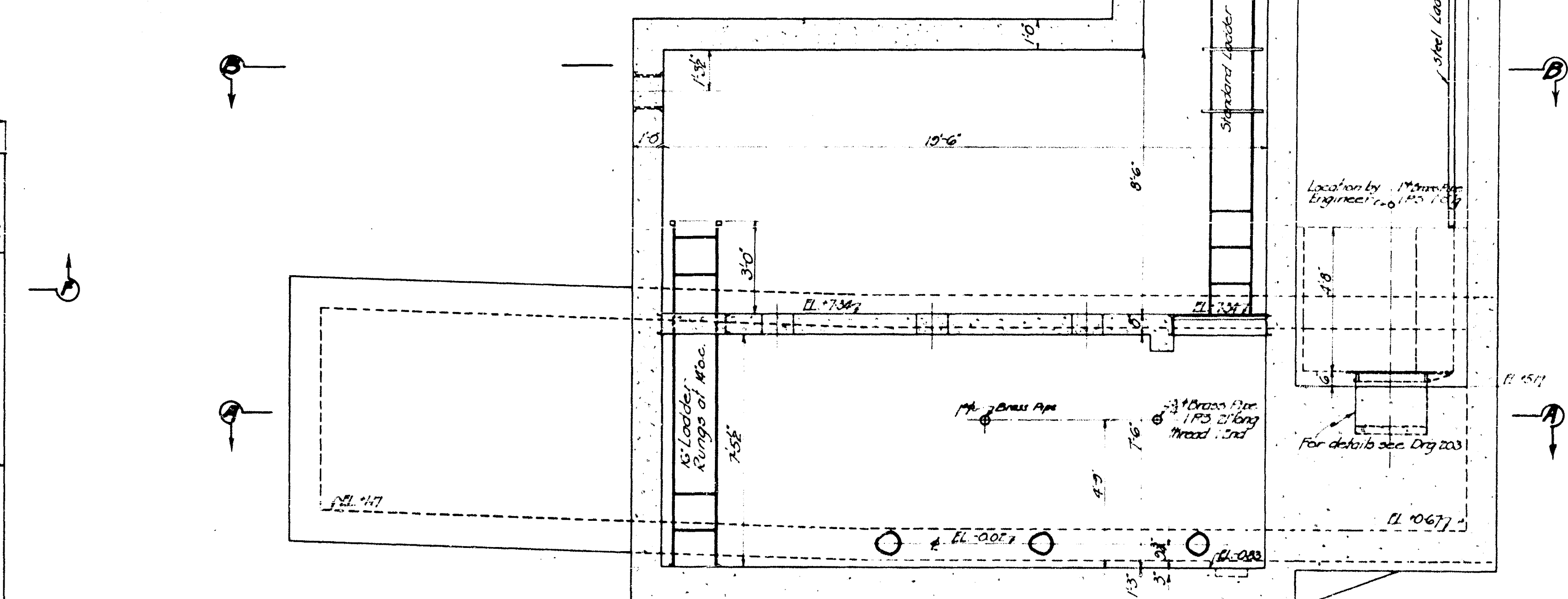
SECTION C-C



SECTION D-D



PUMP CHAMBER FLOOR
SECTION A-A



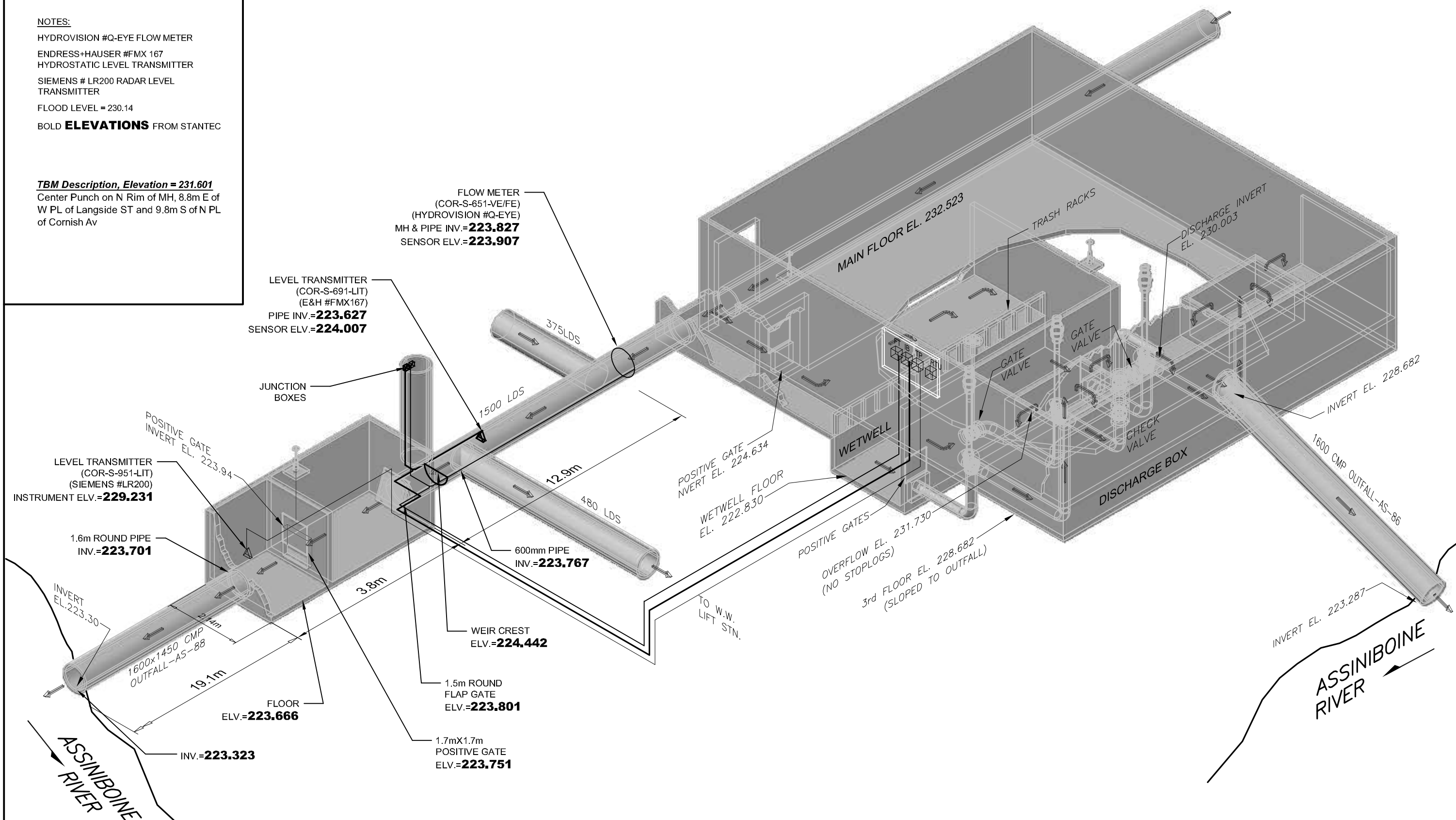
SECTION E-E

NOTE:-
Material to be supplied and installed by Contractor where shown or located as directed by Engineer.
Ladders; Sides 2" x 2" Flat, 16" apart, Rungs 3" x 4" of W.C.
Gratings to support 200 lbs per sq. ft. live load
Eyeballs (3) 3/4" Galvanized, with 4" x 4" Washers.
Waterpipe connection, 1 piece 3/4" (IPS) 1 1/2" long brass pipe, threaded ends
Reinforcing Steel; Sizes and spacing to be given later by Engineer.
Reference: For Sections not shown on this sheet see Dwg. No. 203.
For Details of Superstructure see Dwg. No. 201.
For Details of Special Solid Cover & M.H. Frame see Dwg. No. 181
Towel finish of floors.

GREATER WINNIPEG SANITARY DISTRICT		
W. S. L. E. Consulting Engineer	DATE	202
ENGINEER BOARD APPROVED	DATE	
W. P. BURNETT, Chairman N. J. BURNETT, Secretary J. W. BURNETT, Treasurer C. B. LAMONT, Auditor	Checked By Approved By	Contract No. 47
<p>W. S. L. E. Consulting Engineer 100 St. James Street Winnipeg, Man. 1917. This is the Contract Dwg. for Construction Dwg. No. 202A 154</p>		

NOTES:
 HYDROVISION #Q-EYE FLOW METER
 ENDRESS+HAUSER #FMX 167
 HYDROSTATIC LEVEL TRANSMITTER
 SIEMENS # LR200 RADAR LEVEL TRANSMITTER
 FLOOD LEVEL = 230.14
 BOLD **ELEVATIONS** FROM STANTEC

TBM Description, Elevation = 231.601
 Center Punch on N Rim of MH, 8.8m E of W PL of Langside ST and 9.8m S of N PL of Cornish Av



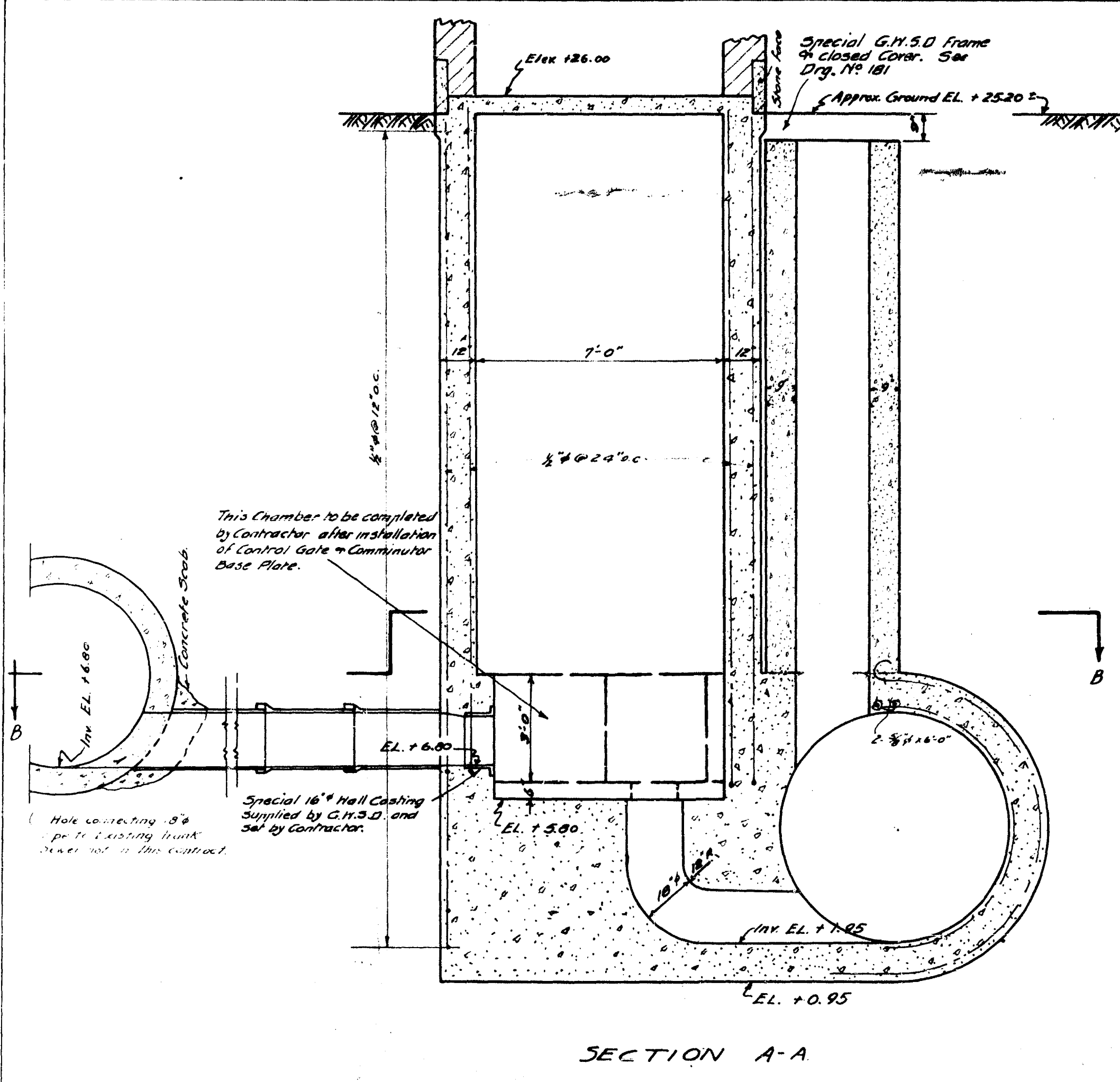
APEGM
 Certificate of Authorization
 Stantec Consulting Ltd.
 No. 1301 Date: _____



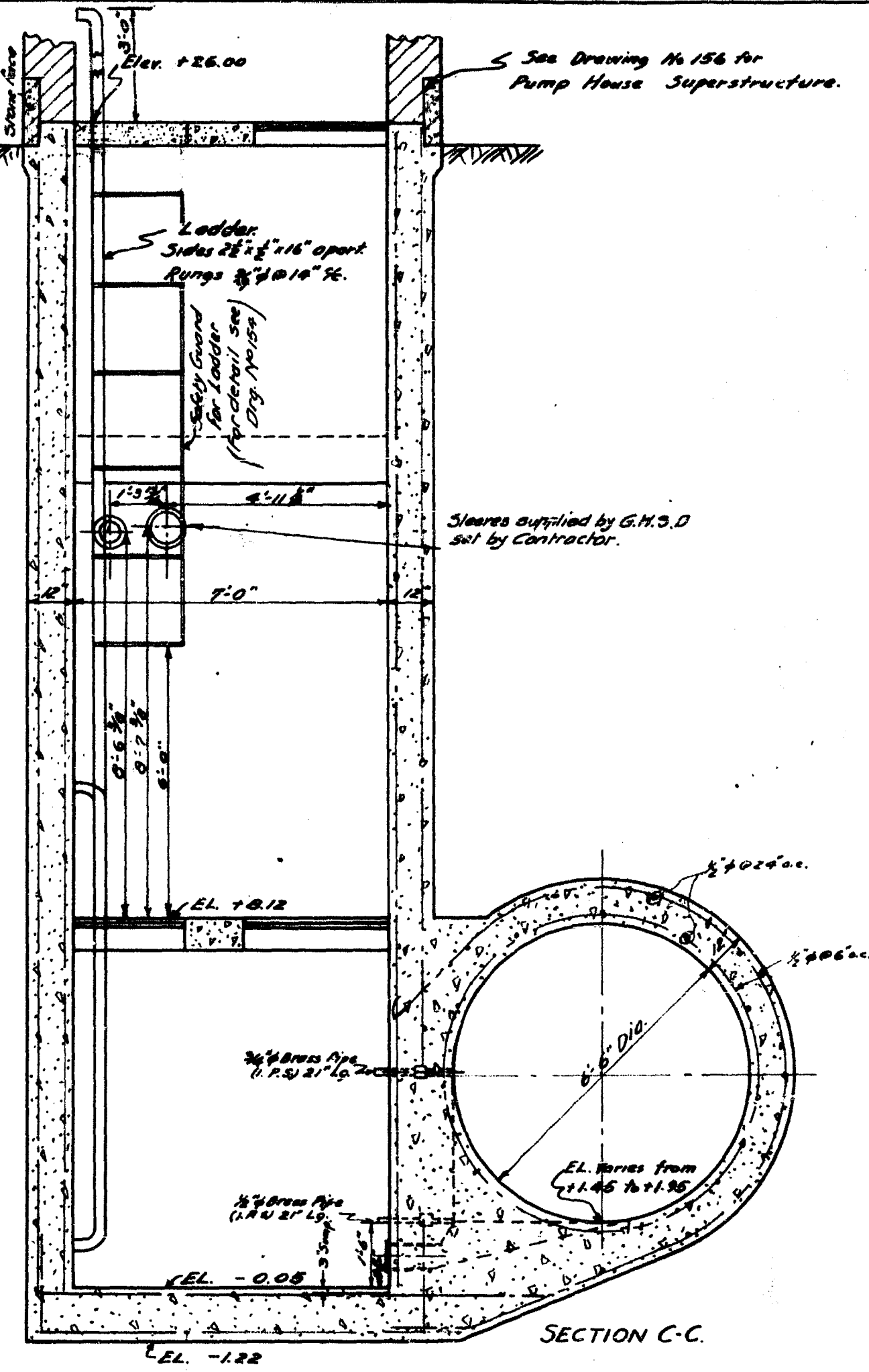
REV	DATE	NOTE
0	10.04.22	CLIENT REV.

THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT

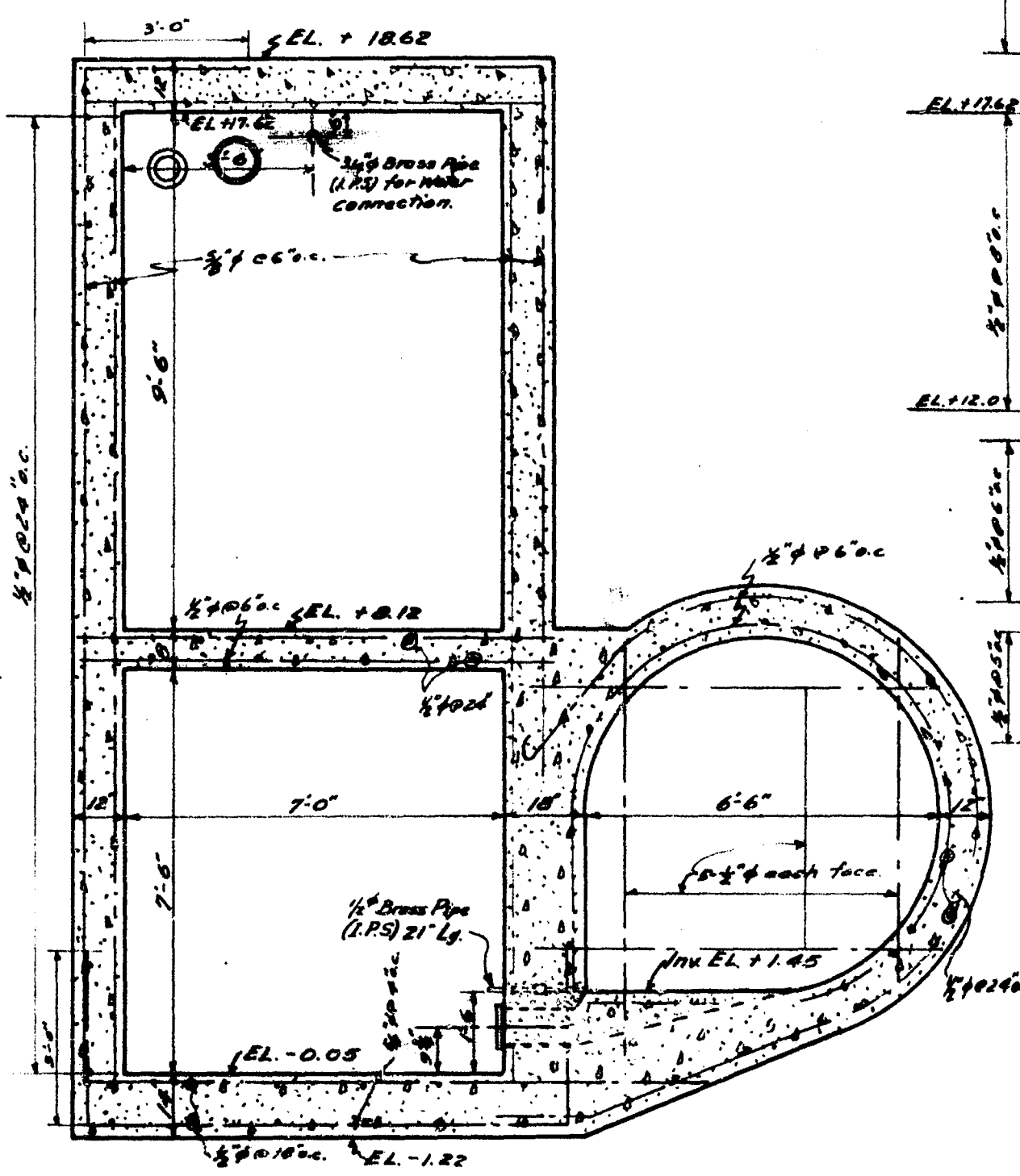
CSO OUTFALL MONITORING		
TITLE:	CORNISH ELECTRICAL SITE PLAN	
JOB No.	111211190	DATE: OCT. 30, 2009
SCALE:	N.T.S.	DWG. No.
CHECKED:	D.W.D.	E-1001



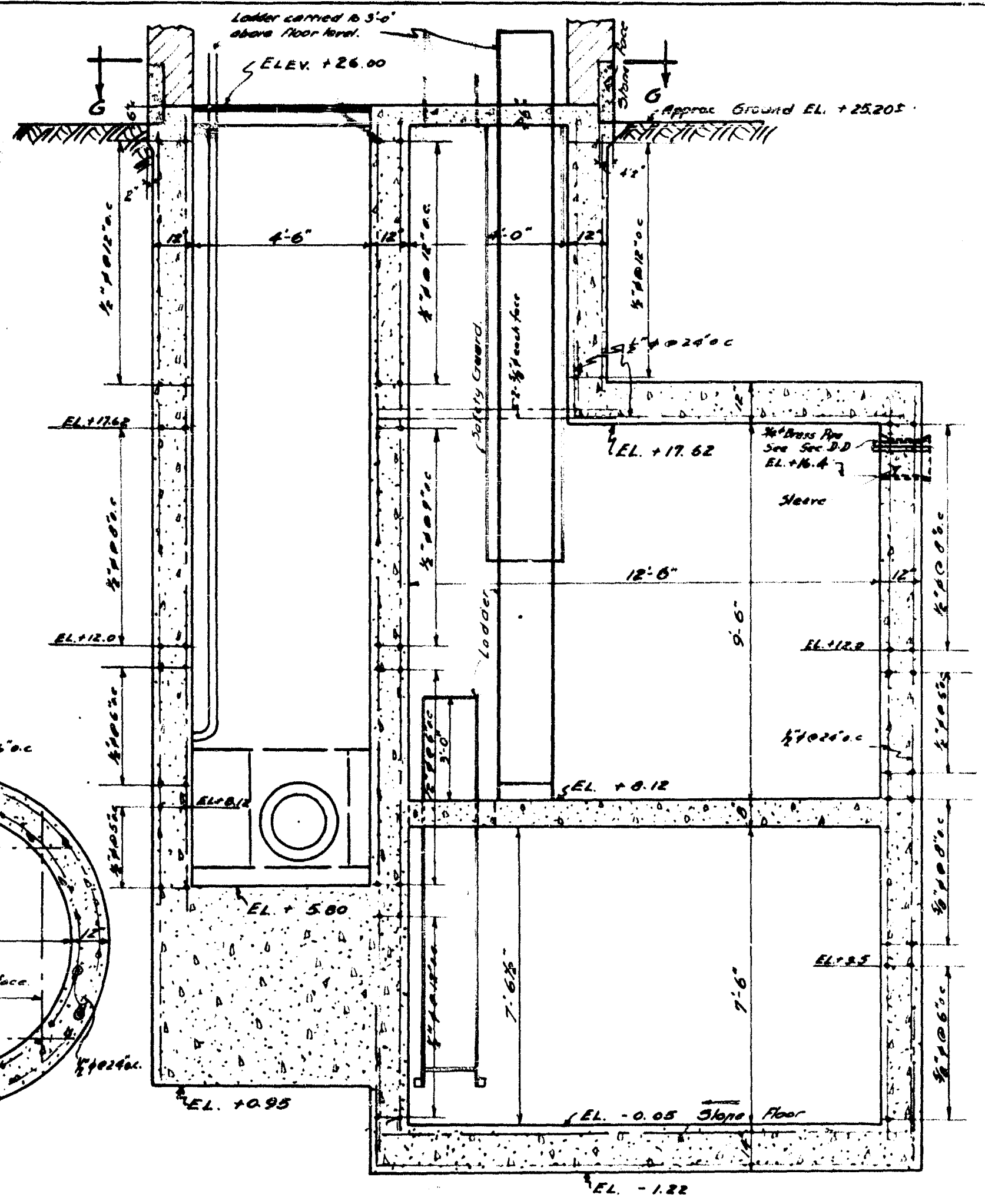
SECTION A-A



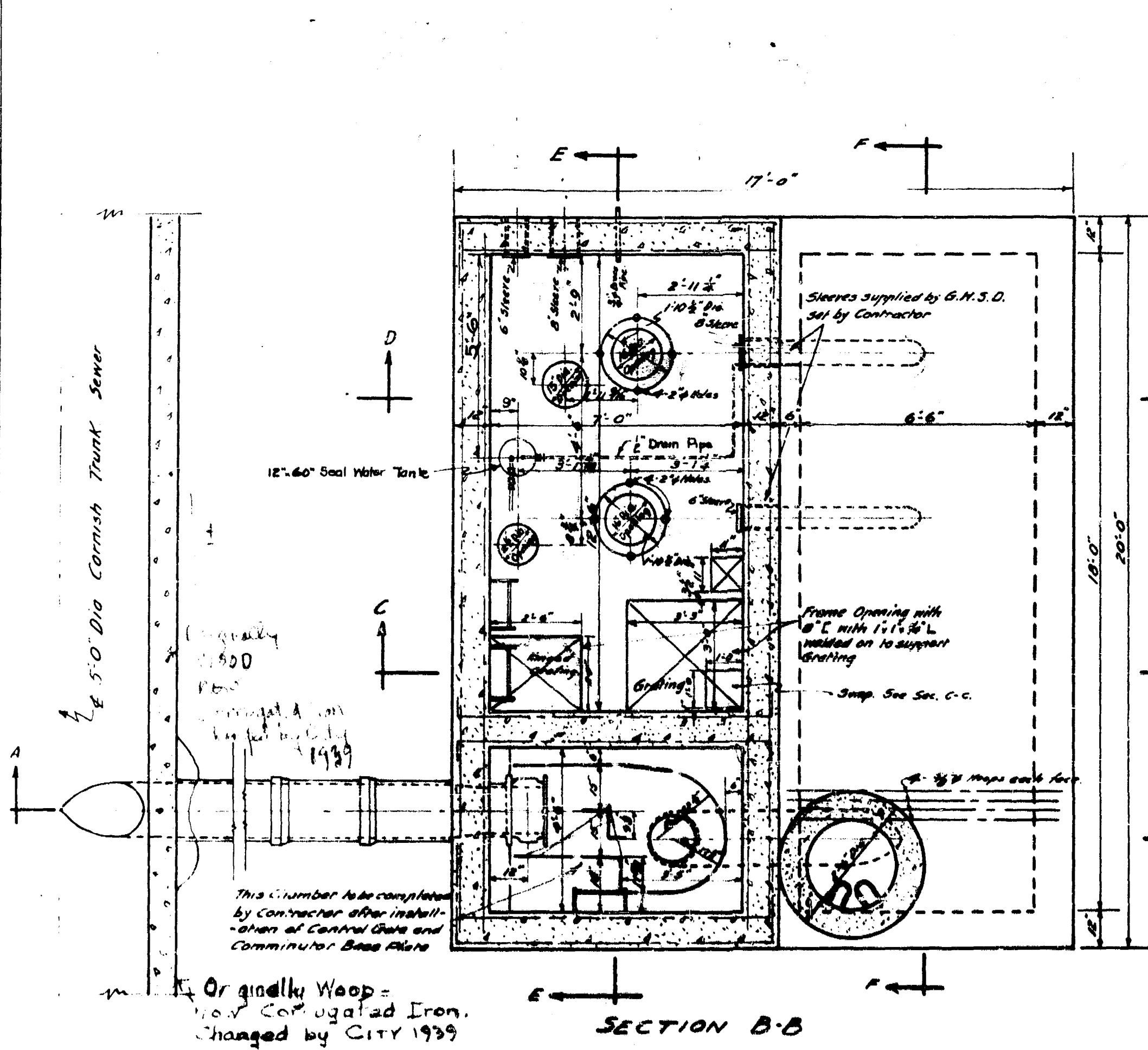
SECTION C-C



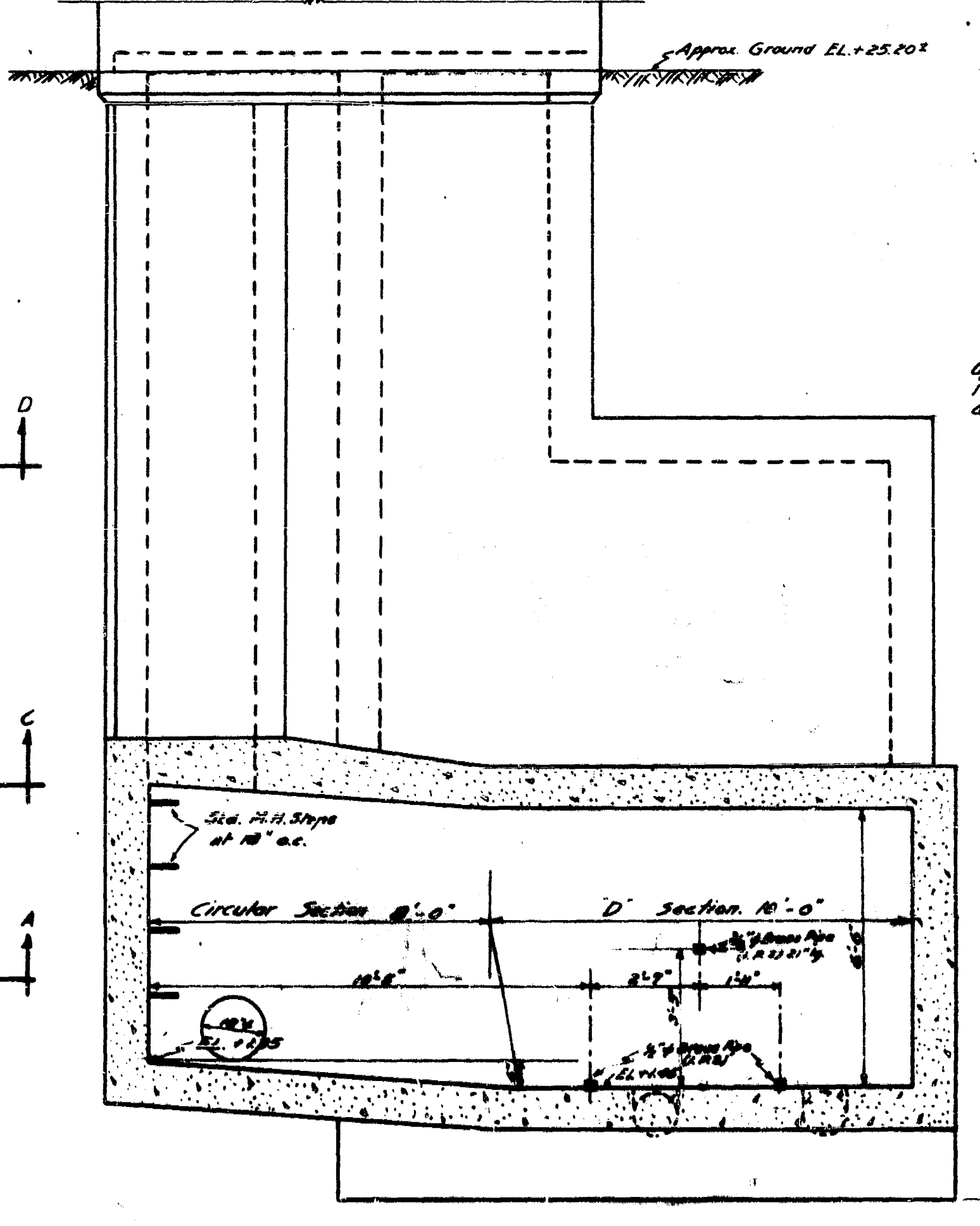
SECTION D-D



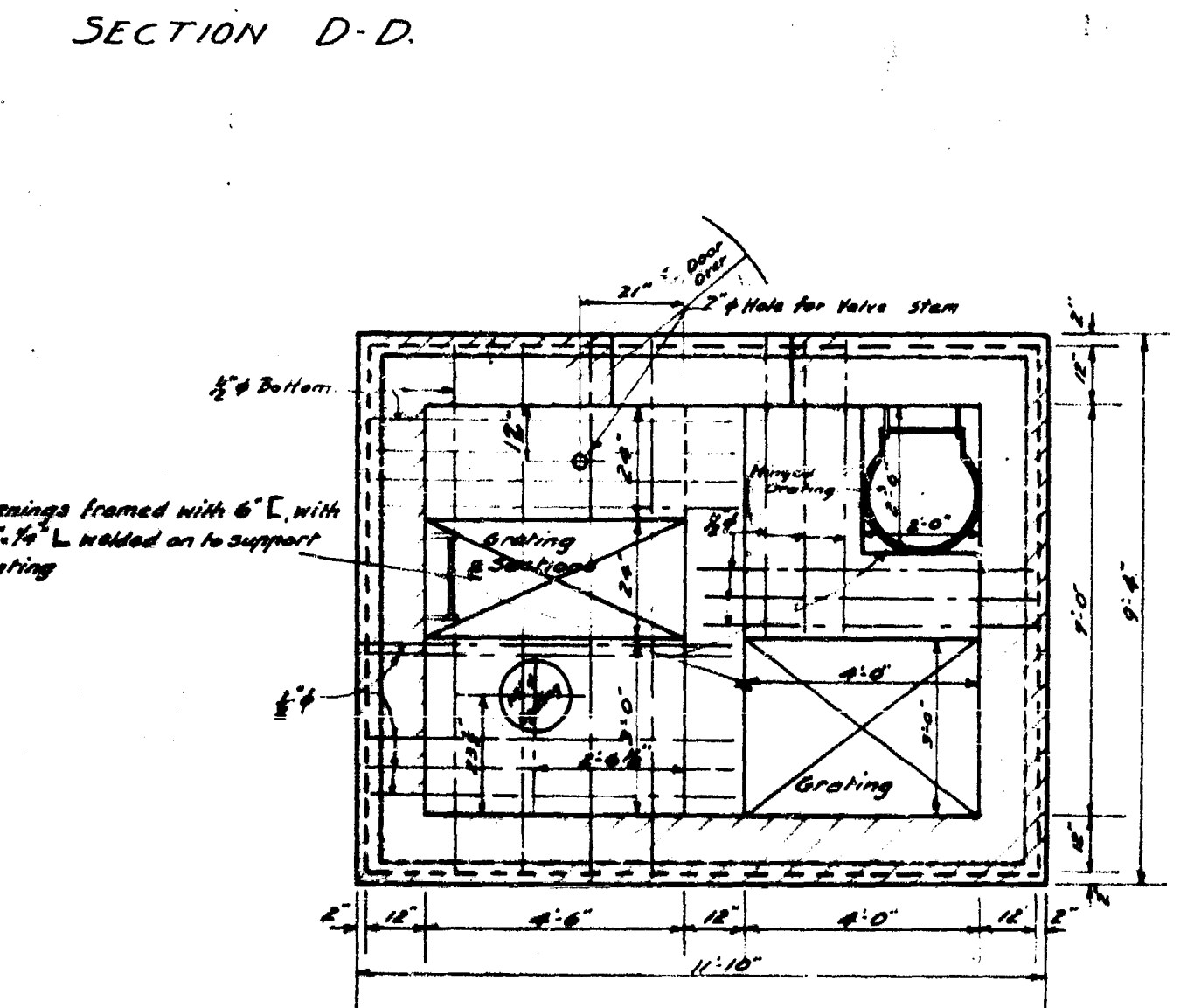
SECTION E-E



SECTION B-B

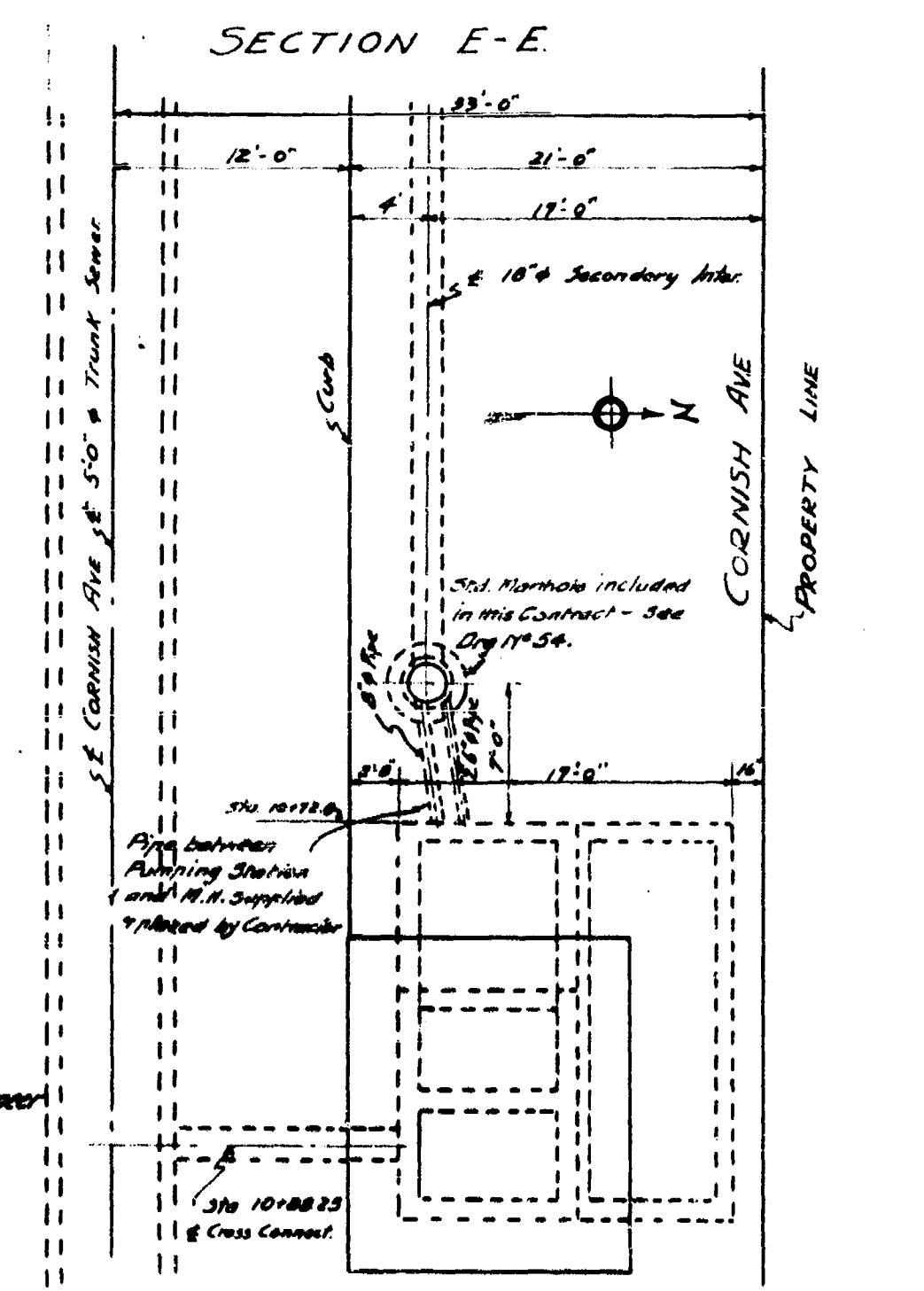


SECTION F-F



NOTE: SECTION G-G
 Material to be supplied and installed by Contractor, where shown, or as directed by Engineer.
 Ladders - Verticals 28" x 16" apart. Rungs 3" x 10" x 10' o.c.
 Grating to support 200 lbs/ft² live load. Eye bolts - 7/8" eye bolts with 4-4 washers, placed as directed.

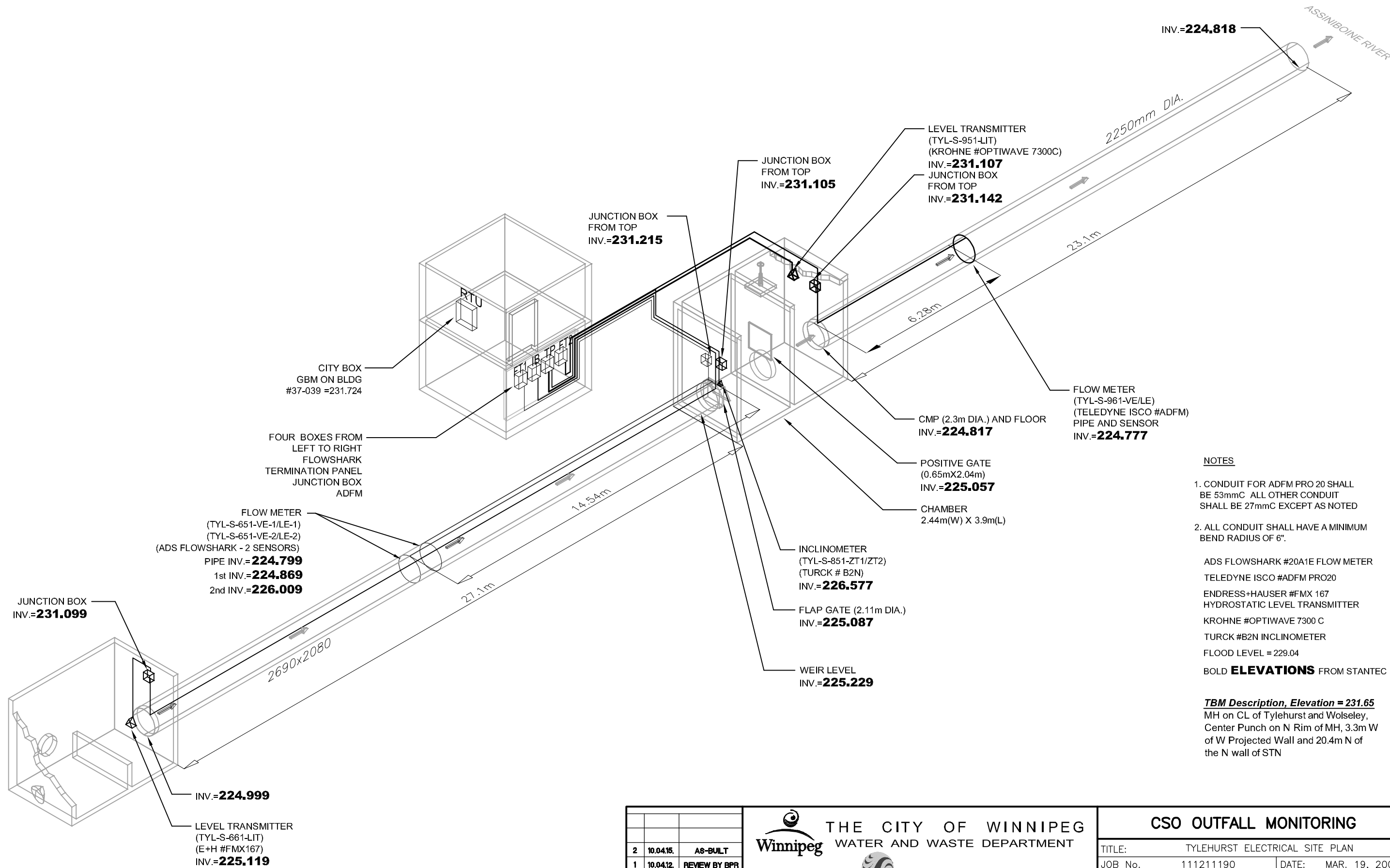
Safety Guard - See Drawing No. 154 for details.
 Control Valve Connection - 2-1/2" Brass Pipe (iron pipe size). See Drawing No. 154 for details.
 Water Pipe Connection - 1-3/4" Brass Pipe (iron pipe size) 18" long, thread both ends.
 Trowel Finish on all floors.
 Holes for electric conduits to be made by Contractor as directed by Engineer.
 See Drawing No. 154 for Details of Seal Water Tank.



SECTION H-H

APPROVED
 W. J. [Signature]

CORNISH AVE
 PUMPING STATION NO
 162
 30



NOTES

1. CONDUIT FOR ADFM PRO 20 SHALL BE 53mmC ALL OTHER CONDUIT SHALL BE 27mmC EXCEPT AS NOTED
2. ALL CONDUIT SHALL HAVE A MINIMUM BEND RADIUS OF 6".

ADS FLOWSHARK #20A1E FLOW METER
 TELEDYNE ISCO #ADFM PRO20
 ENDRESS+HAUSER #FMX 167
 HYDROSTATIC LEVEL TRANSMITTER
 KROHNE #OPTIWAVE 7300 C
 TURCK #B2N INCLINOMETER
 FLOOD LEVEL = 229.04
BOLD ELEVATIONS FROM STANTEC

TBM Description, Elevation = 231.65
 MH on CL of Tylehurst and Wolseley,
 Center Punch on N Rim of MH, 3.3m W
 of W Projected Wall and 20.4m N of
 the N wall of STN

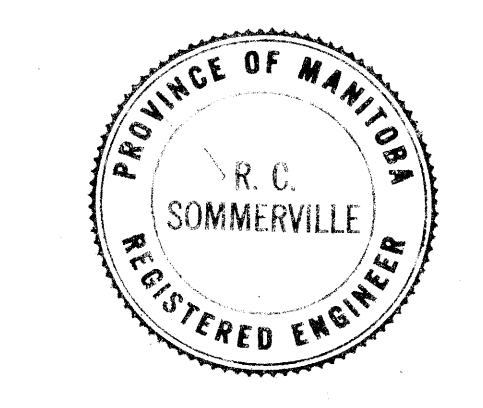
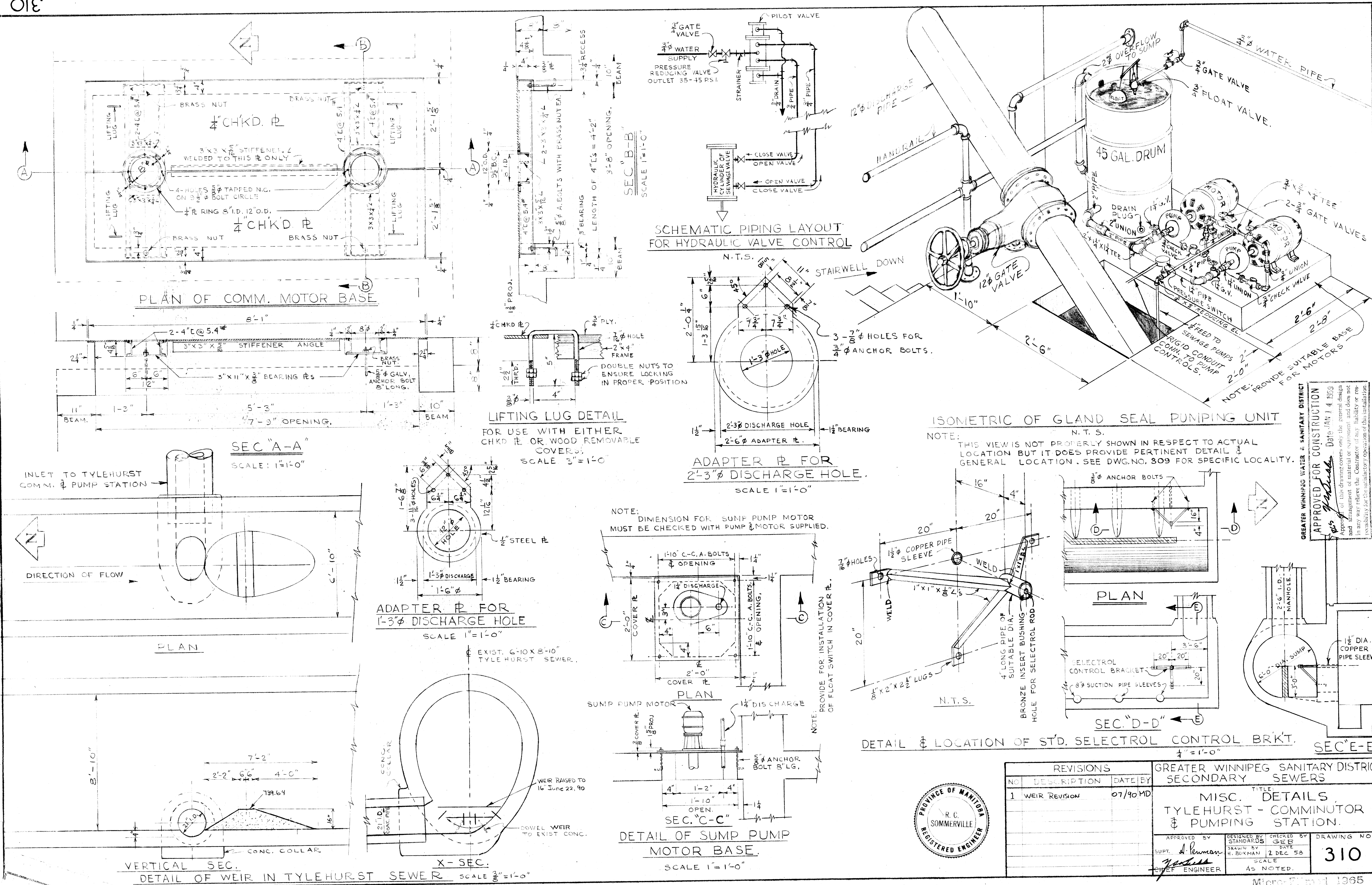
REV	DATE	NOTE
2	10.04.15	AS-BUILT
1	10.04.12	REVIEW BY BPR
0	10.03.08	CLIENT REV.


THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT


CSO OUTFALL MONITORING	
TITLE:	TYLEHURST ELECTRICAL SITE PLAN
JOB No.	111211190
SCALE:	N.T.S.
CHECKED:	D.W.D.
DATE:	MAR. 19, 2009
DWG. No.	E-201

File # SP10066

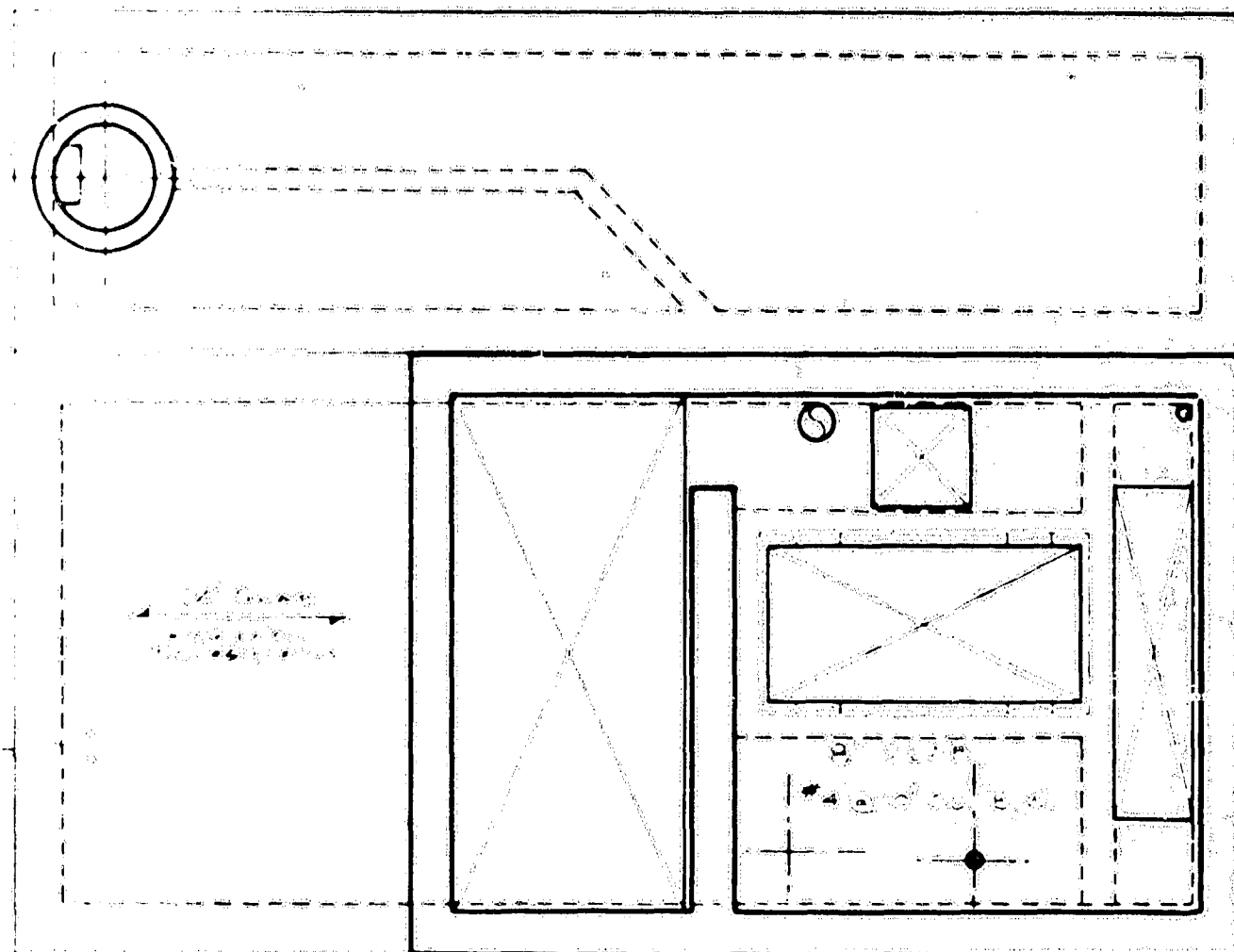
REF. or Drawing No. 310 DETAILS



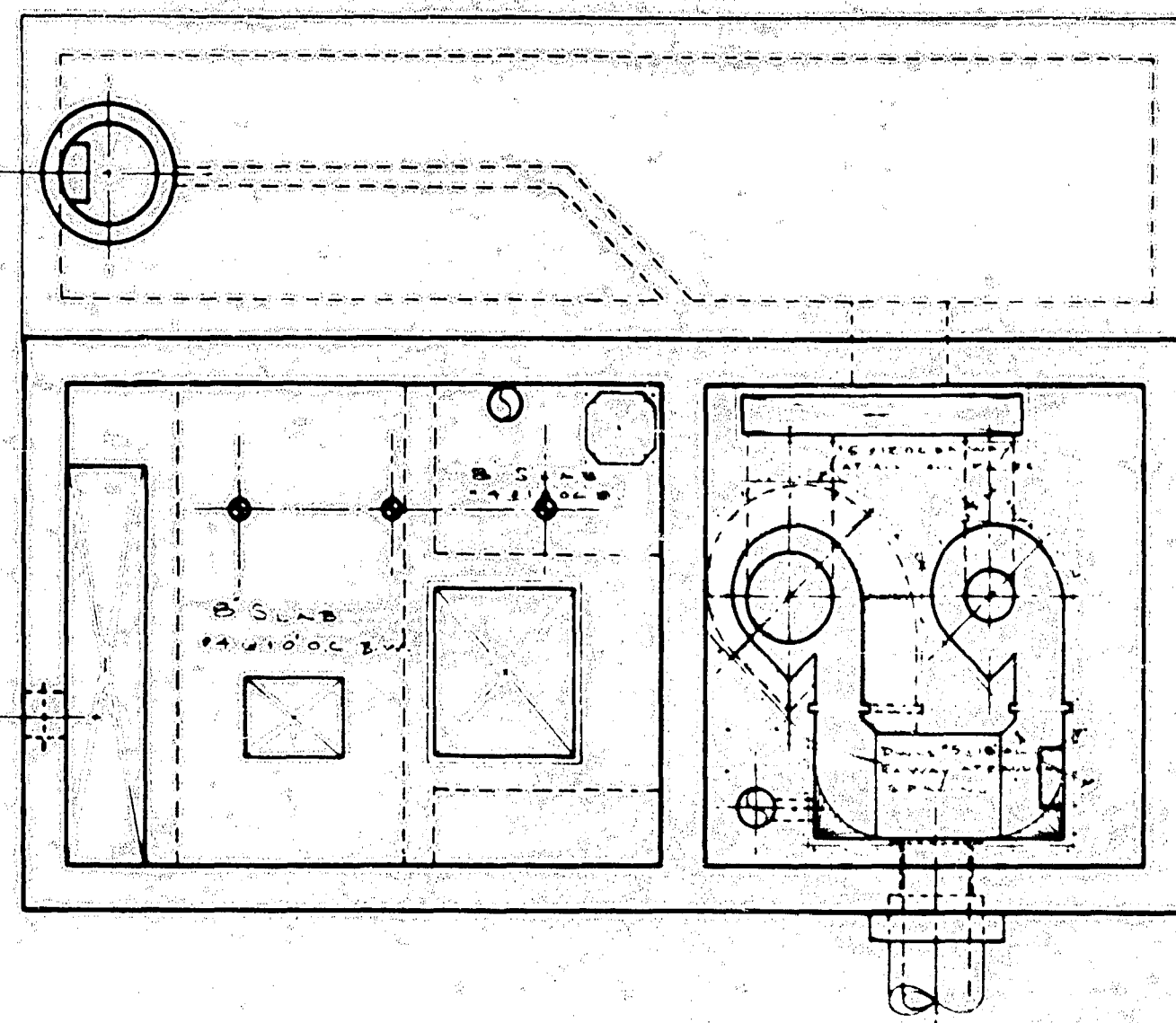
REVISIONS			GREATER WINNIPEG SANITARY DISTRICT SECONDARY SEWERS		
NO.	DESCRIPTION	DATE	BY	TITLE	DRAWING NO.
1	WEIR REVISION	07/90 MD		MISC. DETAILS TYLEHURST - COMMUNICATOR & PUMPING STATION.	310

APPROVED BY: *H. Burkman* Supt. Chief Engineer
 DESIGNED BY: *G. E. P.* STANDARDS DATE: 2 DEC 58
 CHECKED BY: DATE: SCALE: AS NOTED.

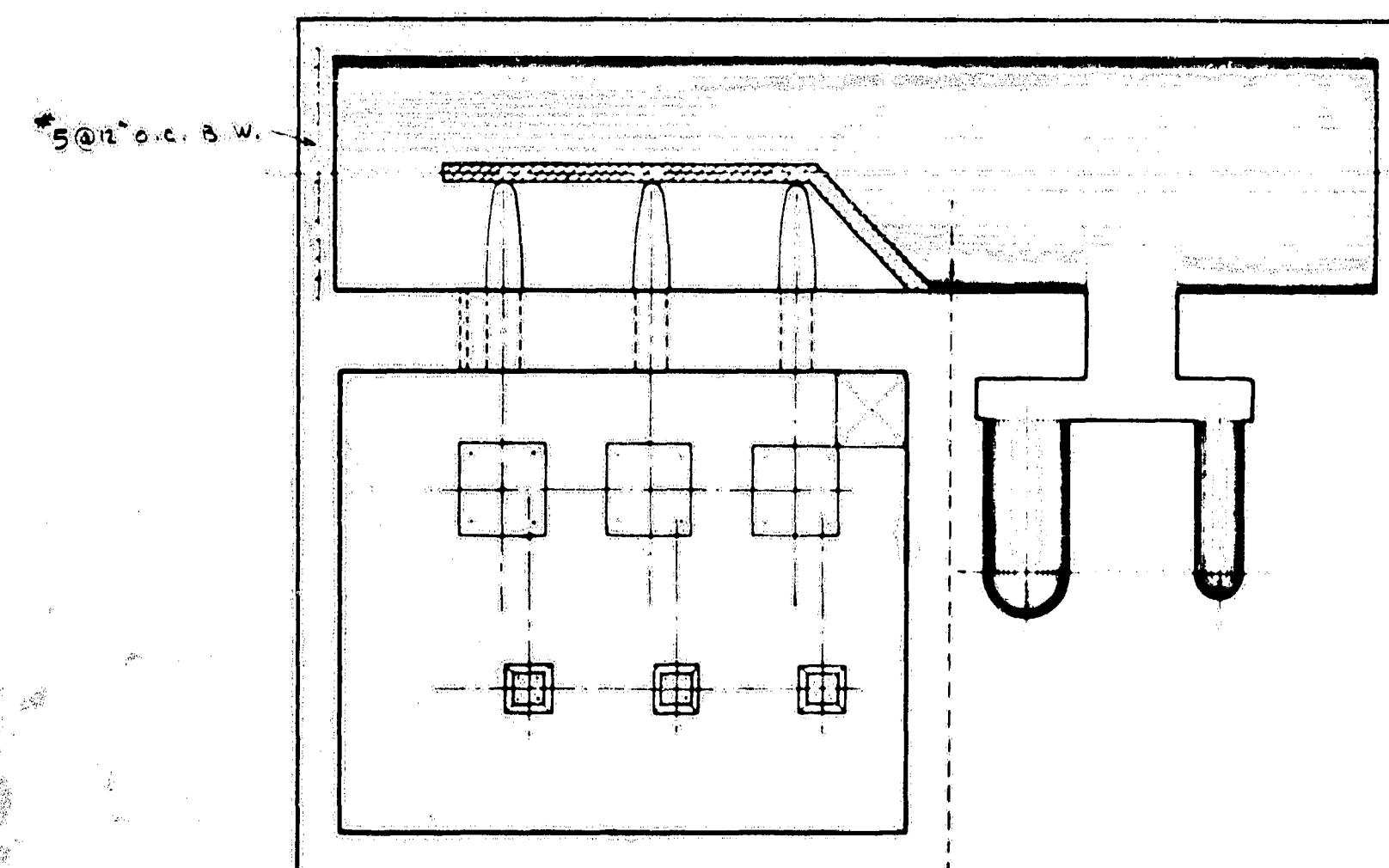
GREATER WINNIPEG WATER & SANITARY DISTRICT
 APPROVED FOR CONSTRUCTION
 Date: JAN 14 1959
 Approved of this drawing covers only the general design and arrangement of material or equipment and does not in any way relieve the Contractor of any liability or responsibility for the satisfactory operation of this installation.



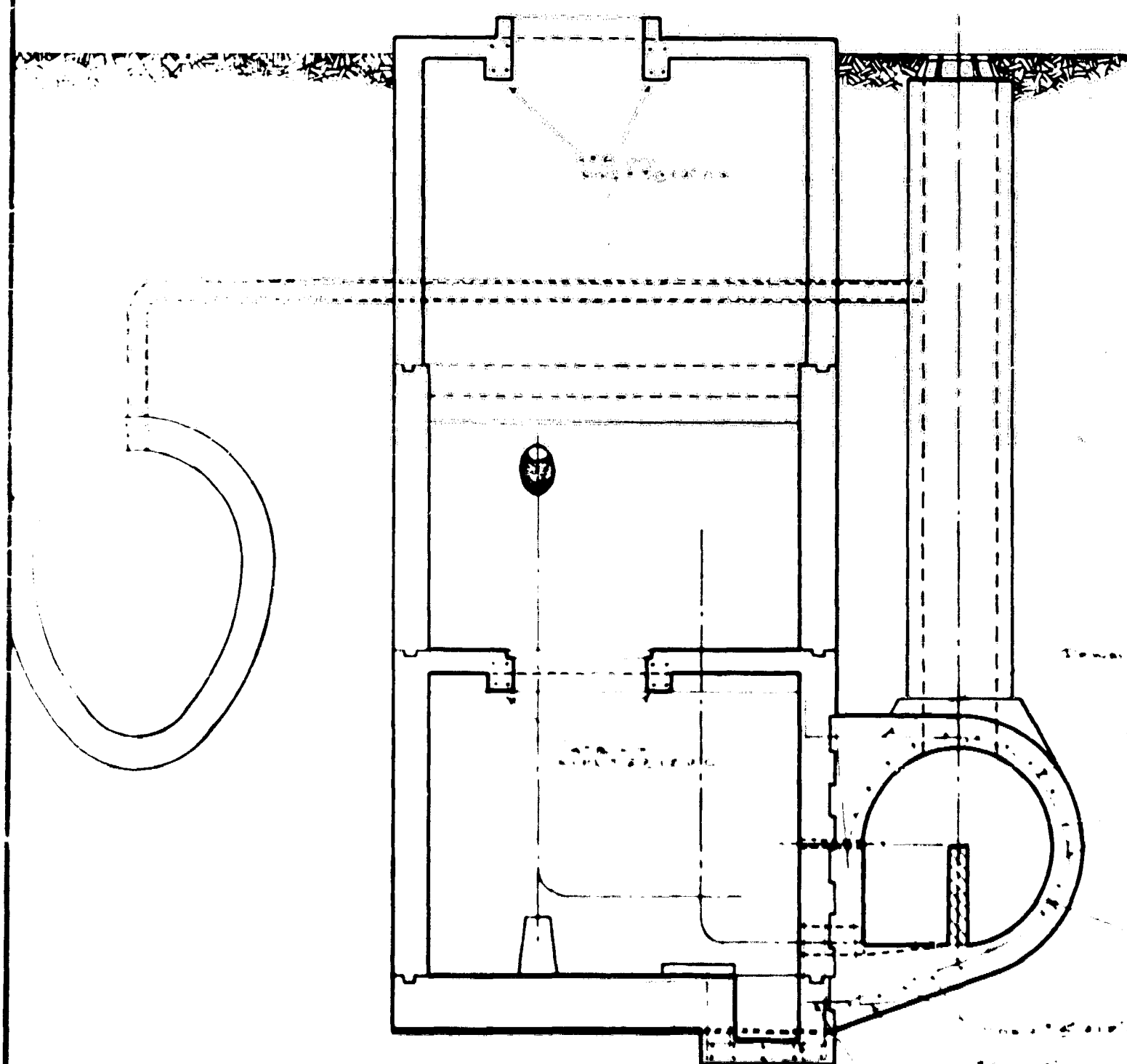
PLAN OF COMM. MOTOR RM. FL.



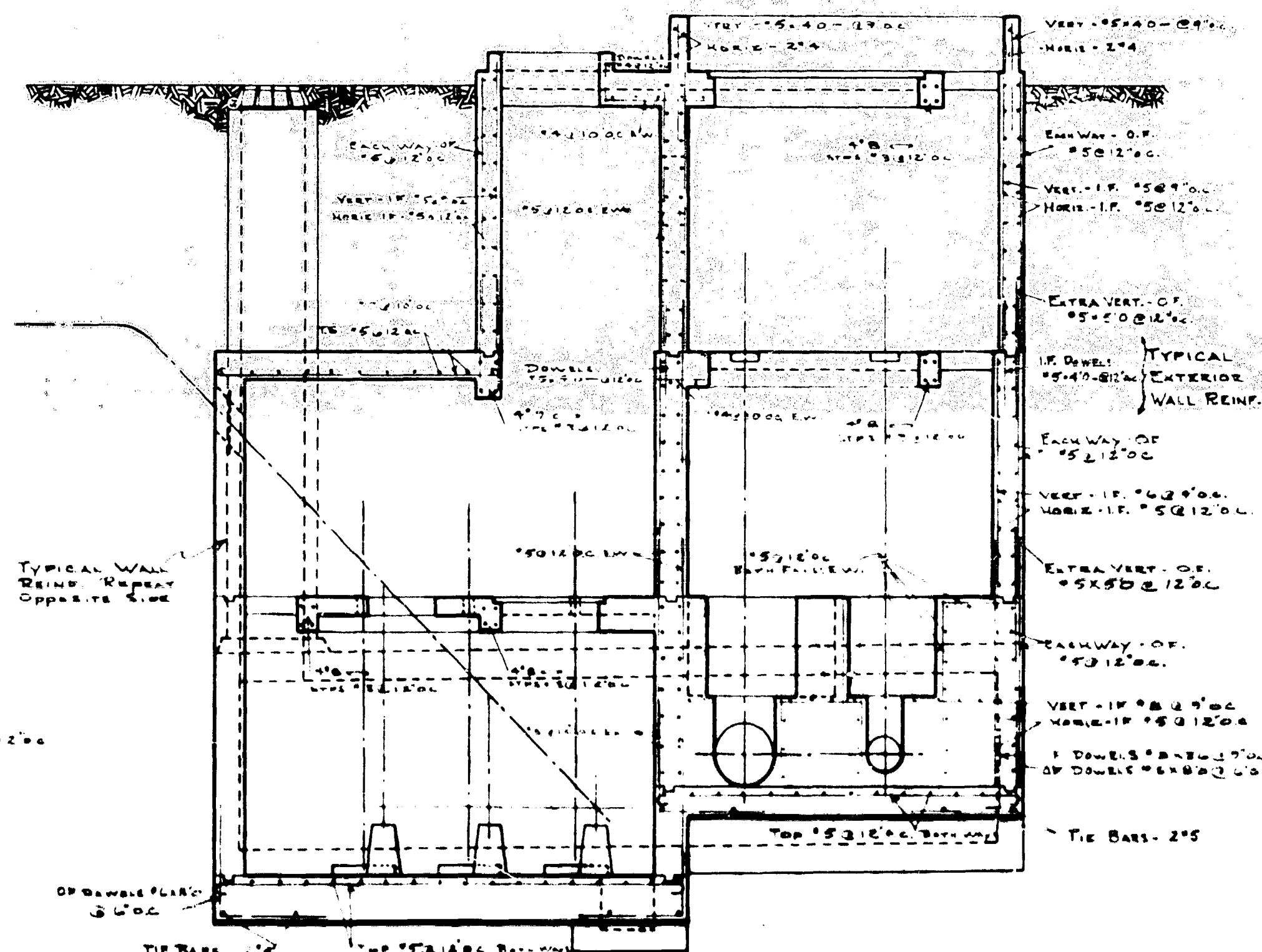
PLAN OF PUMP MOTOR RM. & COMM. CHAMBER FL.



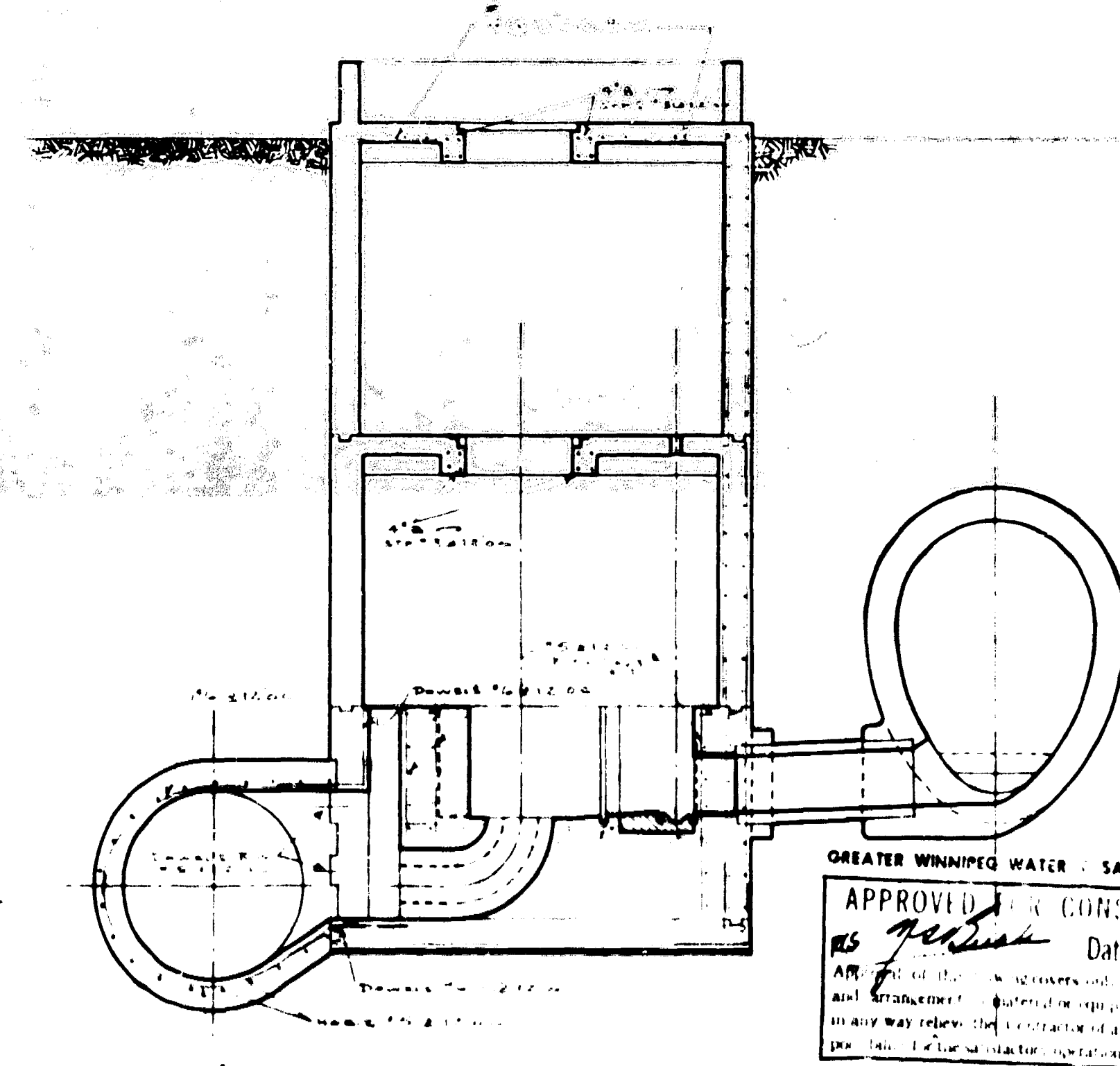
PLAN OF SUMP, PUMP CHAMBER & COMM. DISCHARGE



X-SEC. THRU PUMP CHAMBER
LOOKING NORTH

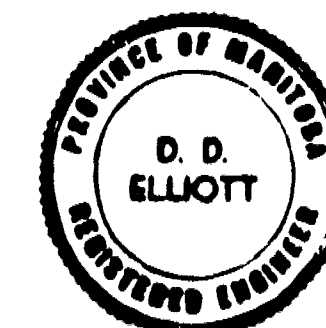


LONGITUDINAL SEC.
LOOKING EAST



X-SEC. THRU COMM. CHAMBER LOOKING SOUTH

COWIN & CO. LTD.
REINFORCED CONCRETE ENGINEERS
WINNIPEG, MAN.



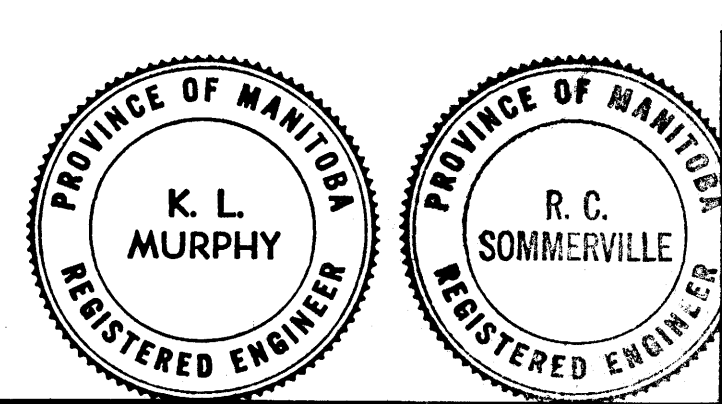
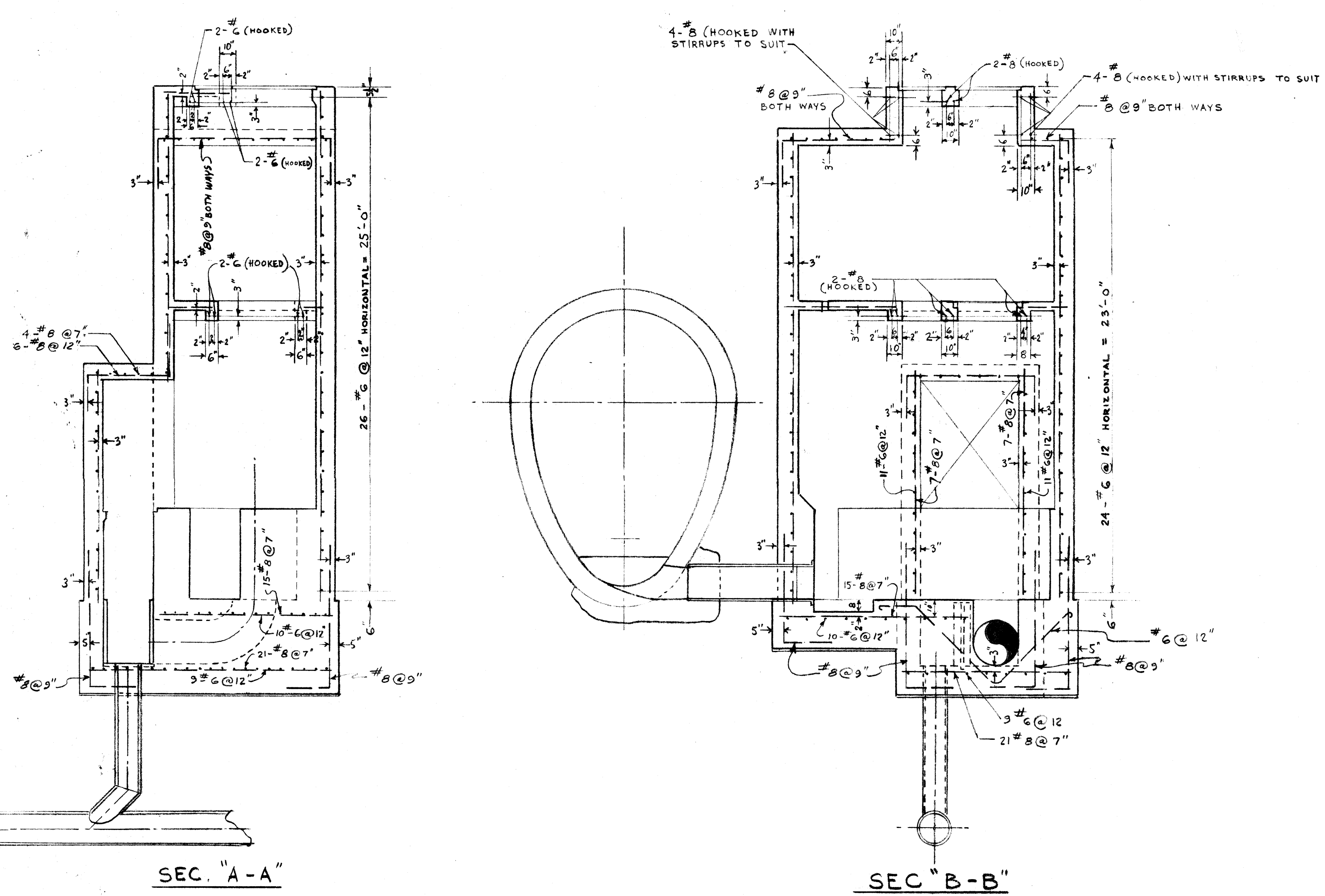
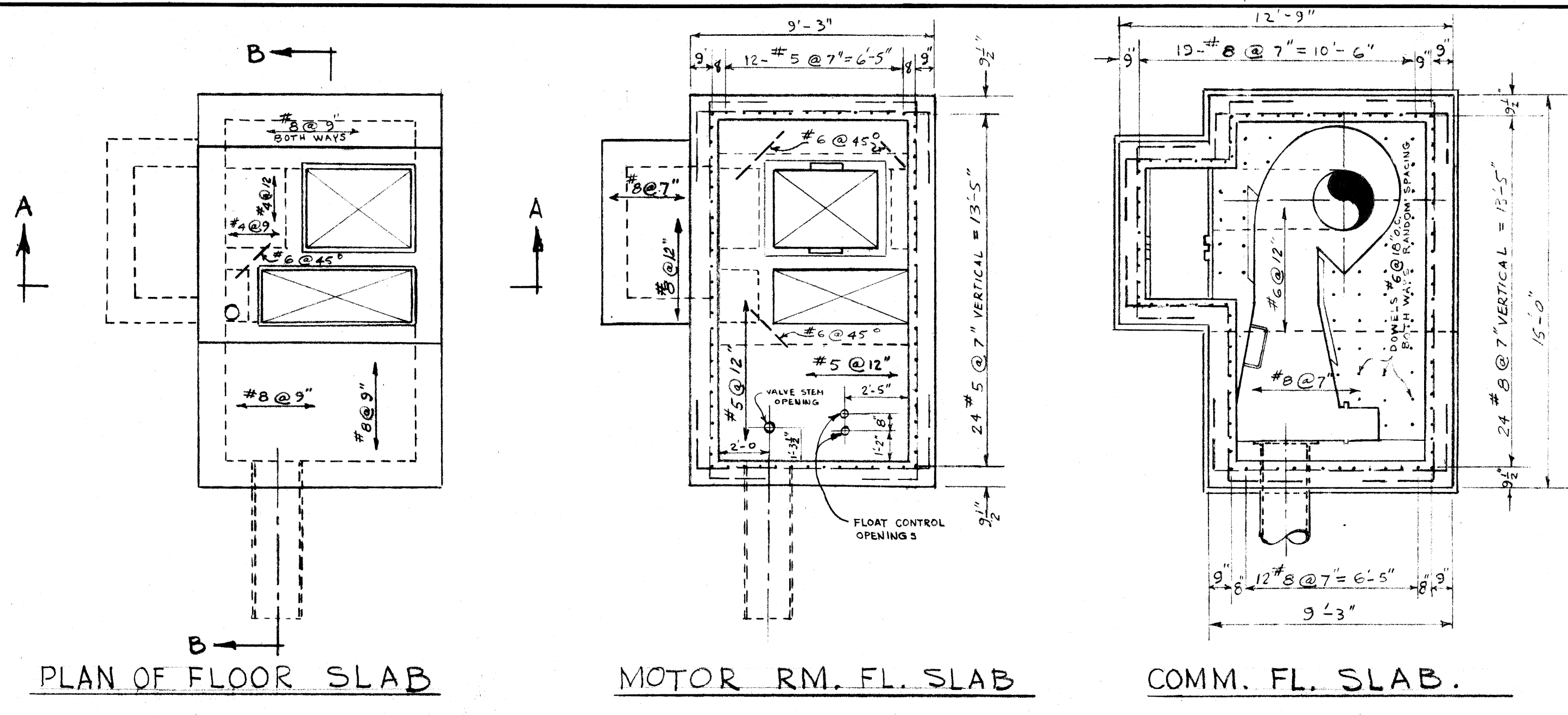
GREATER WINNIPEG WATER & SANITARY DISTRICT
APPROVED FOR CONSTRUCTION
Date JAN 14 1959
APPROVED BY: [Signature]
CHIEF ENGINEER

REVISIONS			
NO.	DESCRIPTION	DATE	BY

GREATER WINNIPEG SANITARY DISTRICT
SECONDARY SEWERS
TYLEHURST COMM. & PUMP STA.
REINFORCING STEEL

APPROVED BY: [Signature] CHIEF ENGINEER	DESIGNED BY: [Signature]	PROJECT NO. [Number]	DRAWING NO. 311
---	-----------------------------	-------------------------	--------------------

REF. or DRAWING NO. **291** FILE# CS10028
 DETAILS



Rev.	DESCRIPTION	Date	By

DRAWN IB DATE 6 AUG 57 TITLE: **JEFFERSON - MAIN ST. COMMUNOTOR STA. REINFORCING STEEL DESIGN**
 TRACED CHECKED GEB
 APPROVED *A. Penman* Supt.
 GEN. MGR.

SCALE 1/4" = 1'-0" DWG. NO. **291**

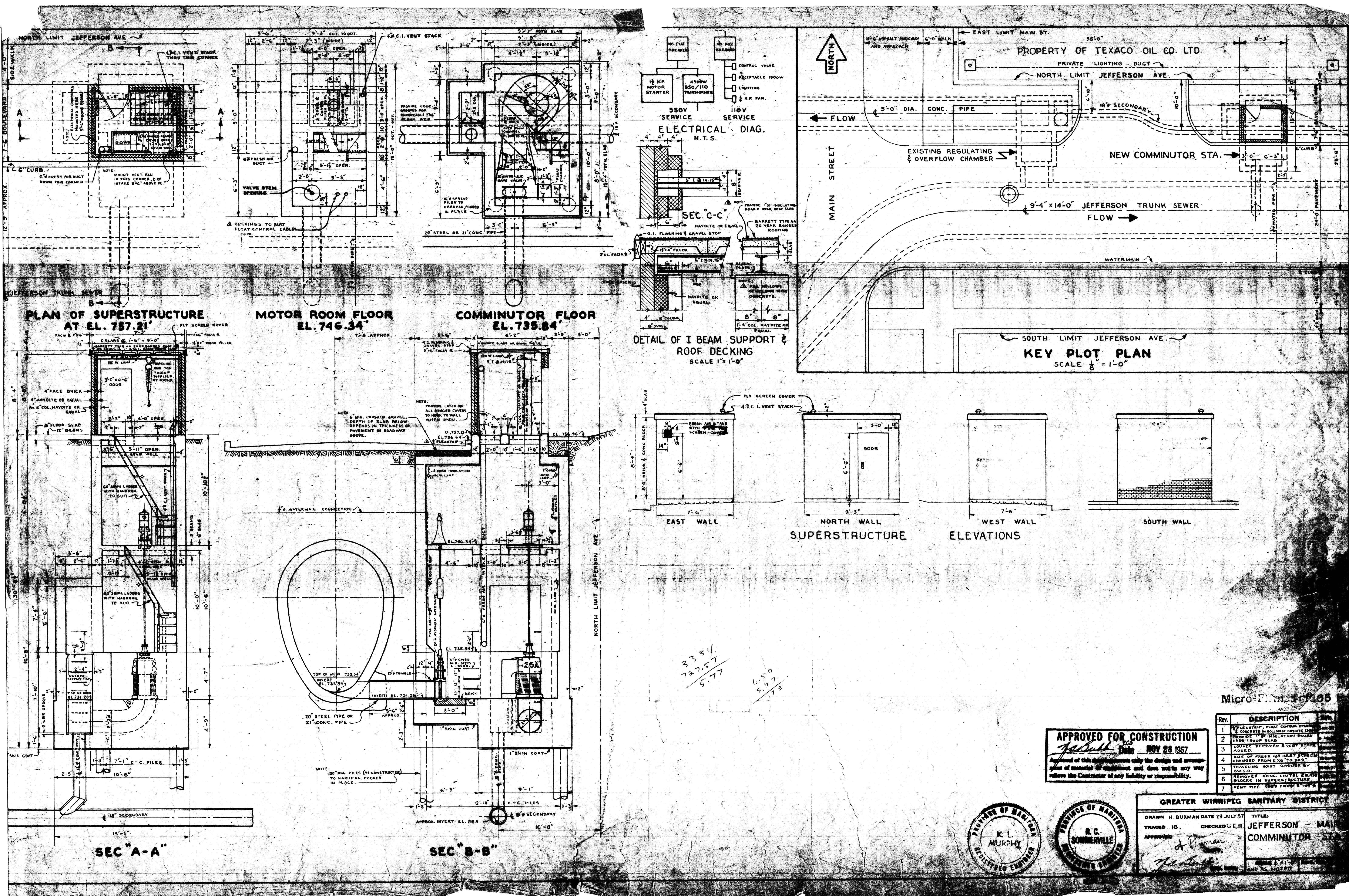
Micro-Filmed 1965

file # CS10027

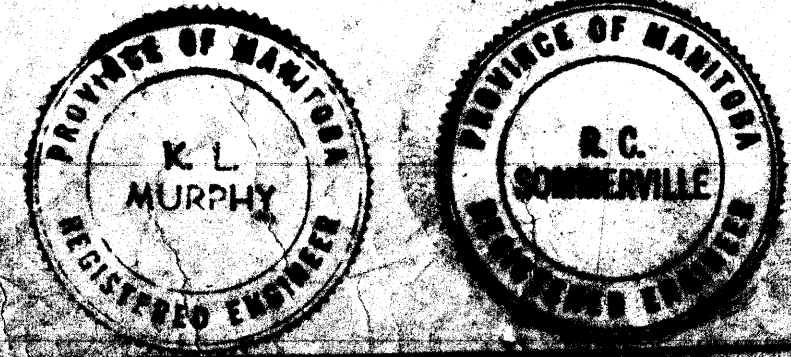
290

REF. or DRAWING No.

DETAILS



APPROVED FOR CONSTRUCTION
John J. ... Date **NOV 28 1957**
 Approval of this design is based on the design and arrangement of materials of equipment and does not in any way relieve the Contractor of any liability or responsibility.



GREATER WINNIPEG SANITARY DISTRICT

DRAWN H. BUXMAN DATE 29 JULY 57 TITLE: JEFFERSON - MAIN COMMUNICATOR ST.

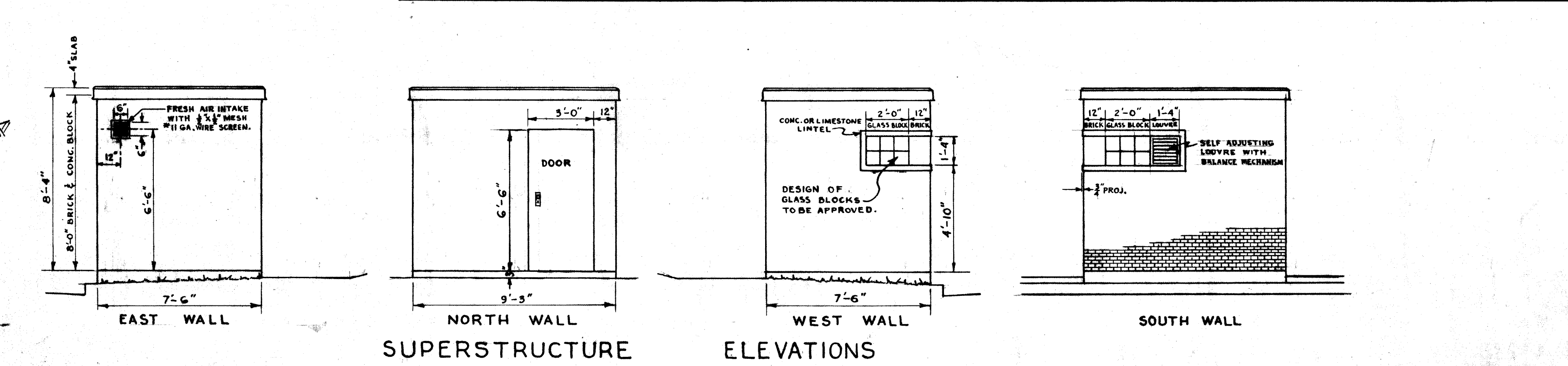
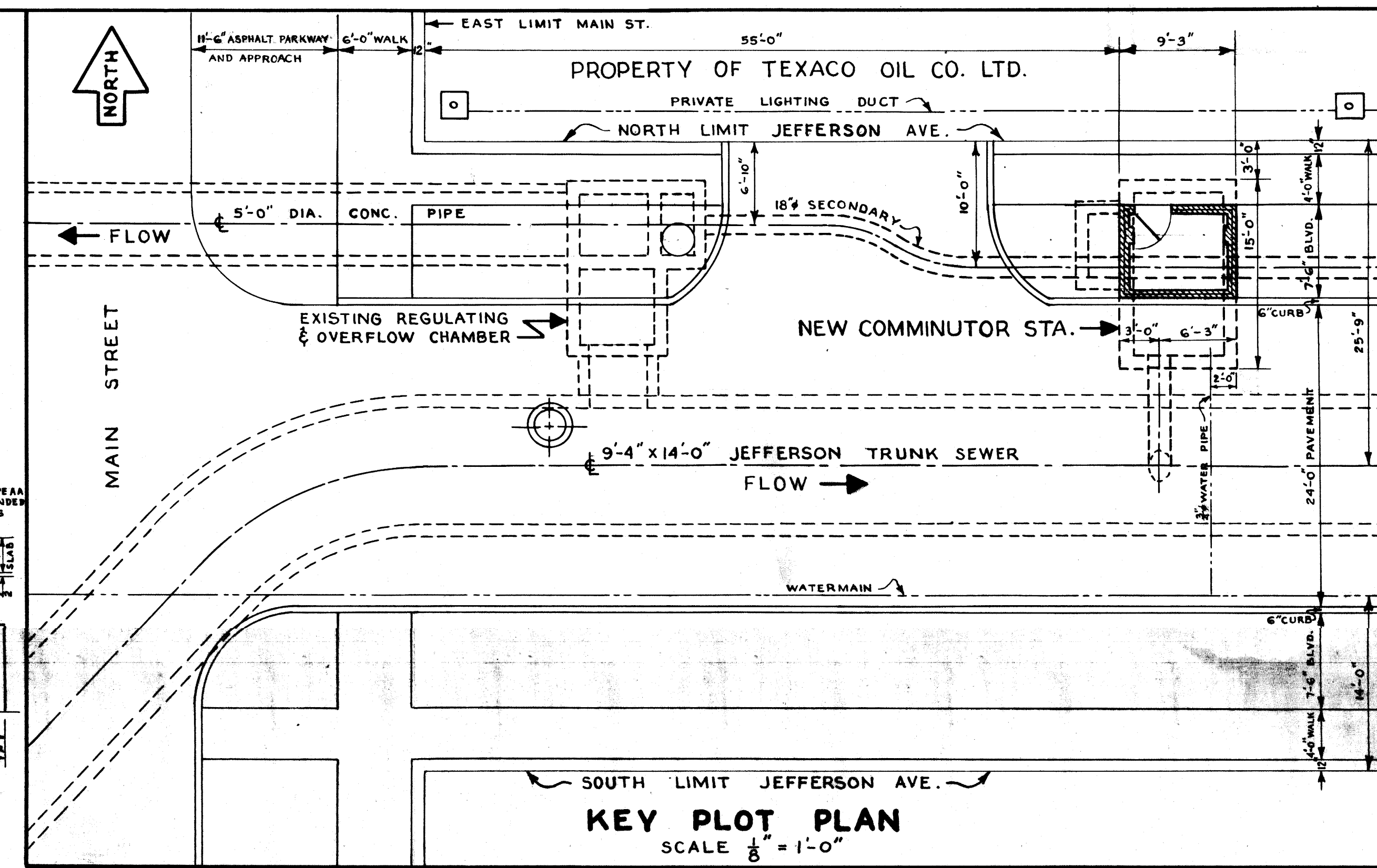
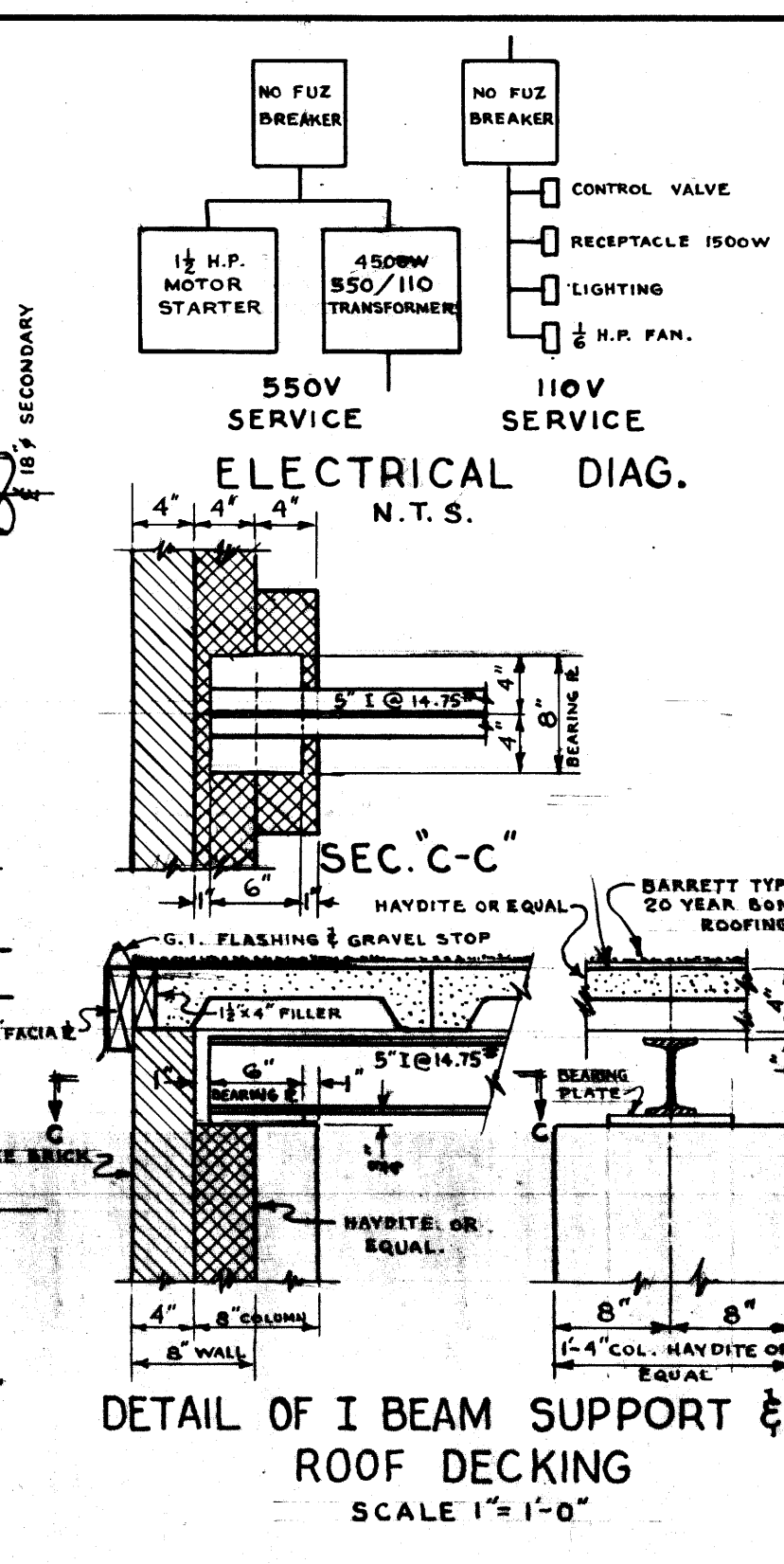
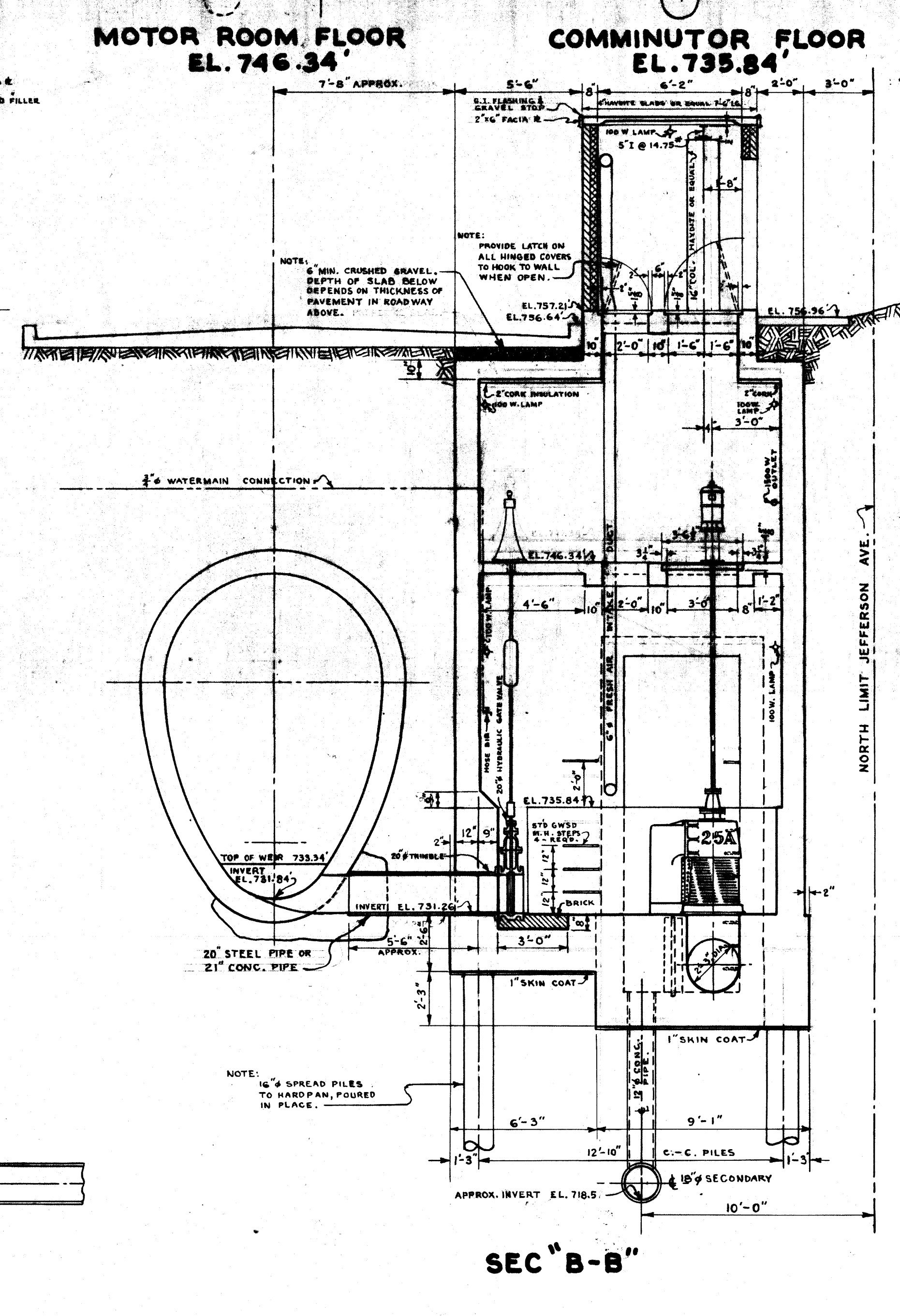
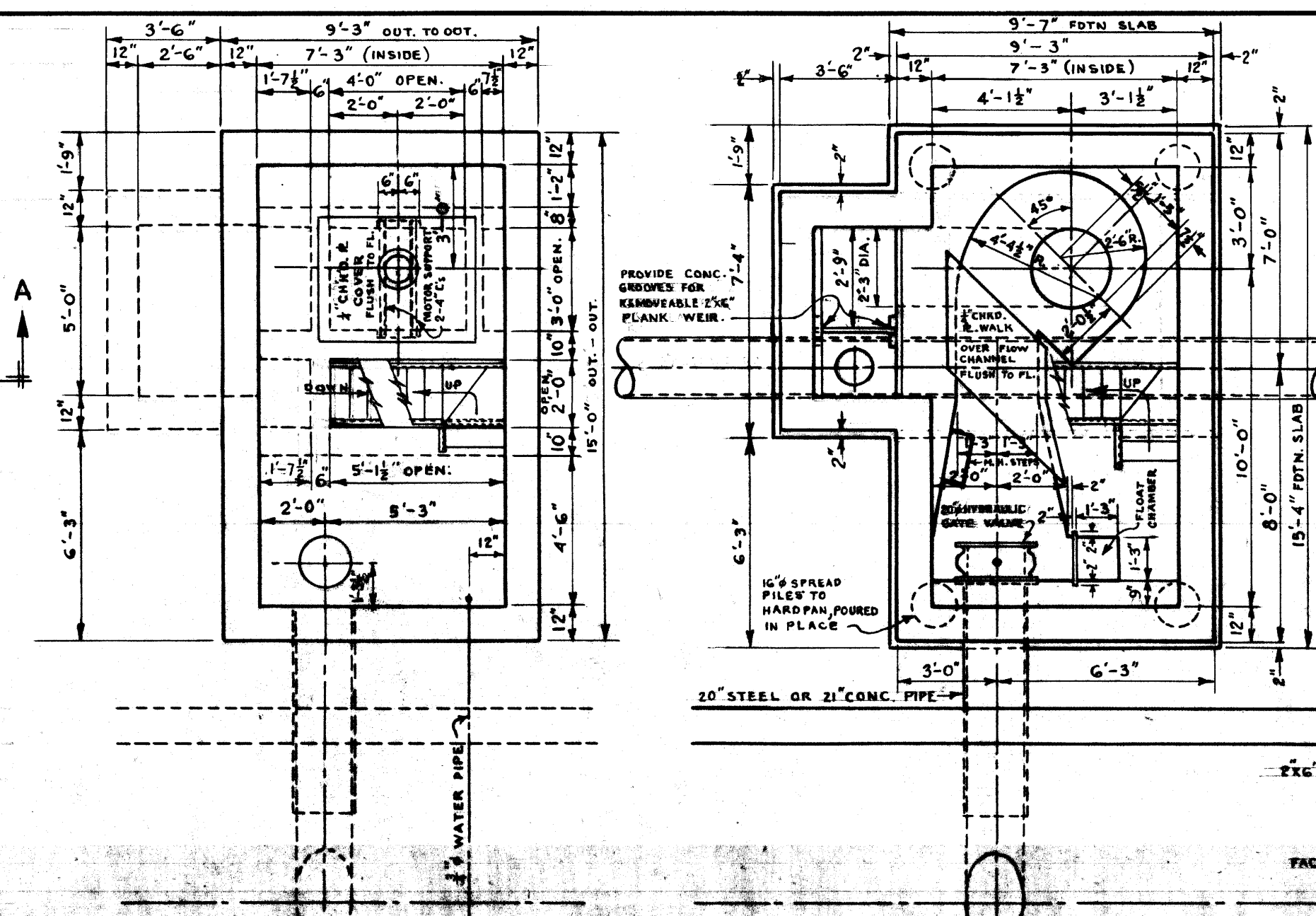
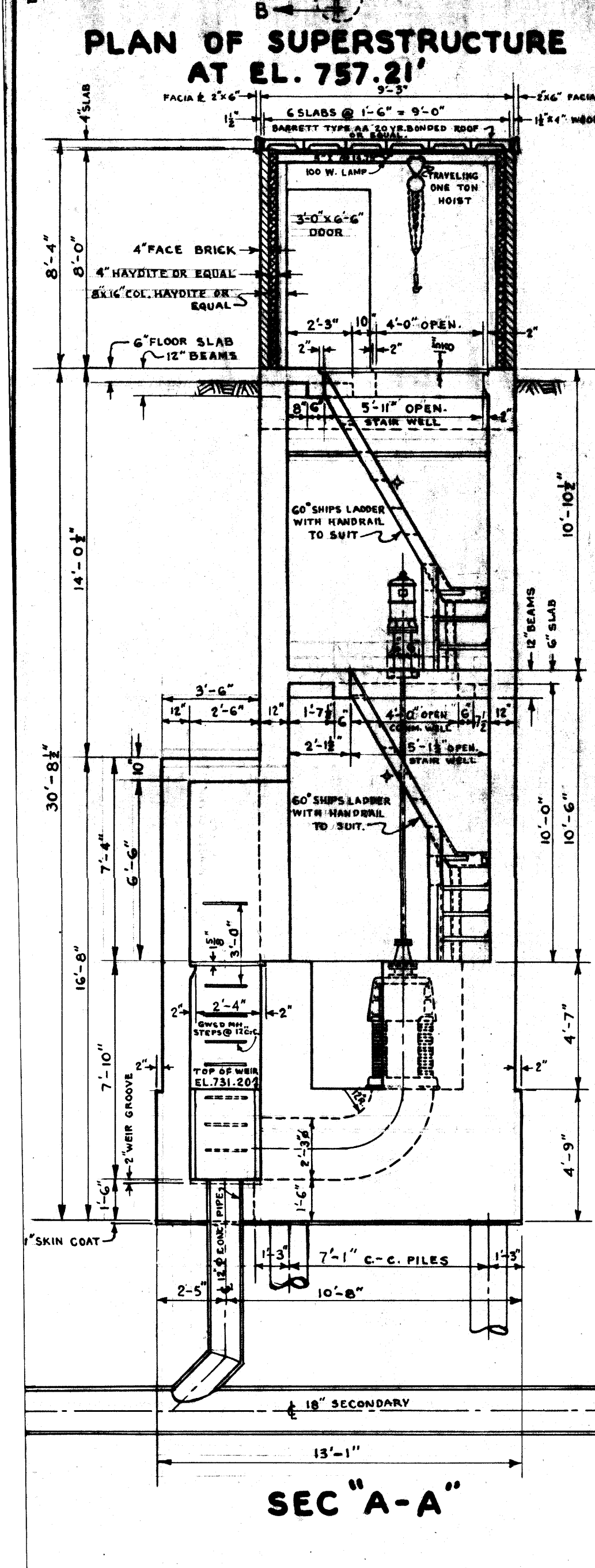
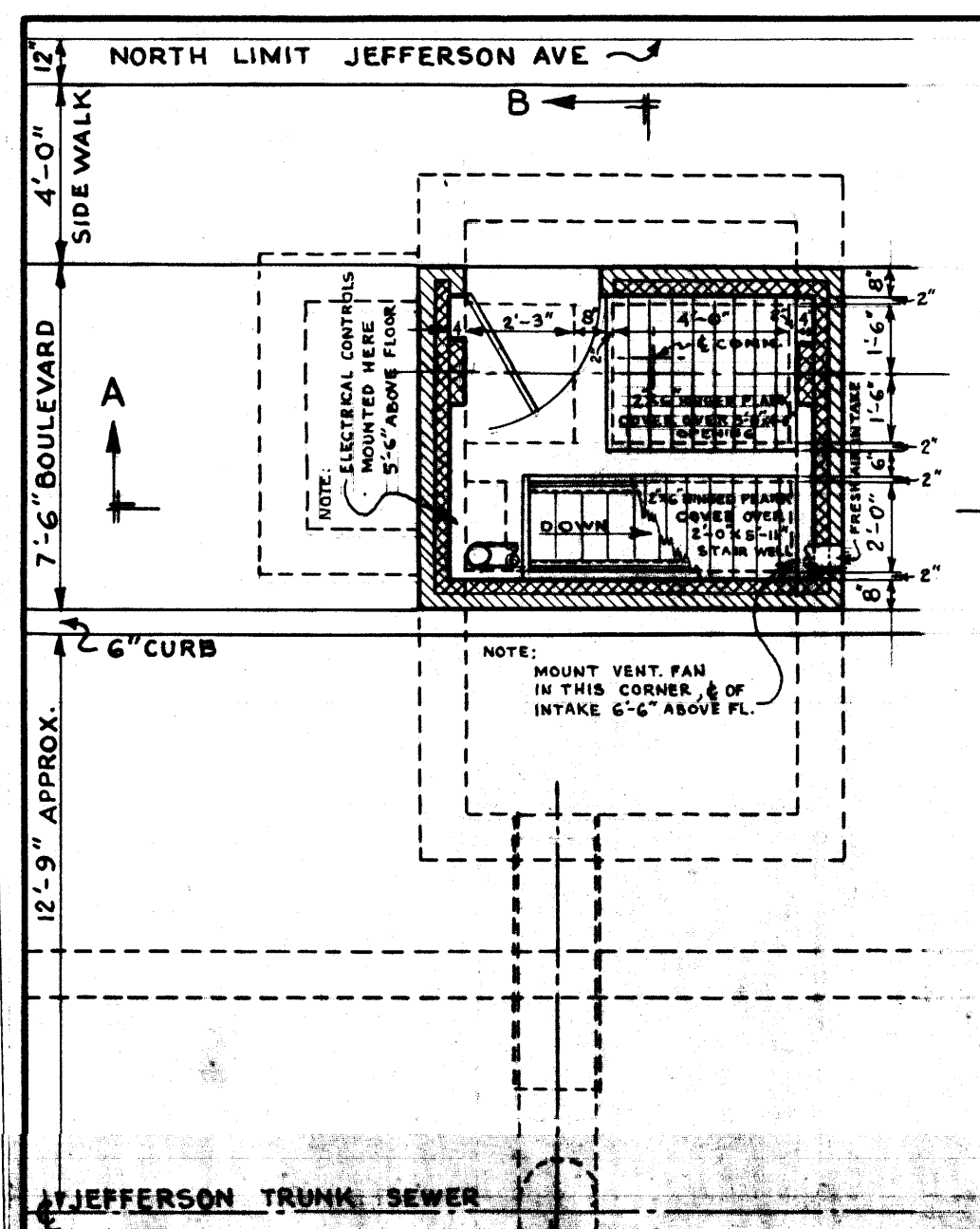
TRACED BY: CHECKED G.E.B. APPROVED: *A. ...*

Rev.	DESCRIPTION	Date
1	FLY SCREEN COVER	
2	CONCRETE IN HOLLOW OF HAYDITE CHANGED FROM C&G TO 20" BY 20" ROOF SLAB	
3	LOUVER REMOVED & VIEW STAKE ADDED	
4	SIZE OF FRESH AIR INLET CHANGED FROM C&G TO 20" BY 20"	
5	TRAVELING HOIST SUPPLIED BY Q.W.S.D.	
6	REMOVED CORE LINTEL BEAMS BLOCKS IN SUPERSTRUCTURE	
7	VENT PIPE SIZED FROM 3" TO 4"	

Handwritten notes: 2381, 22757, 5.77, 6.50, 5.77, 4.3

Micro-Film 1065

file# CS 10027
 REF. or DRAWING NO. 290
 DETAILS



Micro-Filmed 1967

PROVINCE OF MANITOBA REGISTERED ENGINEER K. L. MURPHY

PROVINCE OF MANITOBA REGISTERED ENGINEER R. G. SOMMERVILLE

WHIRREP SANITARY DISTRICT
 HODGSON BRIDGE JULY 57
 CHARGED JEFFERSON - MAIN ST
 COMMUNOTOR STA.