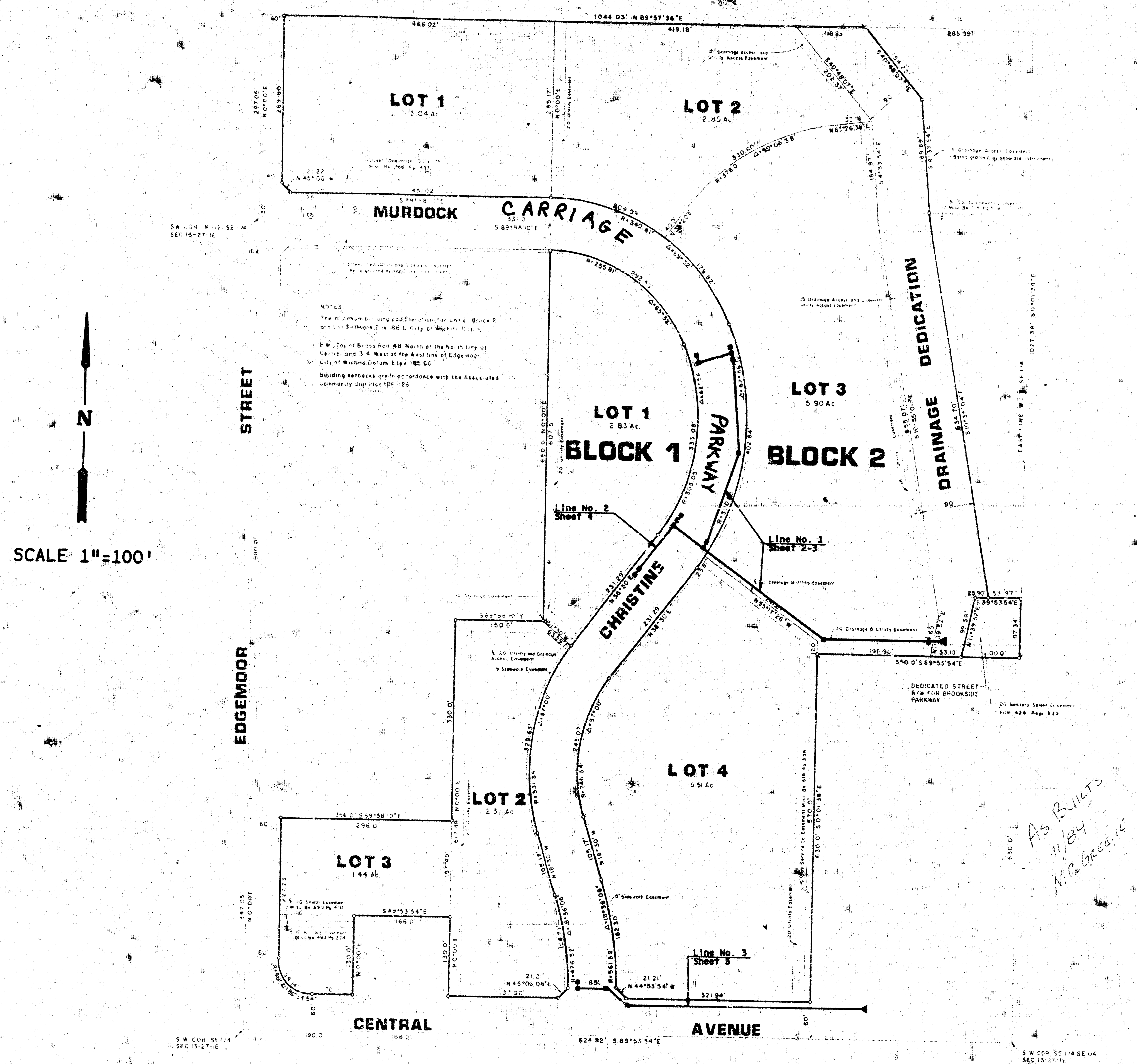

As Builts
11/84
M.C. Greene

dp POE & ASSOCIATES OF KANSAS, INC.
CONSULTING ENGINEERS

STORM WATER SEWER
CENTRAL AVENUE PLAZA

CITY OF WICHITA

M.E. LINDEBAK, CITY ENGINEER

PROJECT NO. 468-76-245-80000-000-000-008

DATE: AUGUST 1983

TABLE OF CONTENTS

COVER SHEET-------------SHEET 1
PLAN AND PROFILES-------SHEETS 2-5
TYPE 1-A INLET----------SHEET 6
RC MANHOLE--------------SHEET 7
HEADWALL FOR 36" PIPE---SHEET 8
HEADWALL FOR 42" PIPE---SHEET 9

CITY OF WICHITA
APPROVED: Approval does not relieve the contractor from any responsibility for errors or deviations from the contract requirements or for any deficiencies of equipment, work, or materials.
Date 9/1/83
Engineering Div. COB

NOTE TO CONTRACTOR

This project will be constructed under the supervision of the CITY ENGINEER and conforming to the STANDARDS of the CITY OF WICHITA. THE CONTRACTOR will [illegible] the City of Wichita for all costs of inspection.

GENERAL NOTES

1. Contractor shall coordinate work with Paving and Sanitary Contractors, and contact relevant Utility Companies and other Agencies involved with this project.
2. The tops of Inlets as noted on the plans may vary so as to meet proposed top of curb elevations. The field Engineer shall locate Inlets with reference to proposed Paving Plans of the pertinent streets.
3. All concrete shall be "STANDARD PAVING MIX" unless otherwise noted.
4. Erosion protection shall be type III Rip-Rap, Concrete Rip-Rap Bags or 8" Filter Point Revetment Mat. Quantities shown for these items are for the square yards of coverage and do not account for the toe wall required by the City of Wichita Standard Specifications.

KENNY E. HIEB
LICENSED
7690
KANSAS
PROFESSIONAL ENGINEER

THE CONTRACTOR WILL PROVIDE ALL CONSTRUCTION STAKING ON THIS PROJECT.

ALL EXCESS EXCAVATION FROM THE CONSTRUCTION OF THIS PROJECT SHALL BE STOCKPILED ON THE REAR OF LOT 3, BLOCK 2 AT THE DIRECTION OF THE OWNER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL BE REQUIRED TO REESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENCED LAND SURVEYOR OR A LICENCED PROFESSIONAL ENGINEER IN ACCORDANCE WITH STATE LAWS.

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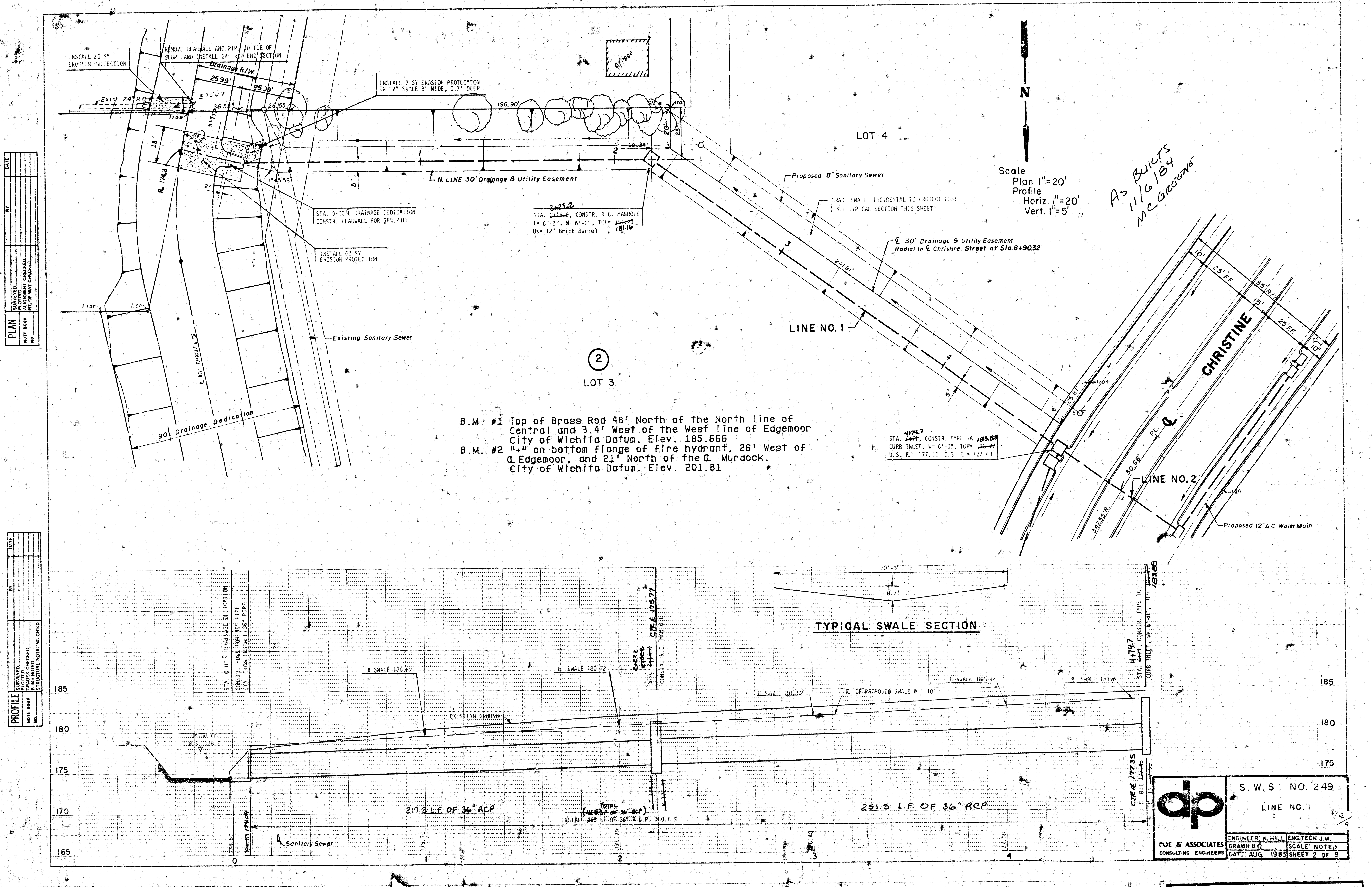
INSTALL 20 SY EROSION PROTECTION
REMOVE HEADWALL AND PIPE TO TOE OF SLOPE AND INSTALL 24" RCP END SECTION
Drainage R/W
25.99'
25.99'
Exist. 24" R.C.P.
Iron
26.55'
26.55
INSTALL 7 SY EROSION PROTECTION IN "V" SWALE 8' WIDE, 0.7' DEEP
196.90'
Garage
18'
℞ 174.3
5' Typ.
11°45'58"
2'
STA. 0+00 ℄ DRAINAGE DEDICATION CONSTR. HEADWALL FOR 36" PIPE
INSTALL 62 SY EROSION PROTECTION
N. LINE 30' Drainage & Utility Easement
10.34'
1
2
3
4
5'
STA. ~~2+12.2~~ 2+23.2, CONSTR. R.C. MANHOLE
L= 6'-2", W= 6'-2", TOP= ~~181.20~~ 181.16
Use 12" Brick Barrel
LOT 4
Proposed 8" Sanitary Sewer
GRADE SWALE INCIDENTAL TO PROJECT COST (SEE TYPICAL SECTION THIS SHEET)
℄ 30' Drainage & Utility Easement Radial to ℄ Christine Street at Sta.8+9032
241.81'
LINE NO. 1
N
Scale
Plan 1"=20'
Profile
Horiz. 1"=20'
Vert. 1"=5'
As Builts 11/6/84 McGregor
10'
25' FF
35' R/W
5'
25' FF
10'
CHRISTINE
Iron
PC ℄
25.81'
30.68'
347.55' R.
LINE NO. 2
Proposed 12" A.C. Water Main
STA. ~~4+77~~ 4+74.7, CONSTR. TYPE 1A CURB INLET, W= 6'-0", TOP= ~~183.77~~ 183.88
U.S. ℞ = 177.53 D.S. ℞ = 177.43
Existing Sanitary Sewer
0.40' CHANNEL
②
LOT 3
Iron
Iron
90' Drainage Dedication
30'-0"
0.7'
TYPICAL SWALE SECTION
STA. 0+00 ℄ DRAINAGE DEDICATION
CONSTR. HDWL FOR 36" PIPE
STA. 0+06 INSTALL 36" PIPE
℞ SWALE 179.62
℞ SWALE 180.72
STA. ~~2+12.2~~ 2+23.2, CONSTR. R.C. MANHOLE
CTR.℞ 175.77
℞ SWALE 181.82
℞ OF PROPOSED SWALE @ 1.10%
℞ SWALE 182.92
℞ SWALE 183.6
STA. ~~4+77~~ 4+74.7, CONSTR. TYPE 1A CURB INLET, W= 6'-0", TOP= ~~183.77~~ 183.88
EXISTING GROUND
Q=100 Yr.
D.W.S. 178.2
217.2 L.F. OF 36" RCP
TOTAL (468.7 L.F. OF 36" RCP)
INSTALL ~~468~~ LF OF 36" R.C.P. @ 0.6%
251.5 L.F. OF 36" RCP
℄ Sanitary Sewer
174.50
~~174.54~~ 174.04
175.10
175.70
℞ OUT ~~177.43~~
℞ IN ~~177.53~~
CTR.℞ 177.35
185
180
175
170
165
0
1
2
3
4
PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
NOTE BOOK
NO.
BY
DATE
PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
IN PLANS
STRUCTURE NOTATIONS CHECKED
NOTE BOOK
NO.
BY
DATE

B.M. #1 Top of Brass Rod 48' North of the North line of Central and 3.4' West of the West line of Edgemoor City of Wichita Datum. Elev. 185.666

B.M. #2 "+" on bottom flange of fire hydrant, 26' West of ℄ Edgemoor, and 21' North of the ℄ Murdock. City of Wichita Datum. Elev. 201.81

POE & ASSOCIATES
CONSULTING ENGINEERS

S.W.S. NO. 249

LINE NO. 1

2/9

ENGINEER: K. HILL	ENG. TECH. J.W.
DRAWN BY:	SCALE: NOTED
DATE: AUG. 1983	SHEET 2 OF 9

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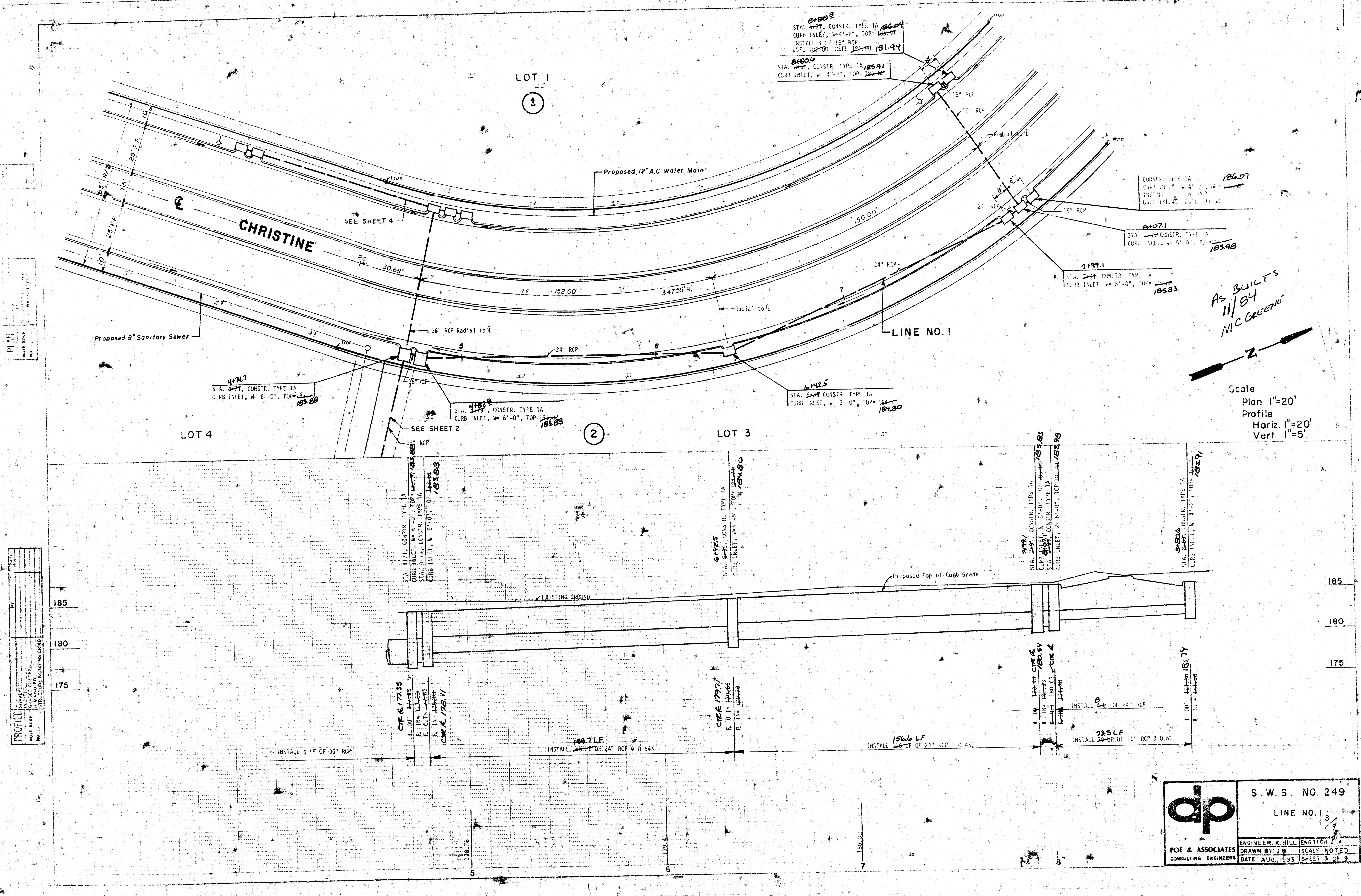
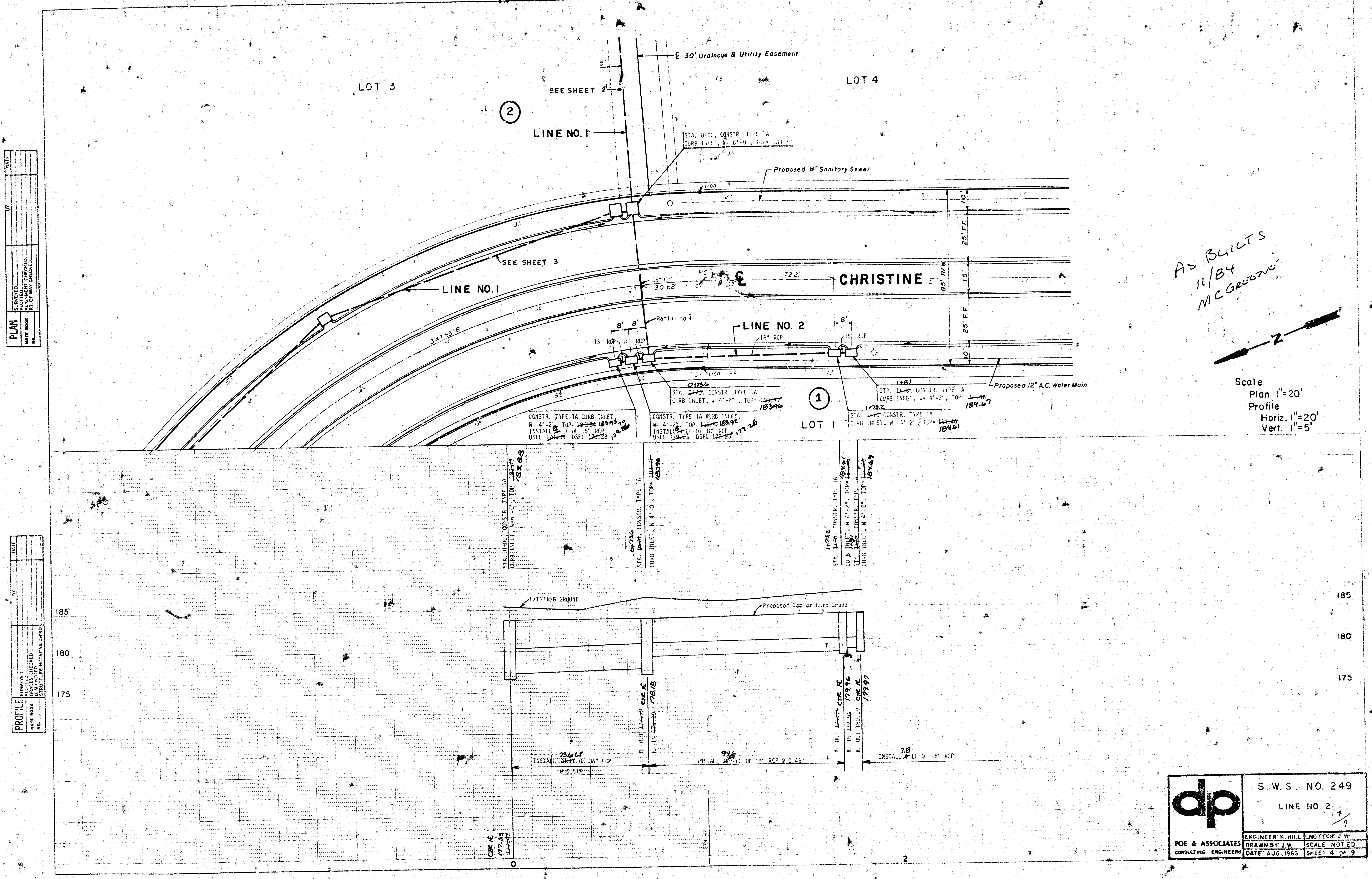

LOT 1
①
LOT 4
②
LOT 3
CHRISTINE
Proposed 12" A.C. Water Main
Proposed 8" Sanitary Sewer
85' R/W
25' F.F.
25' F.F.
15'
15'
10
10
Iron
SEE SHEET 4
SEE SHEET 2
36" RCP Radial to ℄
36" RCP
24" RCP
15" RCP
Radial to ℄
P.C. 30.68'
150.00'
152.00'
347.55' R.
LINE NO. 1
8'
5
6
7
STA. ~~8+77~~ 8+88.8, CONSTR. TYPE 1A
CURB INLET, W=4'-2", TOP= ~~185.97~~ 186.04
INSTALL 4 LF 15" RCP
USFL 182.00 DSFL ~~181.90~~ 181.94
STA. ~~8+69~~ 8+80.6, CONSTR. TYPE 1A
CURB INLET, W= 4'-2", TOP= ~~185.85~~ 185.91
CONSTR. TYPE 1A
CURB INLET, W=4'-2", TOP= 186.07
INSTALL 4 LF 15" RCP
USFL 181.42 DSFL 181.38
STA. ~~7+99~~ 8+07.1 CONSTR. TYPE 1A
CURB INLET, W= 5'-0", TOP= 185.98
STA. ~~7+91~~ 7+99.1, CONSTR. TYPE 1A
CURB INLET, W= 5'-0", TOP= ~~185.80~~ 185.83
STA. ~~6+35~~ 6+42.5 CONSTR. TYPE 1A
CURB INLET, W= 5'-0", TOP= 184.80
STA. ~~4+77~~ 4+74.7, CONSTR. TYPE 1A
CURB INLET, W= 6'-0", TOP= ~~183.77~~ 183.88
STA. ~~4+79~~ 4+82.8, CONSTR. TYPE 1A
CURB INLET, W= 6'-0", TOP= ~~183.82~~ 183.83
As Builts 11/84 M C Greene
N
Scale
Plan 1"=20'
Profile
Horiz. 1"=20'
Vert. 1"=5'
185
180
175
Proposed Top of Curb Grade
EXISTING GROUND
INSTALL 4 LF OF 36" RCP
INSTALL ~~156 LF~~ 159.7 L.F. OF 24" RCP @ 0.64%
INSTALL ~~156 LF~~ 156.6 L.F. OF 24" RCP @ 0.45%
INSTALL ~~4 LF~~ 8 OF 24" RCP
INSTALL ~~20 LF~~ 23.5 LF OF 15" RCP @ 0.6%
CTR ℄ 177.35
CTR ℄ 178.11
CTR ℄ 179.71
CTR ℄ 180.54
CTR ℄ 181.74
5
6
7
8
PLAN
PROFILE

S. W. S. NO. 249

LINE NO. 1 3/9

POE & ASSOCIATES
CONSULTING ENGINEERS

ENGINEER: K. HILL	ENGTECH J.W.
DRAWN BY: J.W.	SCALE: NOTED
DATE: AUG., 1983	SHEET 3 OF 9


LOT 3
LOT 4
℄ 30' Drainage & Utility Easement
5'
SEE SHEET 2
②
LINE NO. 1
STA. 0+00, CONSTR. TYPE 1A CURB INLET, W= 6'-0", TOP= 183.77
Proposed 8" Sanitary Sewer
Iron
SEE SHEET 3
LINE NO. 1
347.55' R
36" RCP
30.68'
P.C.
℄
72.2'
CHRISTINE
85' R/W
15'
10'
25' F.F.
25' F.F.
10'
Radial to ℄
8'
8'
15" RCP
18" RCP
LINE NO. 2
18" RCP
8'
15" RCP
Iron
Proposed 12" A.C. Water Main
0+73.6
STA. ~~0+70~~, CONSTR. TYPE 1A CURB INLET, W= 4'-2", TOP= ~~183.77~~ 183.96
1+81
STA. ~~1+78~~, CONSTR. TYPE 1A CURB INLET, W= 4'-2", TOP= ~~184.48~~ 184.67
①
LOT 1
1+23.2
STA. ~~1+70~~ CONSTR. TYPE 1A CURB INLET, W= 4'-2", TOP= ~~184.40~~ 184.61
CONSTR. TYPE 1A CURB INLET, W= 4'-2", TOP= ~~183.84~~ 183.93 INSTALL ~~9~~ 8 LF OF 15" RCP USFL ~~179.38~~ 179.80 DSFL ~~179.28~~ 179.70
CONSTR. TYPE 1A CURB INLET, W= 4'-2", TOP= ~~183.82~~ 183.92 INSTALL ~~4~~ 6. LF OF 18" RCP USFL ~~179.03~~ DSFL ~~178.93~~ 179.26
STA. 0+00, CONSTR. TYPE 1A CURB INLET, W=6'-0", TOP= ~~183.77~~ 183.88
0+73.6
STA. ~~0+70~~, CONSTR. TYPE 1A CURB INLET, W 4'-0", TOP= ~~183.77~~ 183.96
1+23.2
STA. ~~1+70~~, CONSTR. TYPE 1A CURB INLET, W 4'-2", TOP= ~~184.40~~ 184.61
STA. ~~1+78~~ 1+81, CONSTR. TYPE 1A CURB INLET, W 4'-2", TOP= ~~184.48~~ 184.67
EXISTING GROUND
Proposed Top of Curb Grade
185
180
175
185
180
175
FL OUT ~~177.79~~ CTR FL 178.18
FL IN ~~178.20~~
FL OUT ~~179.74~~ CTR FL 179.96
FL IN ~~179.92~~
FL OUT 180.09 CTR FL 179.97
INSTALL ~~70 LF~~ 73.6 LF OF 36" RCP @ 0.51%
INSTALL ~~16~~ 99.6 LF OF 18" RCP @ 0.45%
INSTALL ~~4~~ 7.8 LF OF 15" RCP
CTR FL 177.55 ~~177.43~~
174.82
0
2
PLAN
NOTE BOOK NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE
PROFILE
NOTE BOOK NO.
SURVEYED
PLOTTED
GRADES CHECKED
B.M. NOTED
STRUCTURE NOTATNS CHKD
BY
DATE
Z
Scale
Plan 1"=20'
Profile
Horiz. 1"=20'
Vert. 1"=5'

As Builts
11/84
McGregor

POE & ASSOCIATES
CONSULTING ENGINEERS

S.W.S. NO. 249

LINE NO. 2

4/9

ENGINEER: K. HILL	ENG TECH: J. W.
DRAWN BY: J. W.	SCALE: NOTED
DATE: AUG., 1983	SHEET 4 OF 9

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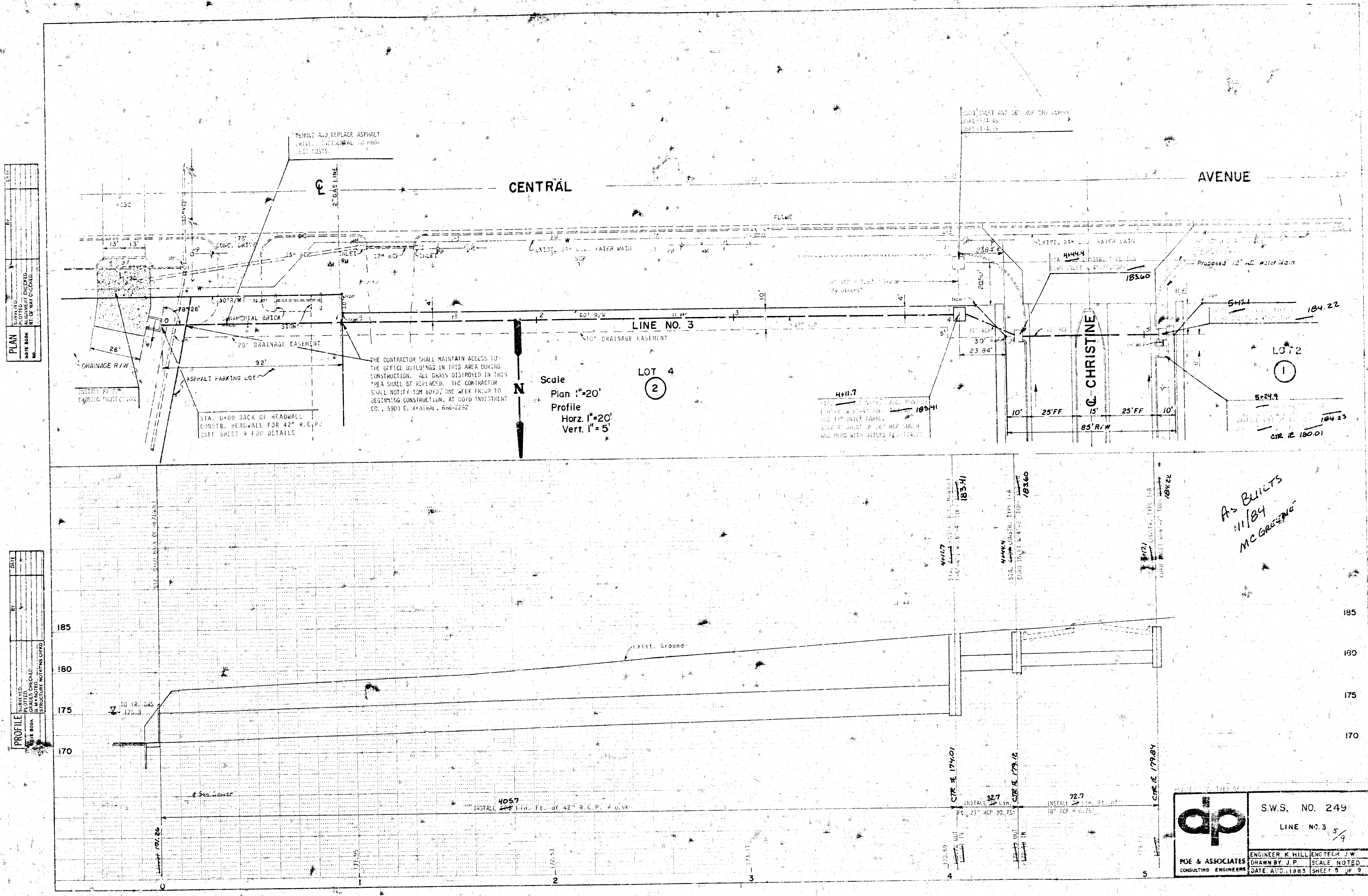
CENTRAL
AVENUE
PLAN
PROFILE
LINE NO. 3
LOT 4
②
LOT 2
①
C CHRISTINE
2" GAS LINE
REMOVE AND REPLACE ASPHALT DRIVE. INCIDENTAL TO PROJECT COSTS.
THE CONTRACTOR SHALL MAINTAIN ACCESS TO THE OFFICE BUILDINGS IN THIS AREA DURING CONSTRUCTION. ALL GRASS DISTROYED IN THIS AREA SHALL BE REPLACED. THE CONTRACTOR SHALL NOTIFY TOM BOYD, ONE WEEK PRIOR TO BEGINNING CONSTRUCTION, AT BOYD INVESTMENT CO., 5900 E. CENTRAL, 686-2292
20' DRAINAGE EASEMENT
DRAINAGE R/W
ASPHALT PARKING LOT
INSTALL 87 S.Y. EROSION PROTECTION
STA. 0+00 BACK OF HEADWALL CONSTR. HEADWALL FOR 42" R.C.P. (SEE SHEET 9 FOR DETAILS
26'
92'
13'
13'
78°26'
ORNAMENTAL BRICK
SIGN
60' R/W
N
Scale
Plan 1"=20'
Profile
Horz. 1"=20'
Vert. 1"=5'
CURB INLET AND 36" RCP "By Others"
USFL=174.45
DSFL=174.35
EXIST. 24" L.J. WATER MAIN
Proposed 12" A.C. Water Main
STA. 4+44.4 CONSTR. TYPE 1-A CURB INLET 4'-2", TOP=183.60
4+11.7
STA. CONSTR. R.C. MANHOLE 6'-4" x 6'-4" TOP= 183.41
USE 12" BRICK BARREL
STUB 4' JOINT OF 36" RCP SOUTH AND PLUG WITH BRICKS FL.=174.22
5+17.1
184.22
5+24.9
184.23
CTR ℄ 180.01
23.84'
20.50'
30'
21" RCP
18" RCP
15" RCP
10'
25'FF
15'
25'FF
10'
85' R/W
Exist. Ground
TO TR. DAS 175.3
CTR ℄ 174.01
CTR ℄ 179.12
CTR ℄ 179.84
INSTALL 405.7 Lin. Ft. of 42" R.C.P. @ 0.58
INSTALL 32.7 Lin. Ft. 21" RCP @ 0.75
INSTALL 72.7 Lin. Ft. of 18" RCP @ 0.75
171.26
185
180
175
170
0
1
2
3
4
5

As Builts
11/84
MC Greening

REVISED NOV. 1983 BY

S.W.S. NO. 249
LINE NO. 3
5/9

POE & ASSOCIATES
CONSULTING ENGINEERS

ENGINEER. K. HILL	ENG TECH. J.W.
DRAWN BY. J. P.	SCALE. NOTED
DATE. AUG., 1983	SHEET 5 OF 9

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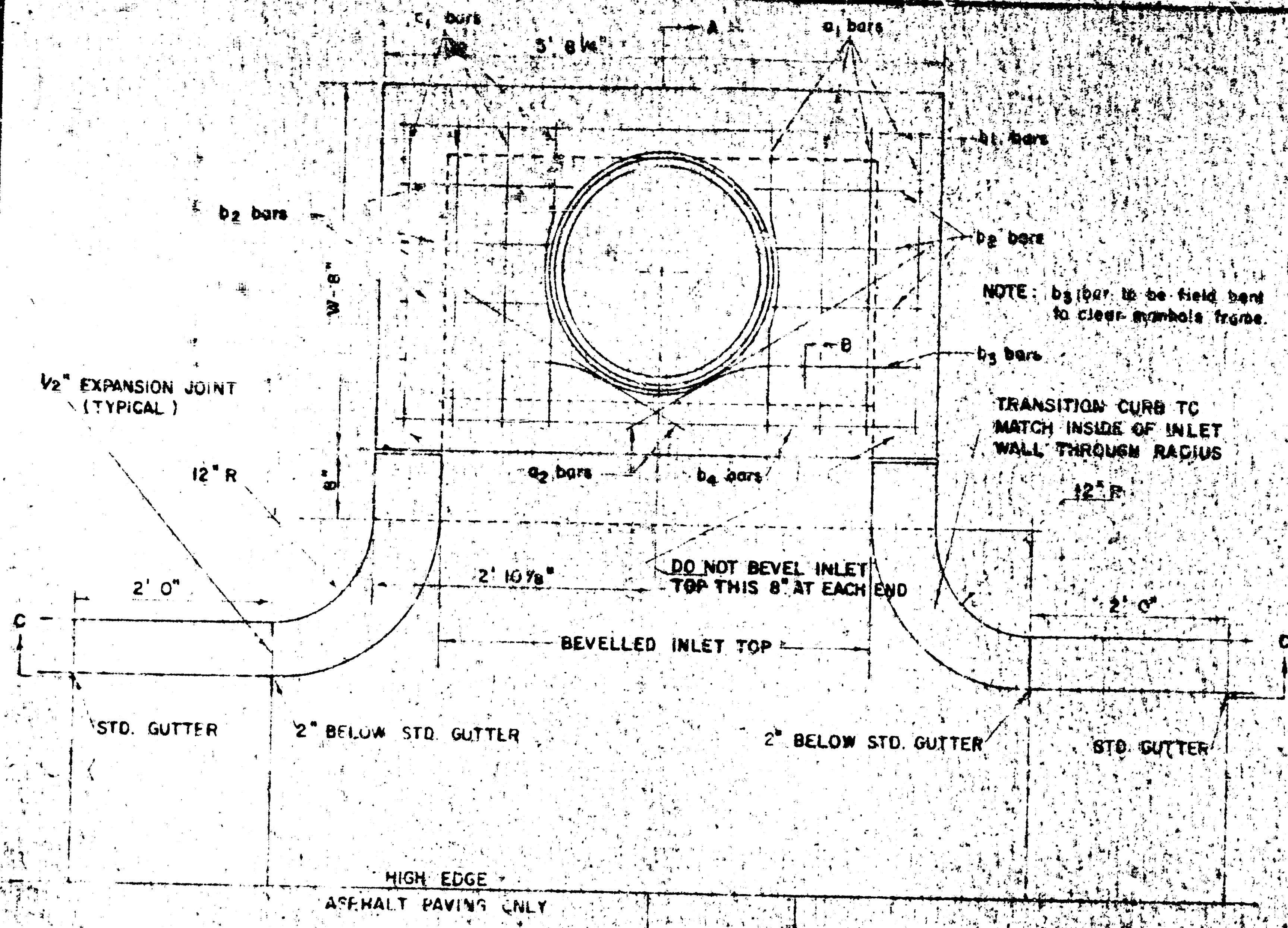
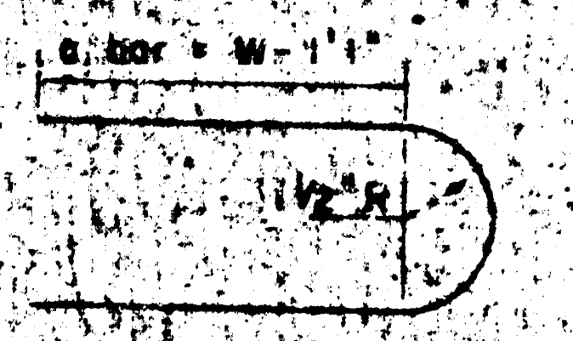


PLAN (SCALE [illegible] 1' 0")



BENDING DIAGRAM

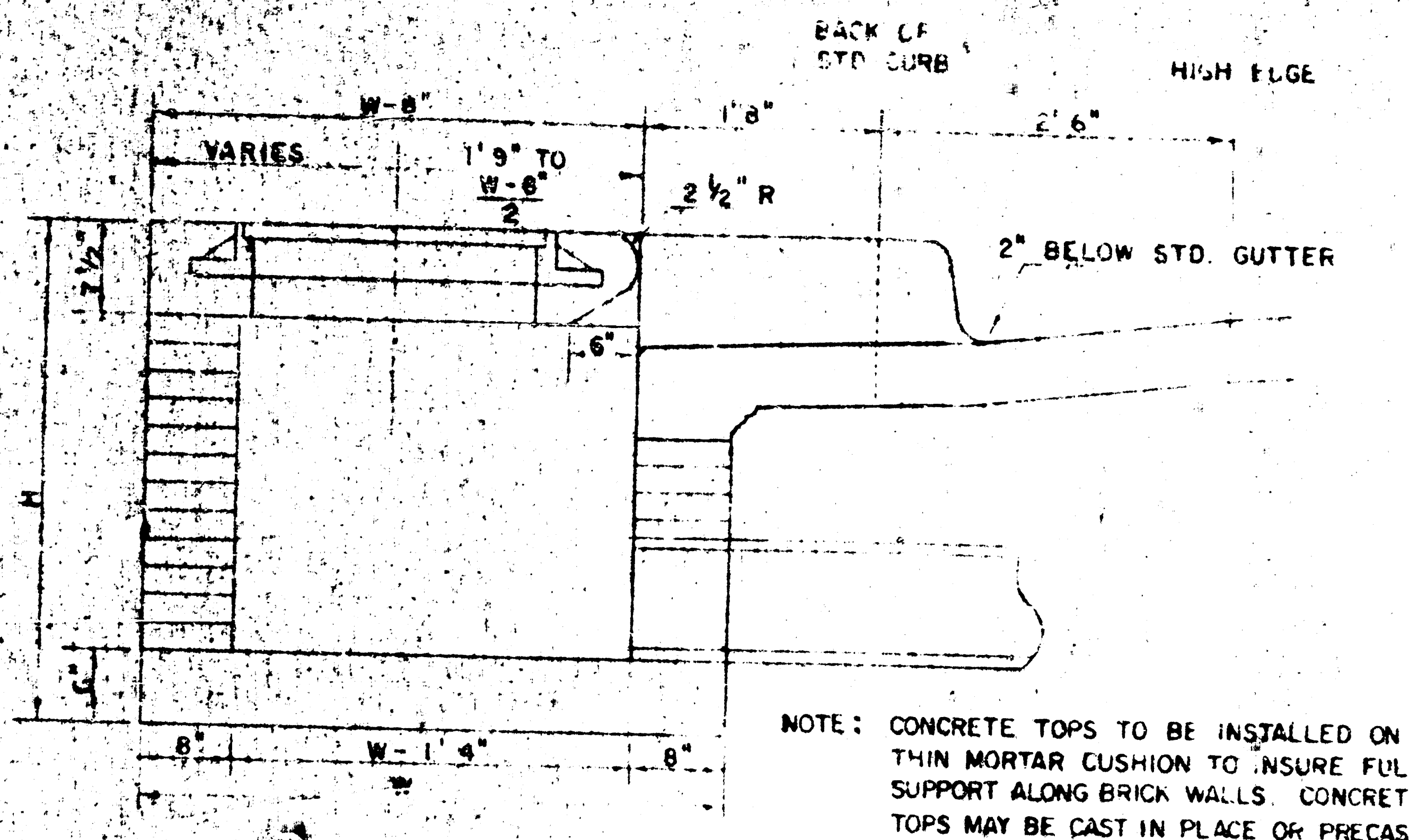
STEEL SCHEDULE

BAR		a1	a2*	b1 W=4'2"	b1 W=5'0"	b1 W=6'0"	b1 W=7'0"	b1 W=8'0"	b2	b3	b4	WT. LBS.
NUMBER		8	2	1	3	5	7	9	6	1	1	
SIZE		#4	#4	#4	#4	#4	#4	#4	#4	#4	#6	
LENGTH	W=4'2"	6'5"	3'4"	5'5"	–	–	–	–	1'5"	5'6"	5'5"	60#
	W=5'0"	8'1"	4'4"	–	5'5"	–	–	–	1'5"	5'6"	5'5"	77#
	W=6'0"	10'1"	5'4"	–	–	5'5"	–	–	1'5"	5'6"	5'5"	97#
	W=7'0"	11'1"	6'4"	–	–	–	5'5"	–	1'5"	5'6"	5'5"	111#
	W=8'0"	12'1"	7'4"	–	–	–	–	5'5"	1'5"	5'6"	5'5"	124#

* NOTE: a_2 BARS TO BE PLACED APPROX. 2" BELOW TOP OF INLET COVER

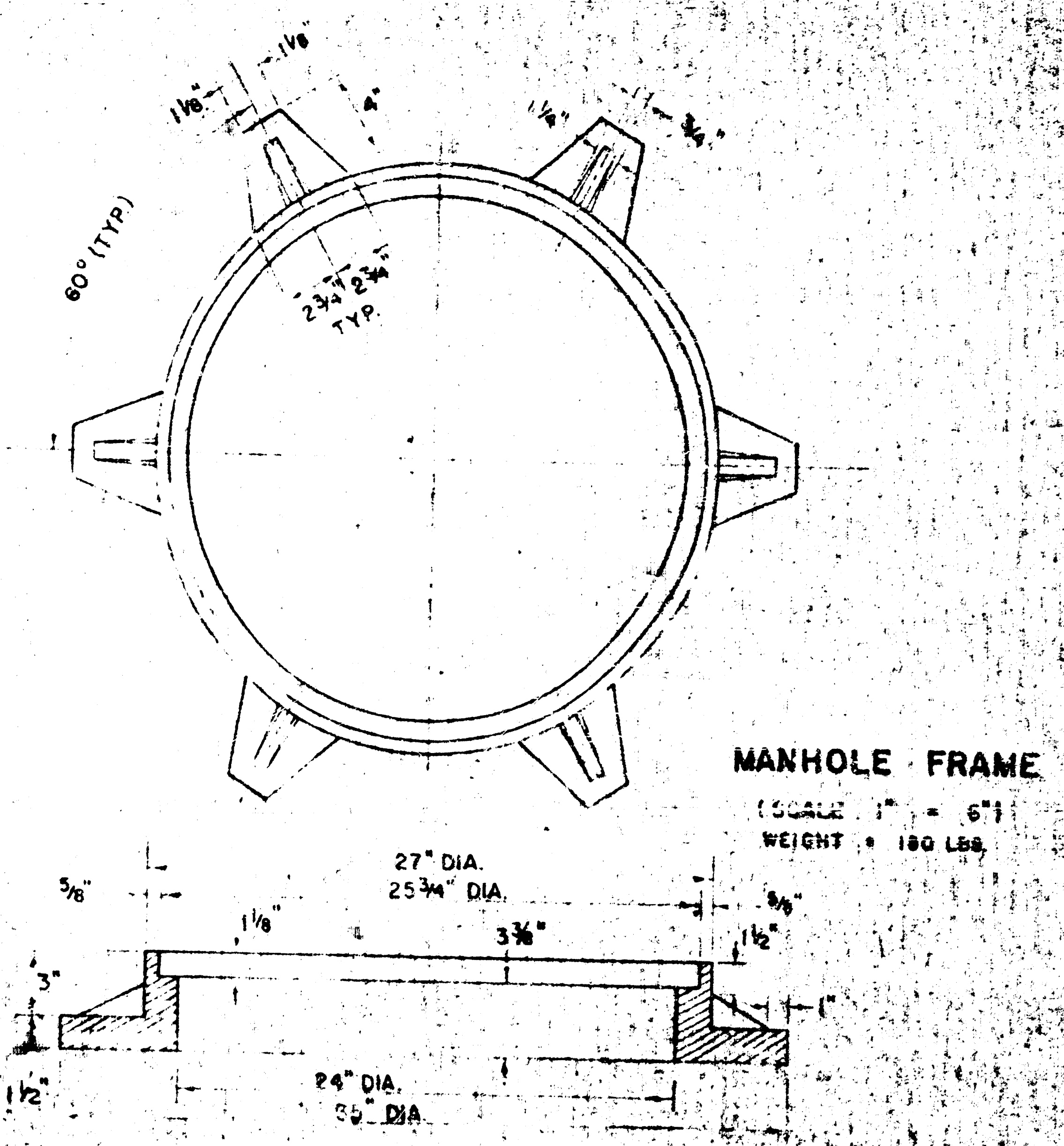
STANDARD CURB INLET PRECAST TOPS			
W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4' 2"	36"x5'8 1/4"x7 1/2"	21" & SMALLER	0.46 *
5' 0"	46"x5'8 1/4"x7 1/2"	24" & 30"	0.57 *
6' 0"	54"x5'8 1/4"x7 1/2"	36" & 42"	0.71 *
7' 0"	64"x5'8 1/4"x7 1/2"	48" & 54"	0.84 *
8' 0"	7'4"x5'8 1/4"x7 1/2"	60" & 66"	0.97 *

* CROSS VOLUME

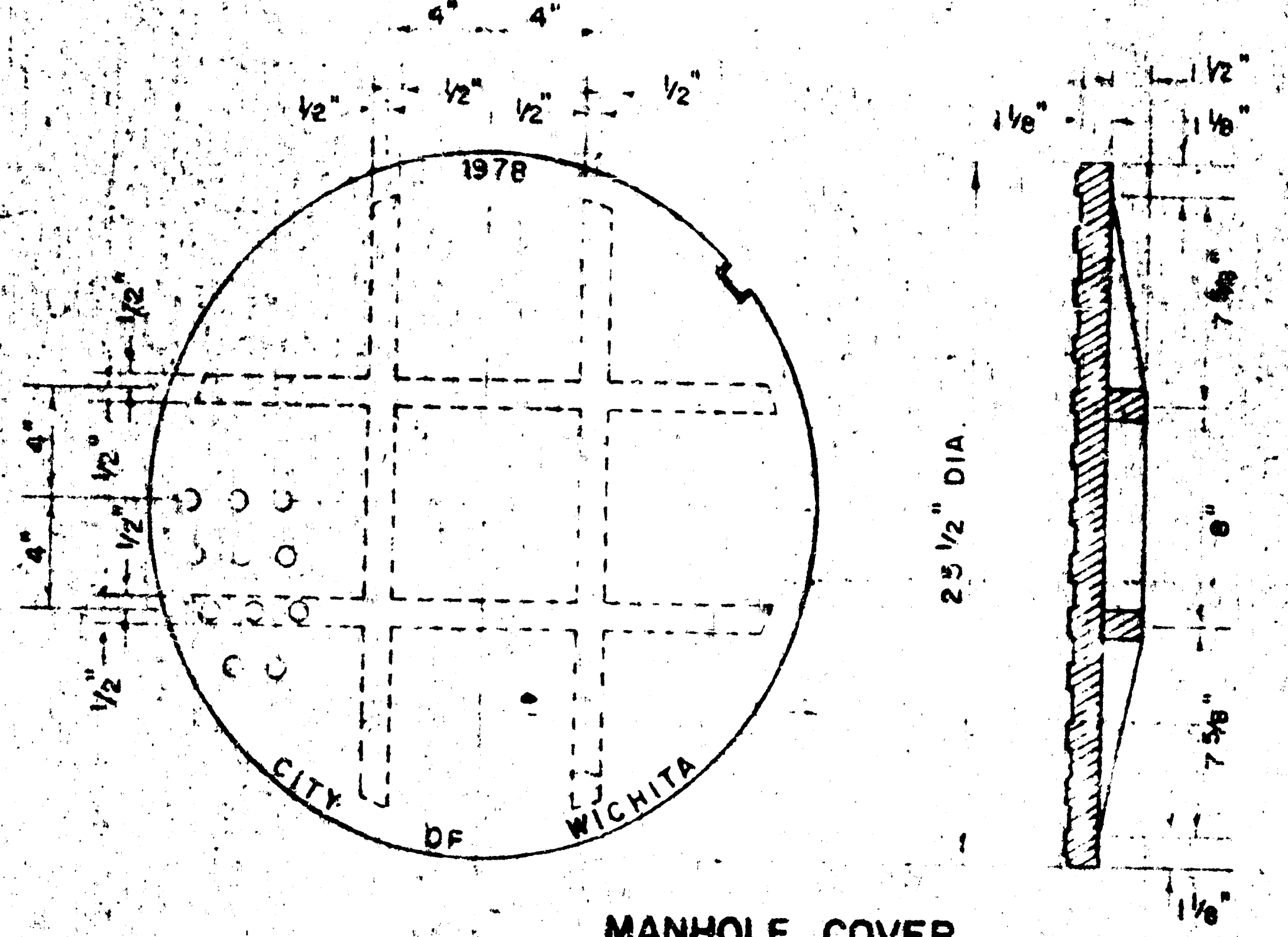


SECTION A-A
(SCALE 1" = 1'0")

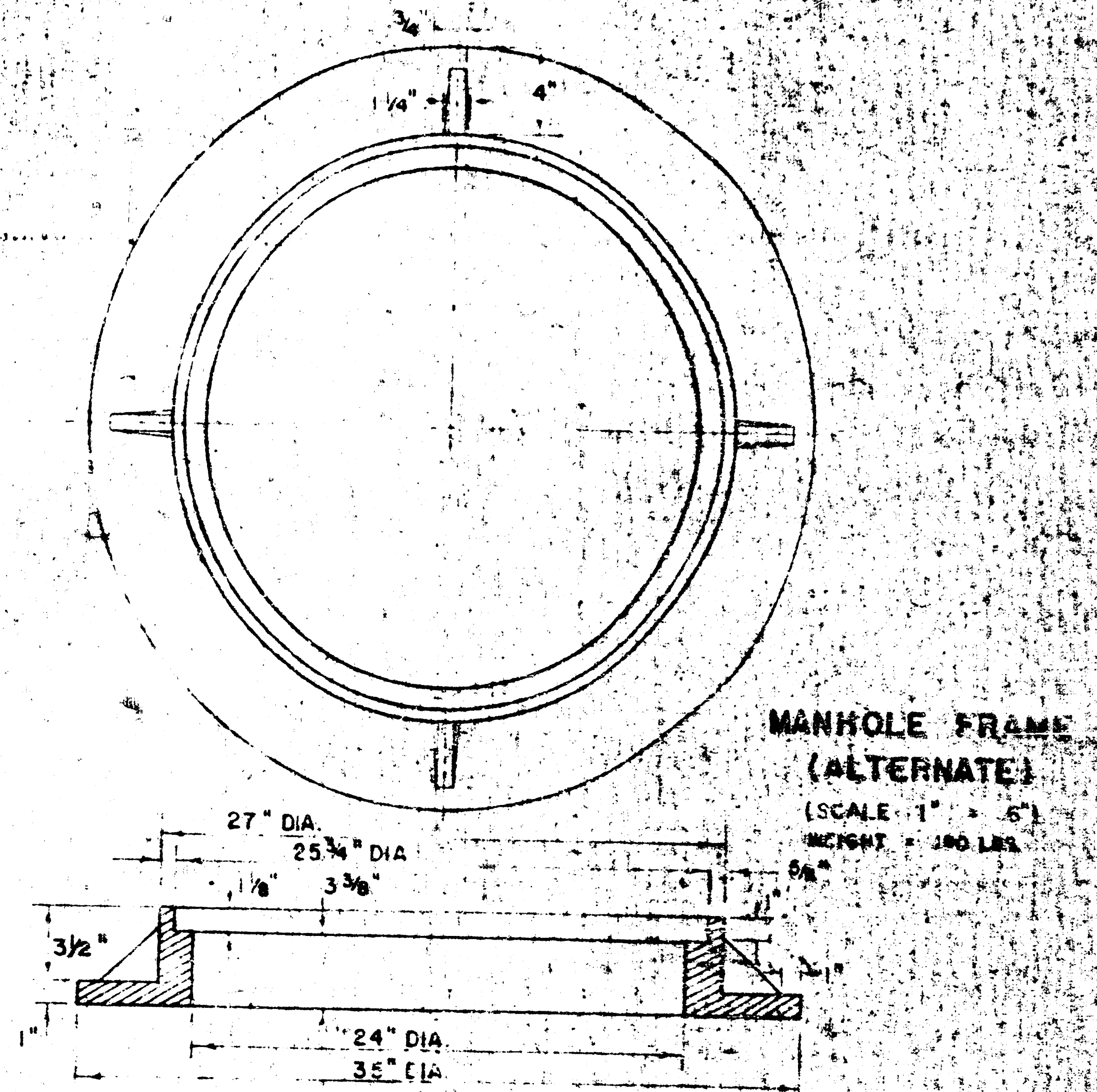
NOTE: CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK WALLS. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST CONCRETE FOR INLET TOPS AND FLOORS SHALL BE *STANDARD* PAVING MIX.



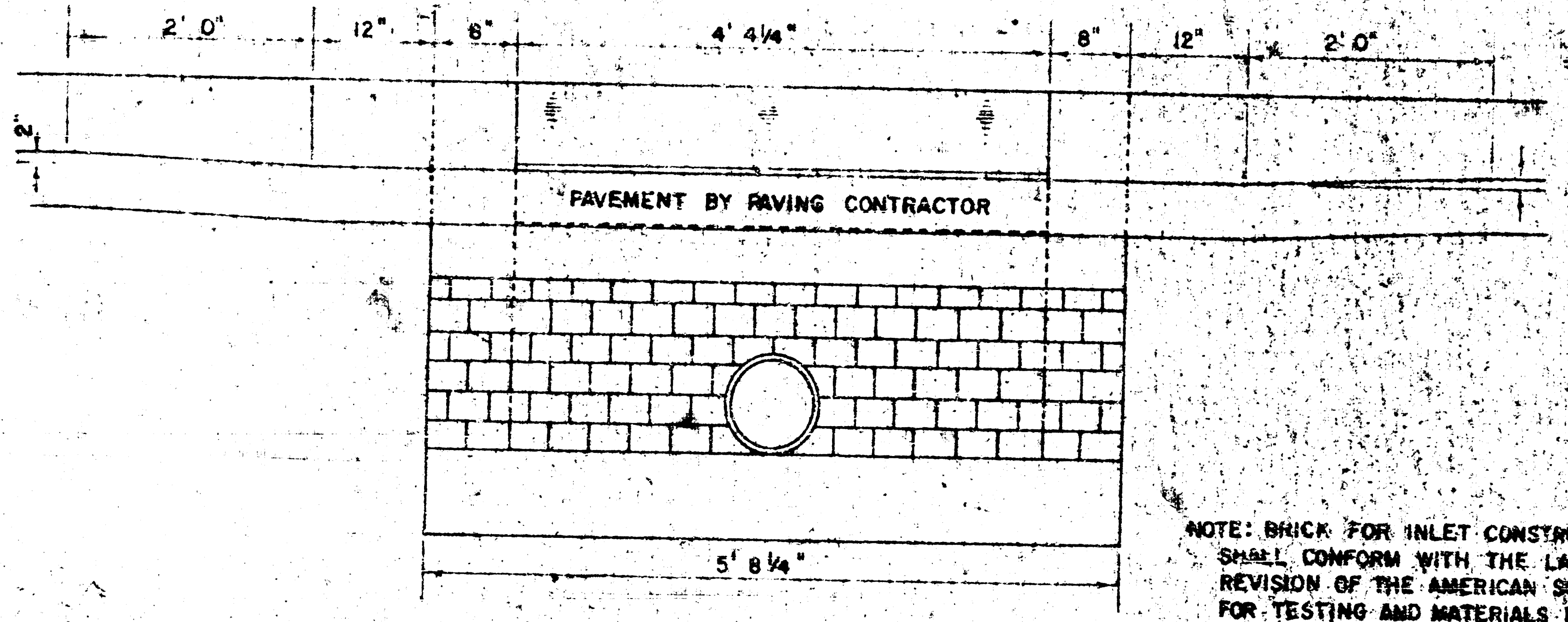
MANHOLE FRAME
(SCALE 1" = 6")
WEIGHT = 180 LBS.



MANHOLE COVER
(SCALE 1" = 6")
WEIGHT = 170 LBS.

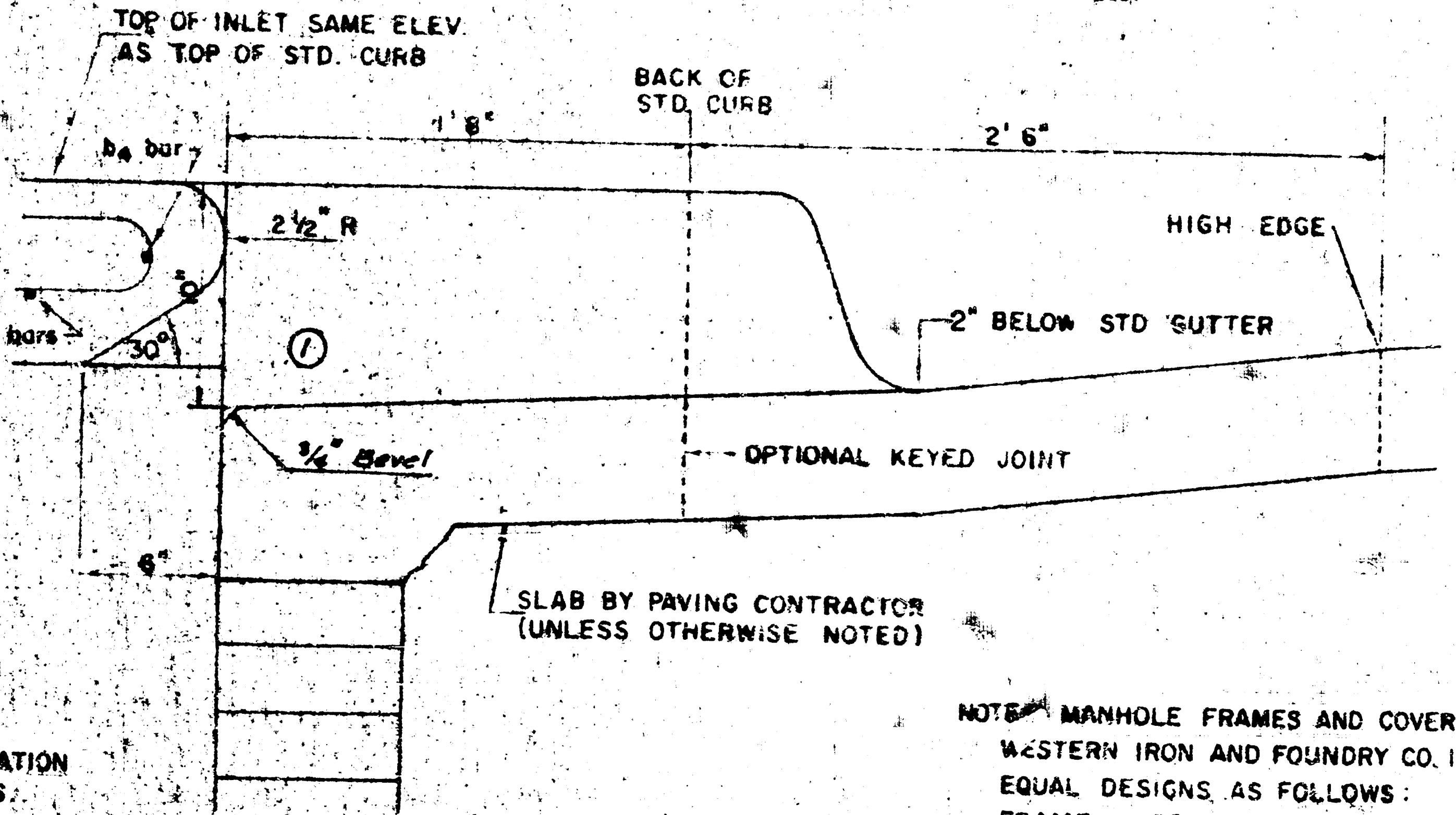


MANHOLE FRAME (ALTERNATE)
(SCALE 1" = 6")
WEIGHT = 180 LBS.



SECTION C-C
(SCALE 1" = 1'0")

NOTE: BRICK FOR INLET CONSTRUCTION SHALL CONFORM WITH THE LATEST REVISION OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS DESIGNATION C-32 FOR MANHOLE BRICK GRADE MS.

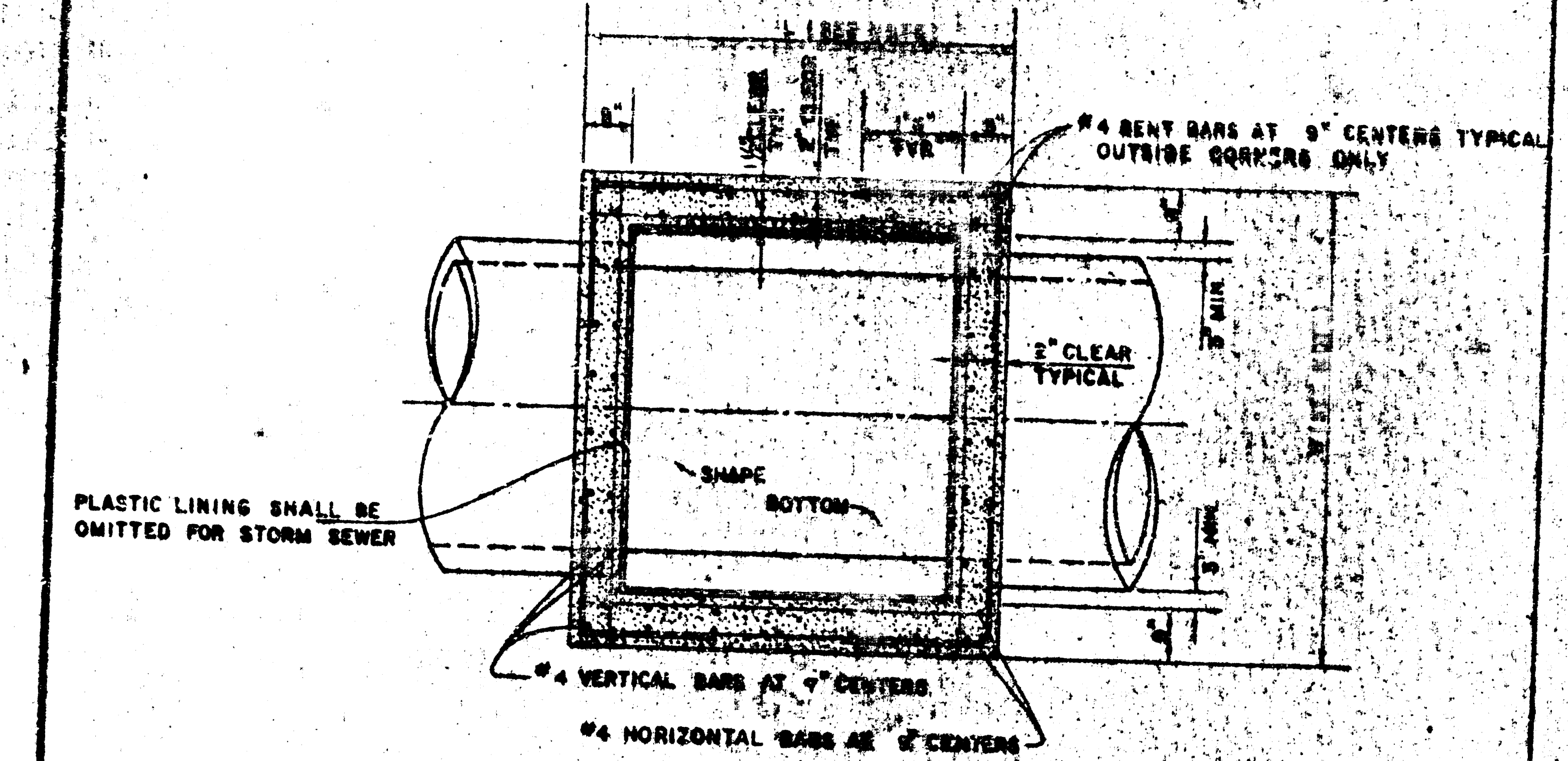


SECTION B-B
(SCALE 1" = 6")

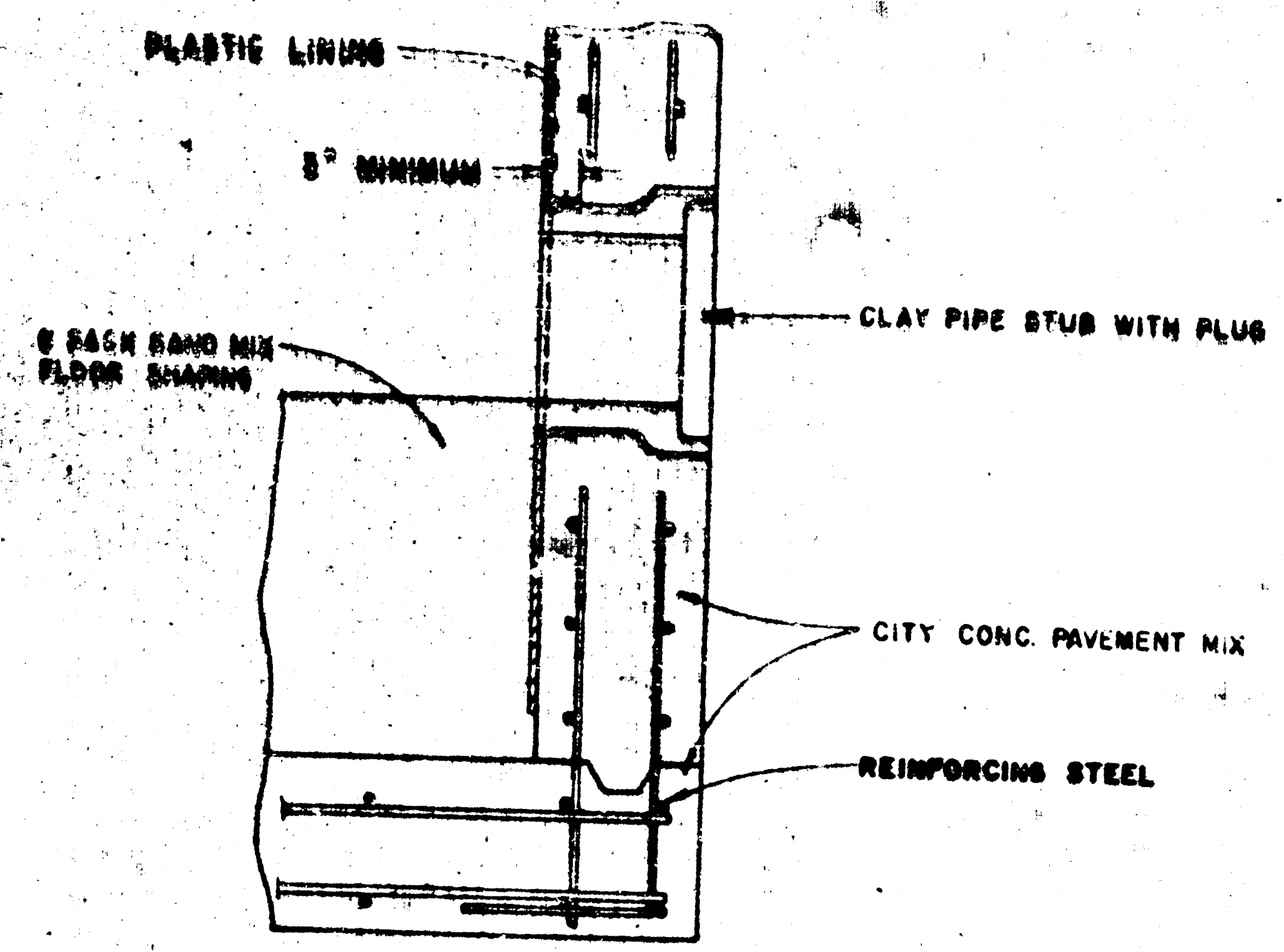
NOTE: MANHOLE FRAMES AND COVER ARE WESTERN IRON AND FOUNDRY CO. INC. OR EQUAL DESIGNS AS FOLLOWS:
FRAME: 524-L6
FRAME (ALTERNATE): 500 A4
COVER: 222 S4 "NOBBY"

Rev. 8-10-83
① *Rev. 3-18-81*
S.W.S. NO. 249

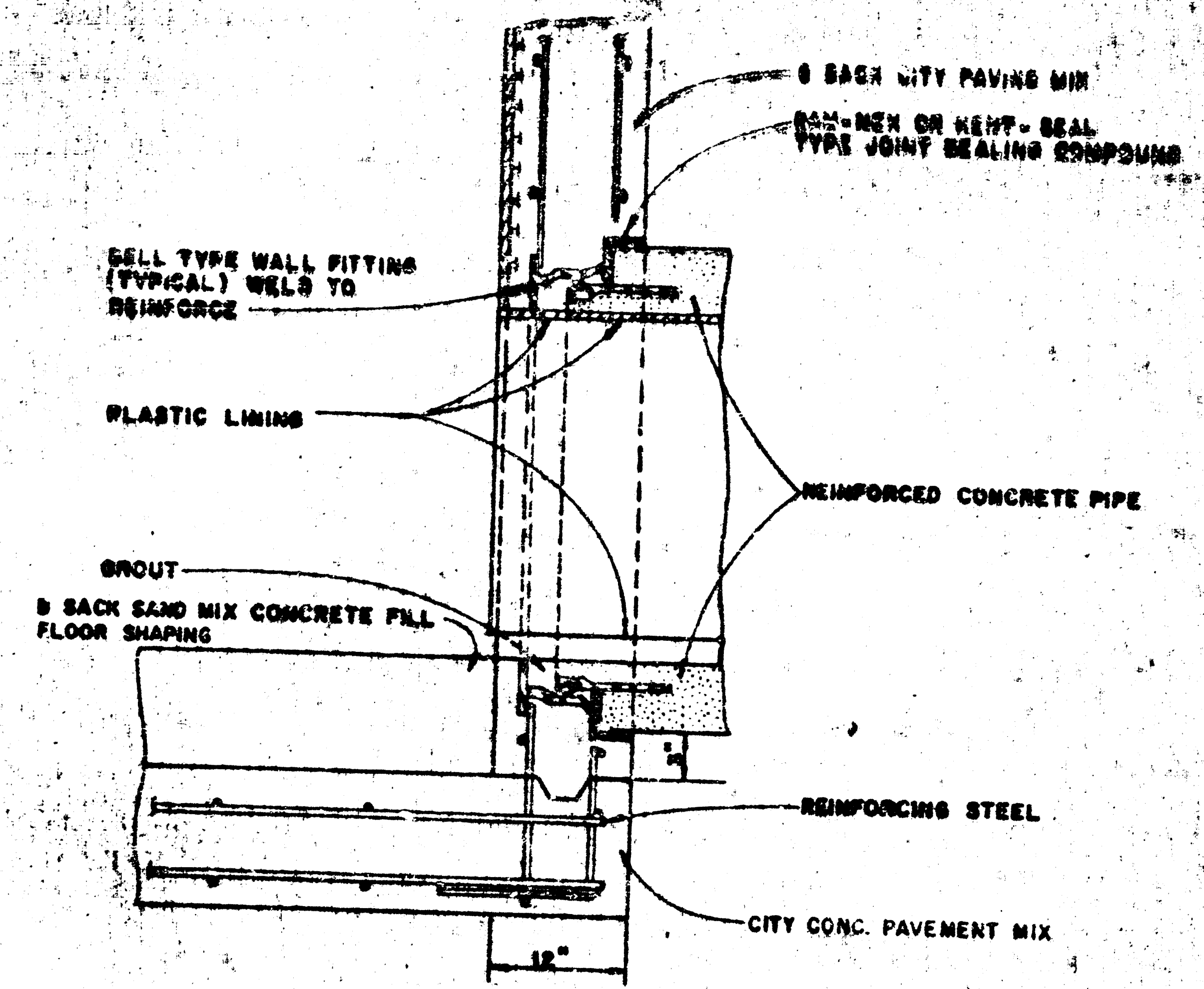
DETAIL STANDARD TYPE IA CURB INLET
CITY OF WICHITA, KANSAS
M.E. LINDEBAK, CITY ENGINEER
JUNE, 1961


L (SEE NOTE)
#4 BENT BARS AT 9" CENTERS TYPICAL OUTSIDE CORNERS ONLY
2" CLEAR TYPICAL
3" MIN
SHAPE BOTTOM
PLASTIC LINING SHALL BE OMITTED FOR STORM SEWER
#4 VERTICAL BARS AT 9" CENTERS
#4 HORIZONTAL BARS AT 9" CENTERS

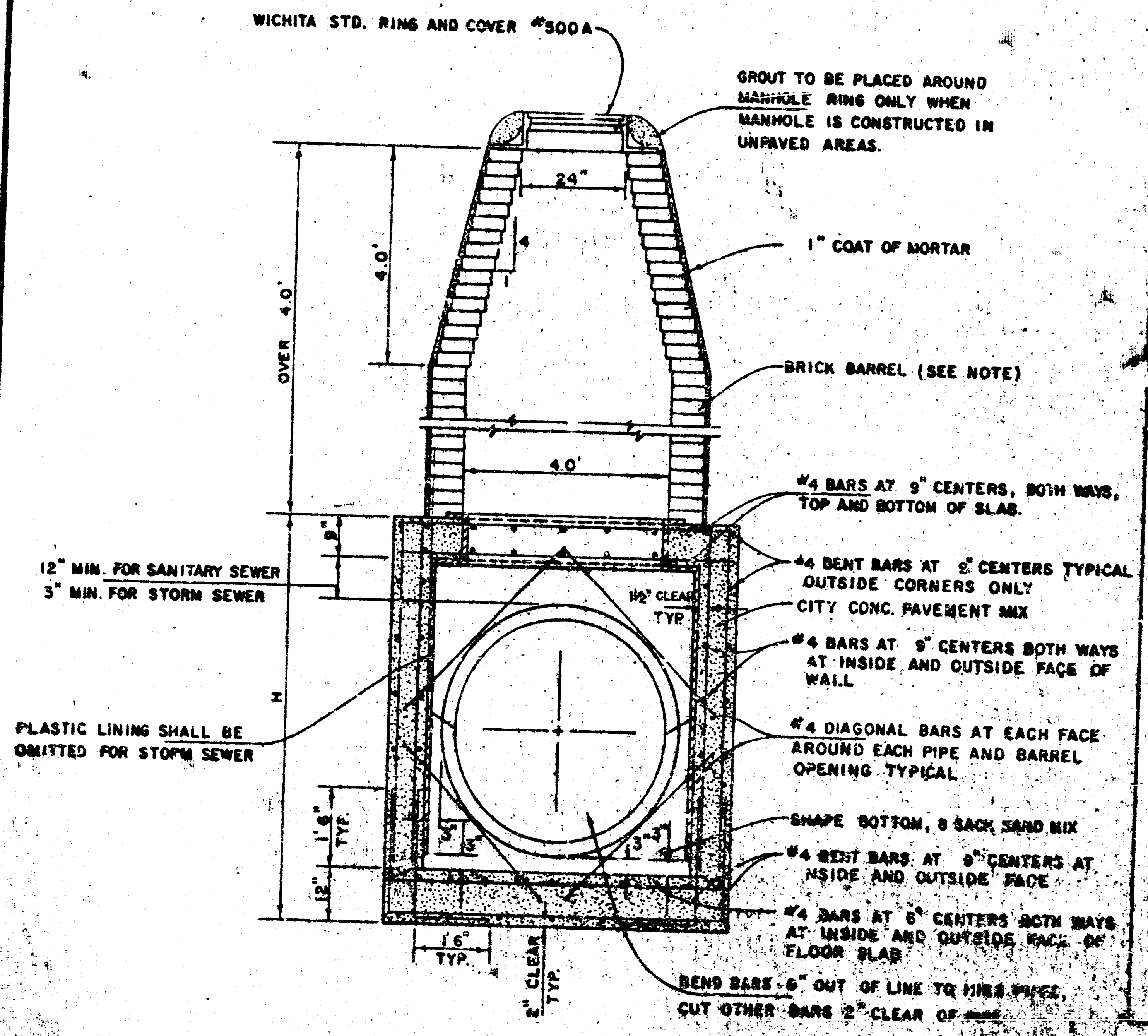
TOP VIEW



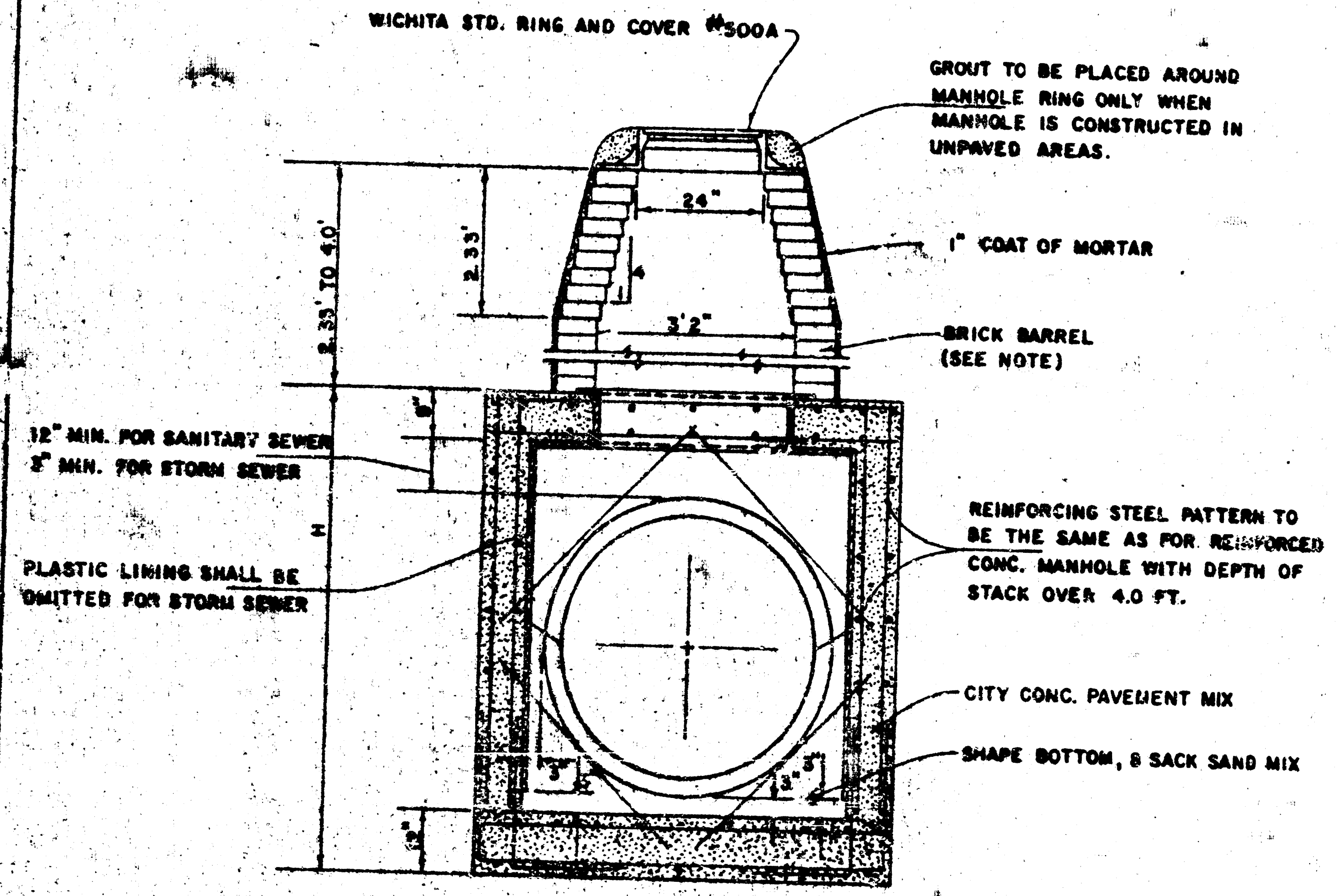
V.C.P. CONNECTION DETAIL
SANITARY SEWER ONLY


8 SACK CITY PAVING MIX
RAM-NEK OR KENT-SEAL TYPE JOINT SEALING COMPOUND
BELL TYPE WALL FITTING (TYPICAL) WELD TO REINFORCE
PLASTIC LINING
REINFORCED CONCRETE PIPE
GROUT
8 SACK SAND MIX CONCRETE FILL FLOOR SHAPING
REINFORCING STEEL
CITY CONC. PAVEMENT MIX
12"

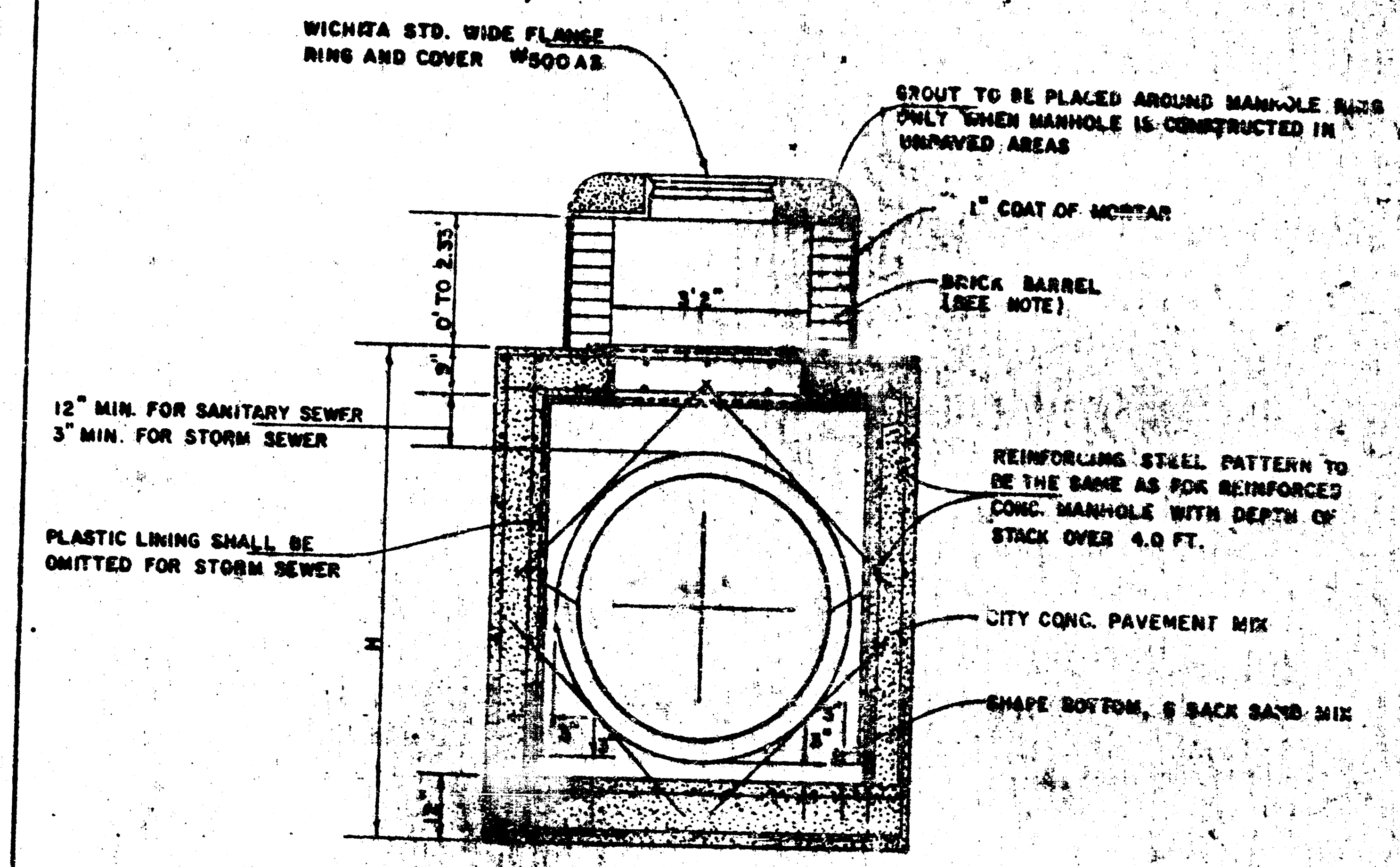
R.C.P. CONNECTION DETAIL
SANITARY SEWER ONLY


WICHITA STD. RING AND COVER #500A
GROUT TO BE PLACED AROUND MANHOLE RING ONLY WHEN MANHOLE IS CONSTRUCTED IN UNPAVED AREAS.
24"
1" COAT OF MORTAR
4.0'
OVER 4.0'
BRICK BARREL (SEE NOTE)
4.0'
#4 BARS AT 9" CENTERS, BOTH WAYS, TOP AND BOTTOM OF SLAB.
9"
12" MIN. FOR SANITARY SEWER
3" MIN. FOR STORM SEWER
#4 BENT BARS AT 9" CENTERS TYPICAL OUTSIDE CORNERS ONLY
1½" CLEAR TYP.
CITY CONC. PAVEMENT MIX
#4 BARS AT 9" CENTERS BOTH WAYS AT INSIDE AND OUTSIDE FACE OF WALL
H
PLASTIC LINING SHALL BE OMITTED FOR STORM SEWER
#4 DIAGONAL BARS AT EACH FACE AROUND EACH PIPE AND BARREL OPENING TYPICAL
SHAPE BOTTOM, 8 SACK SAND MIX
1'6" TYP.
#4 BENT BARS AT 9" CENTERS AT INSIDE AND OUTSIDE FACE
12"
#4 BARS AT 6" CENTERS BOTH WAYS AT INSIDE AND OUTSIDE FACE OF FLOOR SLAB
1'6" TYP.
2" CLEAR TYP.
BEND BARS 6" OUT OF LINE TO MISS PIPES, CUT OTHER BARS 2" CLEAR OF PIPE

REINFORCED CONCRETE MANHOLE
DEPTH OF STACK: OVER 4.0'
SCALE 1" = 2'


WICHITA STD. RING AND COVER #500A
GROUT TO BE PLACED AROUND MANHOLE RING ONLY WHEN MANHOLE IS CONSTRUCTED IN UNPAVED AREAS.
24"
1" COAT OF MORTAR
2.33'
2.33' TO 4.0'
3'2"
BRICK BARREL (SEE NOTE)
12" MIN. FOR SANITARY SEWER
3" MIN. FOR STORM SEWER
H
PLASTIC LINING SHALL BE OMITTED FOR STORM SEWER
REINFORCING STEEL PATTERN TO BE THE SAME AS FOR REINFORCED CONC. MANHOLE WITH DEPTH OF STACK OVER 4.0 FT.
CITY CONC. PAVEMENT MIX
SHAPE BOTTOM, 8 SACK SAND MIX
12"

REINFORCED CONCRETE MANHOLE
DEPTH OF STACK: 2.33' TO 4.0'
SCALE 1" = 2'


WICHITA STD. WIDE FLANGE RING AND COVER #500AS
GROUT TO BE PLACED AROUND MANHOLE RING ONLY WHEN MANHOLE IS CONSTRUCTED IN UNPAVED AREAS
1" COAT OF MORTAR
0' TO 2.33'
3'2"
BRICK BARREL (SEE NOTE)
9"
12" MIN. FOR SANITARY SEWER
3" MIN. FOR STORM SEWER
REINFORCING STEEL PATTERN TO BE THE SAME AS FOR REINFORCED CONC. MANHOLE WITH DEPTH OF STACK OVER 4.0 FT.
PLASTIC LINING SHALL BE OMITTED FOR STORM SEWER
H
CITY CONC. PAVEMENT MIX
SHAPE BOTTOM, 8 SACK SAND MIX

REINFORCED CONCRETE MANHOLE
DEPTH OF STACK: 0' TO 2.33'
SCALE 1" = 2'

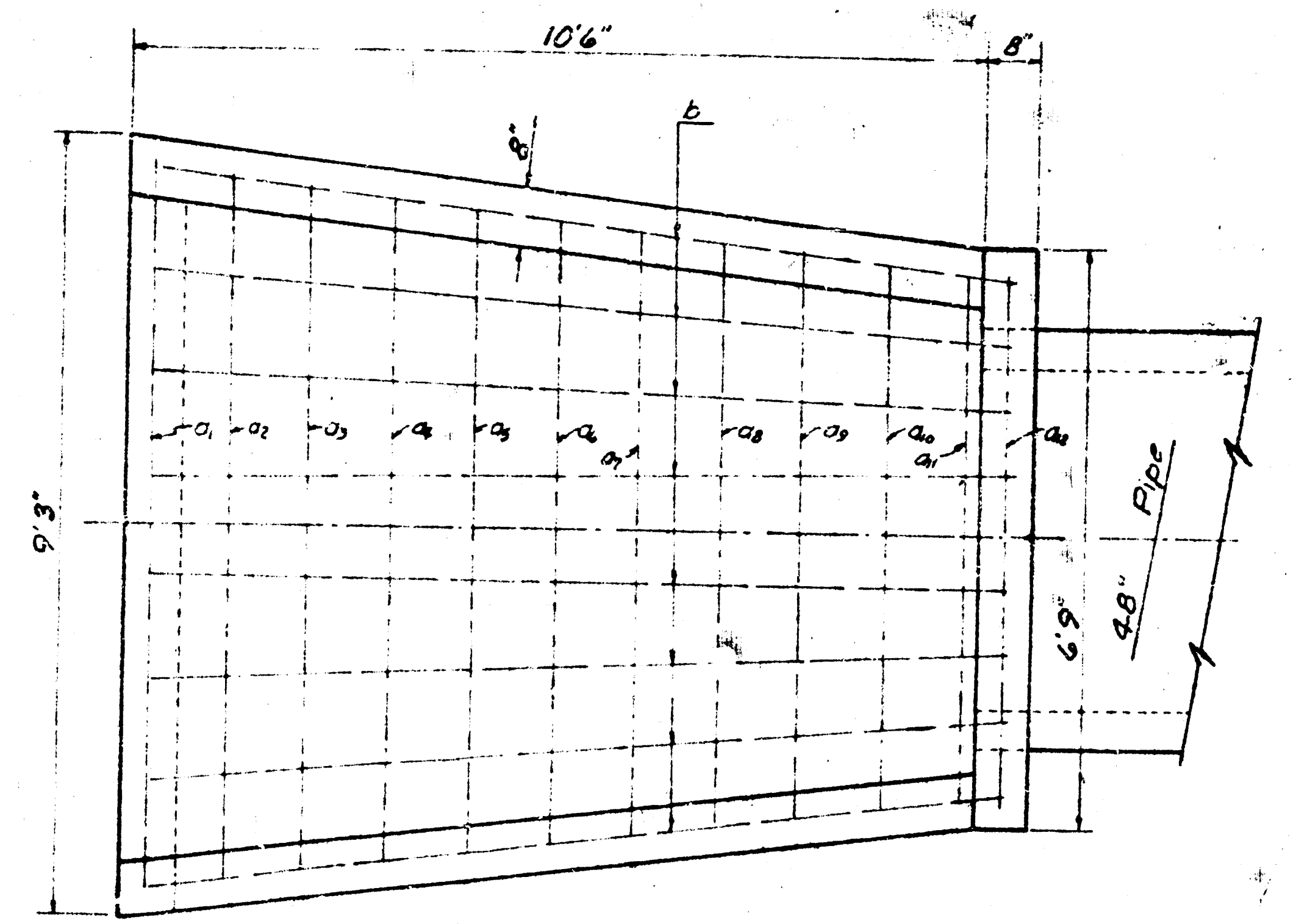
NOTE:

BRICK BARRELS LESS THEN [illegible] DEEP SHALL HAVE 8" WALLS EXCEPT WHEN LOCATED WITHIN PUBLIC STREET OR ALLEY PAVEMENT THEN THE WALL SHALL BE 12". BRICK BARRELS MORE THEN [illegible] DEEP SHALL HAVE 12" WALLS. THE "L" AND "W" DIMENSIONS SHALL BE A MINIMUM OF 5'2" FOR BRICK BARRELS WITH 8" WALLS AND 6'2" FOR BRICK BARRELS WITH 12" WALLS.

S.W.S. NO. 249

STANDARD DETAILS
REINFORCED CONCRETE MANHOLES
CITY OF WICHITA
APRIL 197[illegible]

C/R

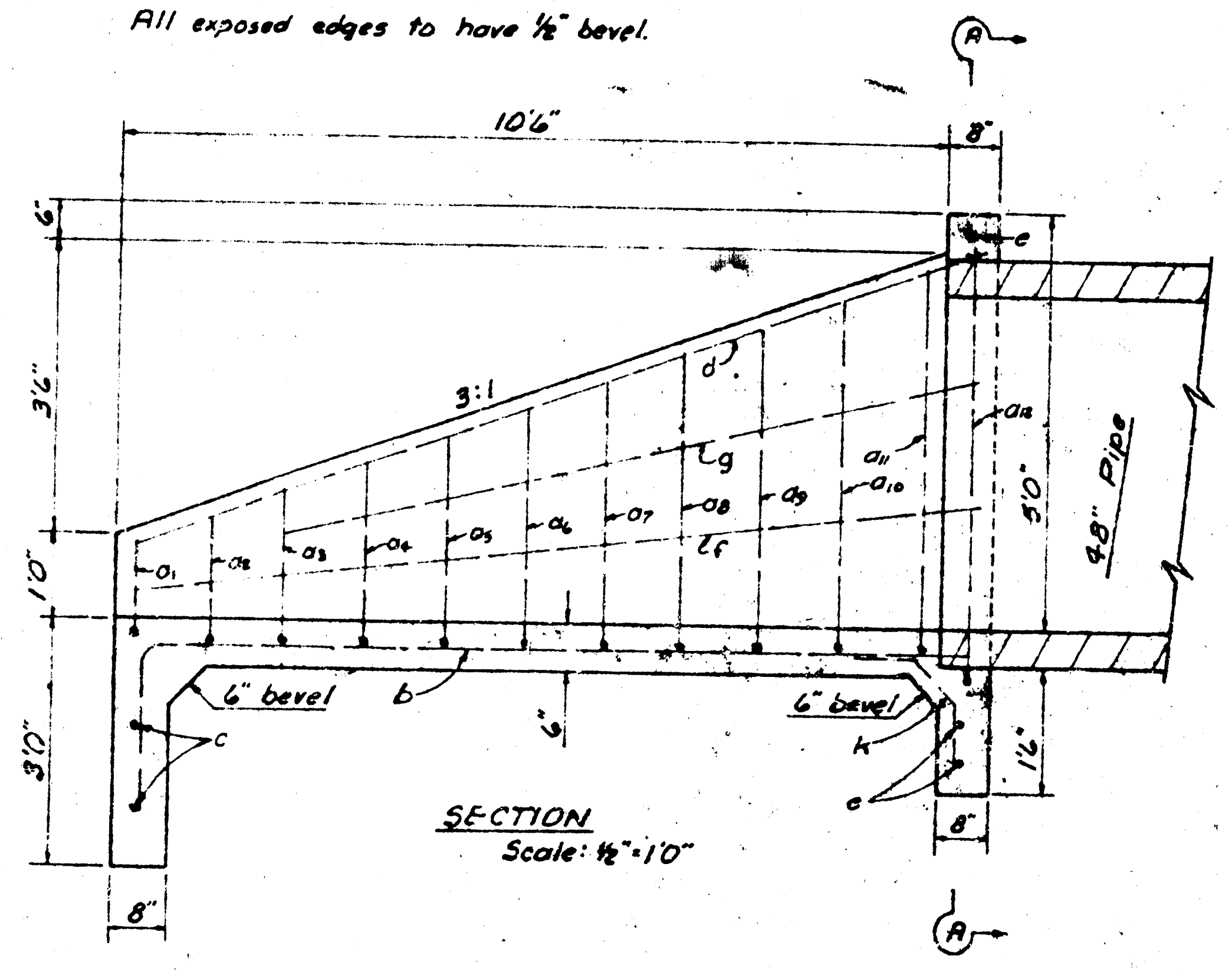


PLAN
Scale: ½"=1'0"

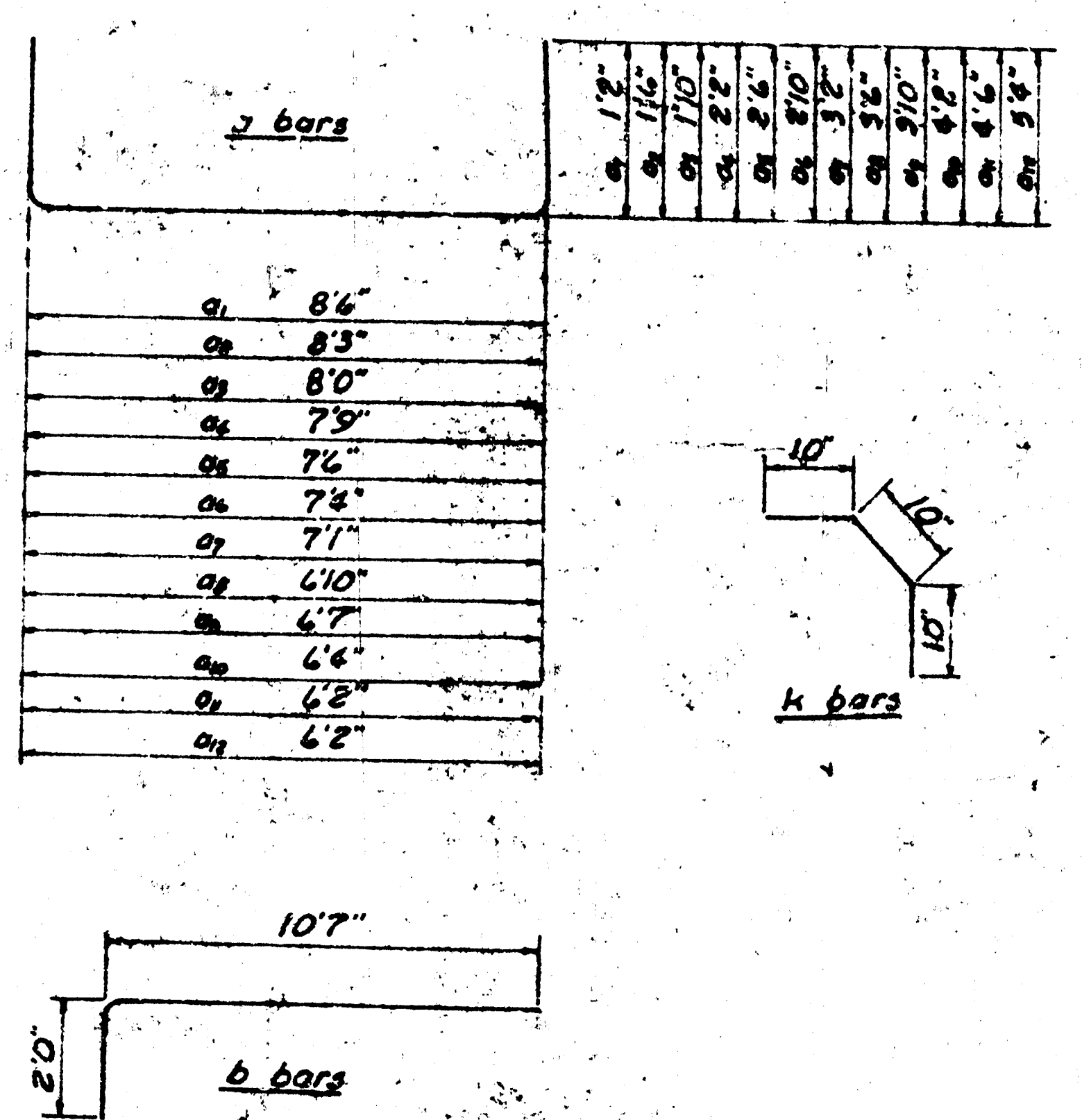
TABLE OF QUANTITIES				
BAR	NUMBER	LENGTH	SHAPE	WEIGHT
a_1	1	10'10"	⊔	7.24
a_2	1	11'3"	⊔	7.52
a_3	1	11'8"	⊔	7.79
a_4	1	12'1"	⊔	8.07
a_5	1	12'6"	⊔	8.35
a_6	1	13'0"	⊔	8.68
a_7	1	13'5"	⊔	8.96
a_8	1	13'10"	⊔	9.24
a_9	1	14'3"	⊔	9.52
a_{10}	1	14'8"	⊔	9.80
a_{11}	1	15'2"	⊔	10.15
a_{12}	1	16'10"	⊔	11.24
b	8	12'7"	⌐	67.25
c	2	8'6"	—	11.36
d	2	11'6"	—	15.36
e	3	6'3"	—	12.91
f	2	10'9"	—	14.36
g	2	9'0"	—	12.02
h_1	4	1'2"	—	3.12
h_2	4	8"	—	1.78
j	4	3'3"	—	8.68
k	7	2'6"	⌝	11.69
Rebars (lbs)				265.07
Concrete (C.Y.)				4.75

All rebars to be #4

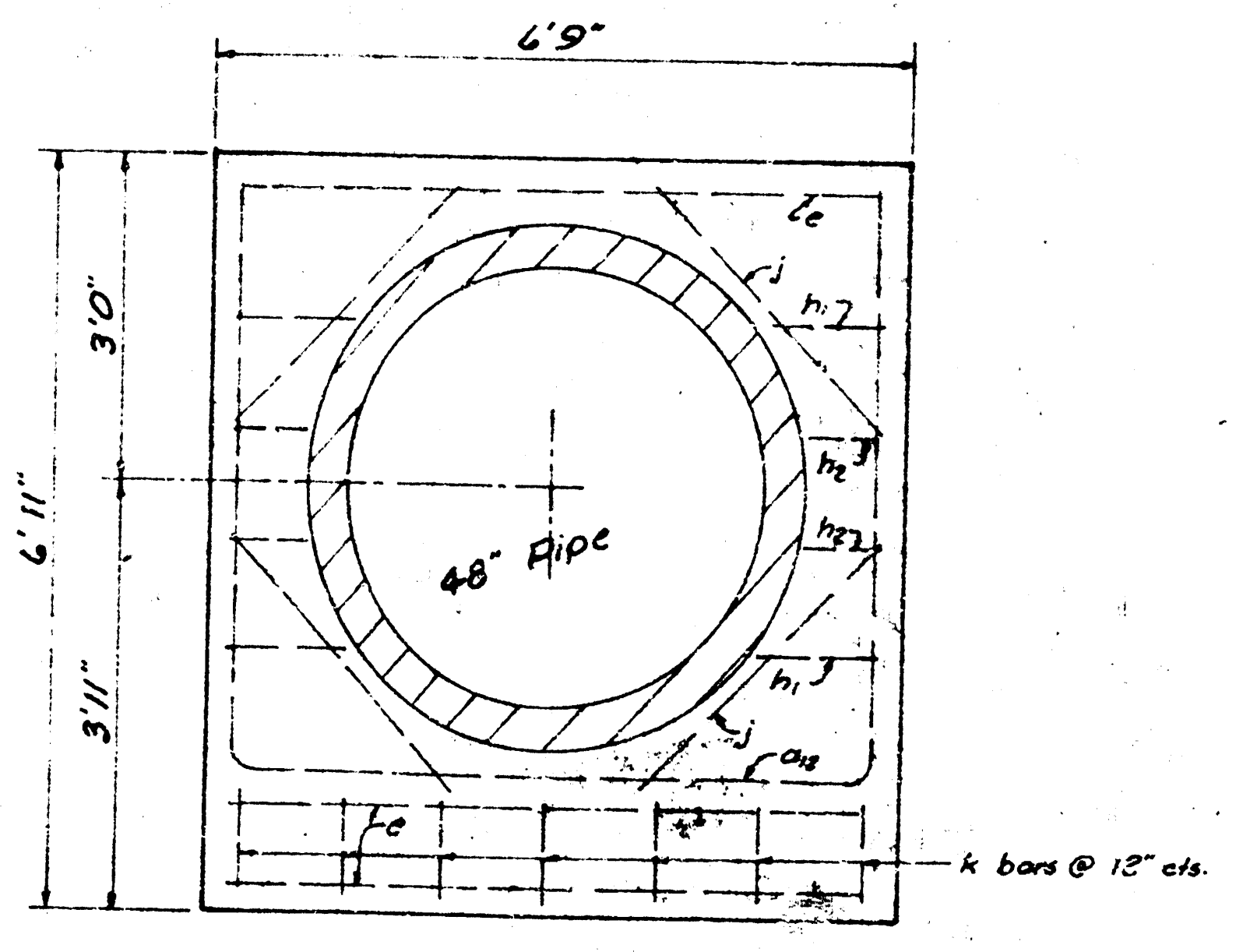
All exposed edges to have ⅛" bevel.



SECTION
Scale: ½"=1'0"

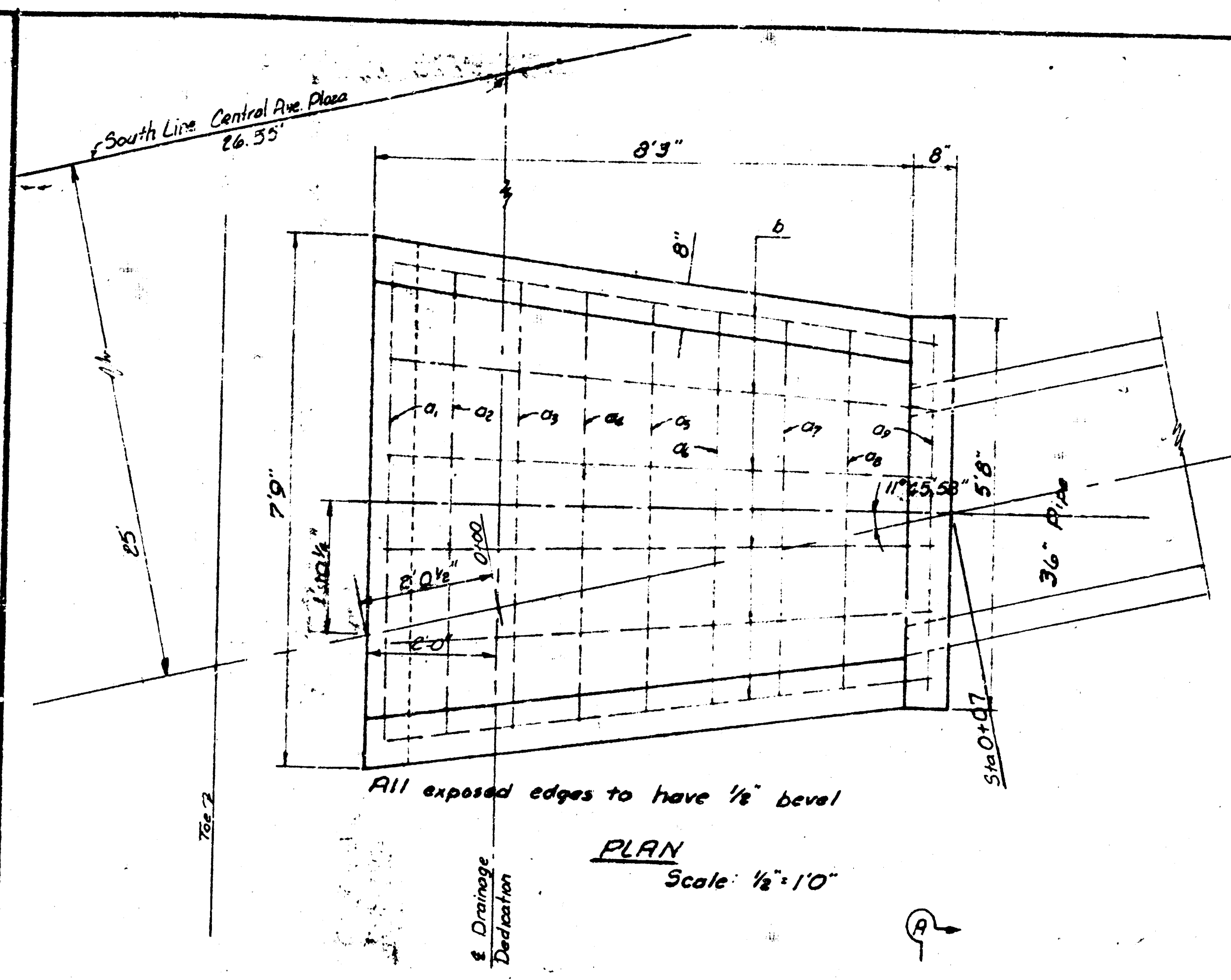


a_1	8'6"
a_2	8'3"
a_3	8'0"
a_4	7'9"
a_5	7'6"
a_6	7'4"
a_7	7'1"
a_8	6'10"
a_9	6'7"
a_{10}	6'4"
a_{11}	6'2"
a_{12}	6'2"



SECTION A-A
Scale: ½"=1'0"

HEADWALL FOR 48" PIPE

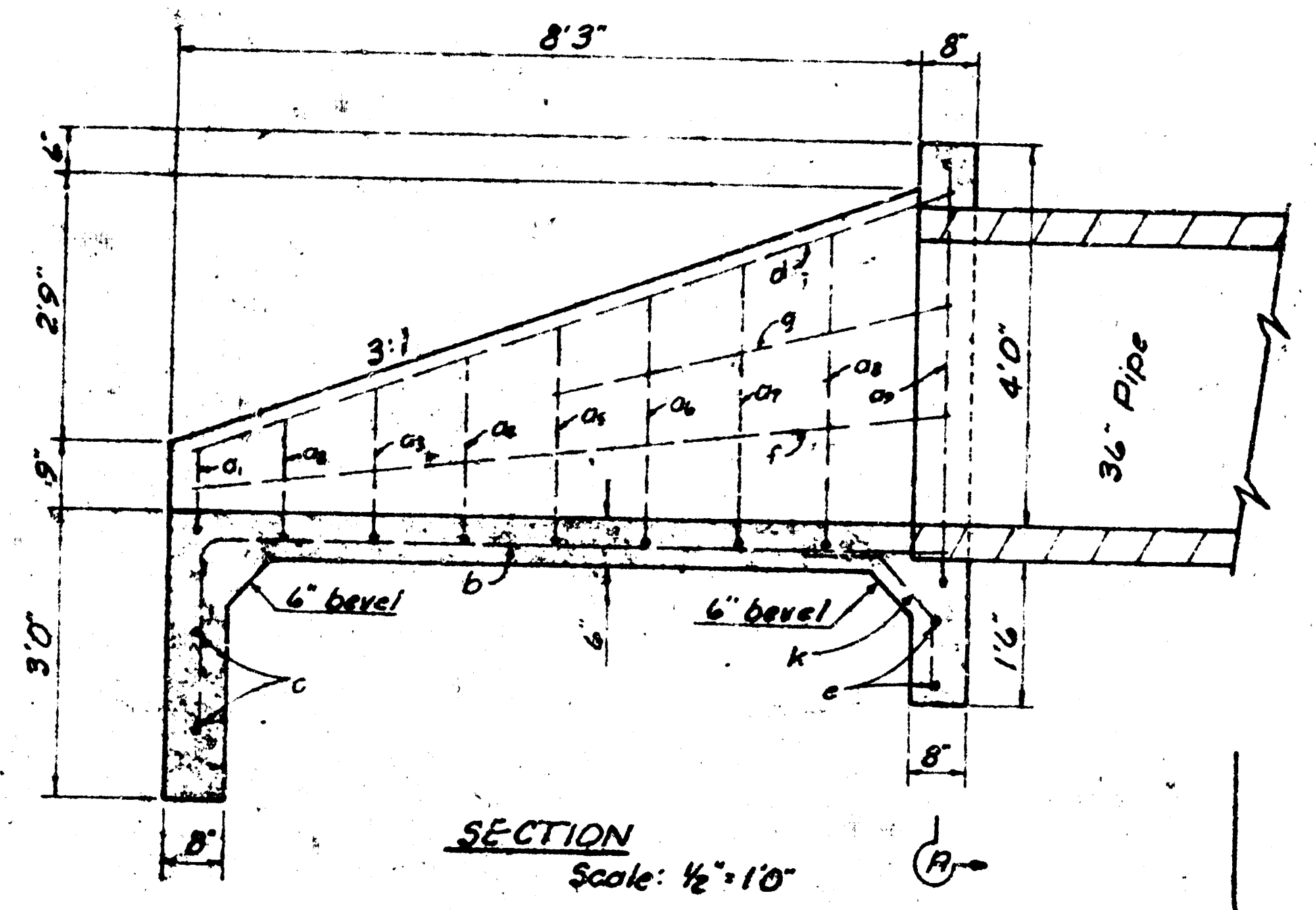


All exposed edges to have ⅛" bevel

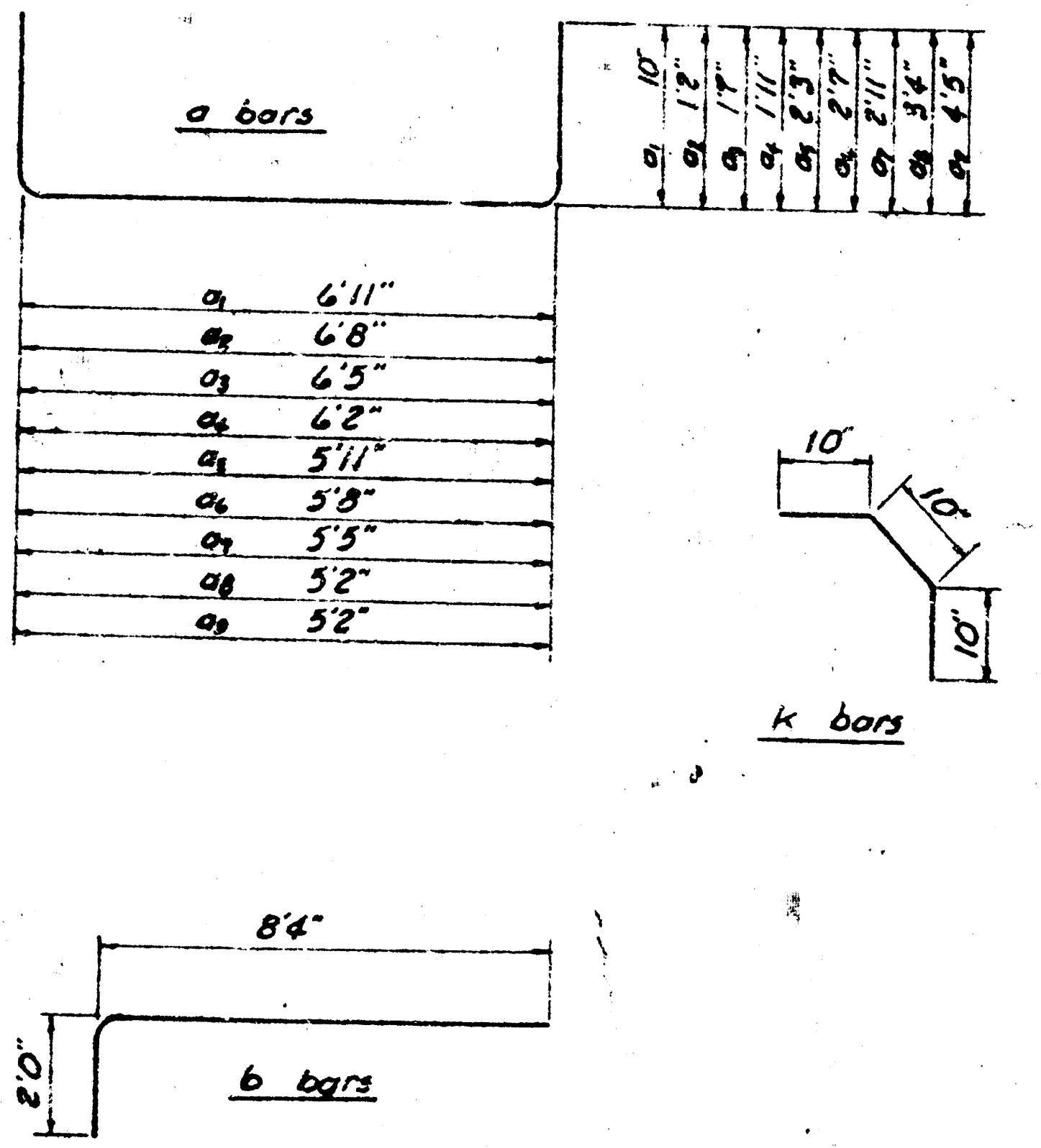
PLAN
Scale: ½"=1'0"

TABLE OF QUANTITIES				
BAR	NUMBER	LENGTH	SHAPE	WEIGHT
a_1	1	8'7"	⊔	5.73
a_2	1	9'0"	⊔	6.01
a_3	1	9'7"	⊔	6.40
a_4	1	10'0"	⊔	6.68
a_5	1	10'5"	⊔	6.96
a_6	1	10'10"	⊔	7.24
a_7	1	11'3"	⊔	7.52
a_8	1	11'10"	⊔	7.90
a_9	1	14'0"	⊔	9.35
b	6	10'4"	⌐	41.42
c	2	7'0"	—	9.35
d	2	9'0"	—	12.02
e	3	5'4"	—	10.69
f	2	8'5"	—	11.24
g	2	4'7"	—	6.12
h_1	4	1'6"	—	4.01
h_2	4	10"	—	2.23
j	4	3'0"	—	8.02
k	6	2'6"	⌝	10.02
Total Rebars, lbs.				178.91
Conc. C.Y.				3.20

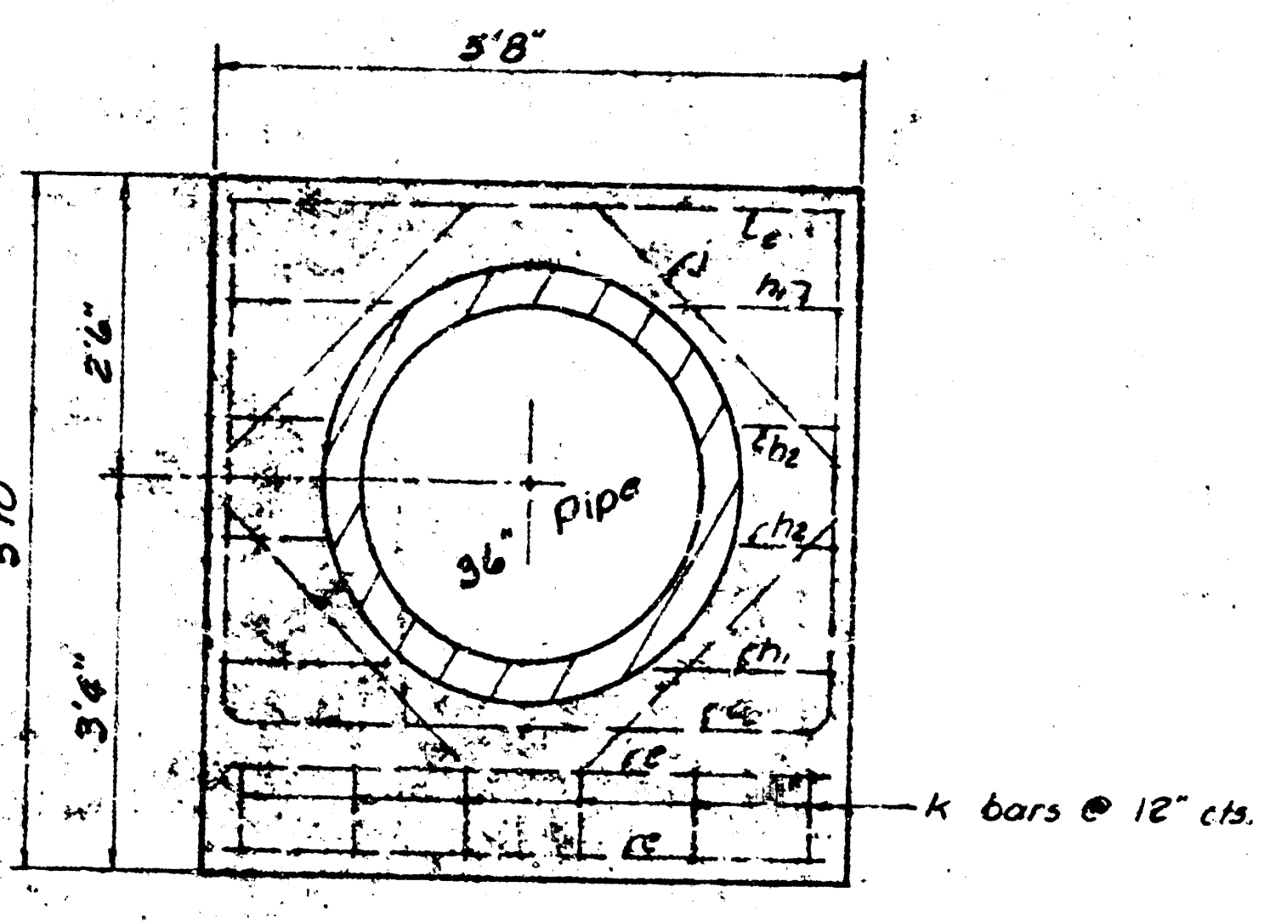
All Rebars to be #4



SECTION
Scale: ½"=1'0"



a_1	6'11"
a_2	6'8"
a_3	6'5"
a_4	6'2"
a_5	5'11"
a_6	5'8"
a_7	5'5"
a_8	5'2"
a_9	5'2"



SECTION A-A
Scale: ½"=1'0"

HEADWALL FOR 36" PIPE

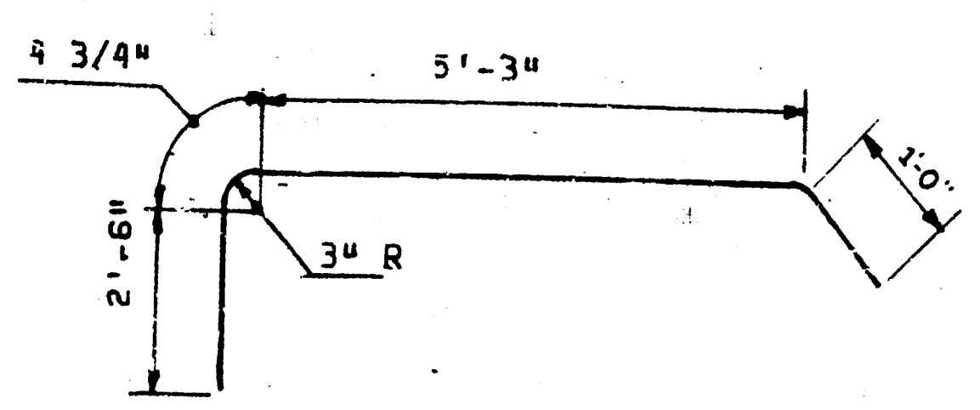
POE & ASSOCIATES
CONSULTING ENGINEERS

S.W.S. NO. 249
HEADWALL DETAIL

8/9

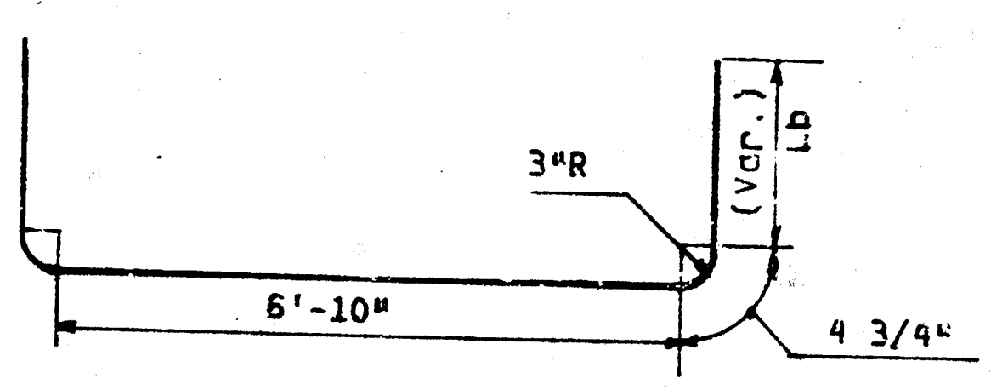
ENGINEER: K. HILL	ENG. TECH: J.W.
DRAWN BY: J.P.	SCALE: NOTED
DATE: AUG. 1983	SHEET 8 OF 9

FILMED FROM THE BEST



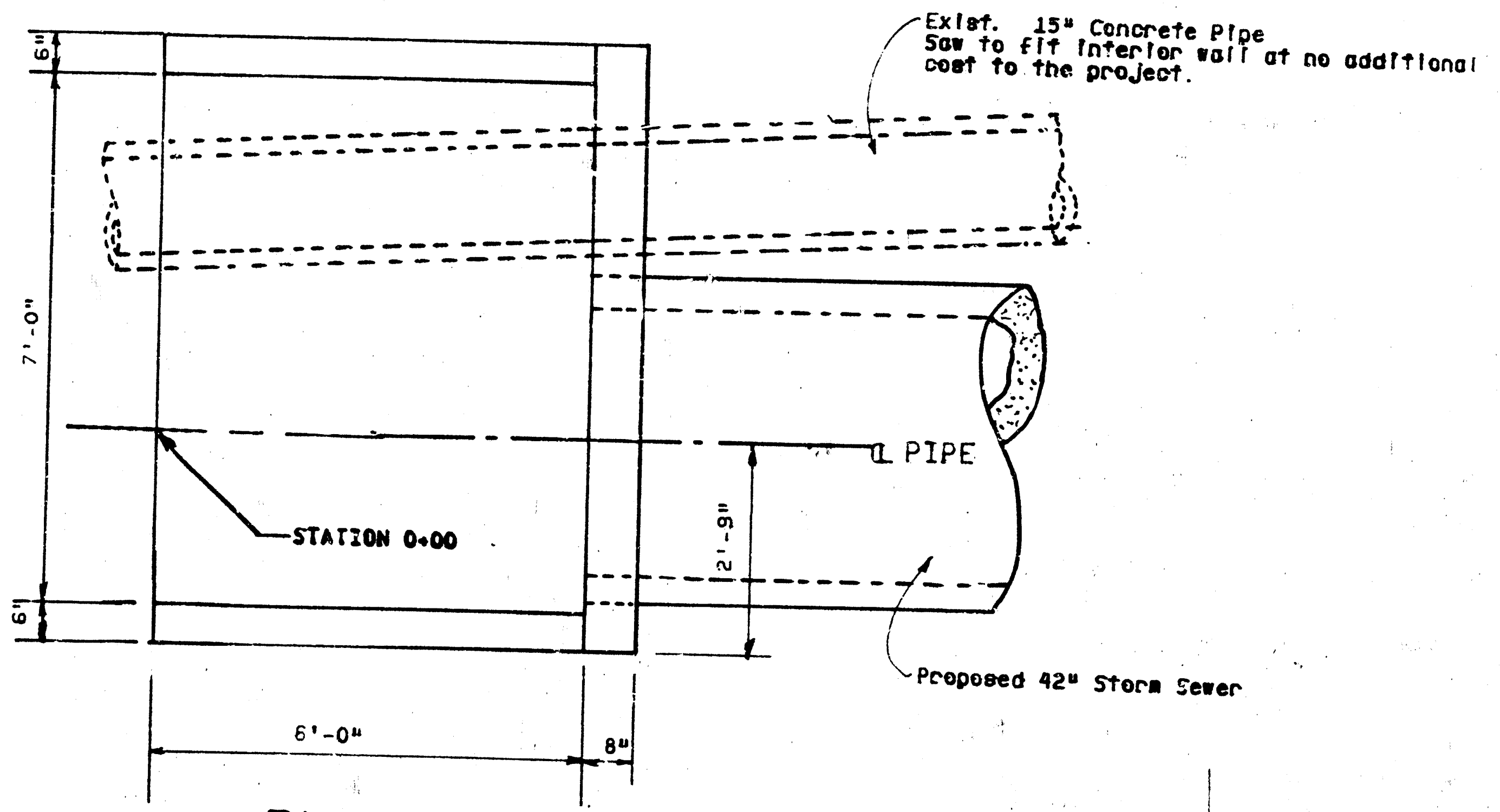
b bar

TOTAL LENGTH 9'-1 3/4"
8 REQUIRED

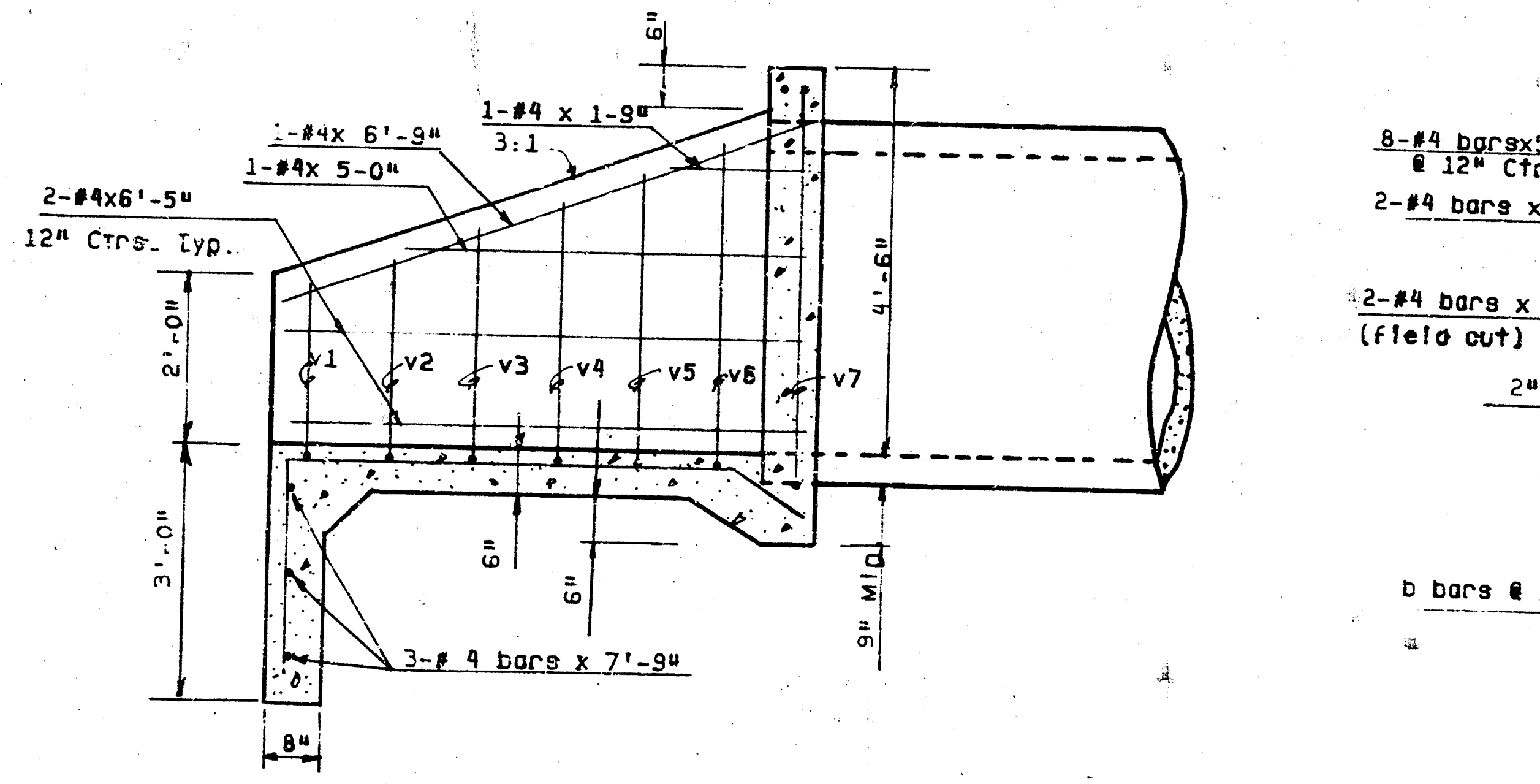


v1-v7 bar

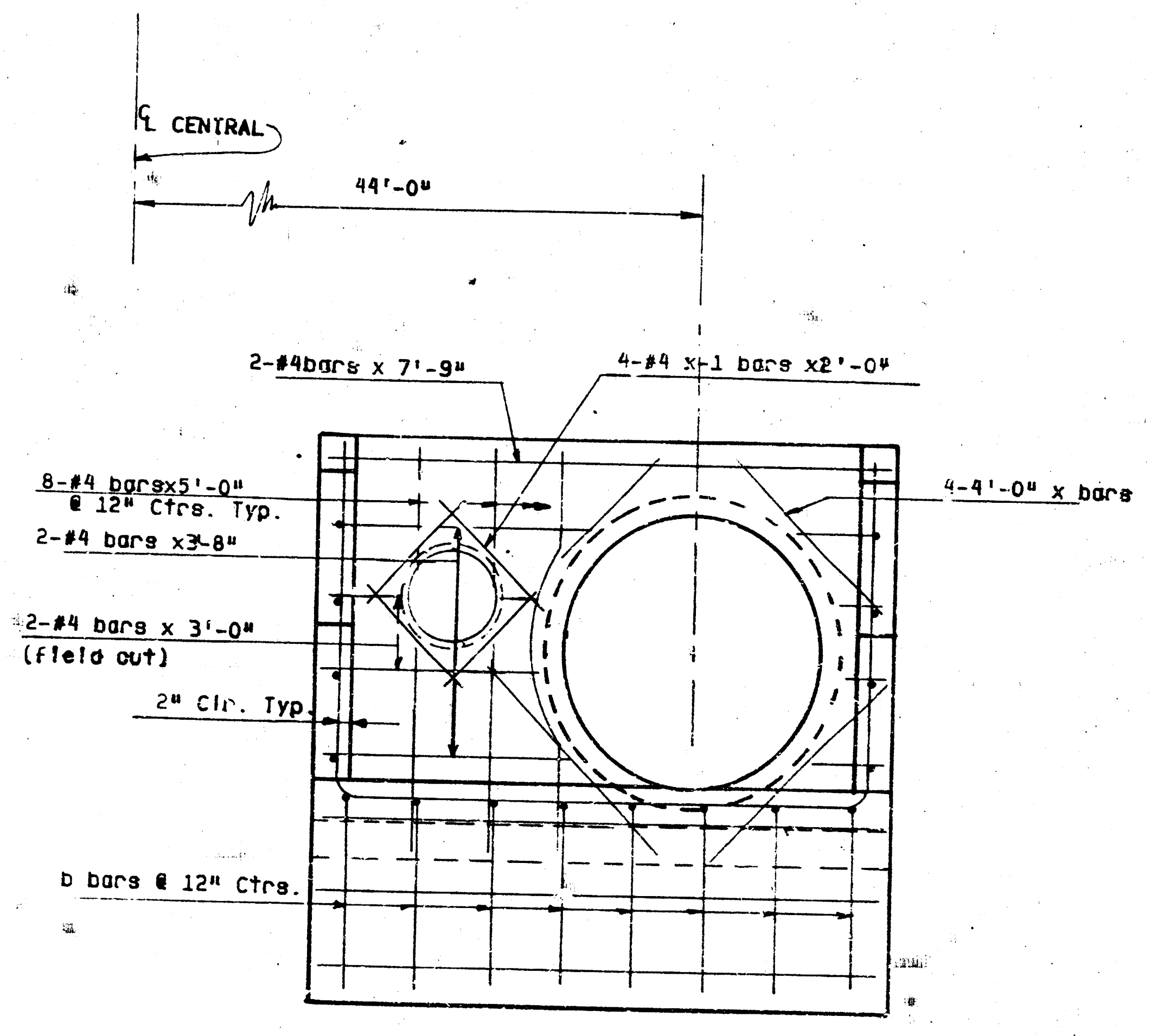
BAR	Lb	TOT. LENGTH
v1	2'-0"	9'-7 1/2"
v2	2'-4"	10'-3 1/2"
v3	2'-8"	10'-11 1/2"
v4	3'-0"	11'-7 1/2"
v5	3'-4"	12'-3 1/2"
v6	3'-8"	12'-11 1/2"
v7	4'-6"	14'-1 1/2"



PLAN



SECTION



NOTE: Field bend all bars around
Pipes at no additional cost
to the project.

HEADWALL @ STATION 0+00 LINE NO. 3

NOTE: ALL BARS SHALL BE #4 UNLESS OTHERWISE NOTED.

POE & ASSOCIATES
CONSULTING ENGINEERS

S.W.S. NO. 243

HEADWALL FOR 42" RCP

ENGINEER K. HILL	CHECKED BY K. HILL
DRAWN BY J.G.P.	SCALE: NONE
DATE: AUG. 1983	SHEET 9 OF 9