

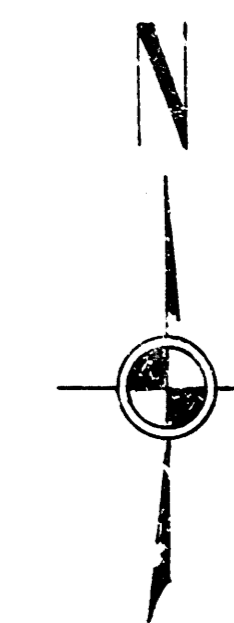
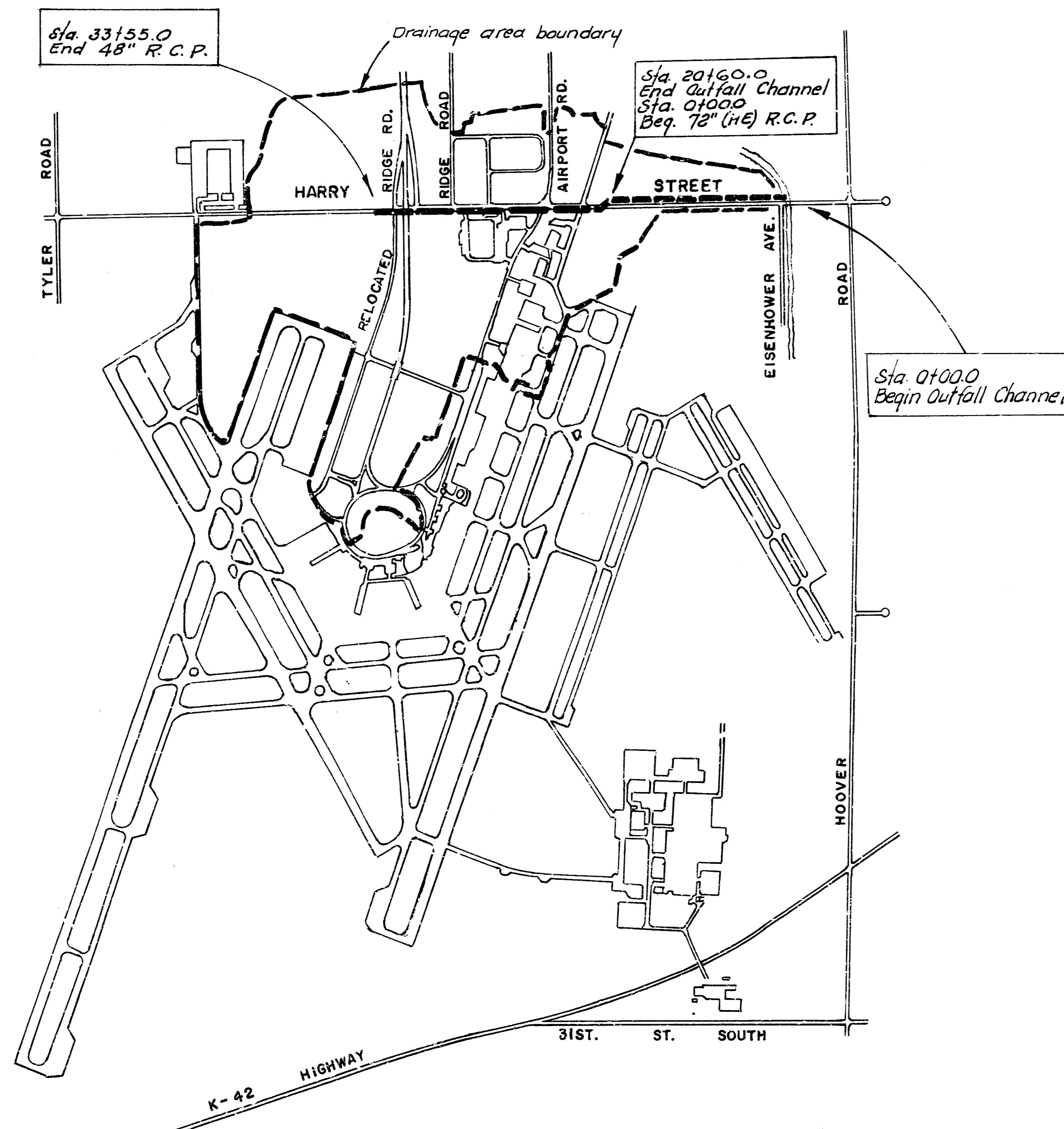
PLAN AND PROFILE FOR
STORM WATER DRAIN NO. 25
 CITY OF WICHITA, KANSAS

R. W. LINN — CITY ENGINEER

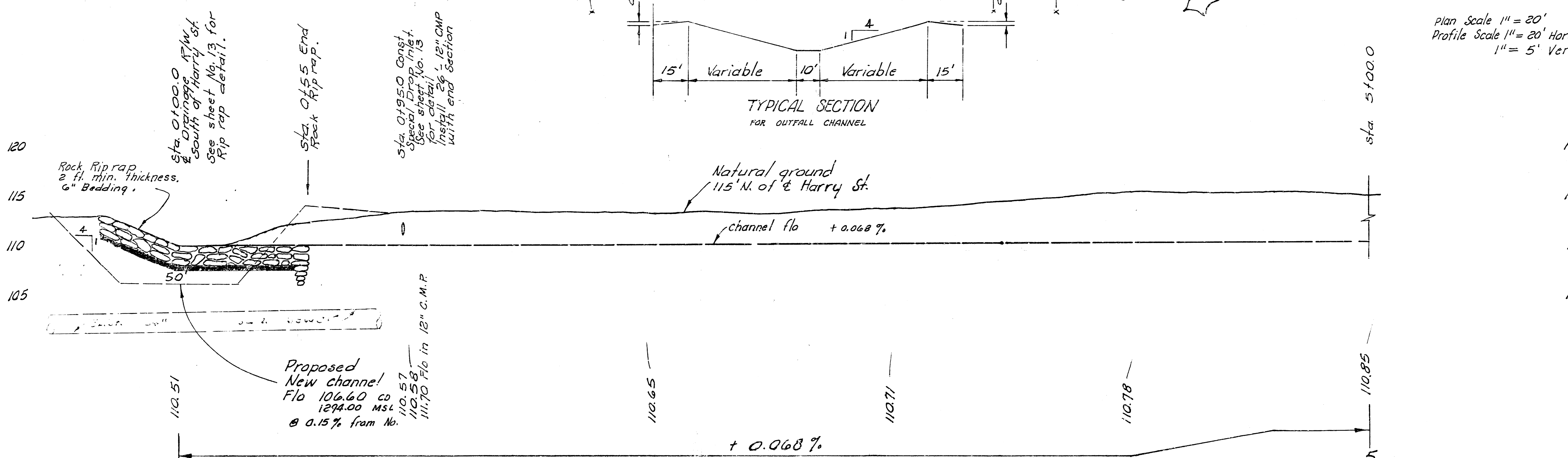
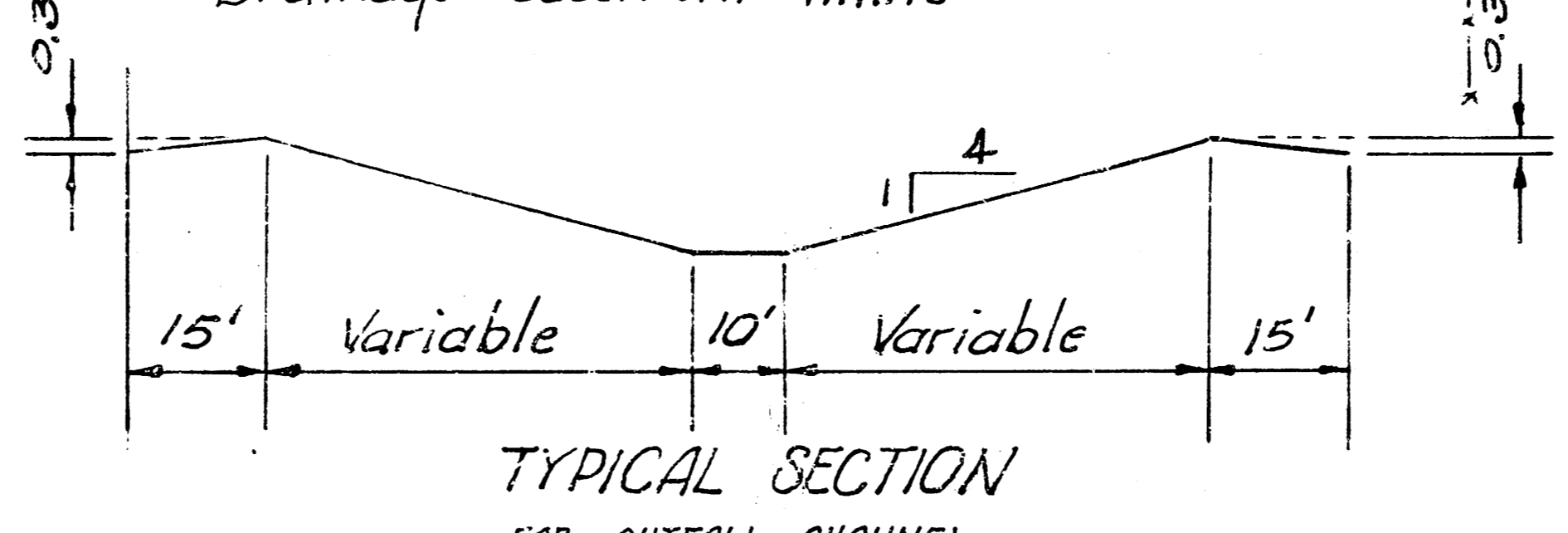
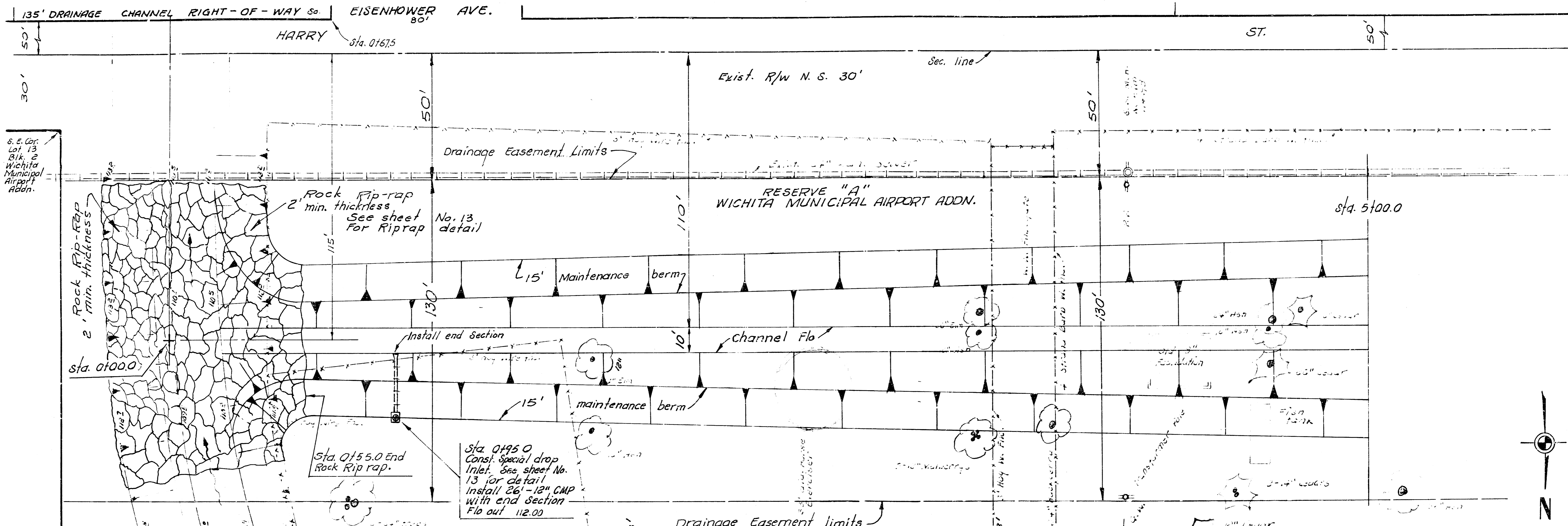
FEB. 1976, PROJECT NO. DBKD575085

INDEX

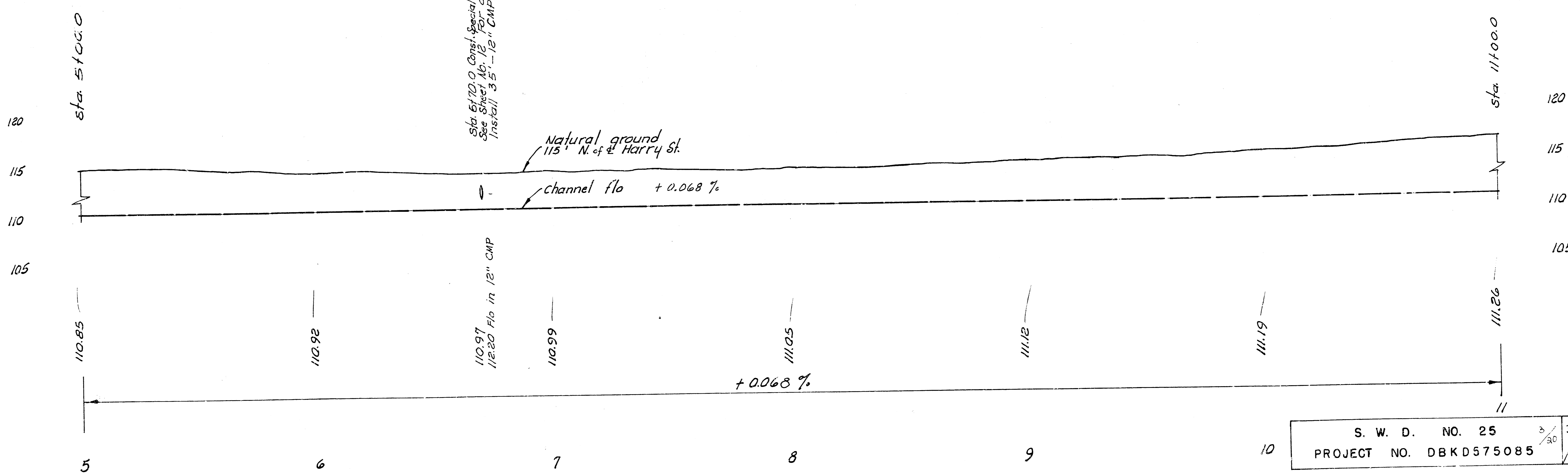
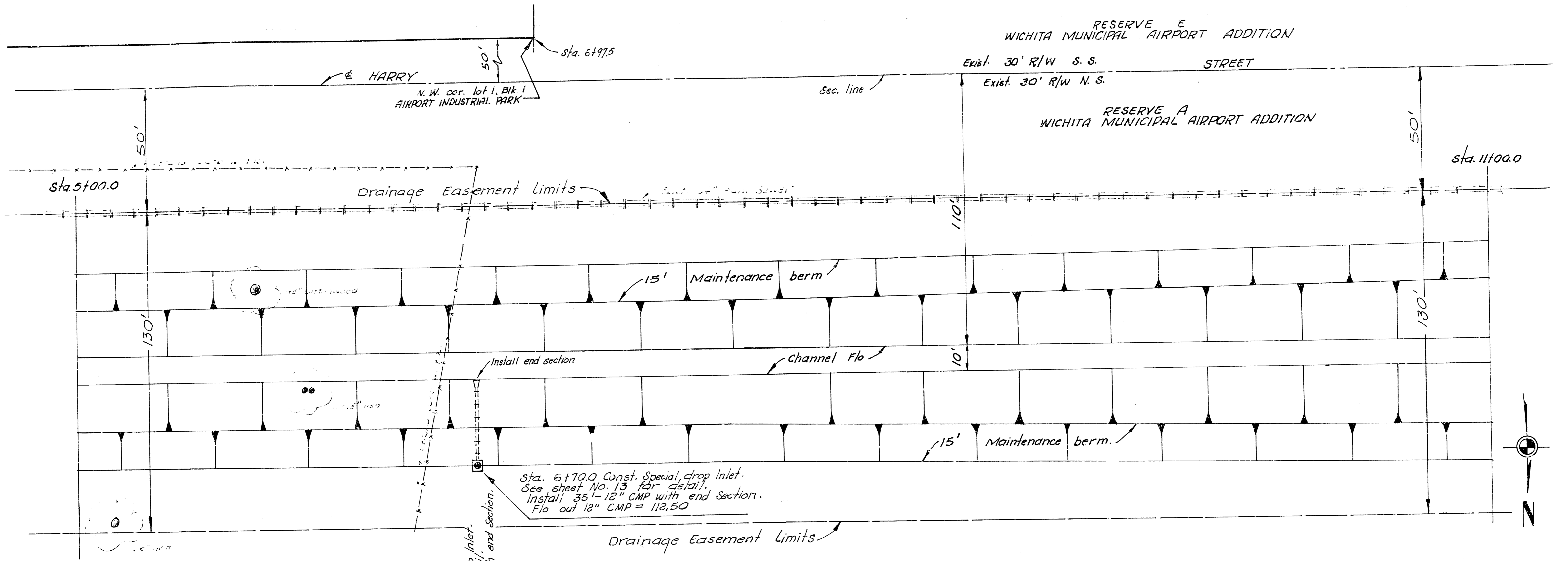
SHEET NO.	
1	TITLE, LOCATION MAP & DRAINAGE AREA BOUNDARY
2-6	OUTFALL CHANNEL PLAN & PROFILE
6-12	STORM WATER SEWER PLAN & PROFILE
13	OUTFALL STRUCTURE DETAIL
13	SPECIAL DROP INLET DETAIL
13	ROCK RIPRAP DETAIL
14-16	REINF. CONC. MANHOLE DETAIL
17	STD. CURB INLET DETAIL
18-19	OUTFALL CHANNEL X-SECTIONS
20	SAN. SEWER SIPHONS



SCALE 1" = 1100'



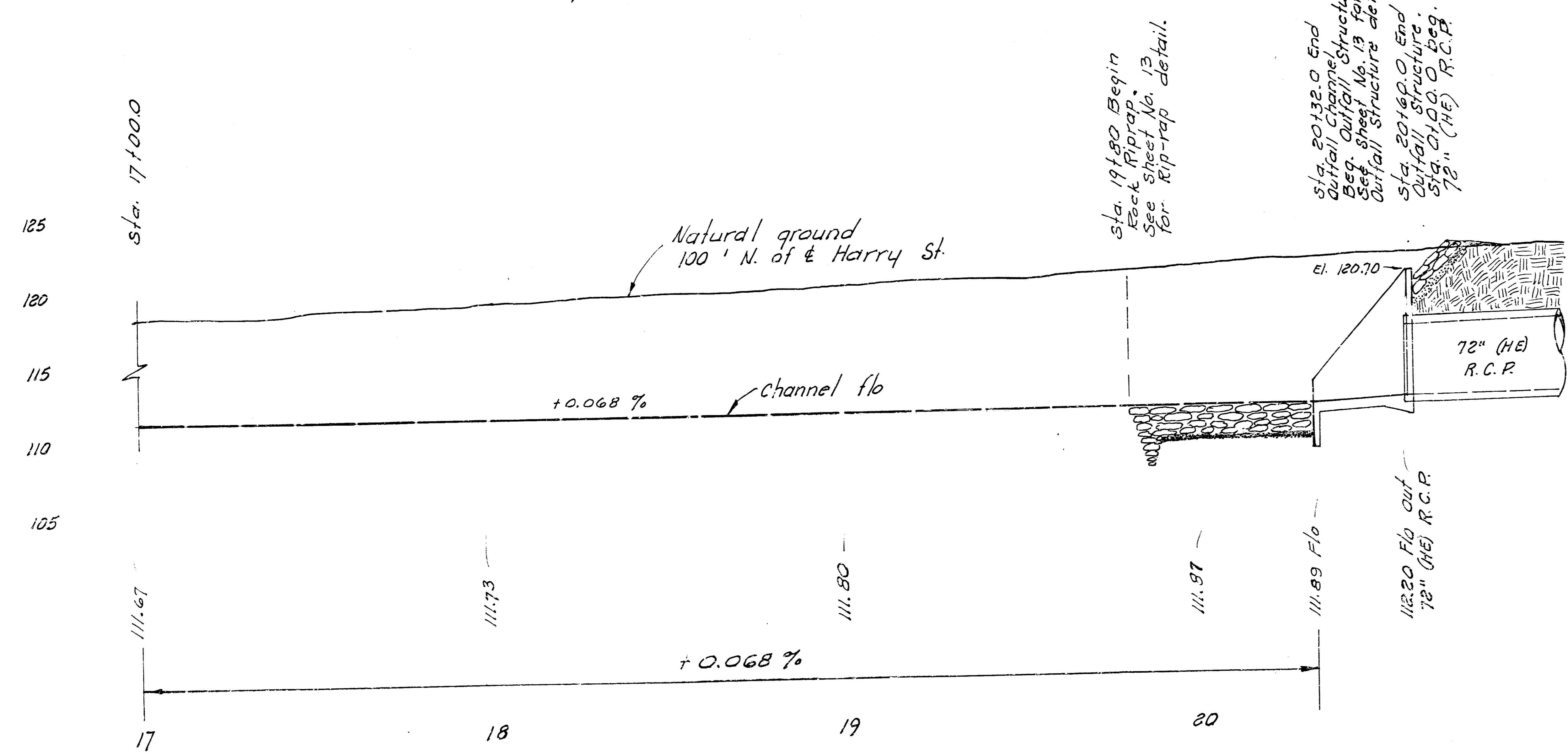
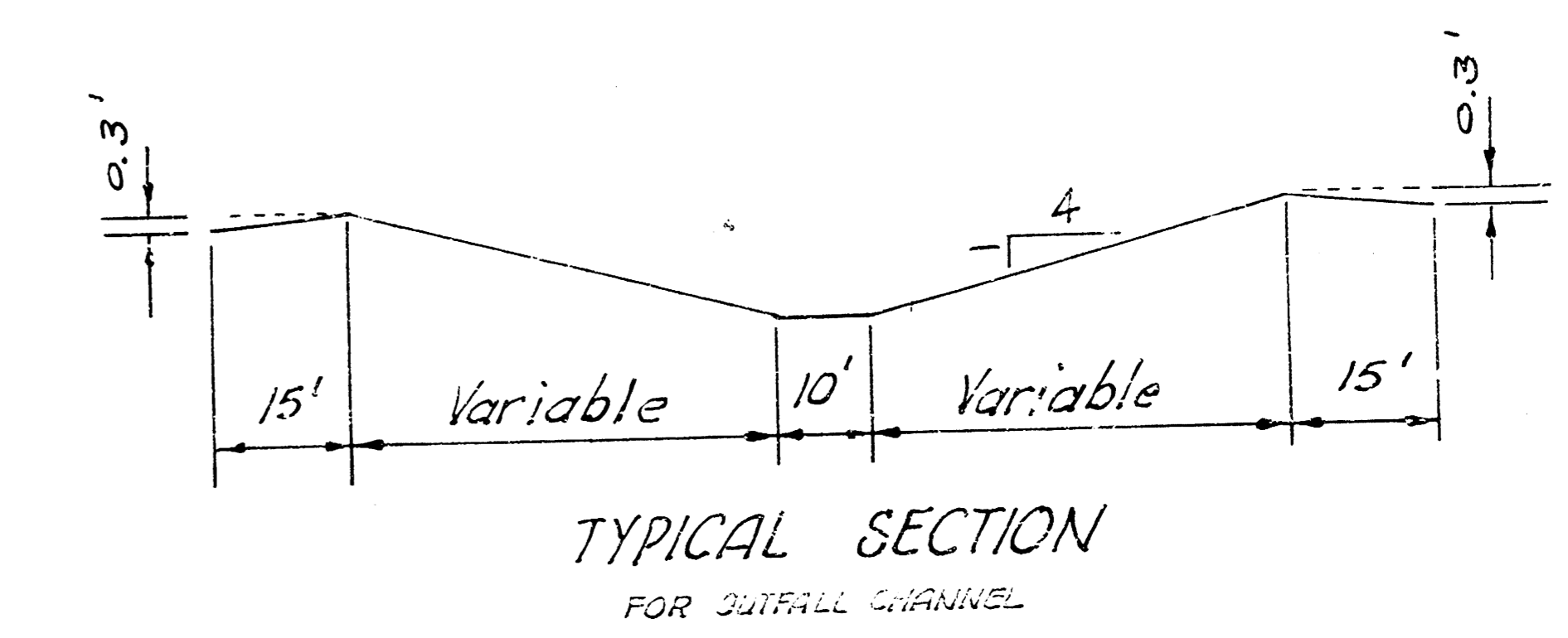
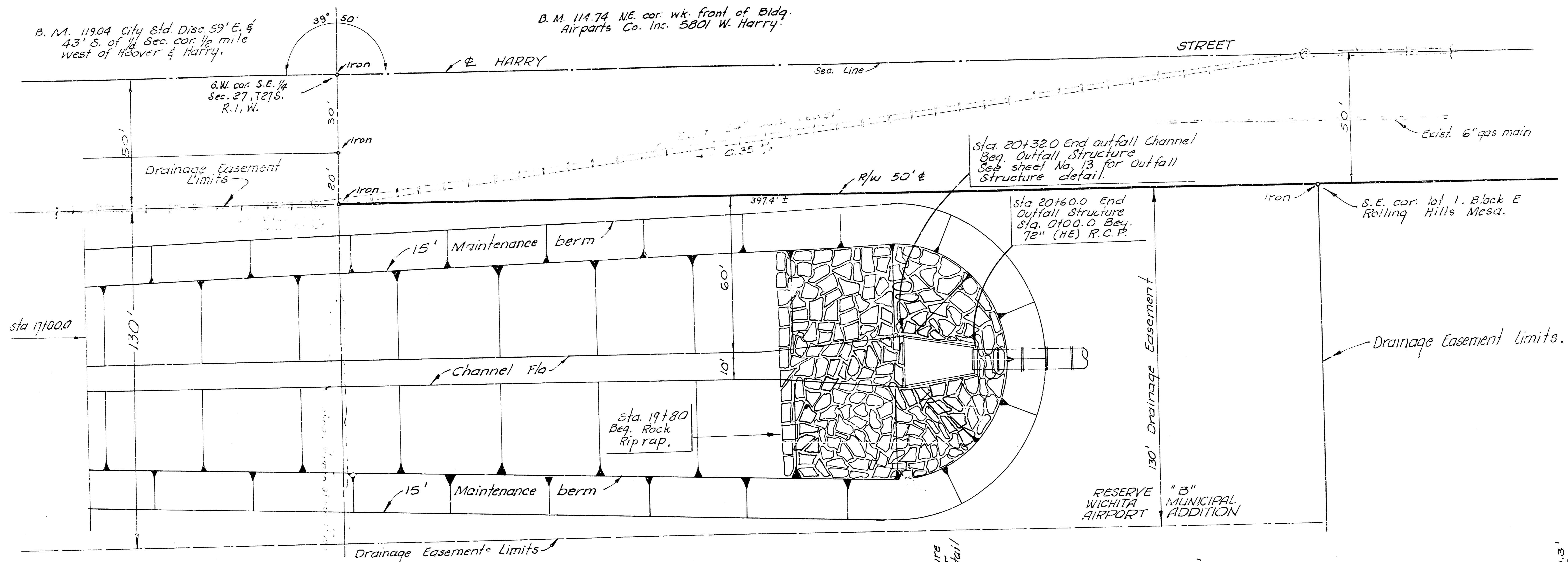
Plan Scale 1" = 20'
 Profile Scale 1" = 20' Horiz.
 1" = 5' Vert.



Sta. 6+70.0 Const. Special drop Inlet.
 See sheet No. 13 for detail.
 Install 35'-12" CMP with end section.
 Flo out 12" CMP = 112.50

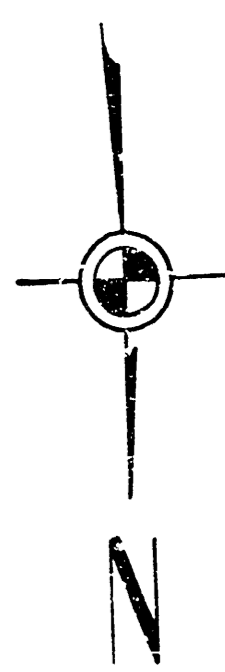
Sta. 6+70.0 Const. Special drop Inlet.
 See sheet No. 12 for detail.
 Install 35'-12" CMP with end section.

S. W. D. NO. 25	3/30	3
PROJECT NO. DBKD575085		20



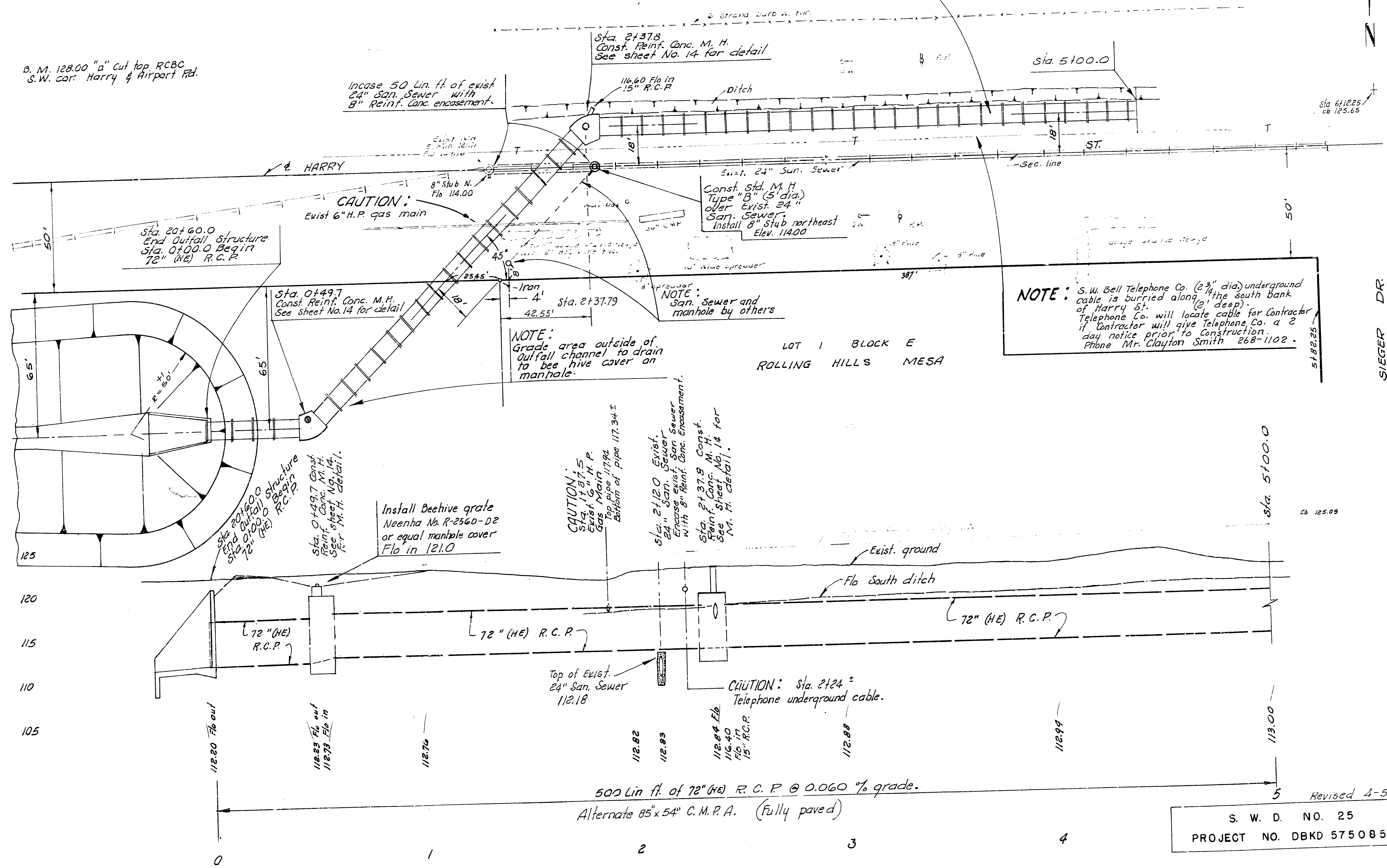
S. W. D. NO. 25	5
PROJECT NO. DBKD 575085	20

Plan Scale 1"=20'
 Profile Scale 1"=20' Horiz.
 1"=5' Vert.



NOTE:
 Grade ditch on south side of
 Harry St. to drain to bee hive
 cover on manholes.

B. M. 128.00 "B" Cut top RCBC
 S.W. cor. Harry & Airport Rd.



Sta. 20+60.0
 End Outfall Structure
 Sta. 0+00.0 Begin
 72" (HE) R.C.P.

Sta. 0+49.7
 Const. Reinf. Conc. M.H.
 See sheet No. 14 for detail

NOTE:
 Grade area outside of
 Outfall channel to drain
 to bee hive cover on
 manhole.

Install Beehive grate
 Neenah No. R-2560-D2
 or equal manhole cover
 Flo in 121.0

CAUTION:
 Sta. 2+12.0
 24" San. Sewer
 Gas Main
 Bottom of pipe 117.34 ±

Sta. 2+12.0
 24" San. Sewer
 Encase exist. San. Sewer
 with 8" Reinf. Conc. Encasement.

Sta. 2+37.9
 Const.
 Reinf. Conc. M.H.
 See sheet No. 14 for
 M.H. detail.

CAUTION: Sta. 2+24 ±
 Telephone underground cable.

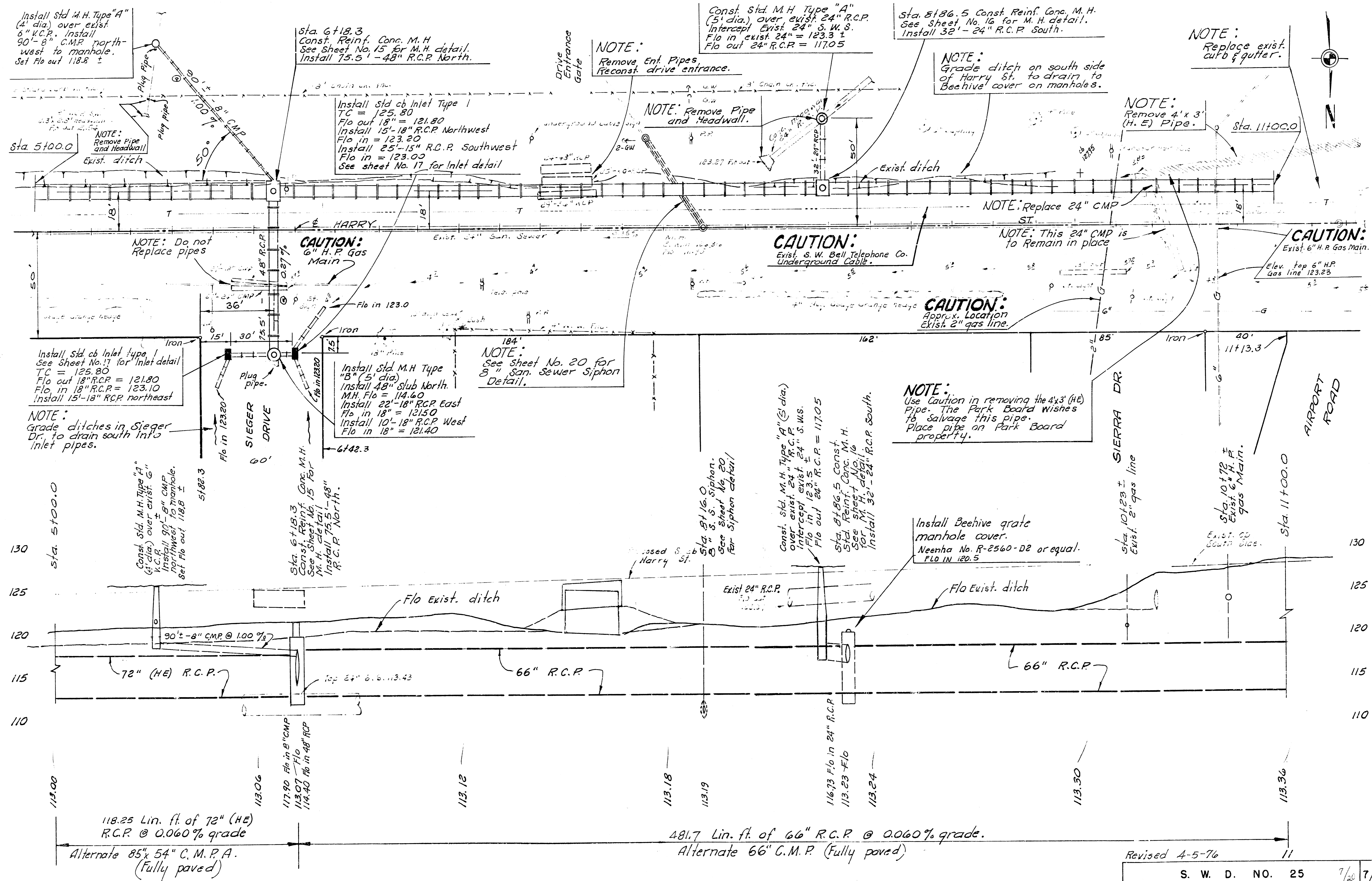
500 Lin. ft. of 72" (HE) R.C.P. @ 0.060 % grade.
 Alternate 85" x 54" C.M.P.A. (Fully paved)

NOTE: S.W. Bell Telephone Co. (2 3/4" dia) underground
 cable is buried along the south bank
 of Harry St. (2' deep).
 Telephone Co. will locate cable for Contractor
 if Contractor will give Telephone Co. a 2
 day notice prior to construction.
 Phone Mr. Clayton Smith 268-1102.

S. W. D. NO. 25		6/20
PROJECT NO. DBKD 575085		20

Revised 4-5-76

SIEGER DR.



Install Std. M.H. Type "A" (4' dia.) over exist. 6" V.C.P. Install 90'-8" C.M.P. northwest to manhole. Set Flo out 118.8 ±

Sta. 6+18.3 Const. Reinf. Conc. M.H. See Sheet No. 15 for M.H. detail. Install 75.5' - 48" R.C.P. North.

NOTE: Remove Ent. Pipes, Reconst. drive entrance.

Const. Std. M.H. Type "A" (5' dia.) over exist. 24" R.C.P. Intercept Exist. 24" S.W.S. Flo in exist. 24" = 123.3 ± Flo out 24" R.C.P. = 117.05

Sta. 8+86.5 Const. Reinf. Conc. M.H. See Sheet No. 16 for M.H. detail. Install 32'-24" R.C.P. South.

NOTE: Grade ditch on south side of Harry St. to drain to Beehive cover on manholes.

NOTE: Replace exist. curb & gutter.

Sta. 5+00.0 NOTE: Remove Pipe and Headwall Exist. ditch

Install Std. Inlet Type 1 TC = 125.80 Flo out 18" = 121.80 Install 15'-18" R.C.P. Northwest Flo in = 123.20 Install 25'-15" R.C.P. Southwest Flo in = 123.00 See sheet No. 17 for Inlet detail

NOTE: Remove Pipe and Headwall.

NOTE: Remove 4' x 3' (H.E.) Pipe.

NOTE: Do not Replace pipes

CAUTION: 6" H.R. Gas Main

CAUTION: Exist. S.W. Bell Telephone Co. Underground Cable.

NOTE: Replace 24" CMP ST.

NOTE: This 24" CMP is to Remain in place

CAUTION: Exist. 6" H.R. Gas Main. Elev. top 6" H.P. Gas line 123.23

CAUTION: Approx. Location Exist. 2" gas line.

Install Std. Inlet Type 1 See Sheet No. 17 for Inlet detail TC = 125.80 Flo out 18" R.C.P. = 121.80 Flo in 18" R.C.P. = 123.10 Install 15'-18" R.C.P. northeast

NOTE: Grade ditches in Sieger Dr. to drain south into Inlet pipes.

Install Std. M.H. Type "B" (5' dia.) Install 48" Slab North. M.H. Flo = 114.60 Install 22'-18" R.C.P. East Flo in 18" = 121.50 Install 10'-18" R.C.P. West Flo in 18" = 121.40

NOTE: See Sheet No. 20 for 8" San. Sewer Siphon Detail.

Const. Std. M.H. Type "A" (5' dia.) over exist. 24" R.C.P. Intercept exist. 24" S.W.S. Flo in 24" = 117.05 Flo out 24" R.C.P. = 117.05

Sta. 8+86.5 Const. Reinf. Conc. M.H. See Sheet No. 16 for M.H. detail. Install 32'-24" R.C.P. South.

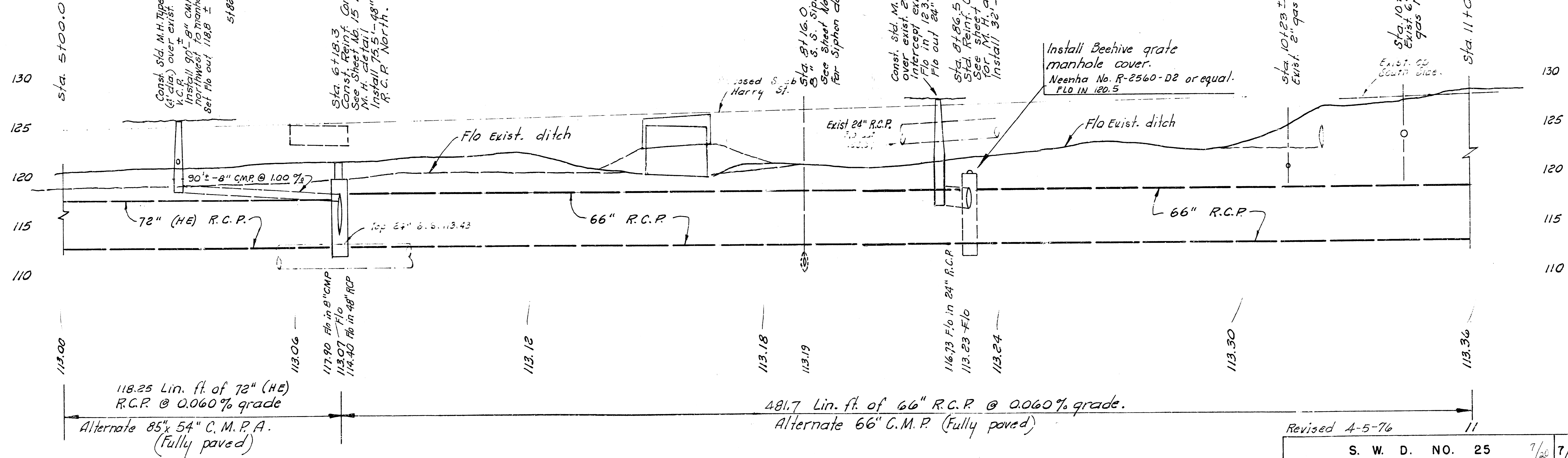
NOTE: Use Caution in removing the 4' x 3' (HE) Pipe. The Park Board wishes to salvage this pipe. Place pipe on Park Board property.

Install Beehive grate manhole cover. Neenah No. R-2560-D2 or equal. Flo in 120.5

Sta. 10+23.1 Exist. 2" gas line

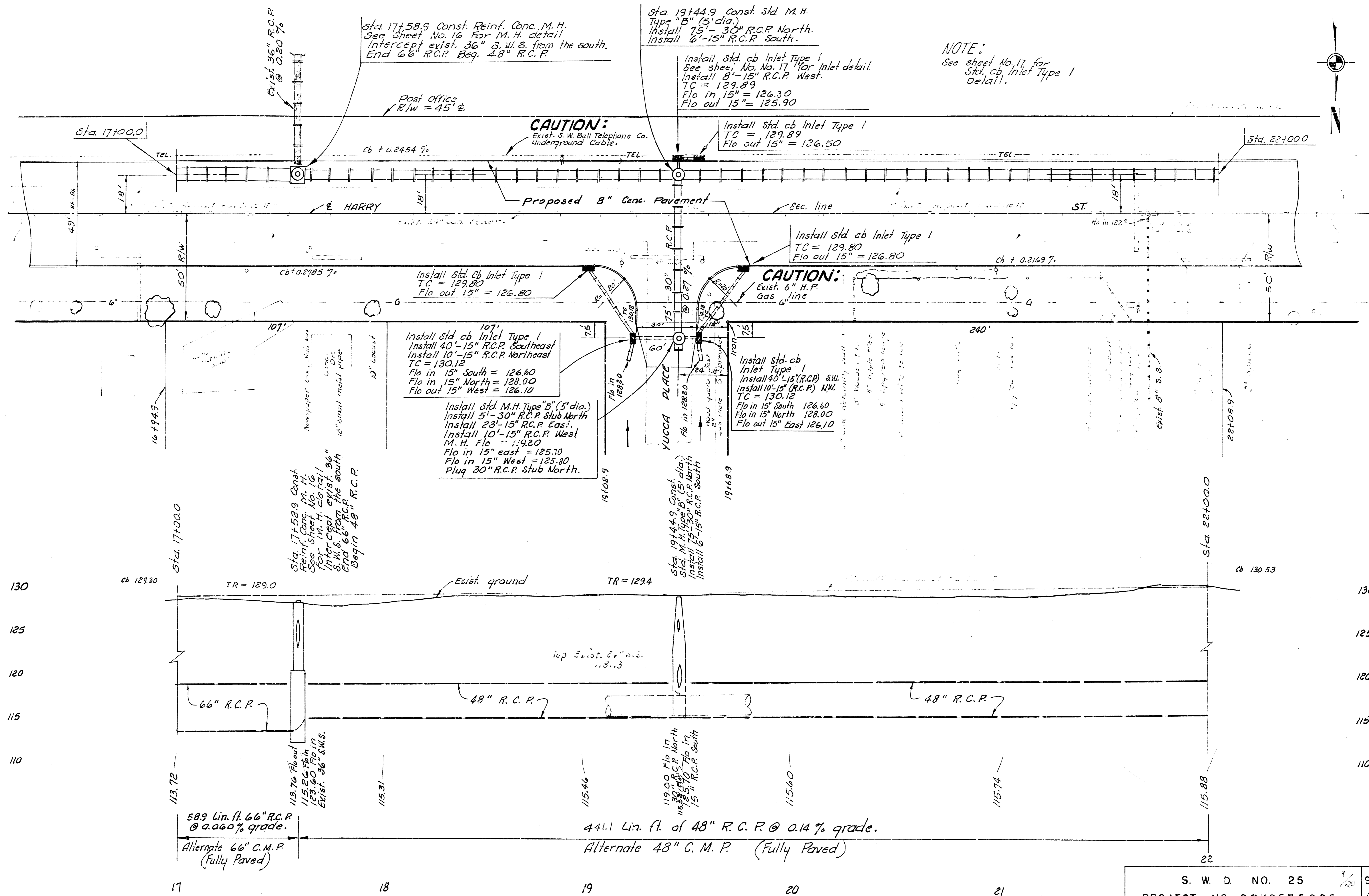
Sta. 10+17.0 Exist. 6" H.P. Gas Main.

Sta. 11+00.0



118.25 Lin. ft. of 72" (HE) R.C.P. @ 0.060% grade
Alternate 85" x 54" C.M.P.A. (Fully paved)

481.7 Lin. ft. of 66" R.C.P. @ 0.060% grade.
Alternate 66" C.M.P. (Fully paved)



Sta. 17+58.9 Const. Reinf. Conc. M.H.
See Sheet No. 16 for M.H. detail
Intercept exist. 36" S.W.S. from the south.
End 66" R.C.P. Beg. 48" R.C.P.

Sta. 19+44.9 Const. Std. M.H.
Type "B" (5' dia.)
Install 75'-30" R.C.P. North.
Install 6'-15" R.C.P. South.

NOTE:
See sheet No. 17 for
Std. cb Inlet Type 1
Detail.

CAUTION:
Exist. S.W. Bell Telephone Co.
Underground Cable.

Install Std. cb Inlet Type 1
TC = 129.89
Flo in 15" = 126.30
Flo out 15" = 125.90

Install Std. cb Inlet Type 1
TC = 129.80
Flo out 15" = 126.50

CAUTION:
Exist. 6" H.P.
Gas line

Install Std. cb Inlet Type 1
TC = 129.80
Flo out 15" = 126.80

Install Std. cb Inlet Type 1
Install 40'-15" R.C.P. Southeast
Install 10'-15" R.C.P. Northeast
TC = 130.12
Flo in 15" South = 126.60
Flo in 15" North = 128.00
Flo out 15" West = 126.10

Install Std. M.H. Type "B" (5' dia.)
Install 5'-30" R.C.P. Stub North
Install 23'-15" R.C.P. East.
Install 10'-15" R.C.P. West
M.H. Flo = 119.20
Flo in 15" east = 125.30
Flo in 15" West = 125.80
Plug 30" R.C.P. Stub North.

Install Std. cb Inlet Type 1
Install 40'-15" R.C.P. S.W.
Install 10'-15" R.C.P. N.W.
TC = 130.12
Flo in 15" South 126.60
Flo in 15" North 128.00
Flo out 15" East 126.10

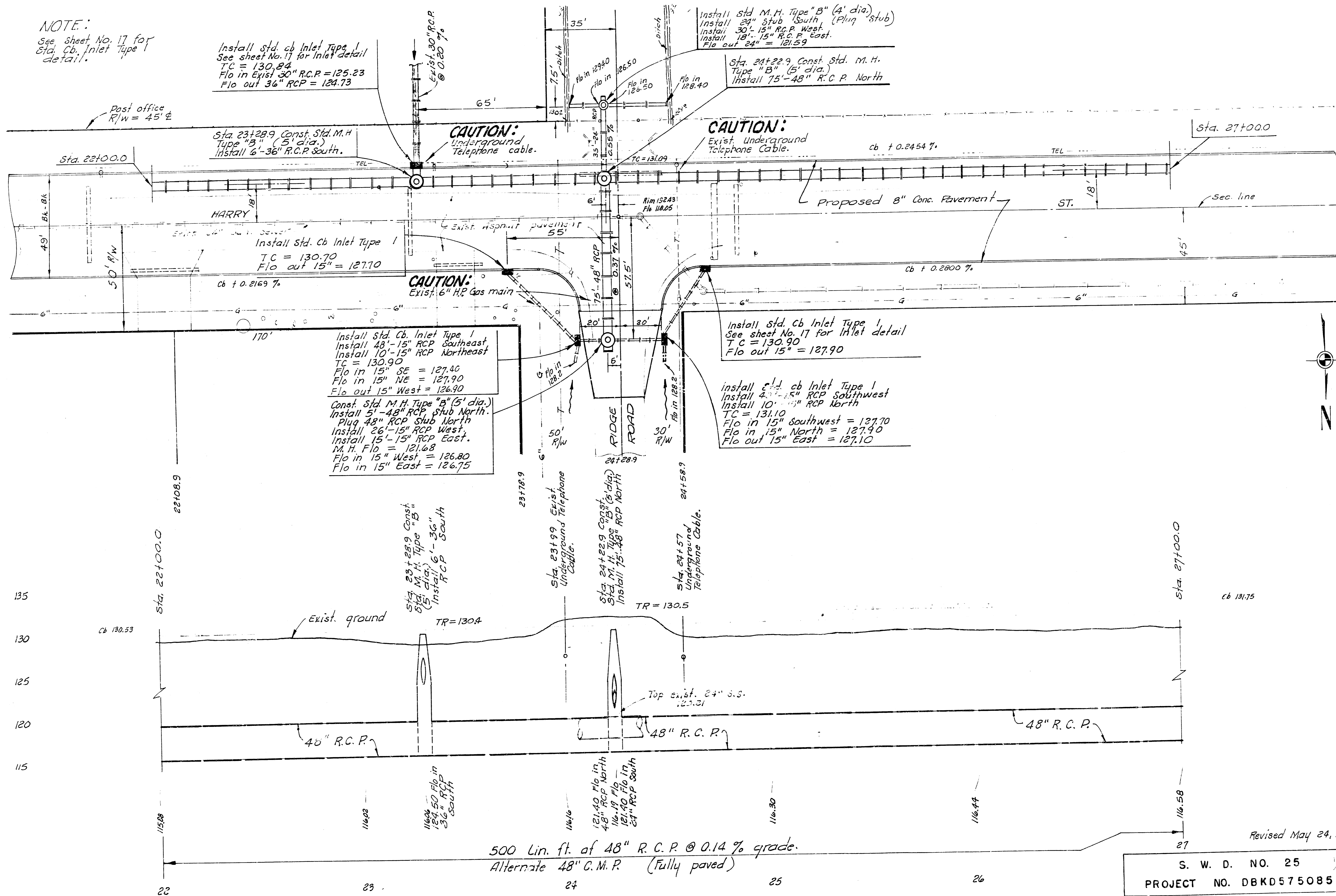
Sta. 17+58.9 Const. Reinf. Conc. M.H.
See Sheet No. 16 for M.H. detail
Intercept exist. 36" S.W.S. from the south
End 66" R.C.P. Begin 48" R.C.P.

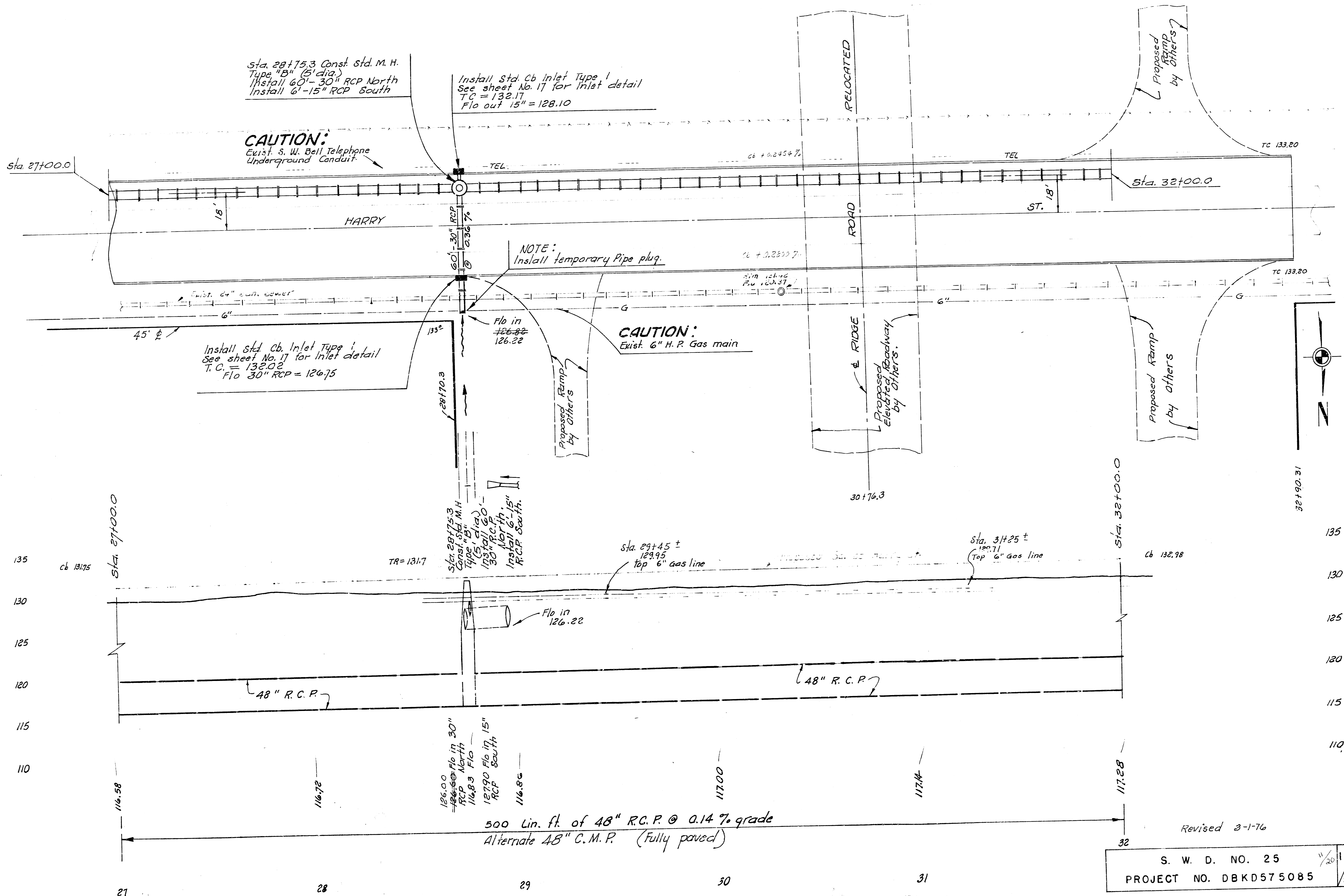
Sta. 19+44.9 Const. M.H. Type "B" (5' dia.)
Install 75'-30" R.C.P. North
Install 6'-15" R.C.P. South

589 Lin. ft. 66" R.C.P.
@ 0.060% grade.
Alternate 66" C.M.P.
(Fully Paved)

441.1 Lin. ft. of 48" R.C.P. @ 0.14% grade.
Alternate 48" C.M.P. (Fully Paved)

NOTE:
See sheet No. 17 for
Sta. Cb. Inlet Type 1
detail.





Sta. 28+75.3 Const. Std. M. H. Type "B" (5' dia.)
 Install 60" - 30" RCP North
 Install 6" - 15" RCP South

Install Std. Cb Inlet Type 1
 See sheet No. 17 for Inlet detail
 T.C. = 132.17
 Flo out 15" = 128.10

CAUTION:
 Exist. S. W. Bell Telephone Underground Conduit.

NOTE:
 Install temporary Pipe plug.

Install Std. Cb. Inlet Type 1
 See sheet No. 17 for Inlet detail
 T. C. = 132.02
 Flo 30" RCP = 126.75

CAUTION:
 Exist. 6" H. P. Gas main

Sta. 28+75.3 Const. Std. M. H. Type "B" (5' dia.)
 Install 60" - 30" RCP North
 Install 6" - 15" RCP South

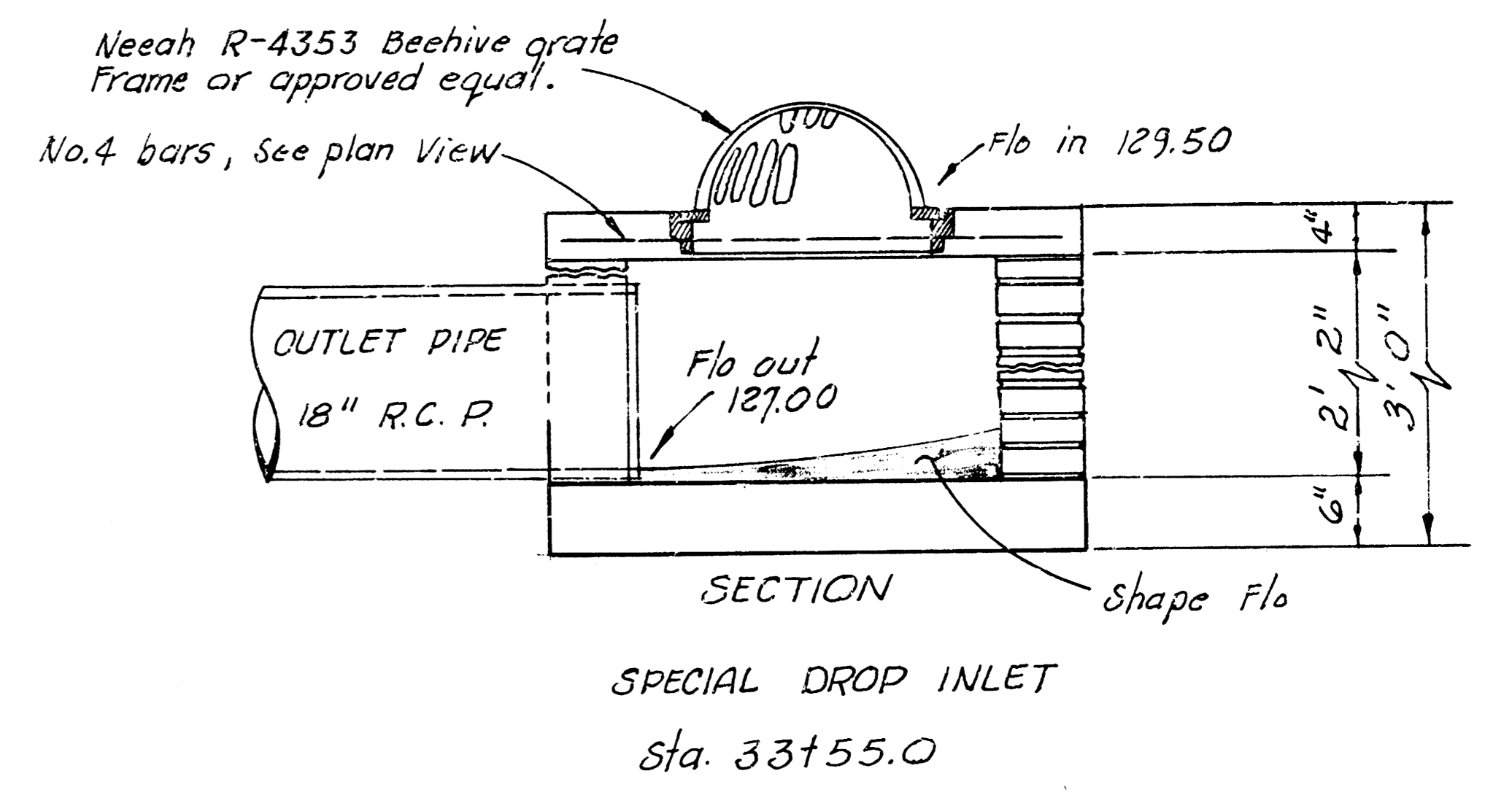
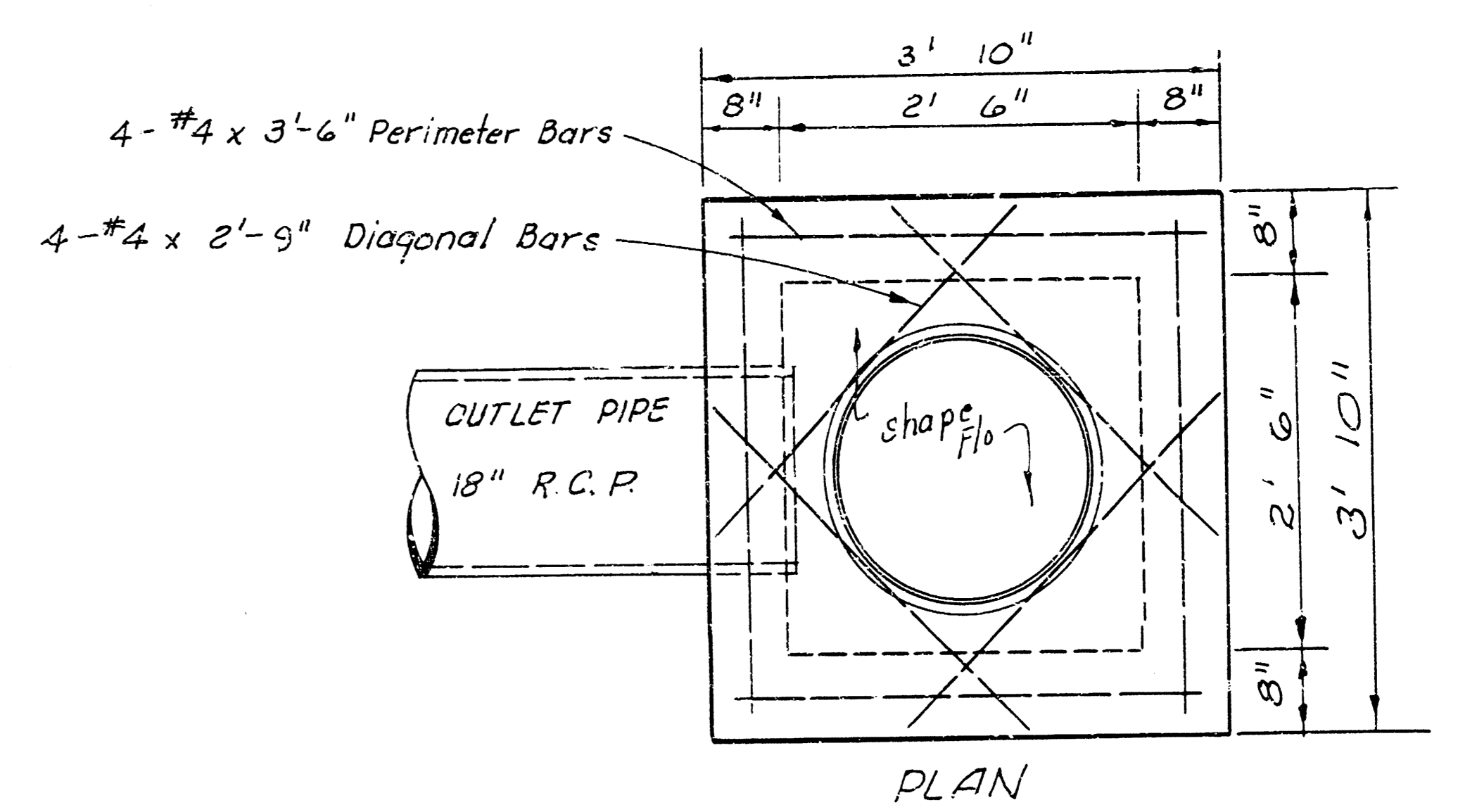
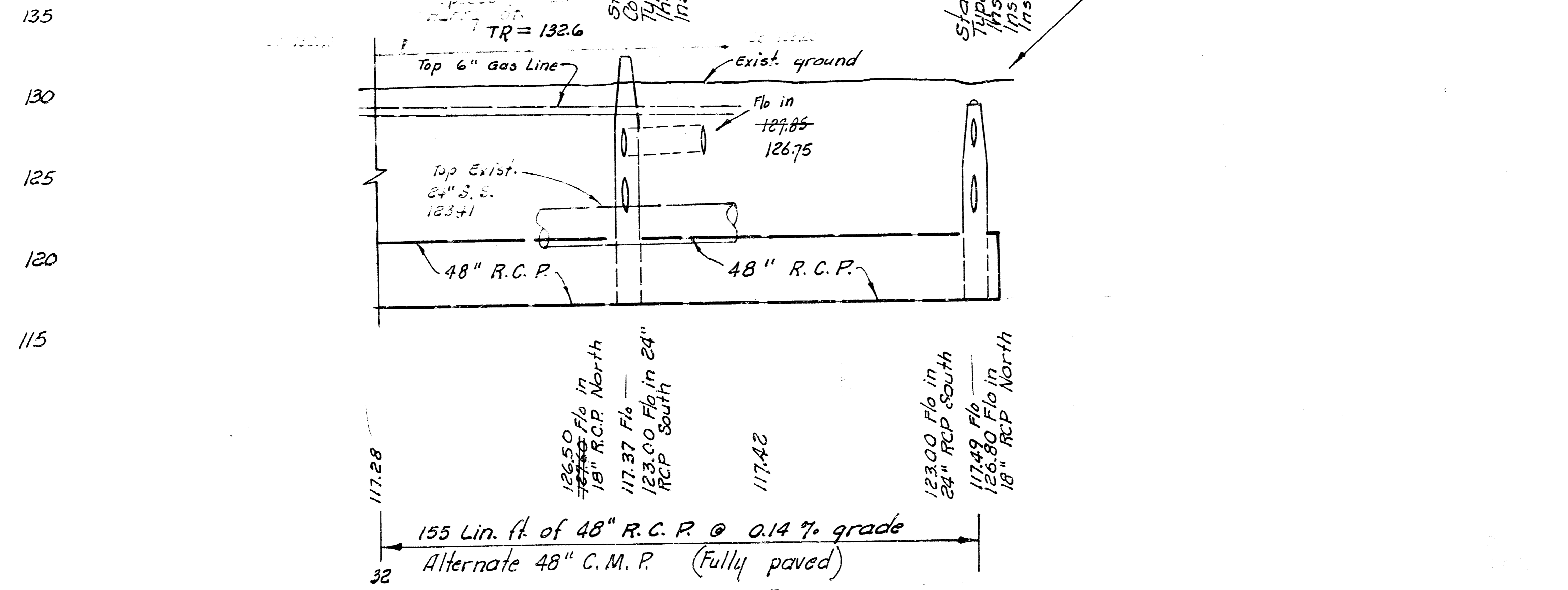
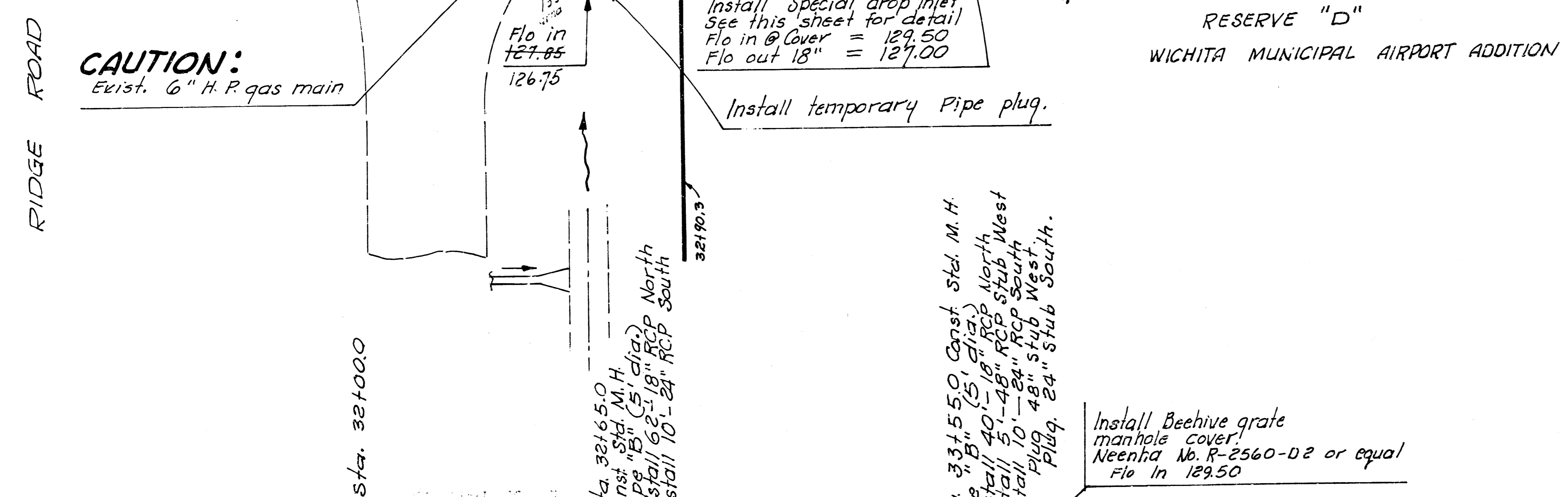
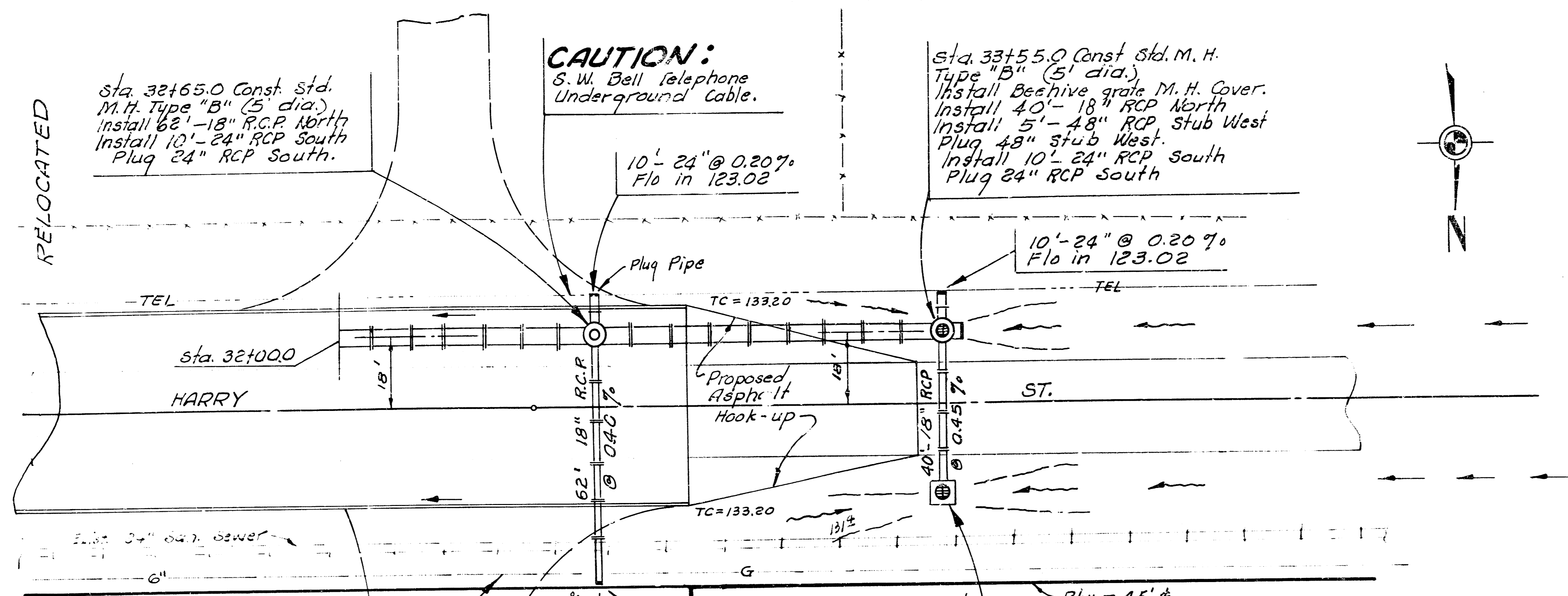
Sta. 29+45 ±
 129.95
 Top 6" Gas line

Sta. 31+25 ±
 120.71
 Top 6" Gas line

300 Lin. ft. of 48" R.C.P. @ 0.14% grade
 Alternate 48" C.M.P. (Fully paved)

Revised 3-1-76

S. W. D. NO. 25	11/20/11
PROJECT NO. DBKD575085	20

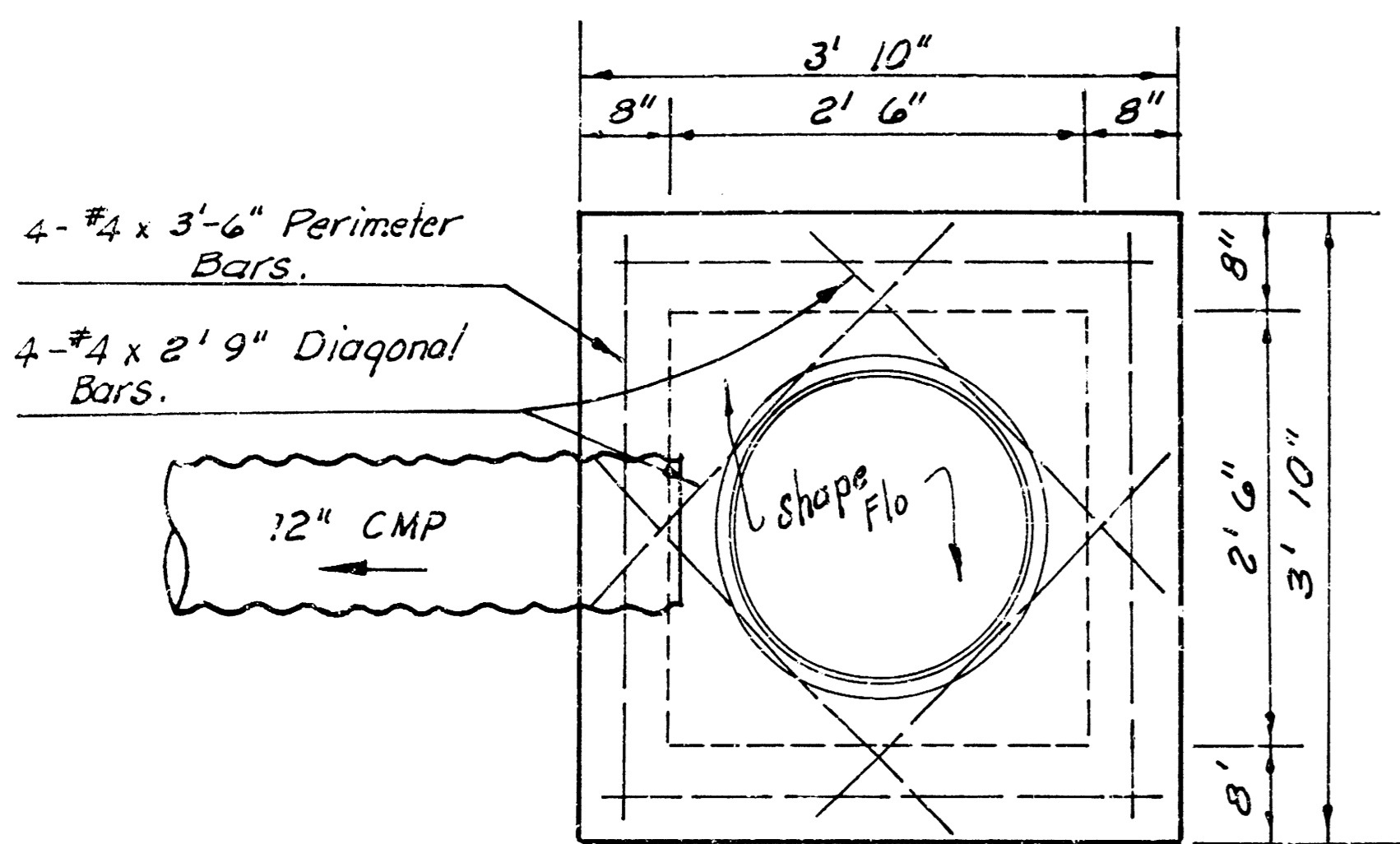


14-7-2-2
14-7-3-9

135
130
125
120
115

Revised 3-1-76

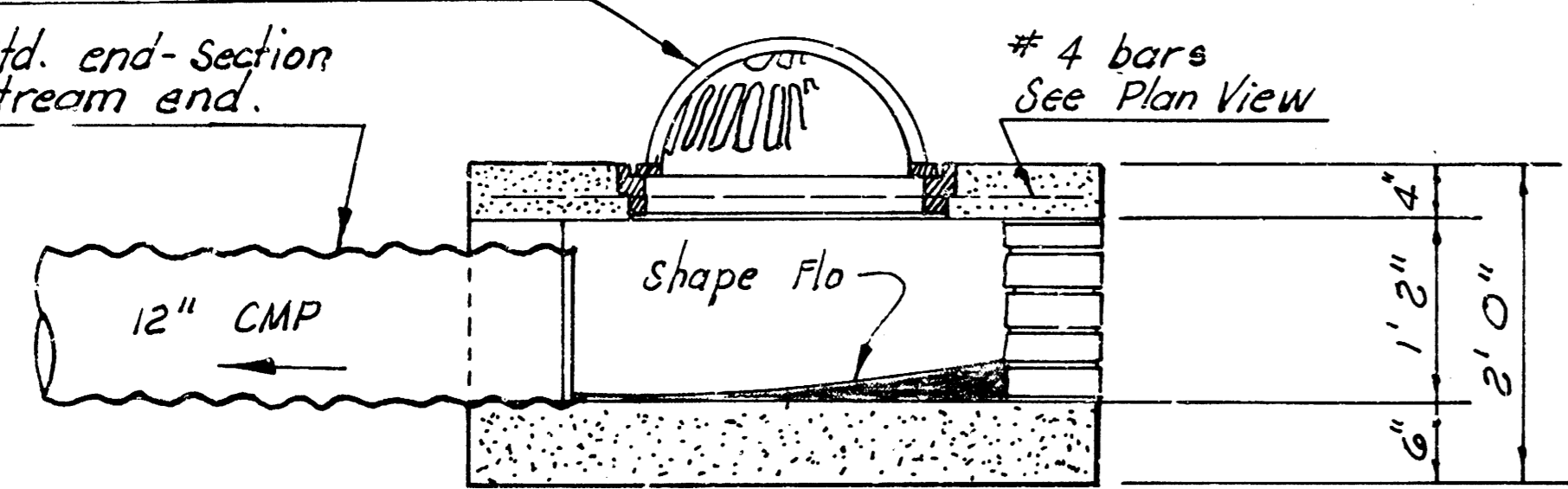
S. W. D. NC. 25		12/20
PROJECT NO. DBKD 575085		12/20



PLAN

Needh R-4353 Beehive grate
Frame or approved equal

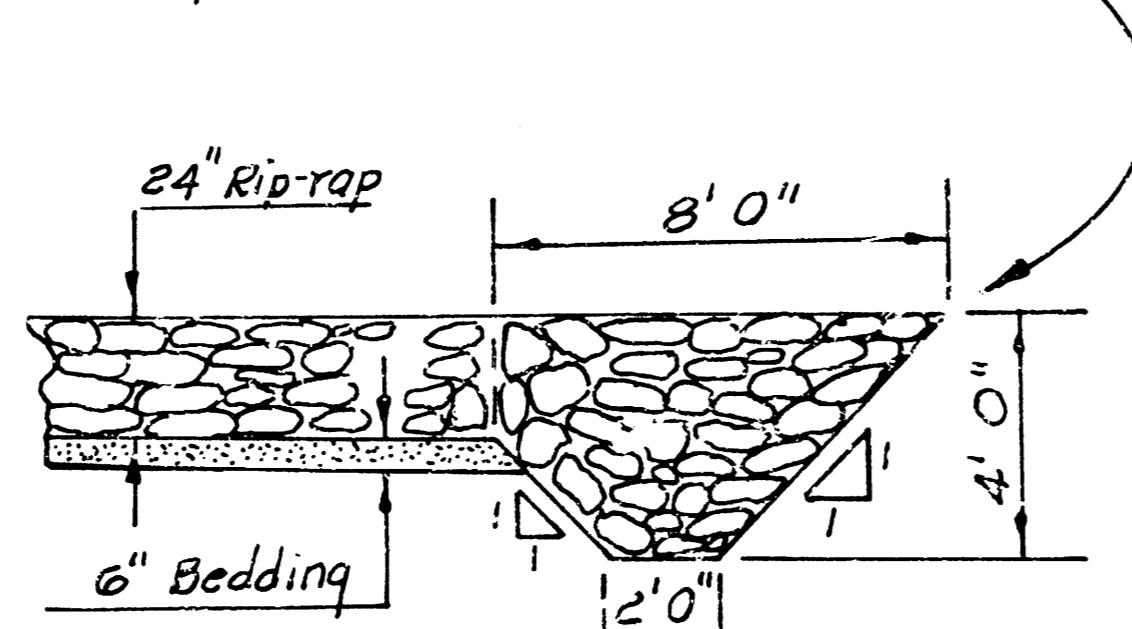
Install std. end-section
at downstream end.



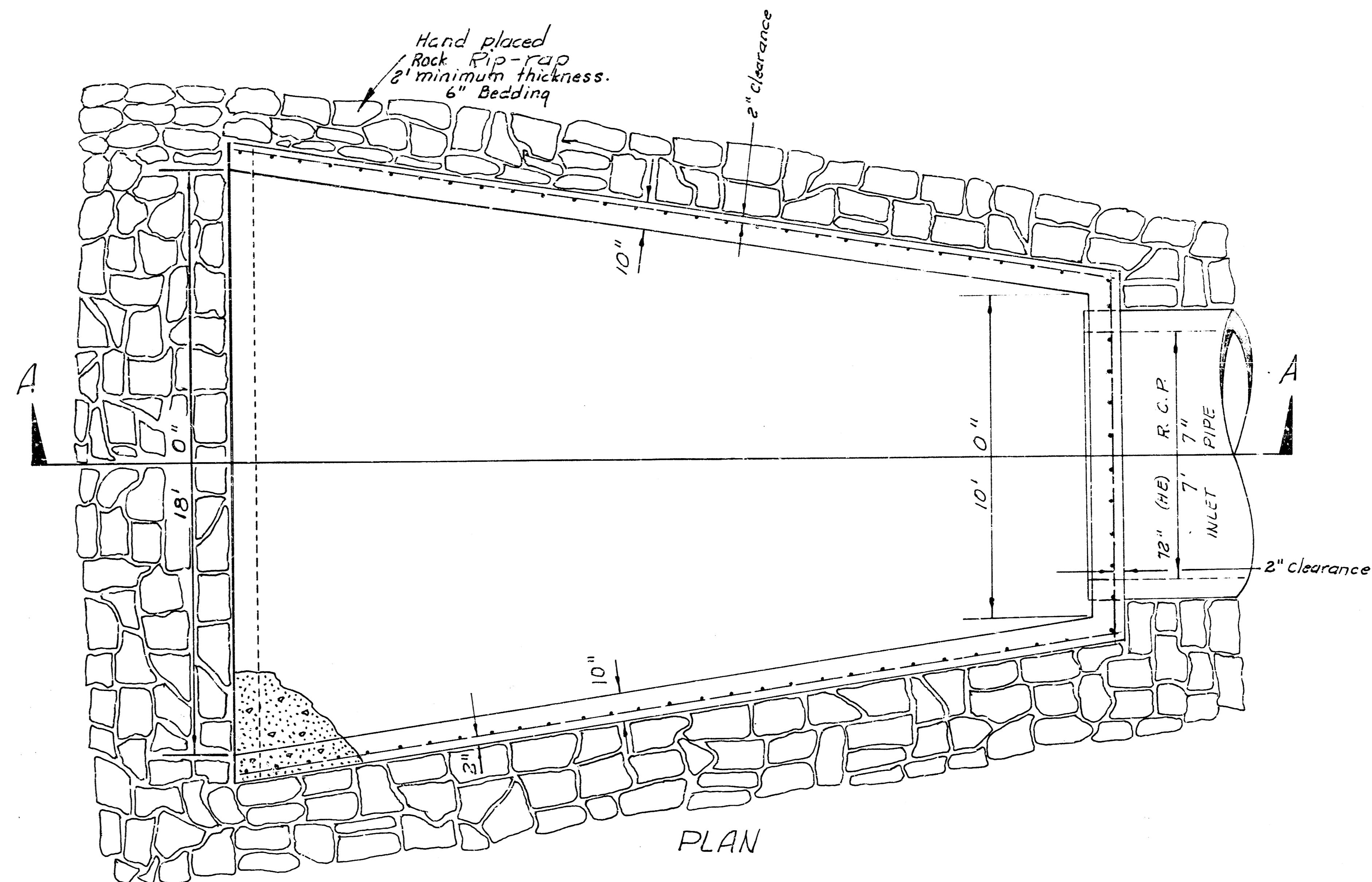
SECTION

SPECIAL DROP INLET
NOT TO SCALE
Sta. 0+95 and Sta. 6+70
along Outfall Channel
Sheet No. 2 of 3

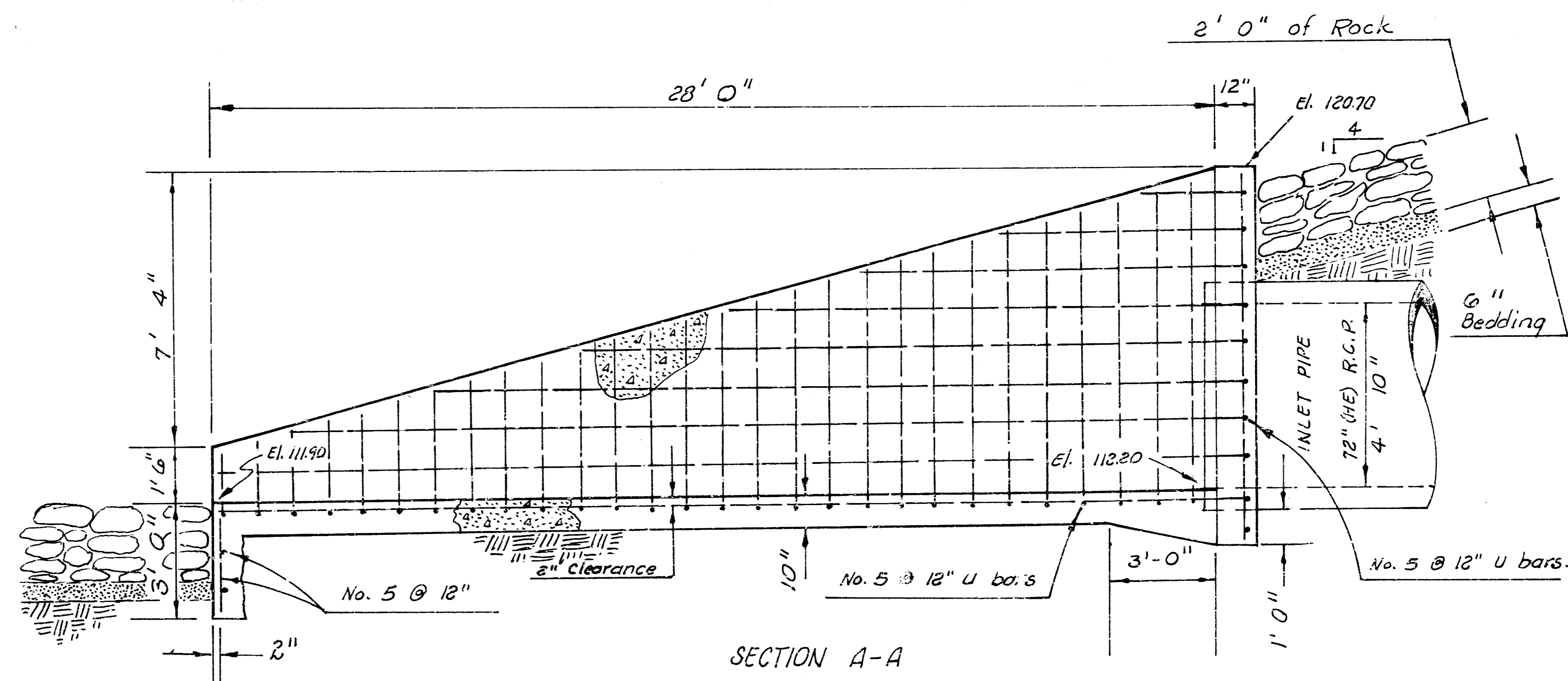
Rock Toe to be constructed on upstream and
downstream ends of Riprap. Rock toe will
not be paid for directly and shall be
considered as subsidiary to the price bid
per sq. yd. of Rock Riprap.



RIP-RAP DETAIL

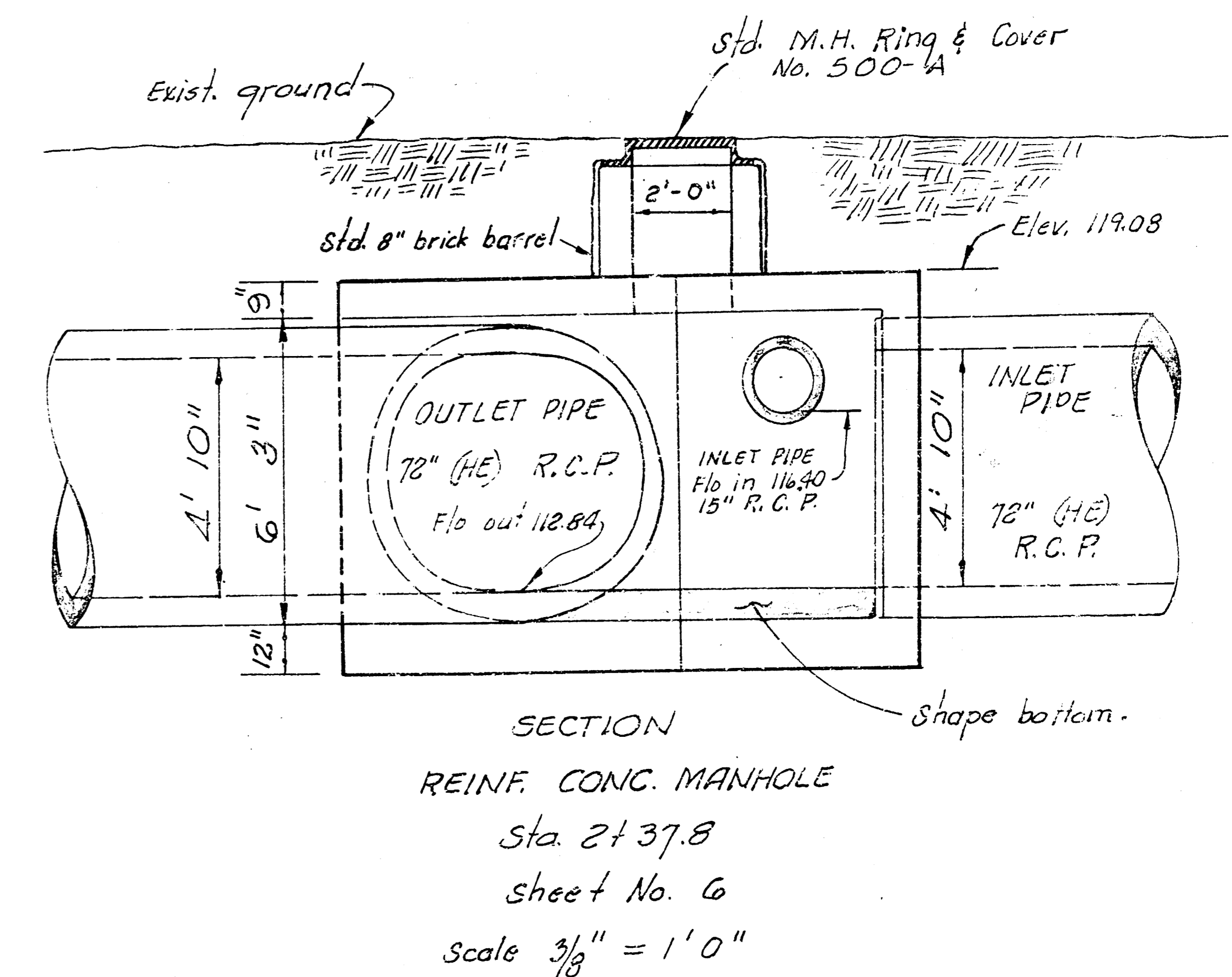
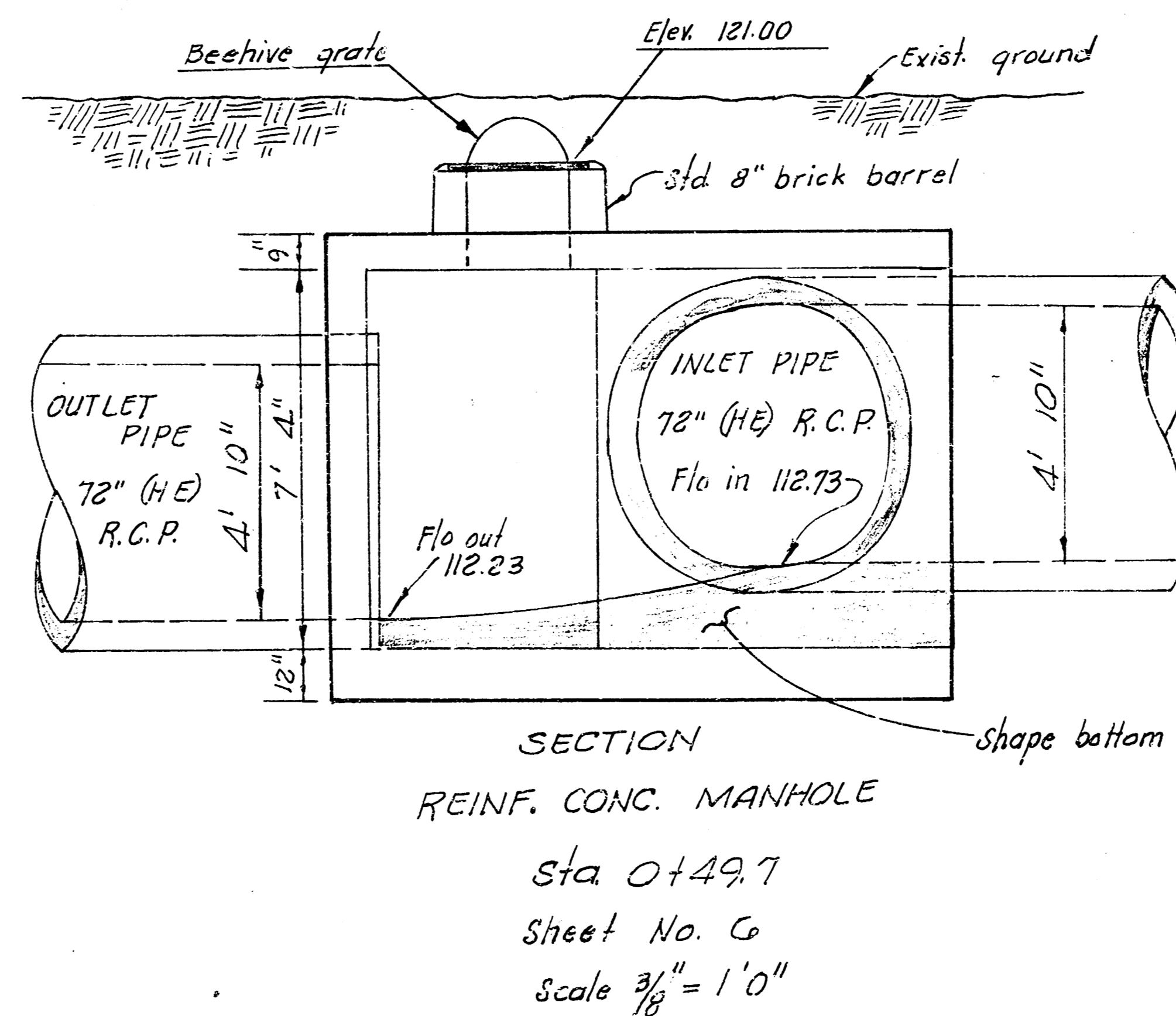
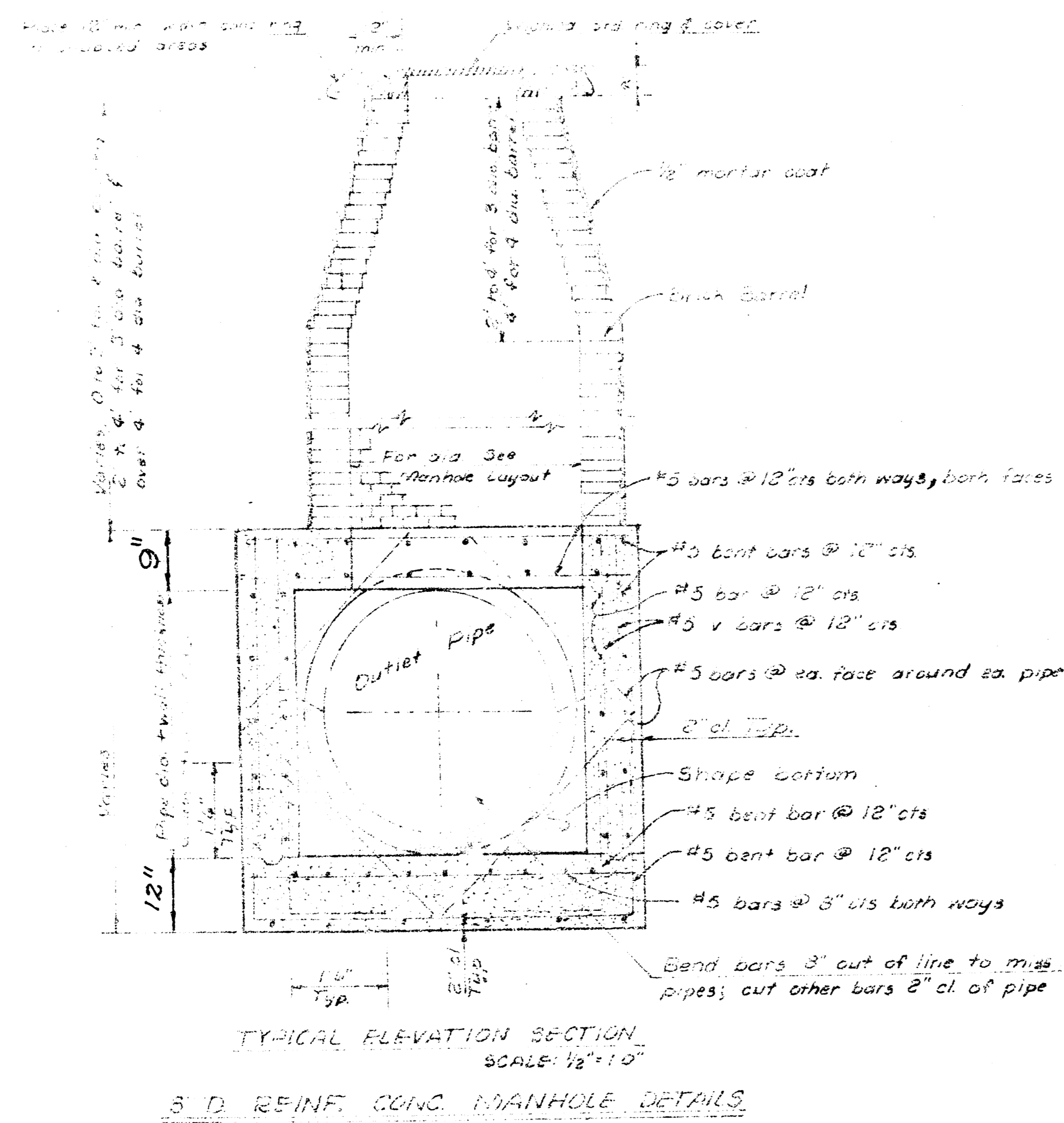
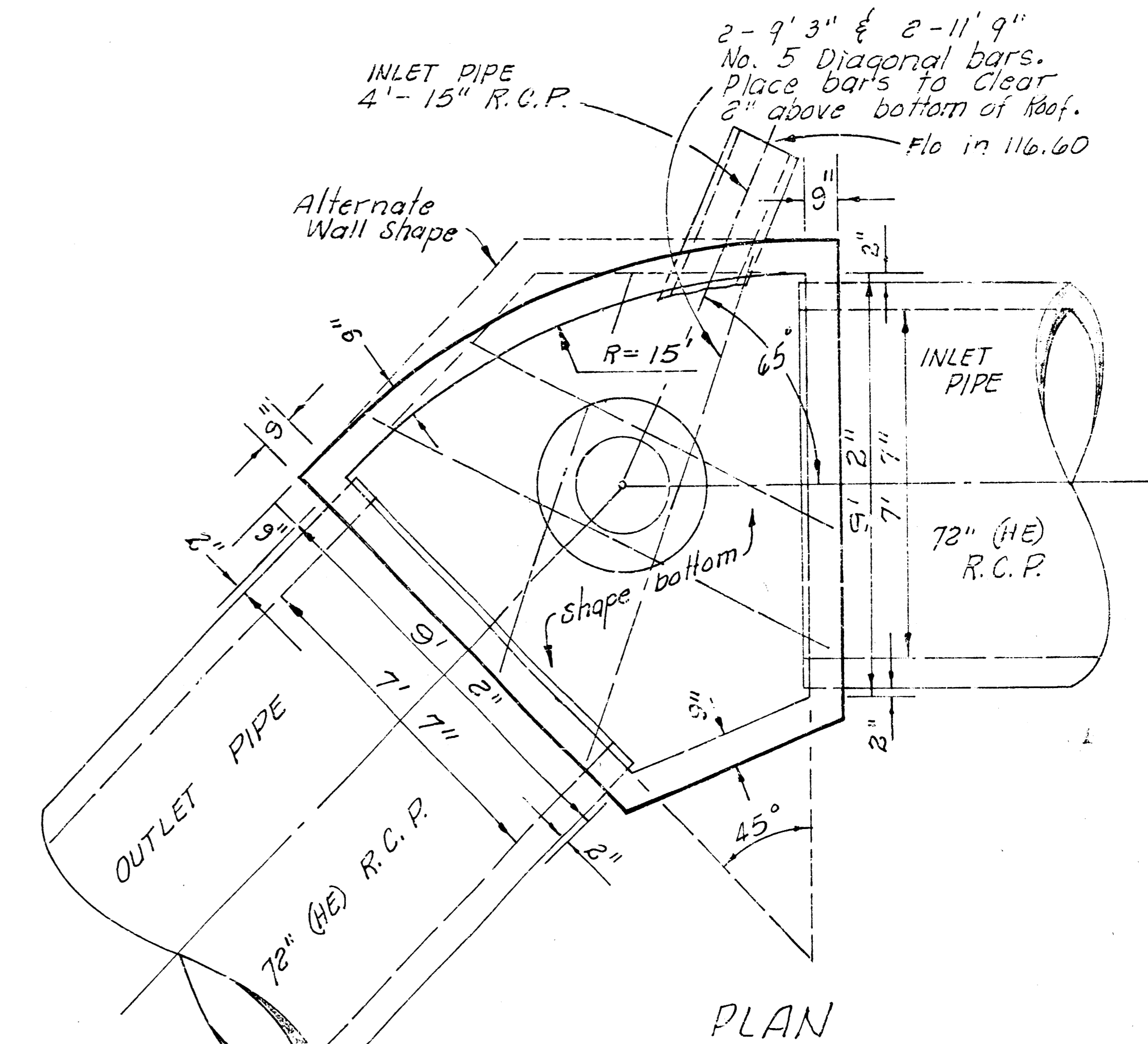
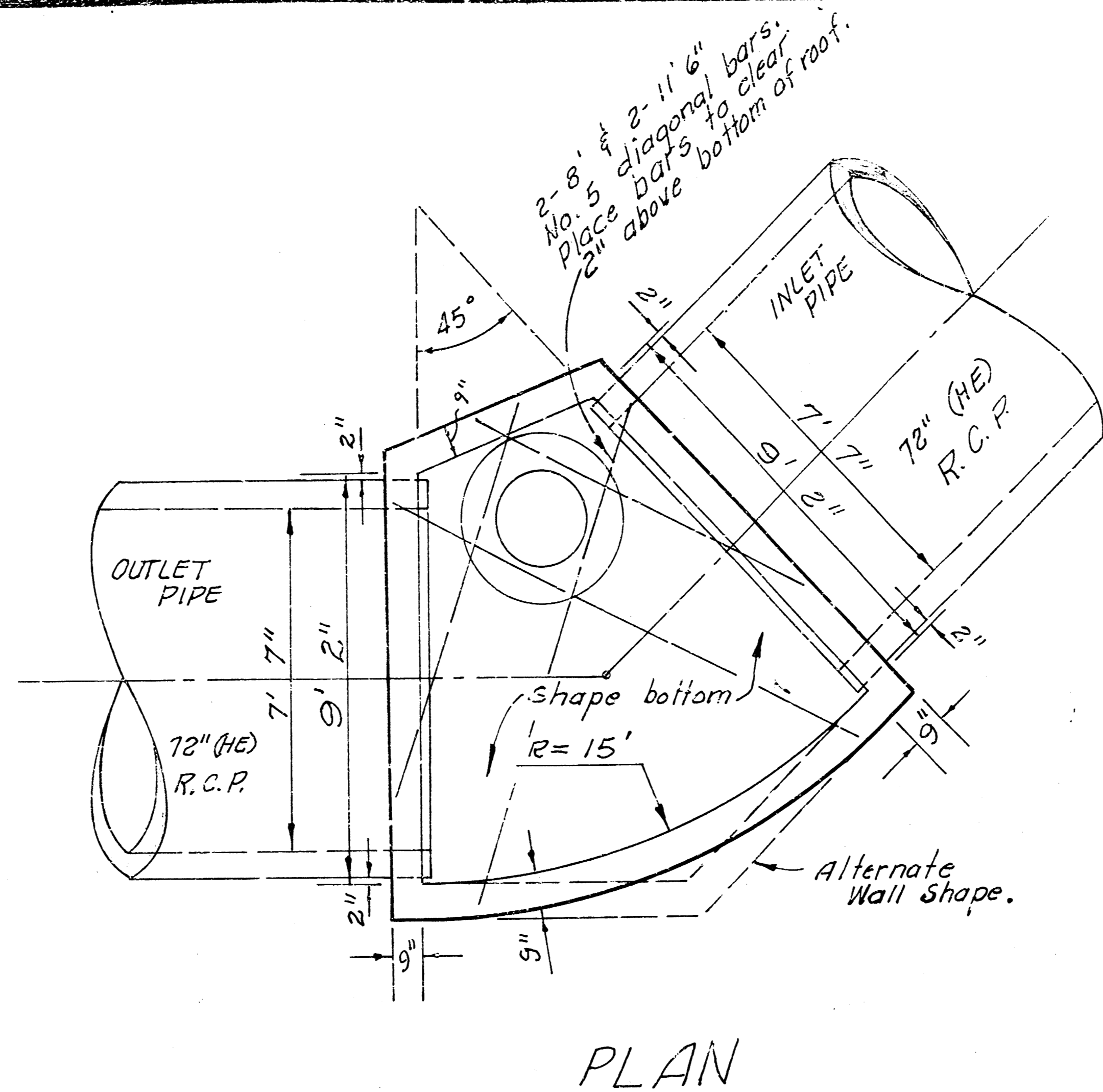
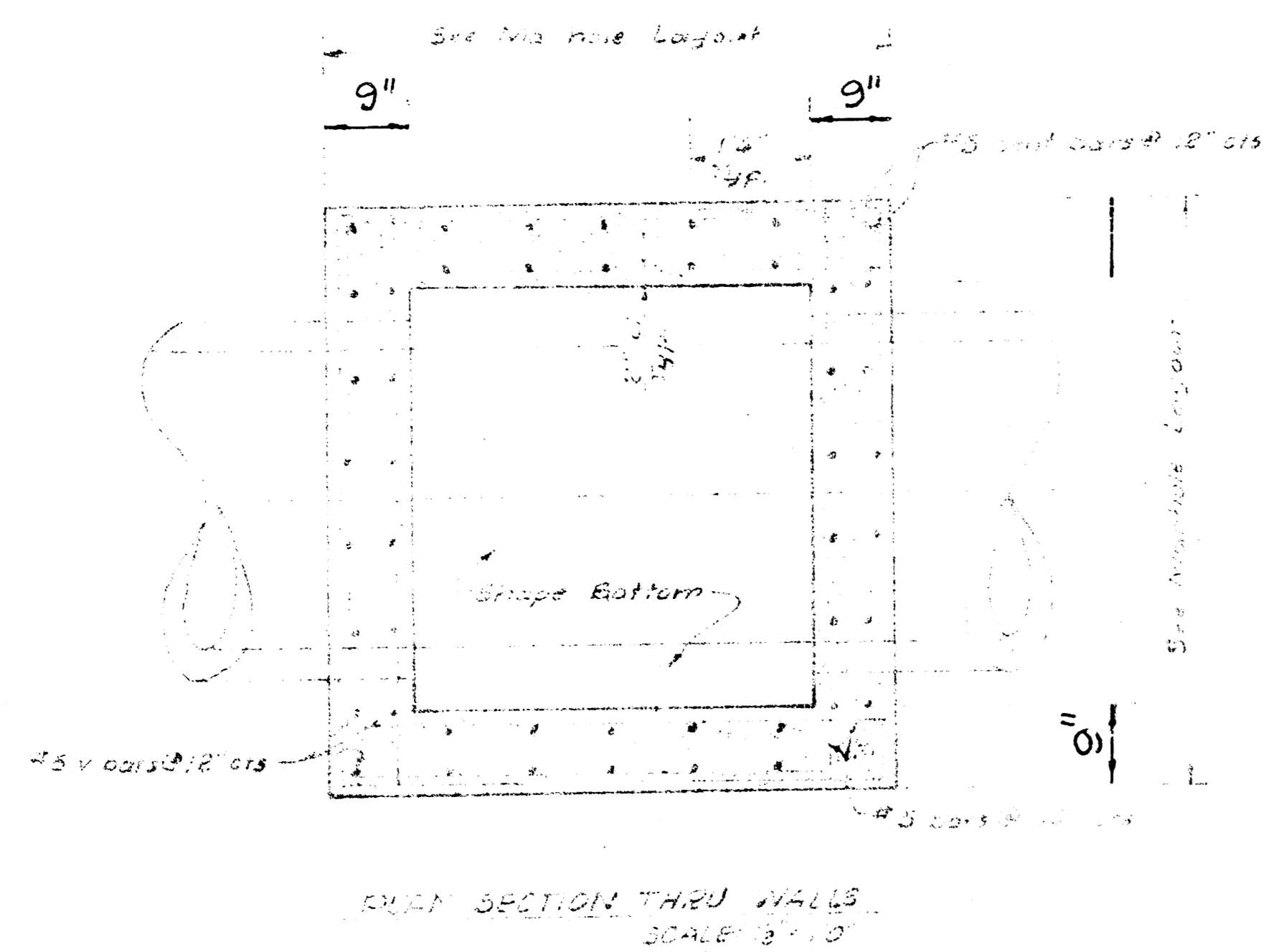


PLAN



SECTION A-A

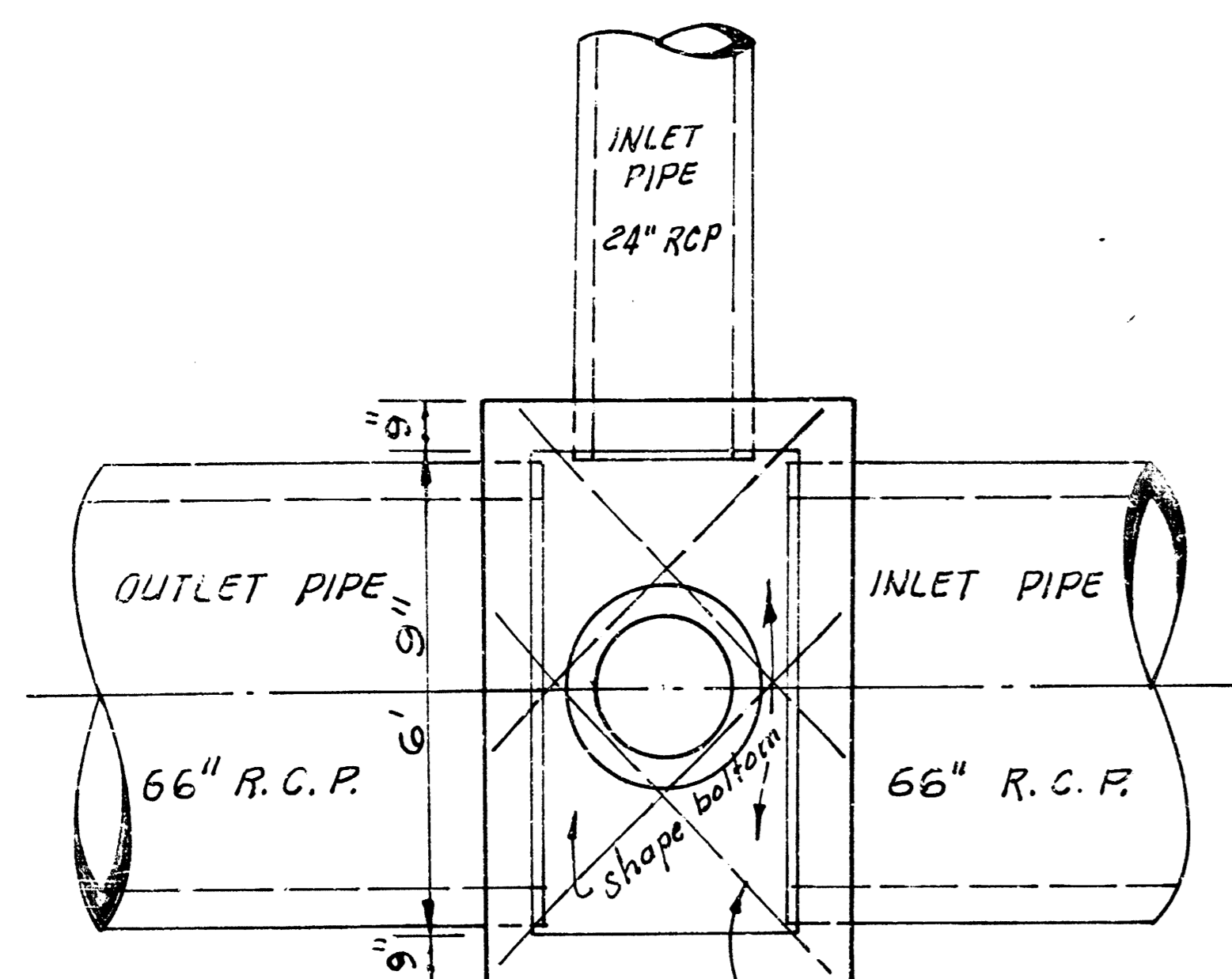
Sta. 0+00.0 Outfall Structure
Sta. 20+60.0 Outfall Channel
Scale 1" = 3/8"



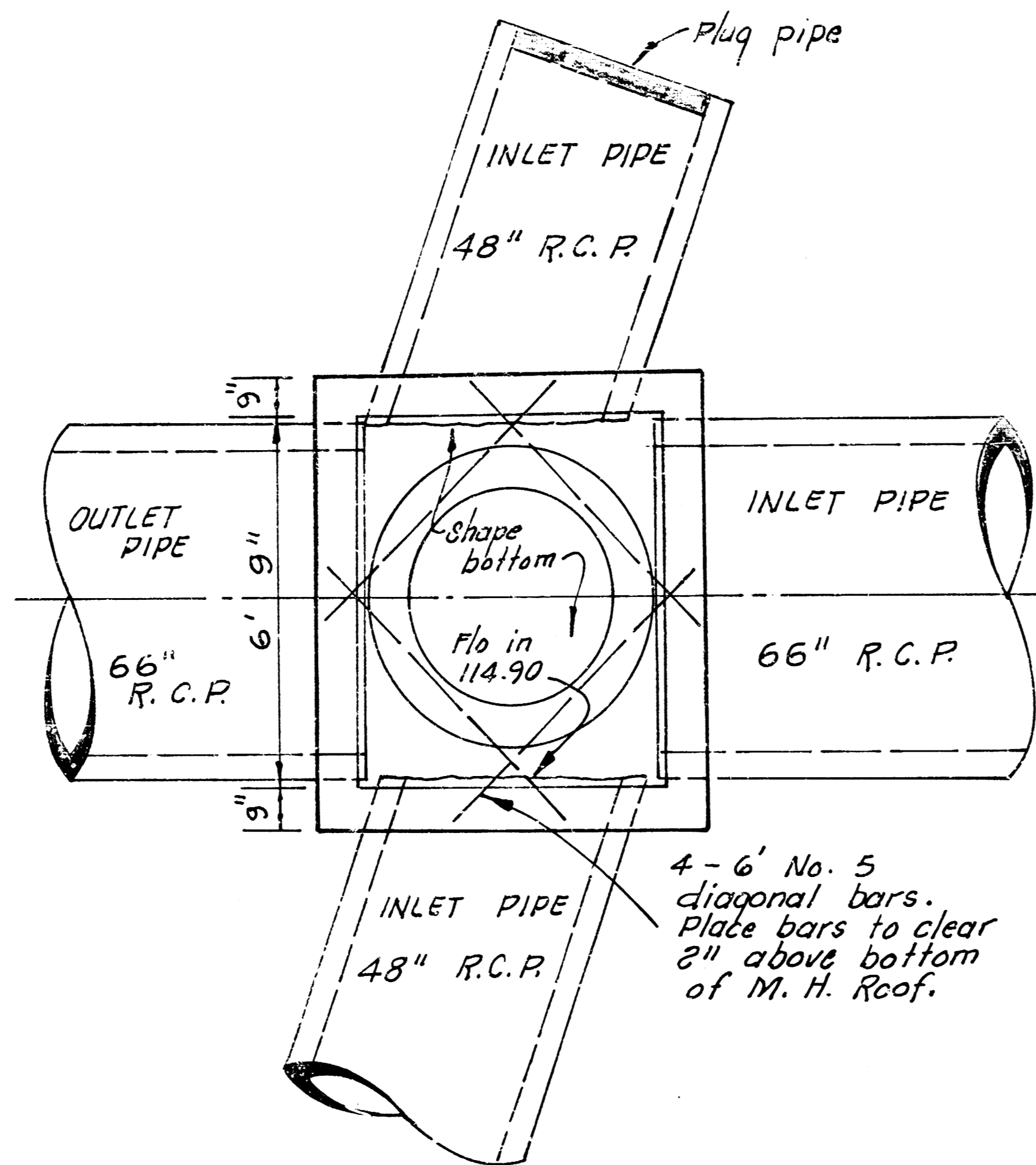
1. ALL REINFORCING BARS SHALL BE AS SHOWN AND TO BE PLACED AS SHOWN UNLESS OTHERWISE SPECIFIED.

2. ALL REINFORCING BARS SHALL BE PLACED AS SHOWN AND TO BE PLACED AS SHOWN UNLESS OTHERWISE SPECIFIED.

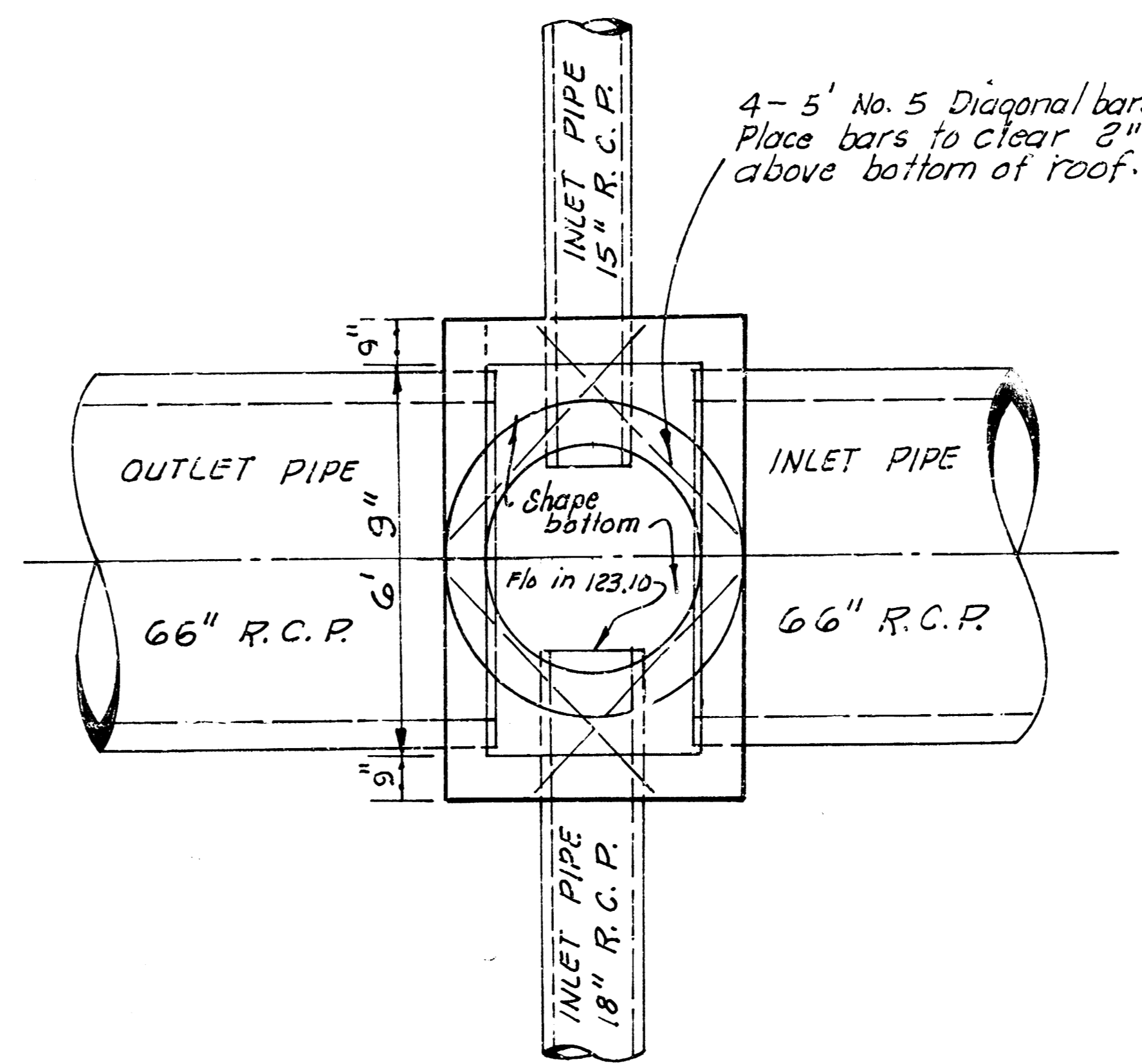
3. ALL REINFORCING BARS SHALL BE PLACED AS SHOWN AND TO BE PLACED AS SHOWN UNLESS OTHERWISE SPECIFIED.



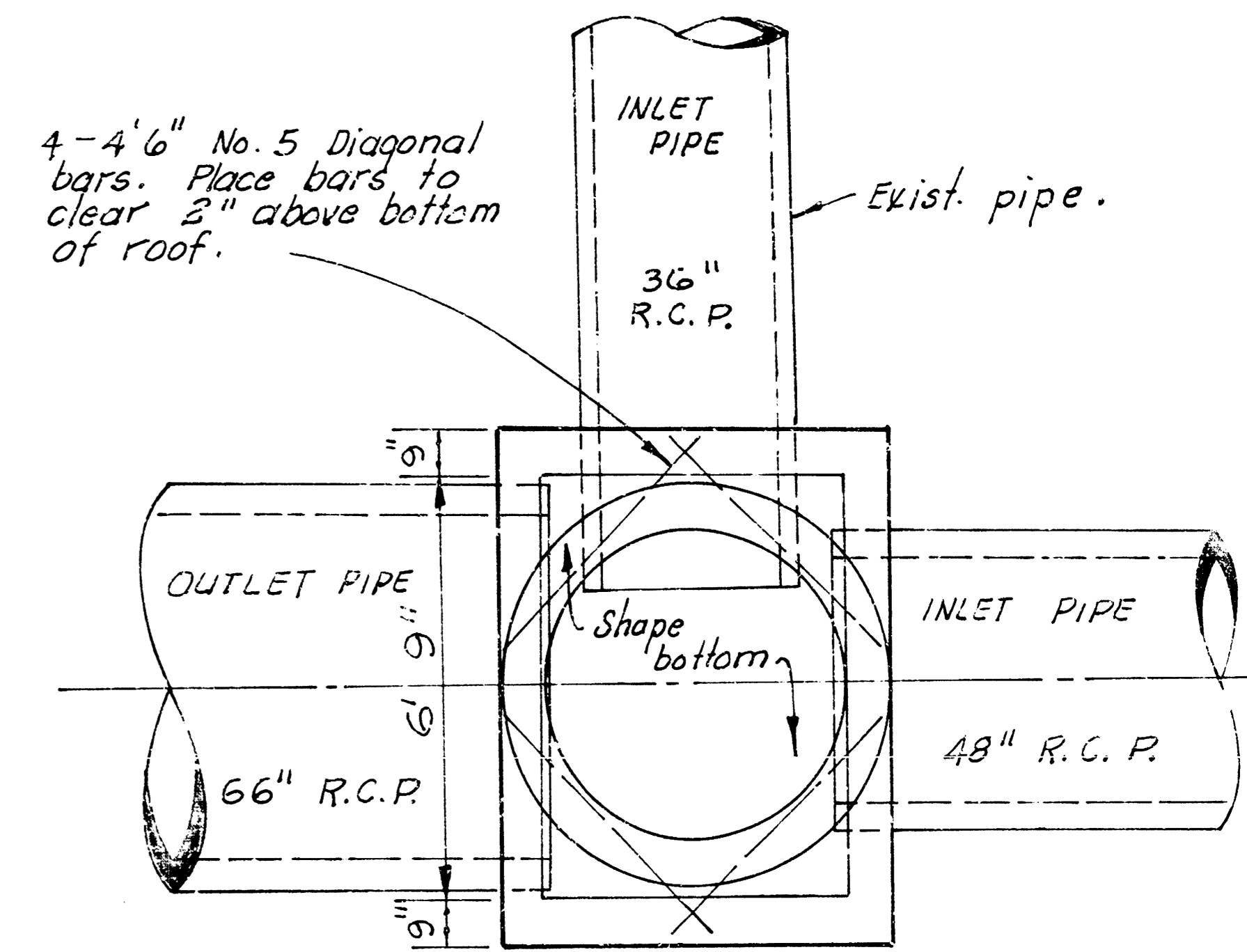
PLAN
4-7' No. 5 Diagonal bars. Place bars to clear 2\"/>



PLAN

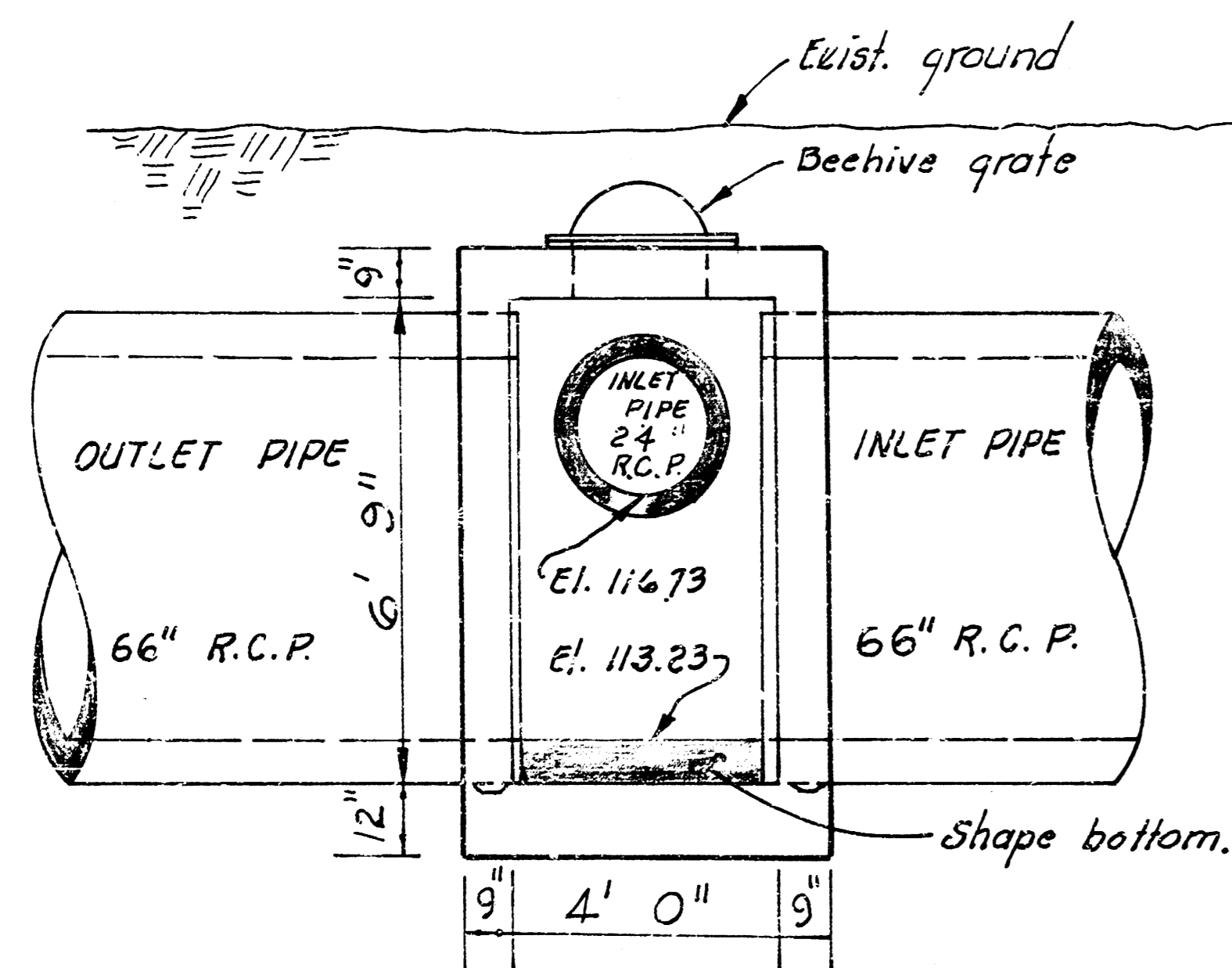


PLAN

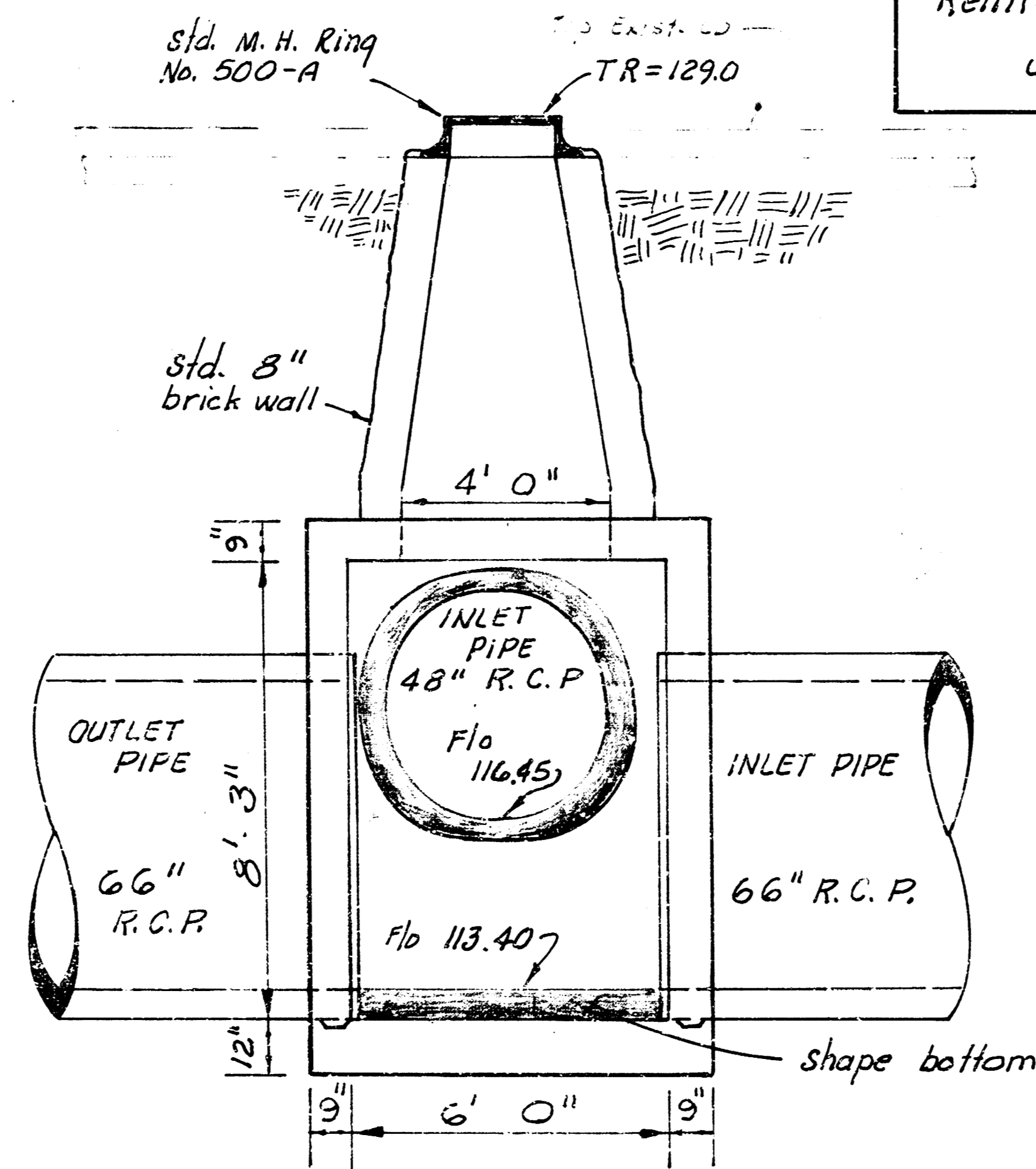


PLAN

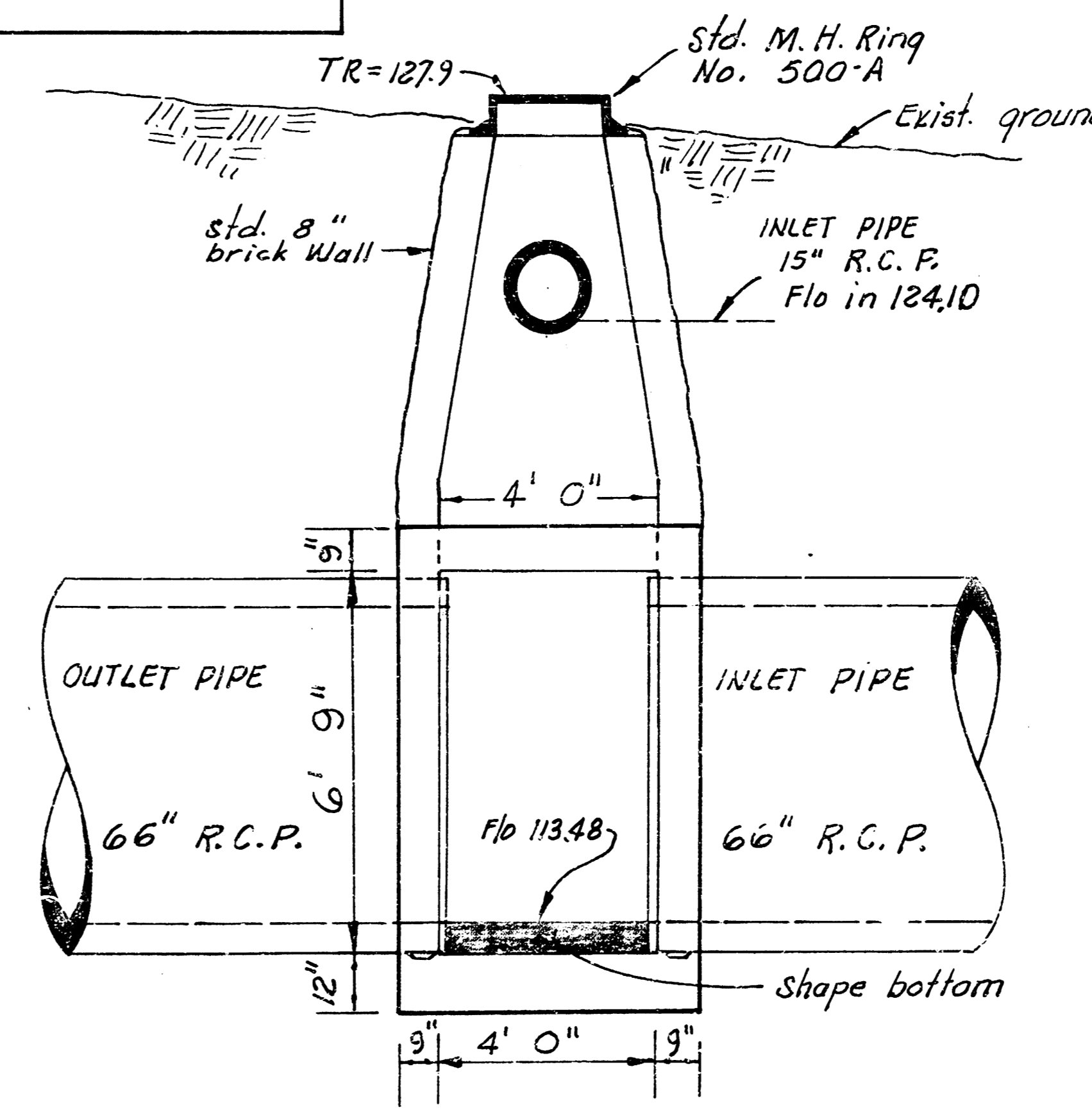
NOTE:
See sheet No. 15 for Steel pattern for Typical Reinf. Conc. Manhole!
Scale $\frac{3}{8}'' = 1' 0''$



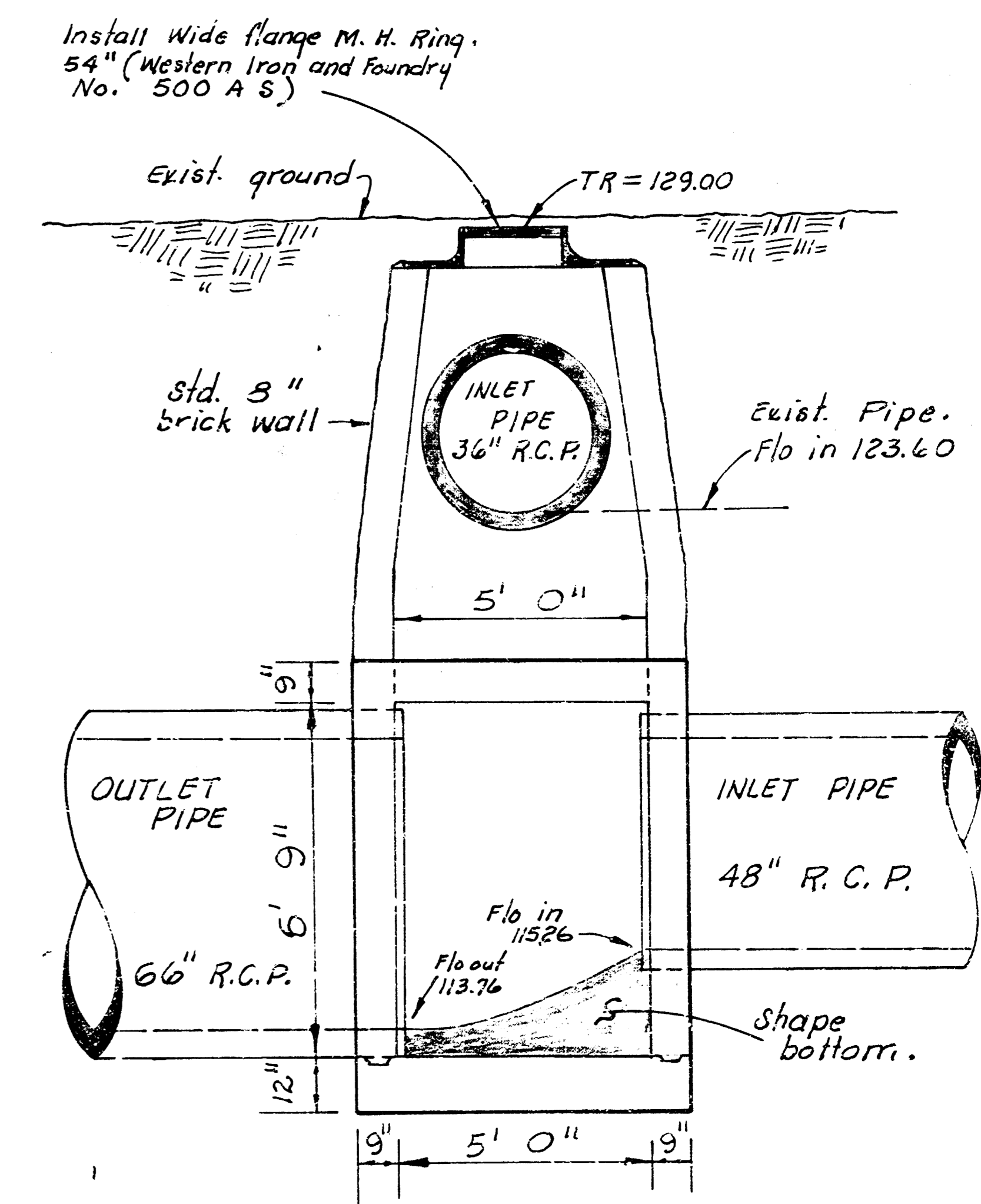
SECTION
REINF. CONC. MANHOLE
Sta. 8186.5
Sheet No. 7



SECTION
REINF. CONC. MANHOLE
Sta. 11+74.0
Sheet No. 8



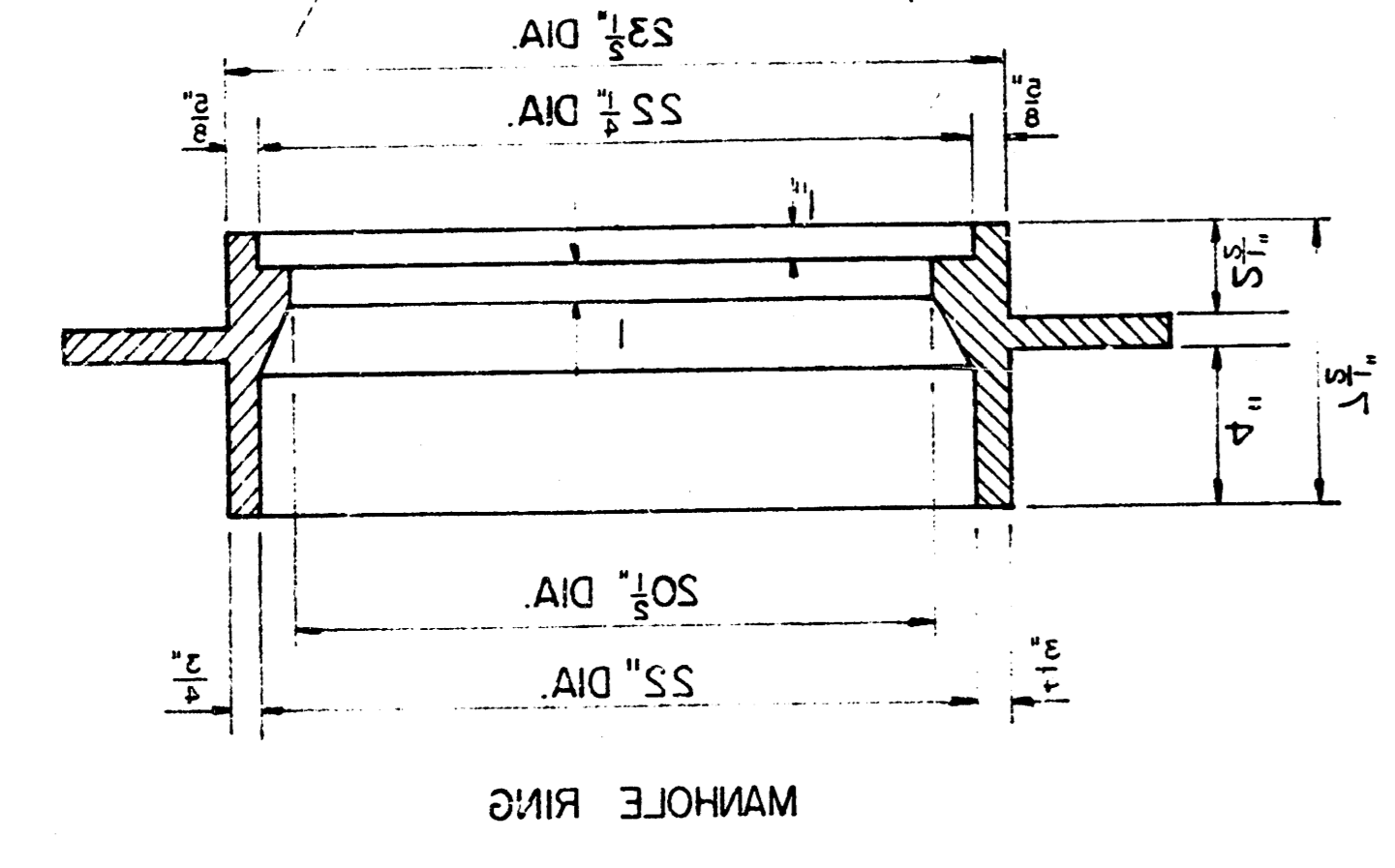
SECTION
REINF. CONC. MANHOLE
Sta. 12+95.8
Sheet No. 8



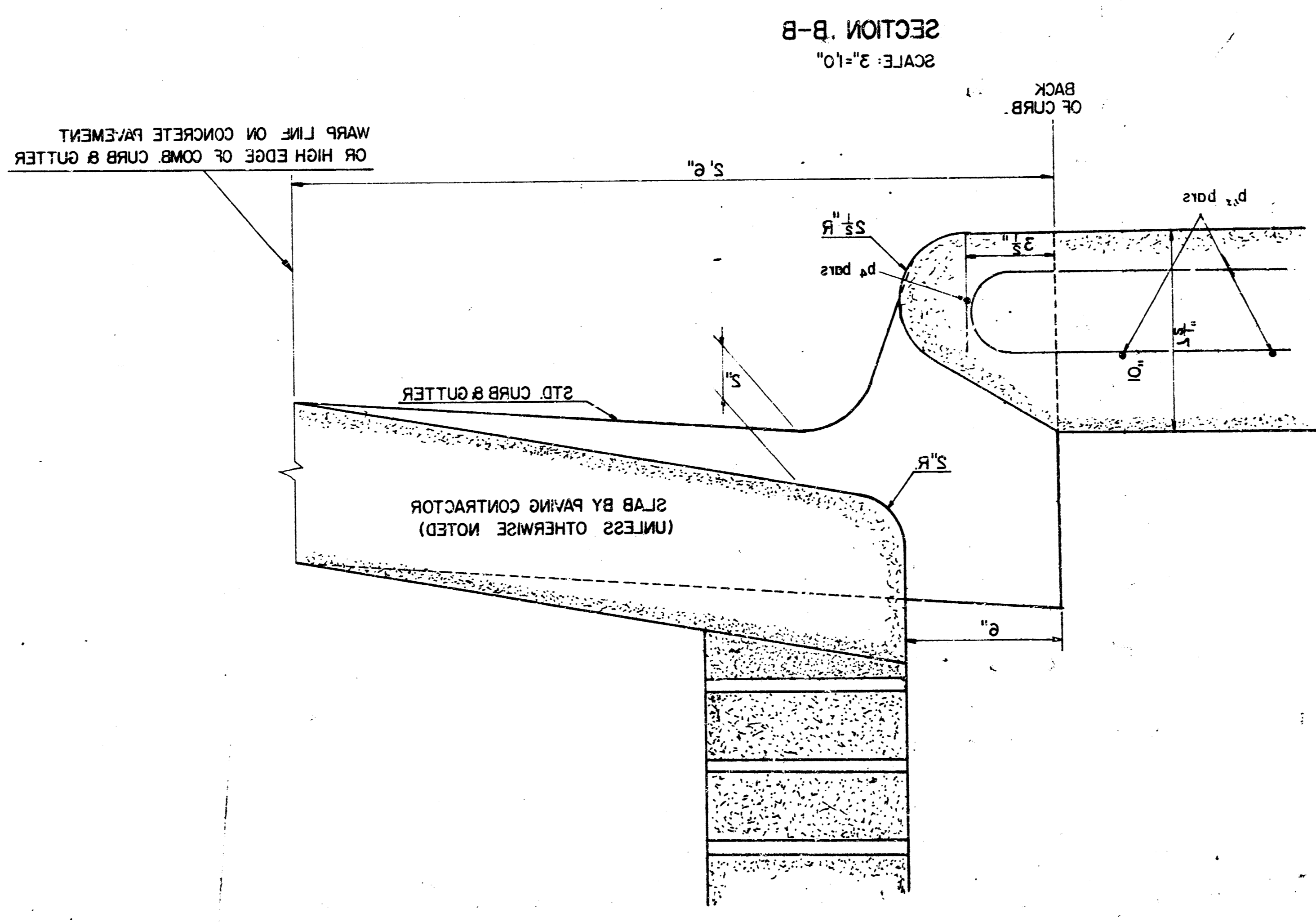
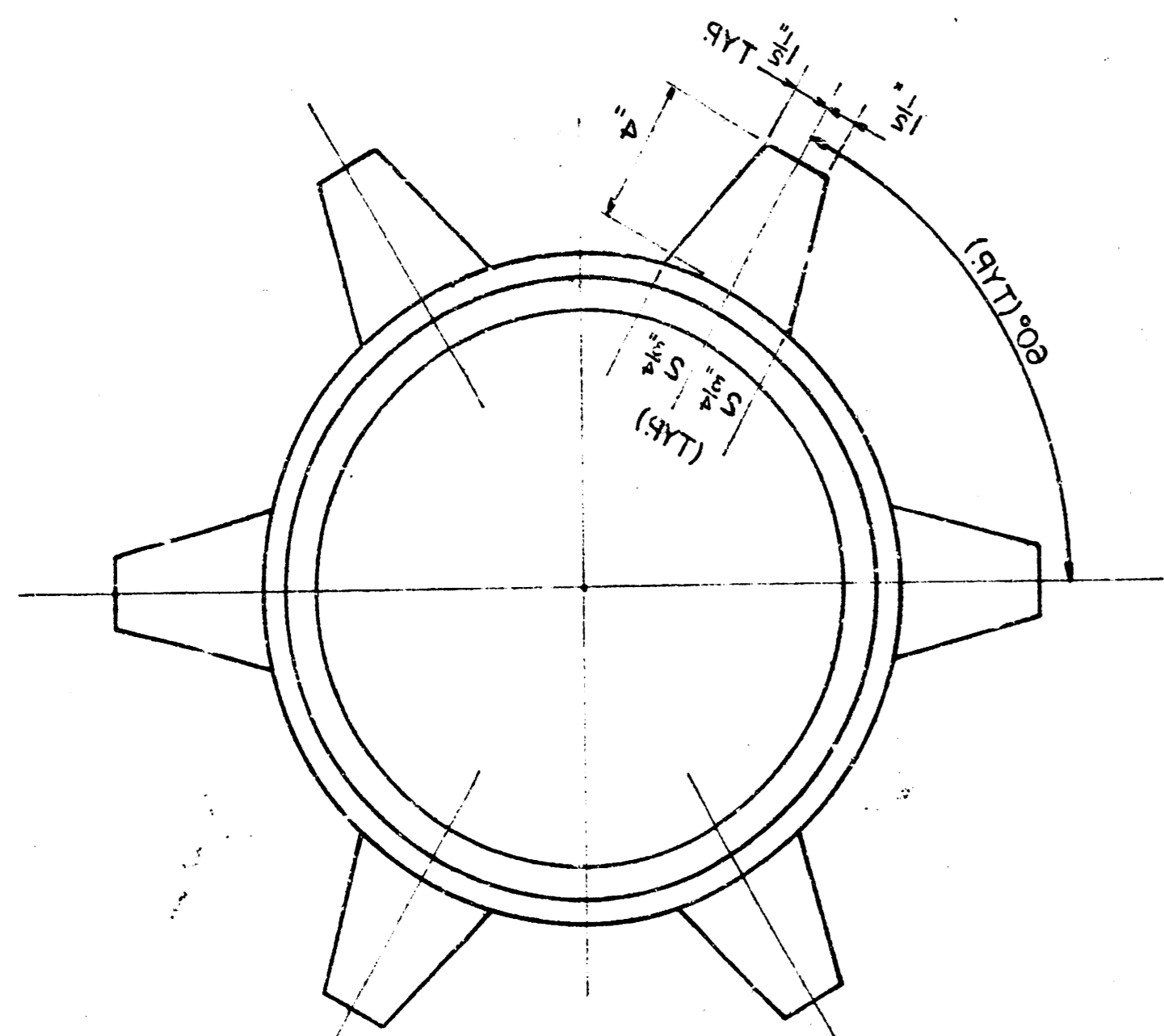
SECTION
REINF. CONC. MANHOLE
Sta. 17+58.9
Sheet No. 9

DETAIL
STANDARD CURB INLET-TYPE I
 CITY OF WICHITA, KANSAS
 R. W. LINN-CITY ENGINEER
 FEBRUARY, 1925

HAVE FULL HEIGHT STANDARD CURBS
 CONCRETE BASE AND/OR WHEN PAVEMENTS
 ARE ASPHALT PAVEMENT WITH
 THIS TYPE INLET TO BE USED WHEN



SEE SEWER APPURTENANCES DETAIL
 SHEET FOR MANHOLE COVER

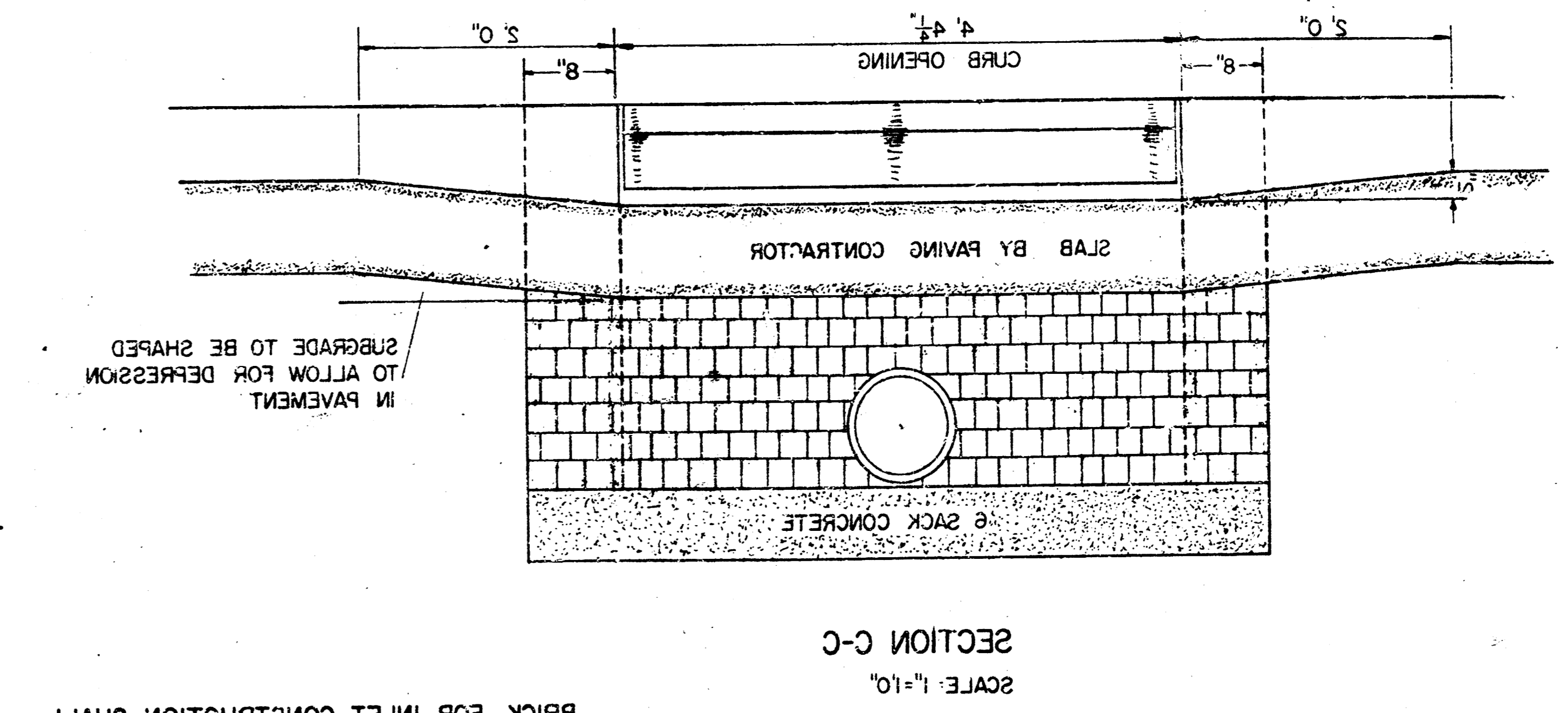
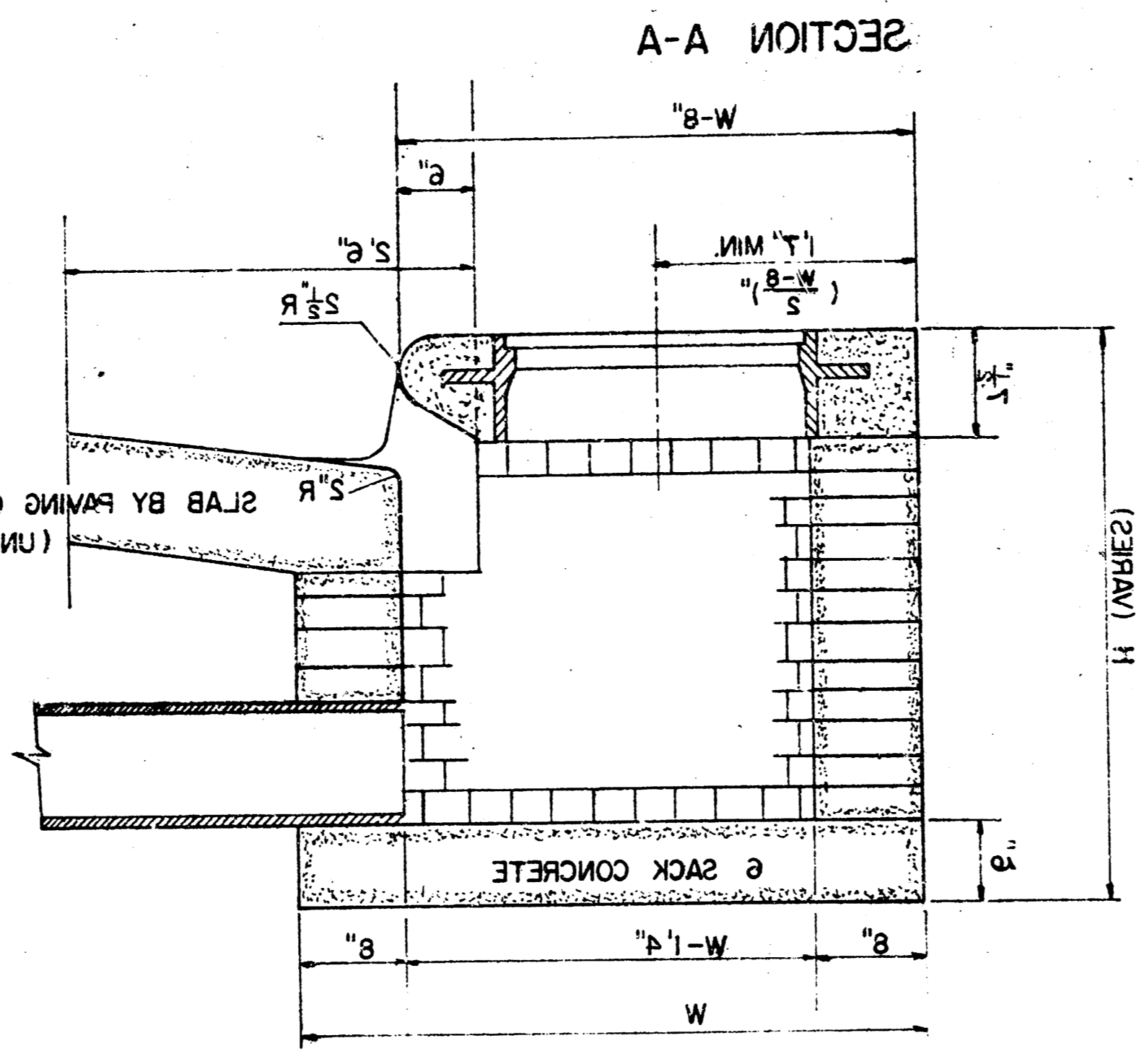


SECTION A-A
SCALE: 1"=10'

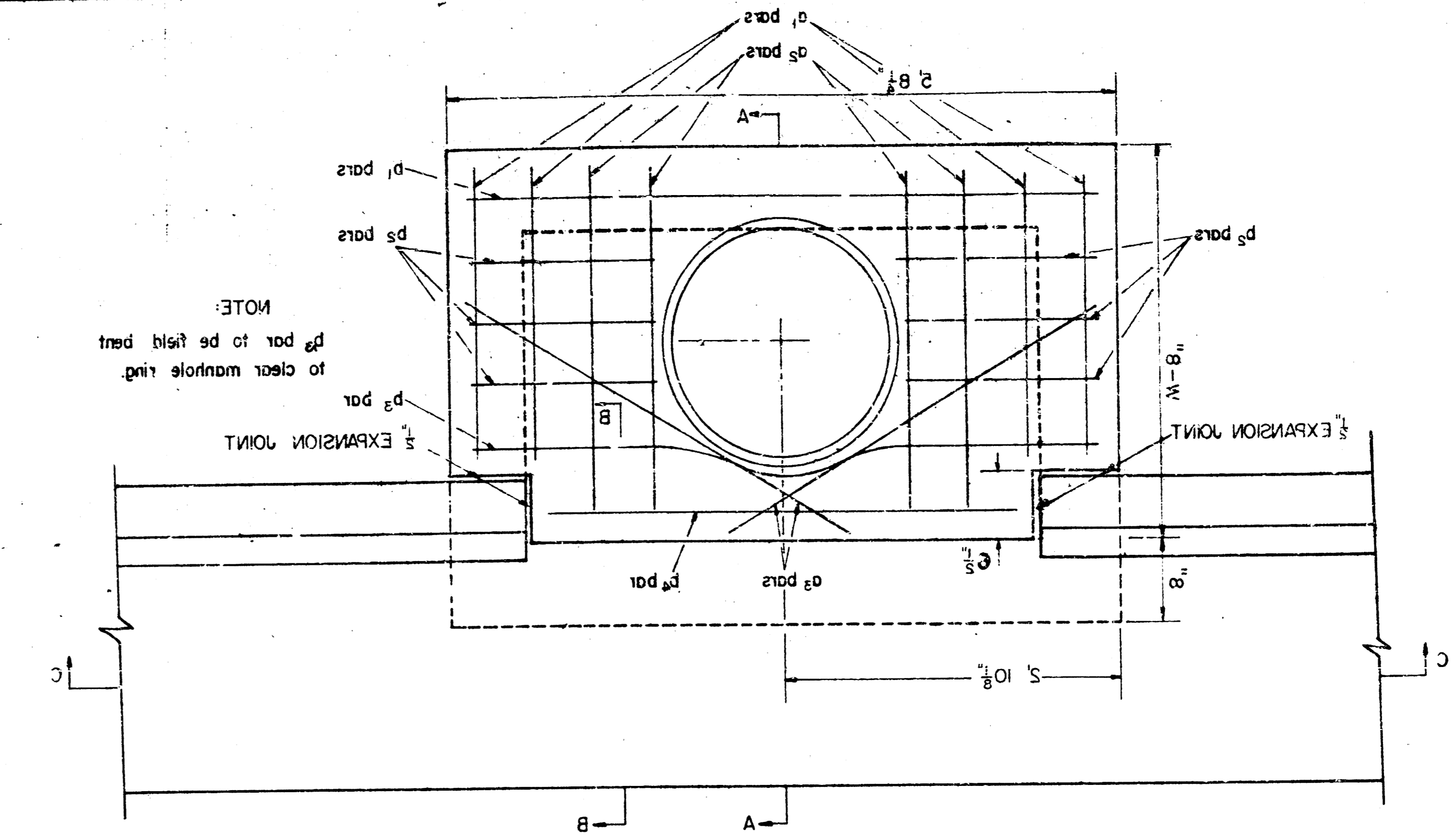
W	SIZE	PIPE SIZE	CL. YD. CONC.
3' 10"	3' 5" x 3' 8" x 1 1/2"	24" BSMALLER	0.42*
4' 10"	4' 5" x 3' 8" x 1 1/2"	30" B 3/8"	0.52*
5' 10"	5' 5" x 3' 8" x 1 1/2"	45" B 4/8"	0.88*

*GROSS VOLUME

FLOORS SHALL BE SACK PAVING MIX.
 OR PRECAST CONCRETE FOR INLET TOPS AND
 WALLS. CONCRETE TOPS MAY BE CAST IN PLACE.
 CUSHION TO INSURE FULL SUPPORT ALONG BRICK
 CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR



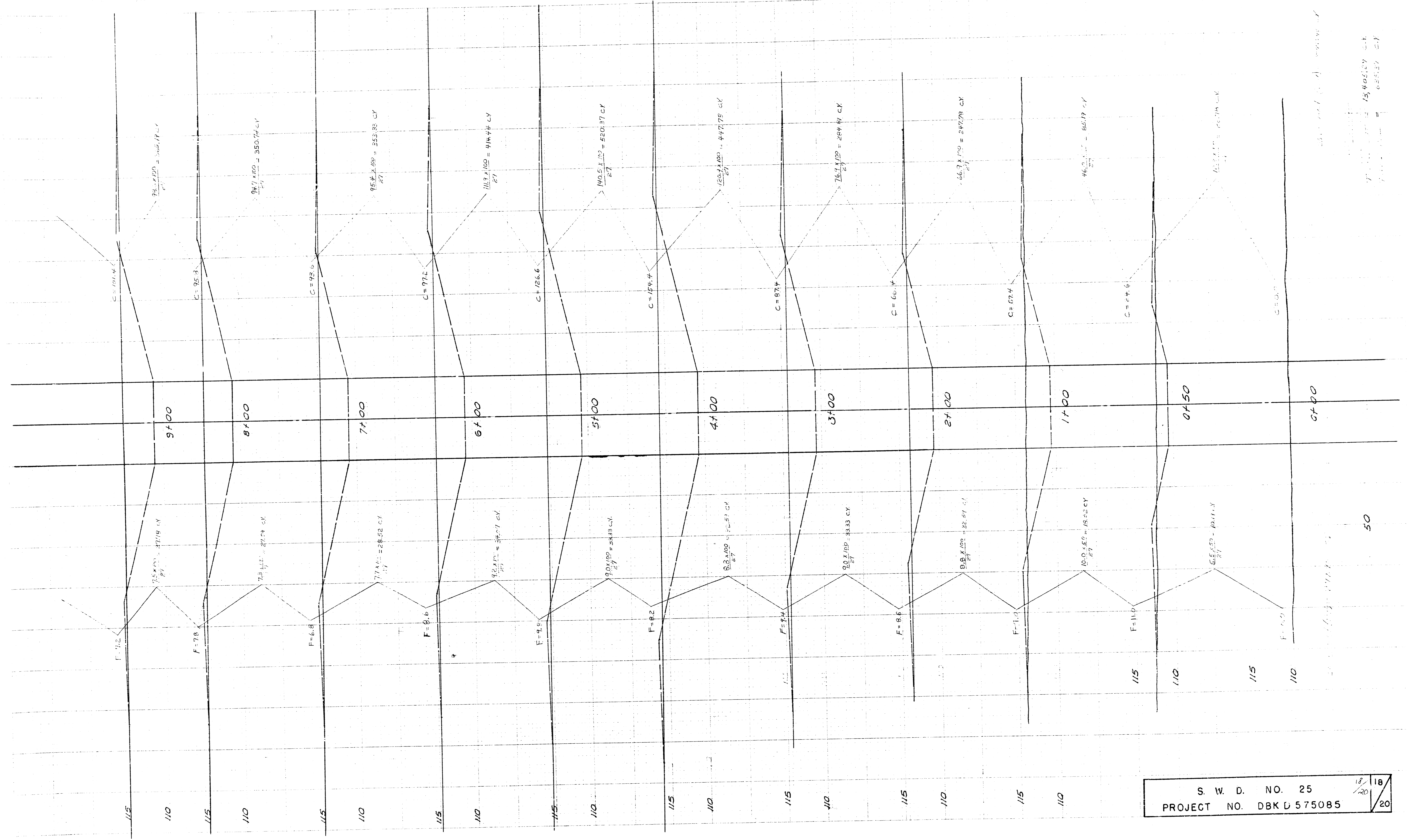
BRICK FOR INLET CONSTRUCTION SHALL
 CONFORM WITH THE LATEST REVISION OF
 THE AMERICAN SOCIETY FOR TESTING AND
 MATERIALS DESIGNATION C25 FOR MANHOLE
 BRICK GRADE M2



OPENING WITH SMOOTH CURVES
 SHAPE CURB AND/OR GUTTER AT INLET
 REINFORCING STEEL TO BE PLACED ON "e" CURBS

NOTE: A³ BARS TO BE PLACED APPROXIMATELY "s" BELOW TOP OF INLET COVER

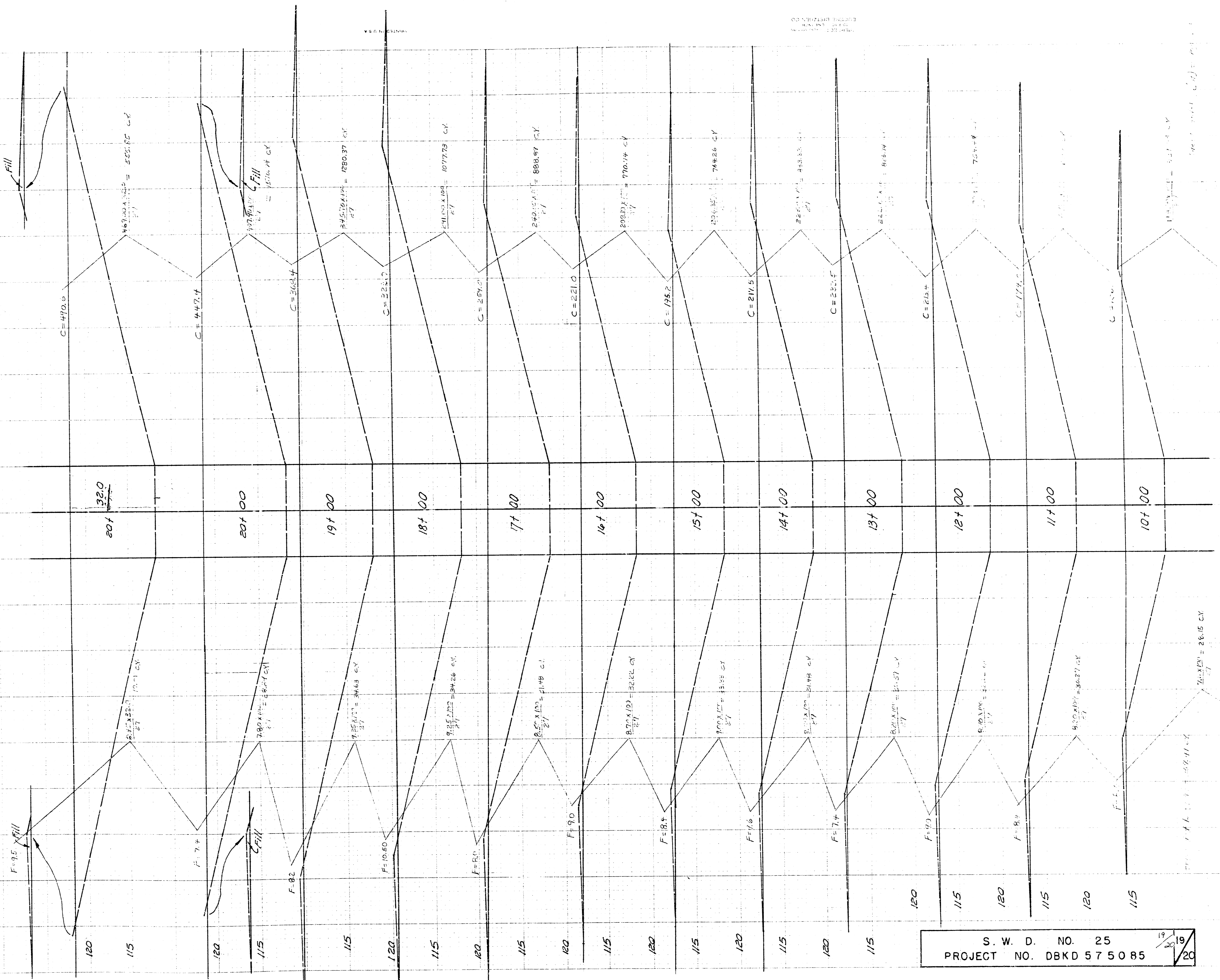
LENGTH	NUMBER	SIZE	BAR
W=3' 10"	4	4"	A ³
W=4' 10"	4	4"	A ³
W=5' 10"	4	4"	A ³



13 400.00 CY
 655.57 CY

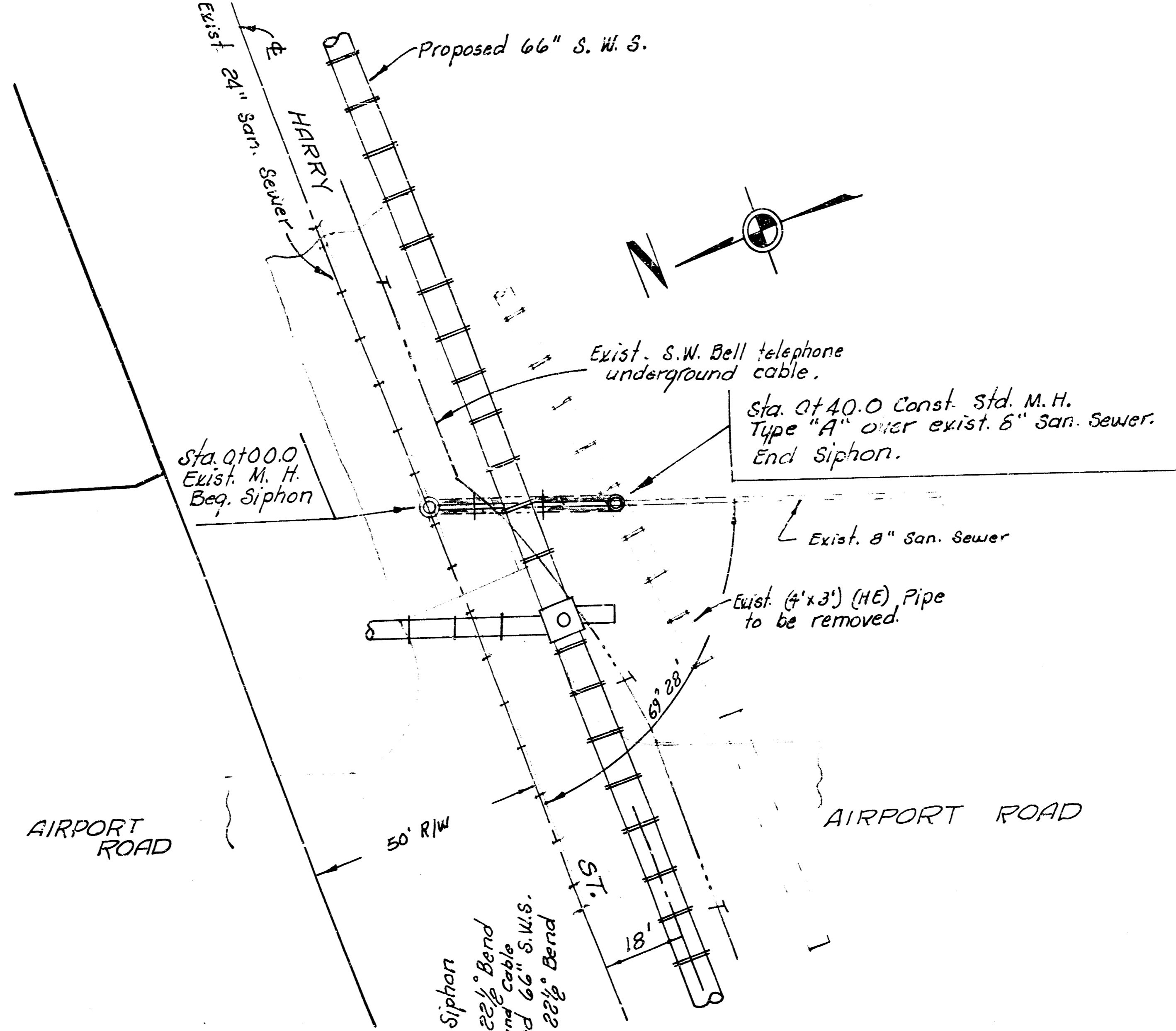
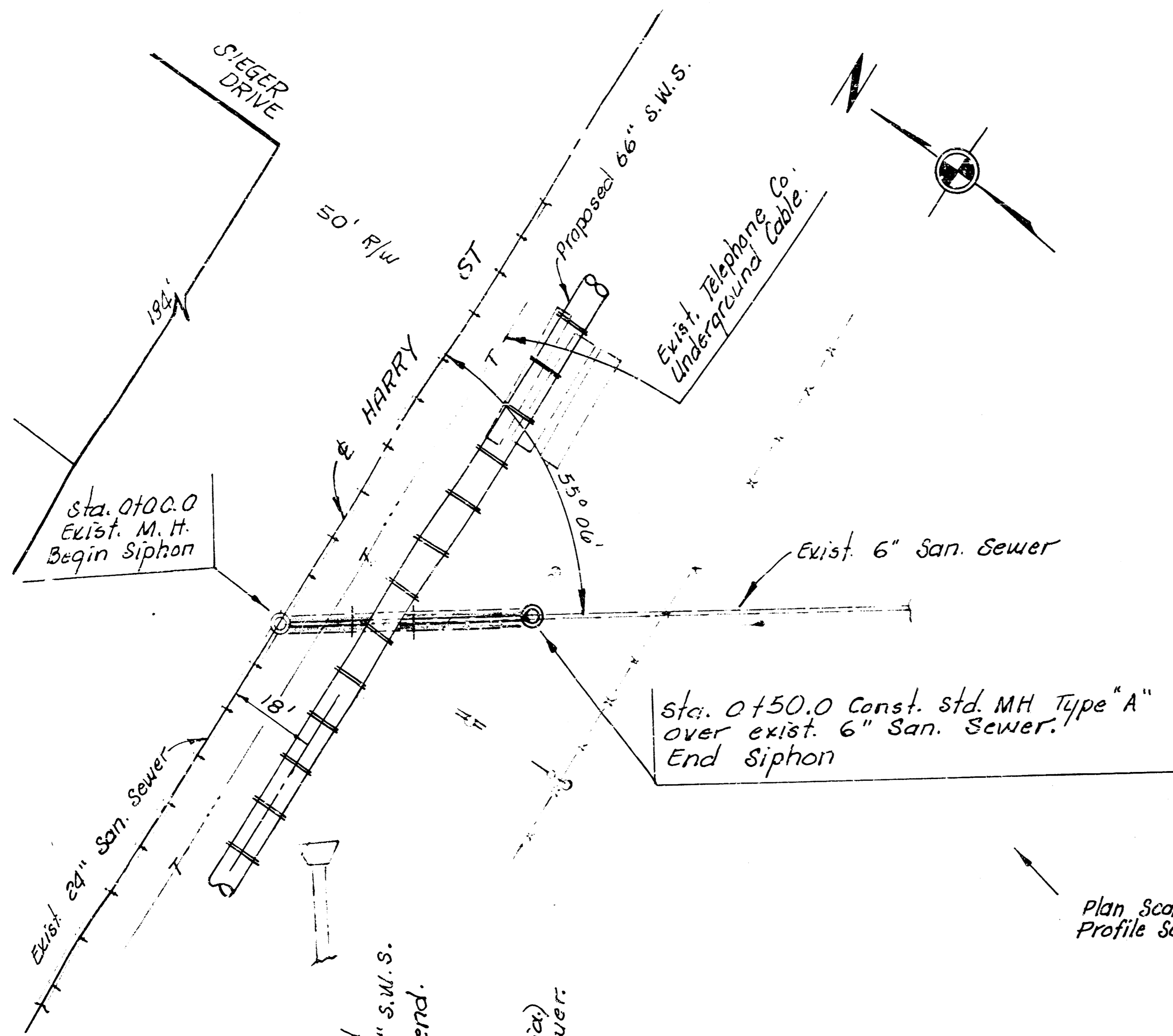
PROJECT NO. DBKD 575085
S.W.D. NO. 25

ENGINEERING
EUGENE BREWER CO.



S. W. D. NO. 25
PROJECT NO. DBKD 575085

19
19
20



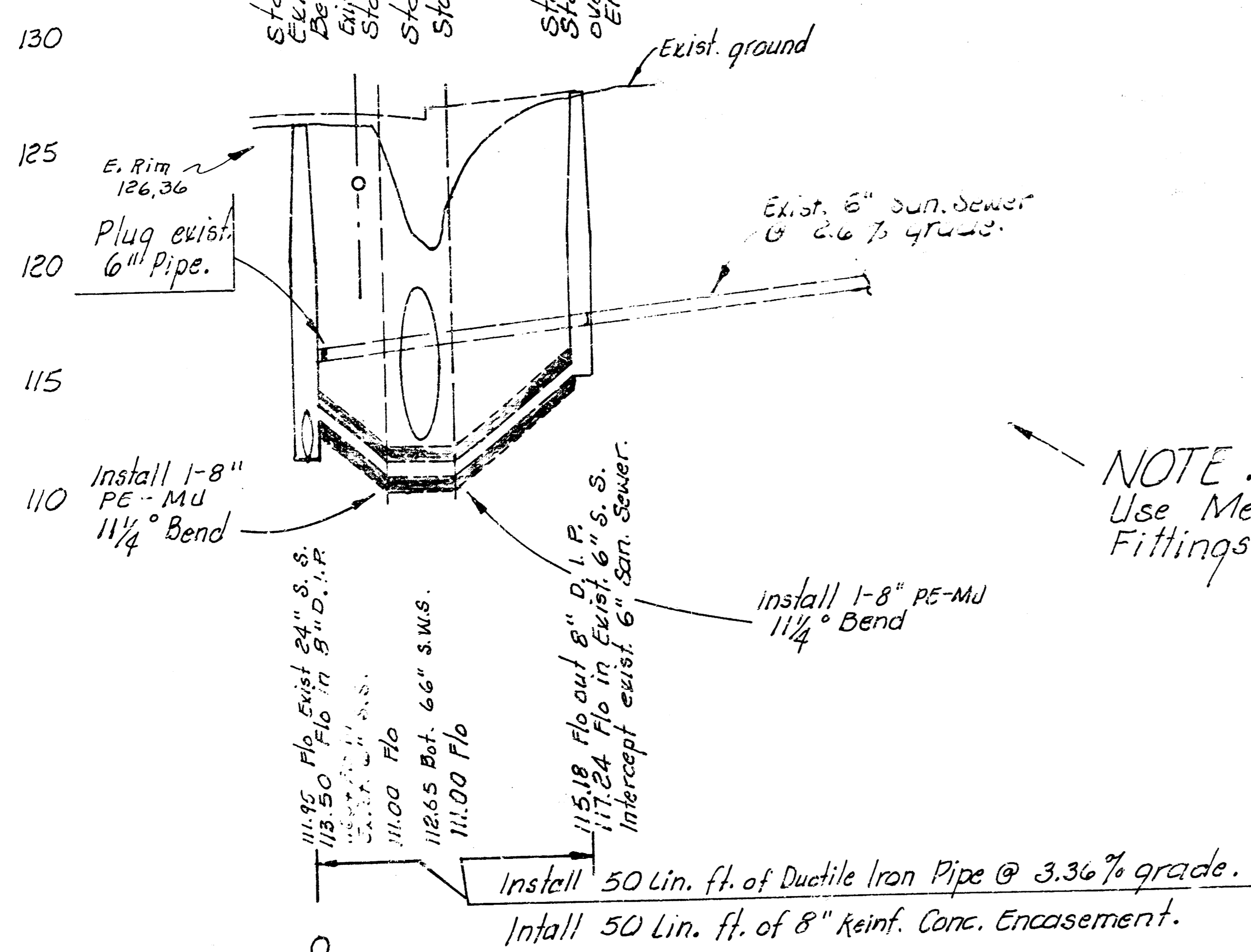
Plan Scale 1" = 20'
 Profile Scale 1" = 20' Horiz.
 1" = 5' Vert.

See Sheet No. 7

Sta. 0100.0
 Const. Manhole
 Beg. Siphon
 Const. 1/4" underground Cable
 Sta. 0114.6 Install 1 1/4" Bend
 Sta. 0121.5 Proposed 66" S.W.S.
 Sta. 0127.0 Install 1 1/4" Bend
 Sta. 0150.0 Const. Std. M.H. Type "A" over exist. 6" San. Sewer. End Siphon.

See Sheet No. 8

Sta. 0100.0
 Exist. M.H. Beg. Siphon
 Sta. 0110.0 Install 22 1/2" Bend
 Sta. 0114.6 Const. Std. M.H. Type "A" over exist. 6" San. Sewer. End Siphon
 Sta. 0120.0 Proposed 66" S.W.S.
 Sta. 0125.0 Install 22 1/2" Bend
 Sta. 0140.0 Const. Std. M.H. Type "A" over exist. 6" San. Sewer. End Siphon.



NOTE:
 Use Mechanical Joint Fittings on these siphons.

