

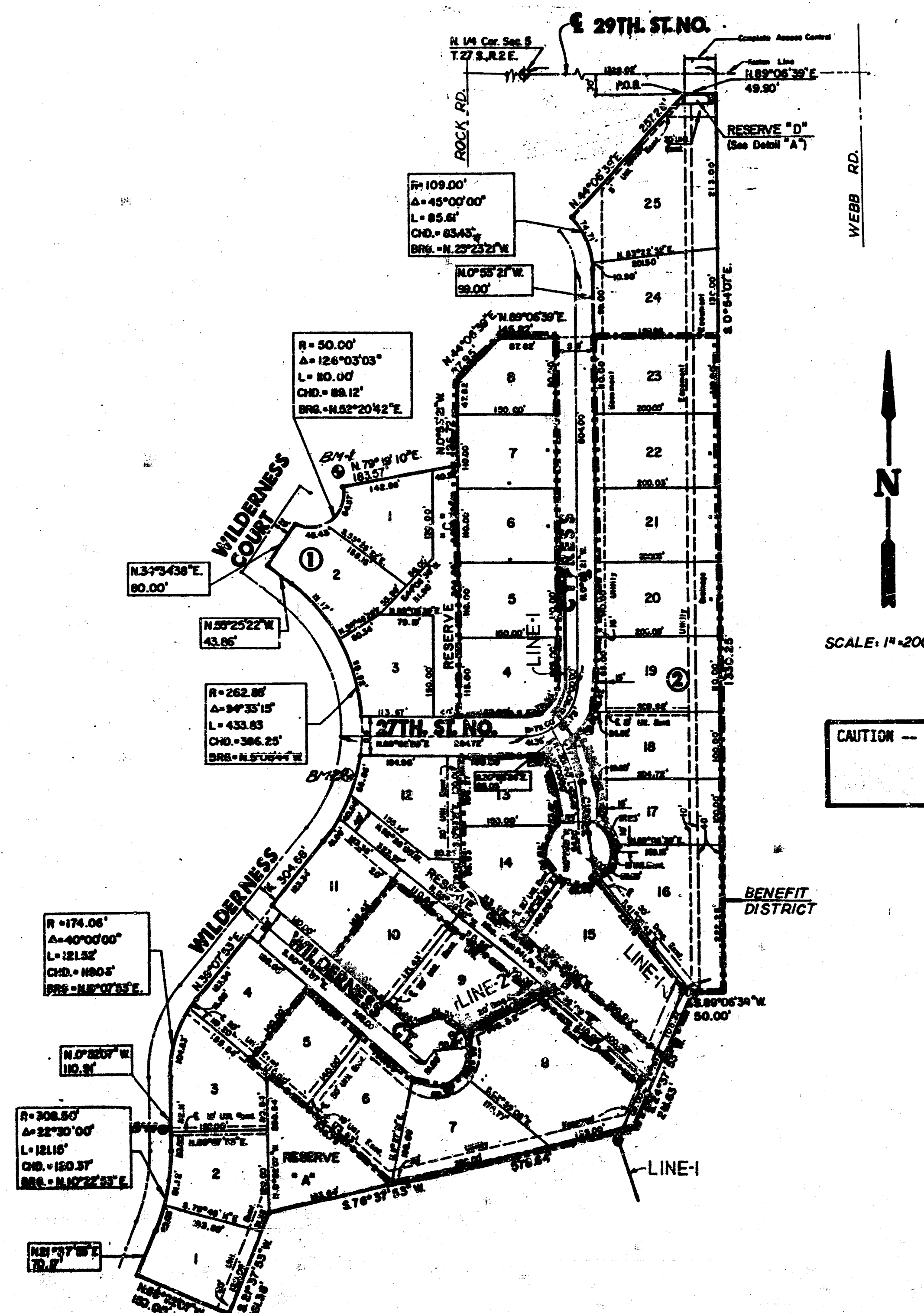
STORM SEWER PLANS FOR S.W.S. NO. 276 WILDERNESS SECOND PROJECT NO. 468-76-245-81419-000-000 001 CITY OF WICHITA, KANSAS MIKE LINDEBAK, CITY ENGINEER APRIL ... 1985

GENERAL NOTES

1. ALL CONCRETE SHALL BE STANDARD PAVING MIX UNLESS OTHERWISE NOTED.
2. CONTRACTOR SHALL AVOID UNCOVERING EXISTING WATER LINES UNLESS ABSOLUTELY NECESSARY. UNCOVERING SHALL BE DONE ONLY IN THE PRESENCE OF A WATER DEPARTMENT ENGINEER.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR OR A LICENSED PROFESSIONAL ENGINEER IN ACCORDANCE WITH STATE LAWS.
4. TREES TO BE REMOVED ARE MARKED . ALL TREES WHICH IN THE OPINION OF THE FIELD ENGINEER CAN BE SAVED SHALL BE SAVED.
5. CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF CONSTRUCTION SCHEDULING.
6. EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED.

BENCH MARKS

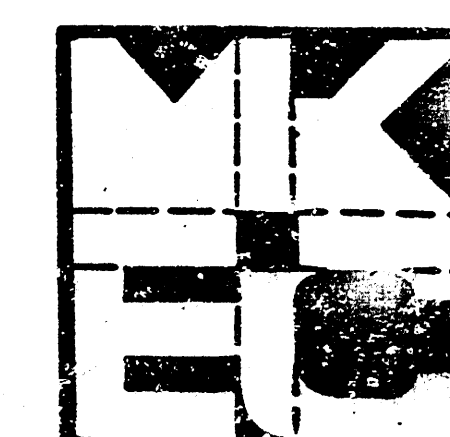
- B.M. #1 * * CUT ON TOP OF CURB AT 60' WEST OF THE N.W. CORNER OF LOT 1, BLOCK 1, WILDERNESS II ADDITION.
ELEV. = 221.55
- B.M. #2 * * CUT ON TOP OF CURB AT N.W. CORNER OF LOT 12, BLOCK 2, WILDERNESS II ADDITION.
ELEV. = 218.35
- B.M. #4 * * CUT ON TOP OF CURB AT N.W. CORNER OF LOT 2, BLOCK 2, WILDERNESS II ADDITION.
ELEV. = 214.77



INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-4	LINE 1
5	LINE 2
6-7	CURB INLET DETAILS
8	DROP INLET DETAILS
9-10	MANHOLE & REINF. CONC. MANHOLE DETAILS
11	FINAL PLAT

*AS BUILT PLAN
10-22-85
GREENE*

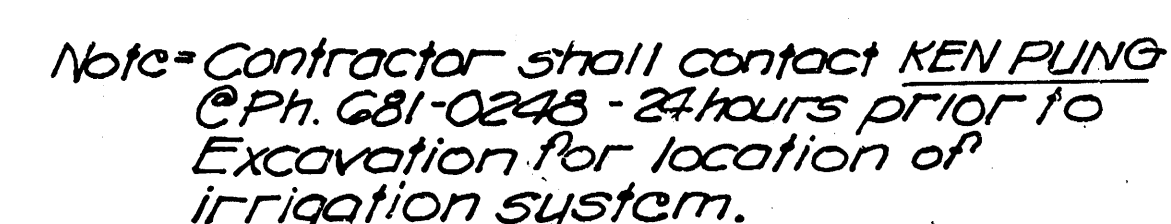


WILDERNESS SECOND
ADDITION
SWS NO. 276
PROJECT NO:
468-76-245-81419 000-000 001

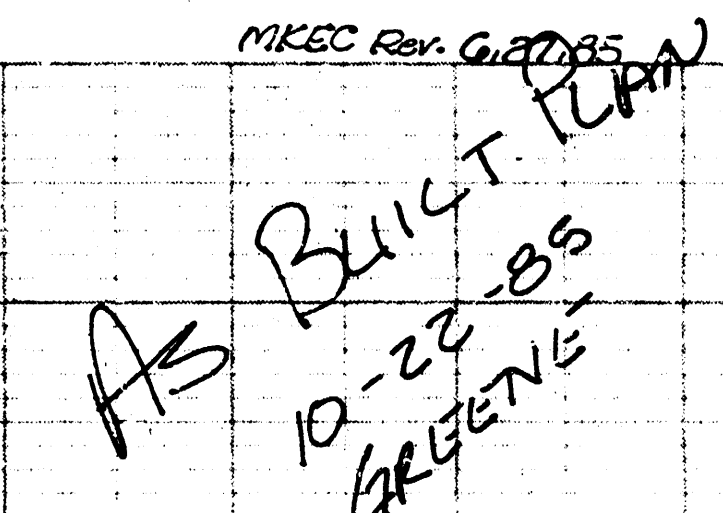
MID-KANSAS ENGINEERING CONSULTANTS PA
3500 N. ROCK ROAD
BUILDING 800
WICHITA, KANSAS 67206

682-6561

Design	SGS
Checked by	SGS
Date	4-85
Sheet	1/1



Note - Regrading & Seeding
around Drop Inlet
subsidiary to protect.



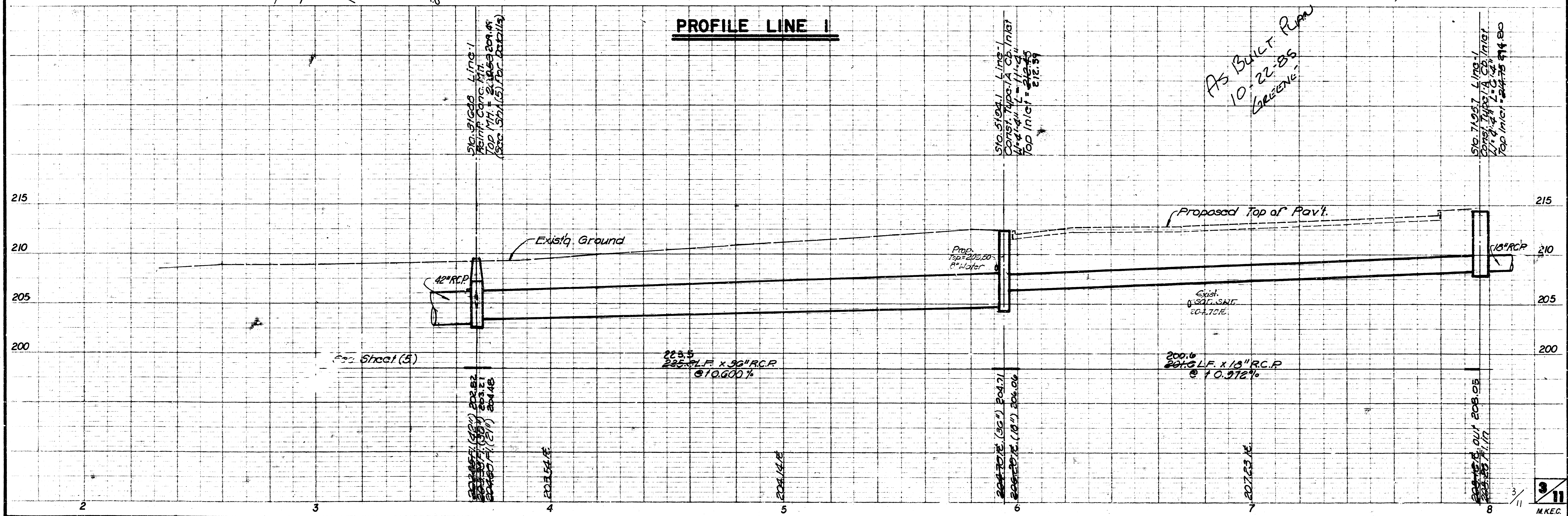
Scale: 1" = 20' Horiz.
1" = 5' Vert.

NOTE: Cost of small trees Rem.
Incidental to LF of Hedge
Removed.

PLAN LINE-1

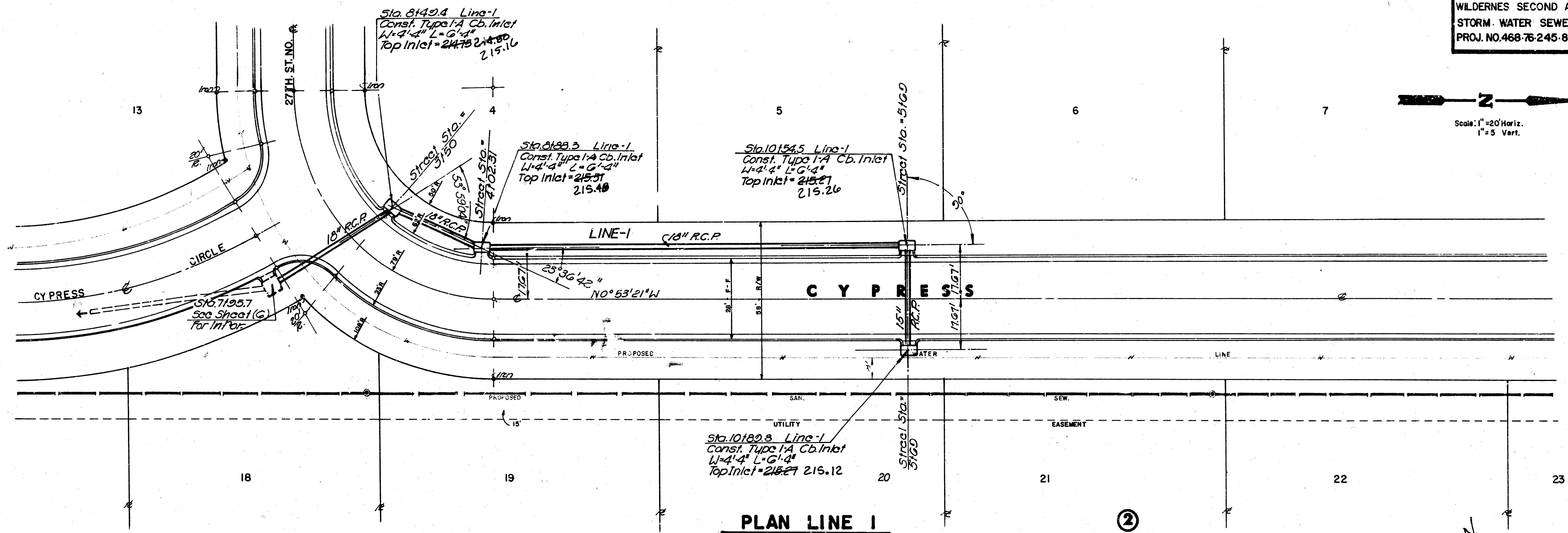
PROFILE LINE 1

As BUILT Plan
10-22-85
GREENE

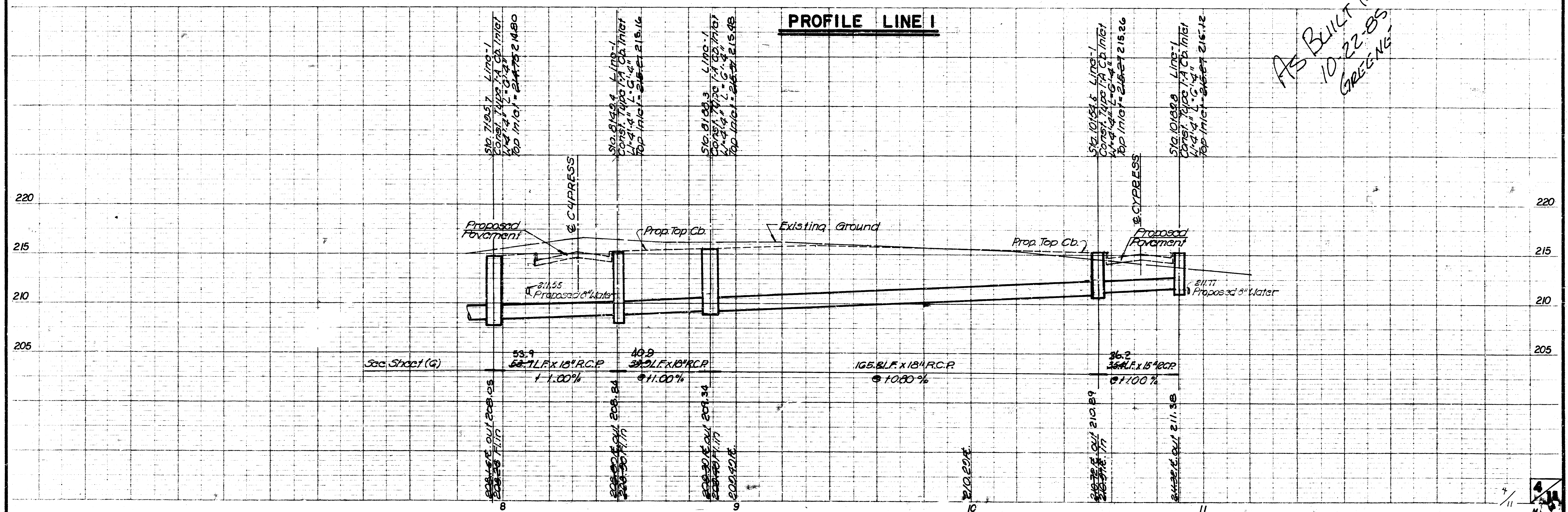


WILDERNES SECOND ADDITION
STORM WATER SEWER NO. 276
PROJ. NO. 468-76-245-8419-000-001

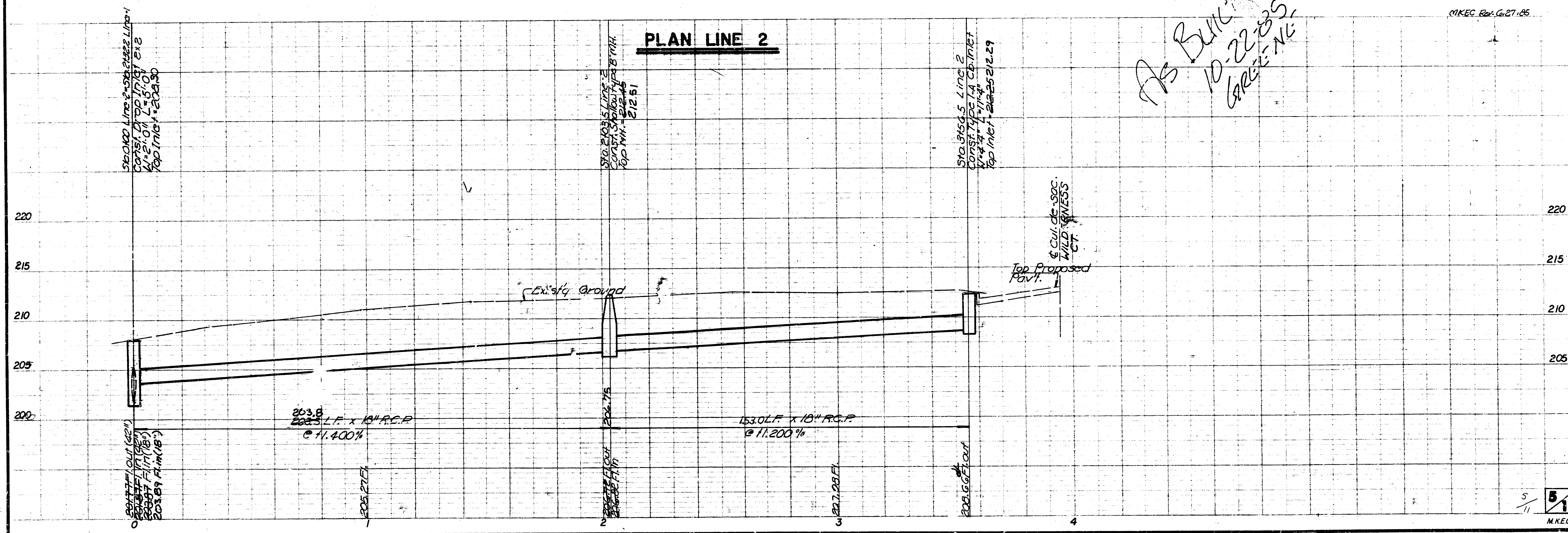
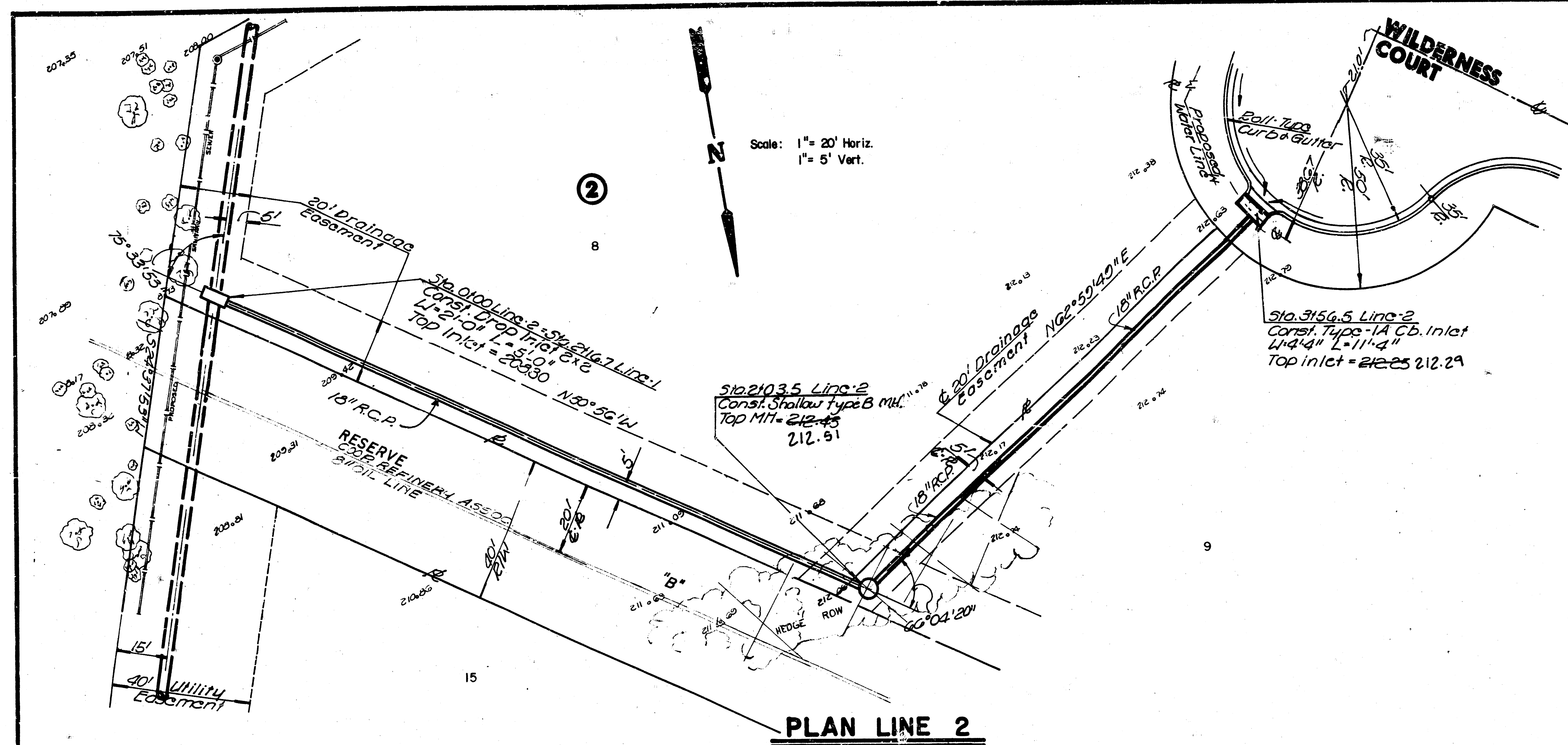
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1" = 5' Vert.

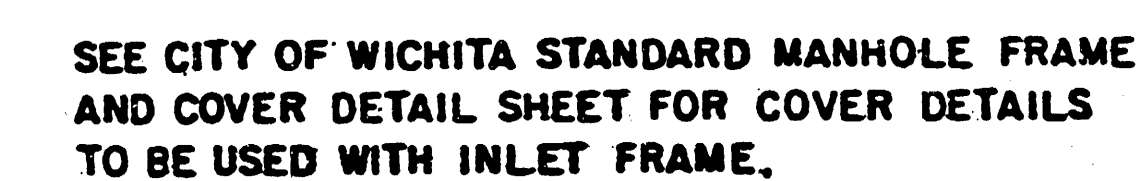


PLAN LINE 1



AS BUILT RAN
10-22-85
GREENE



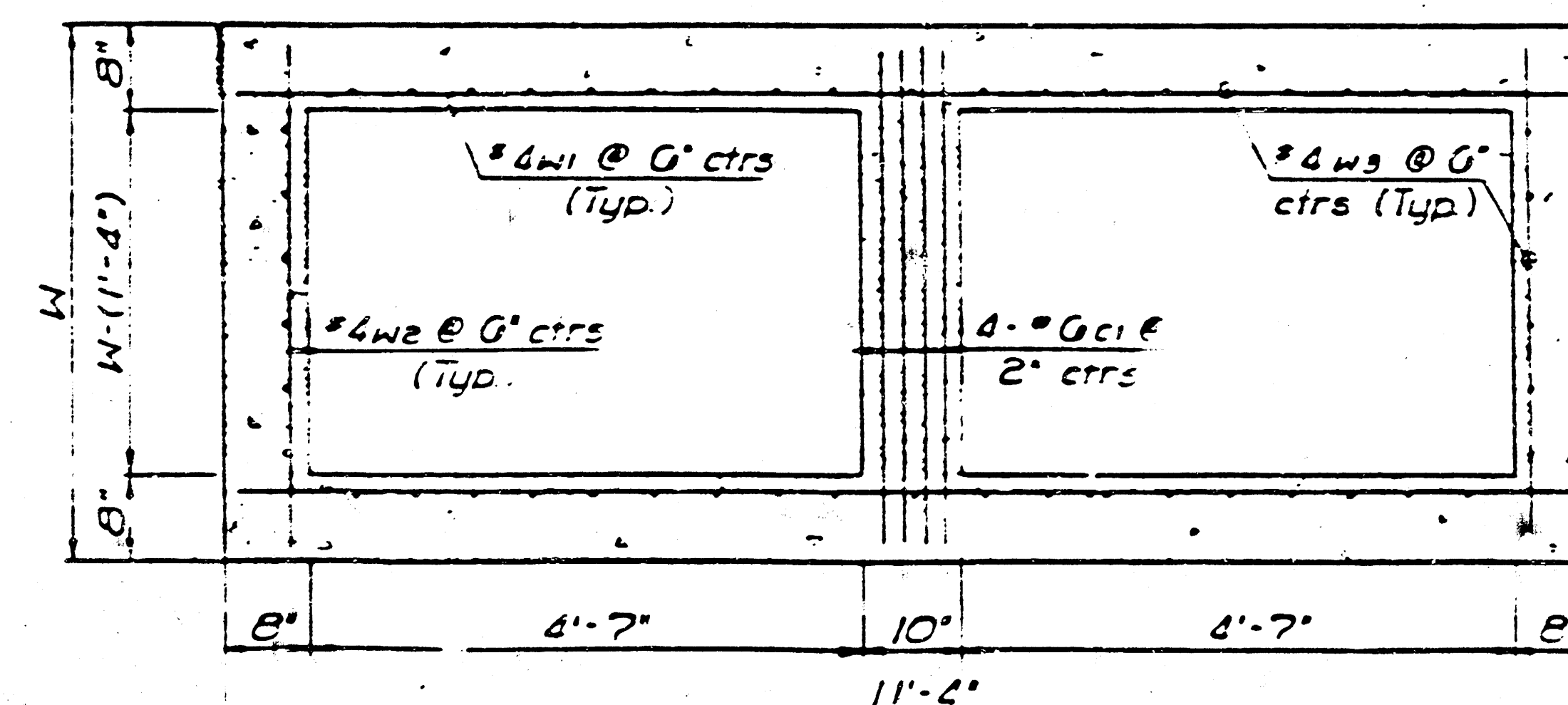
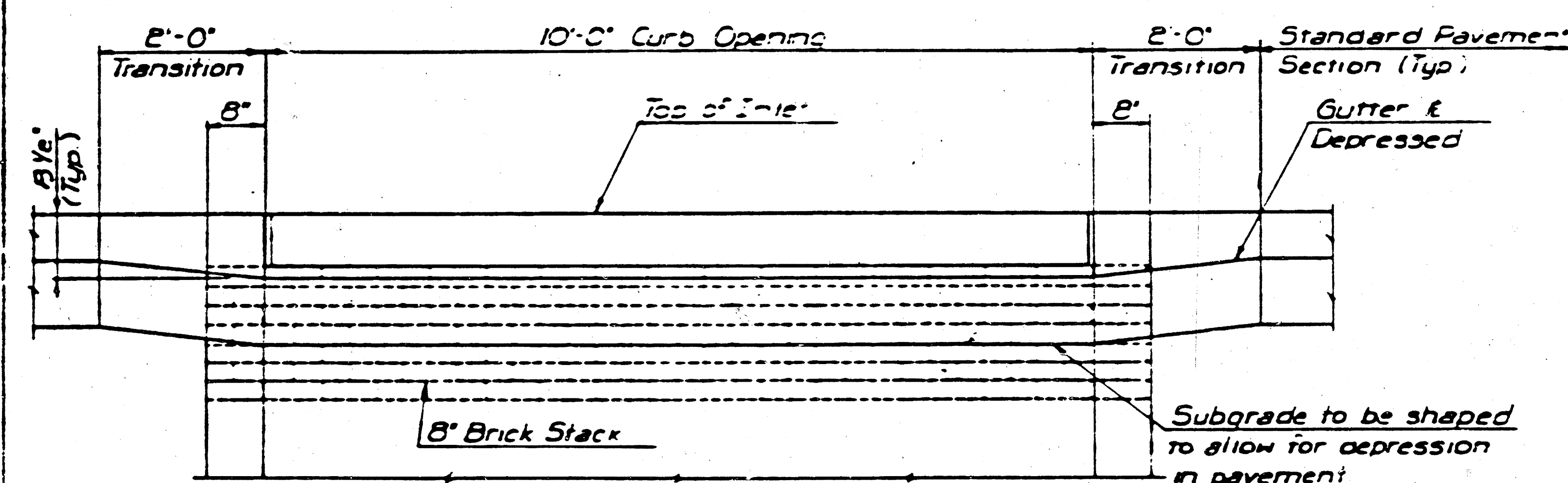
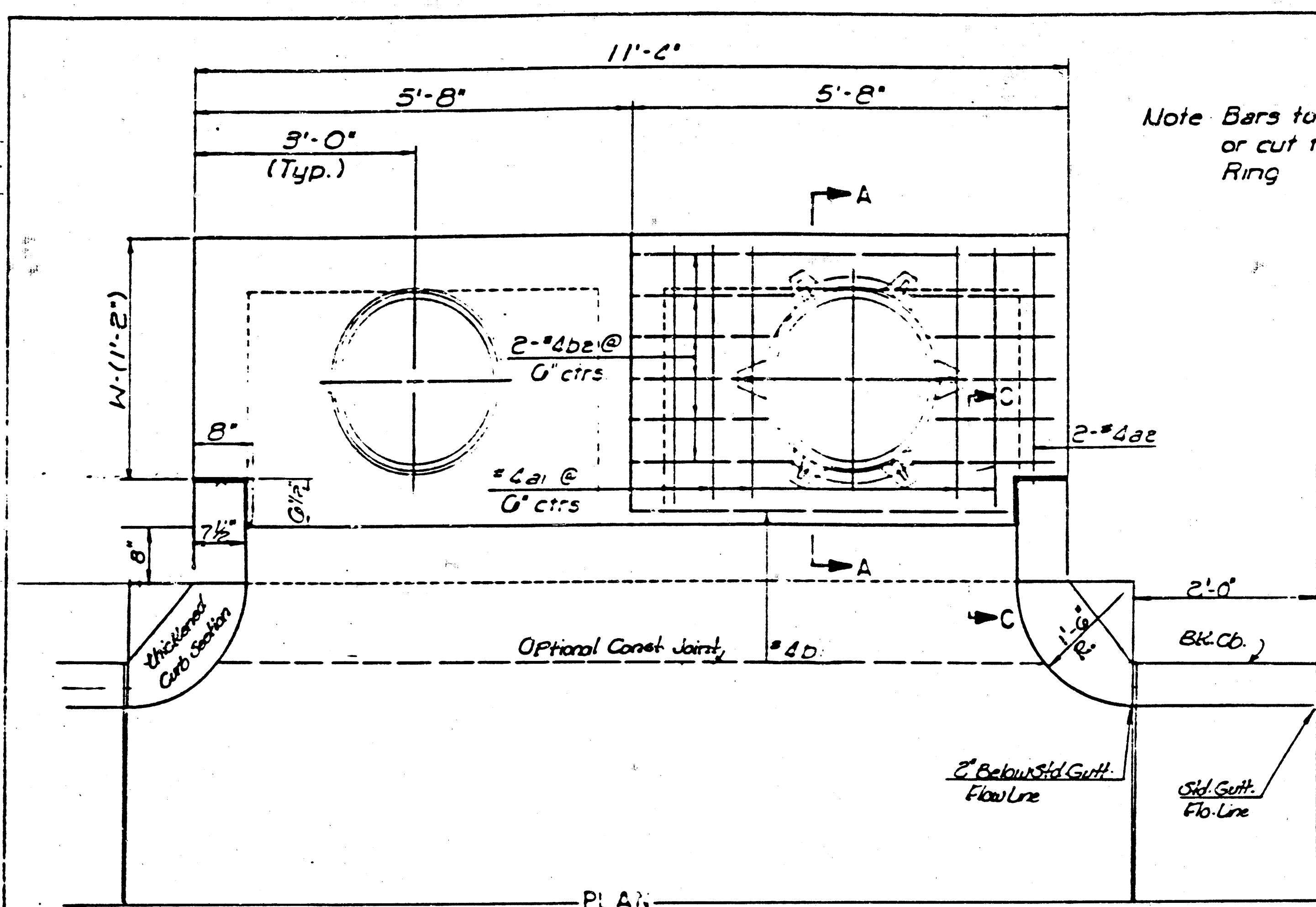


WEIGHT = 180 LBS.

INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO
CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH
THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR
OUTLET PIPES.

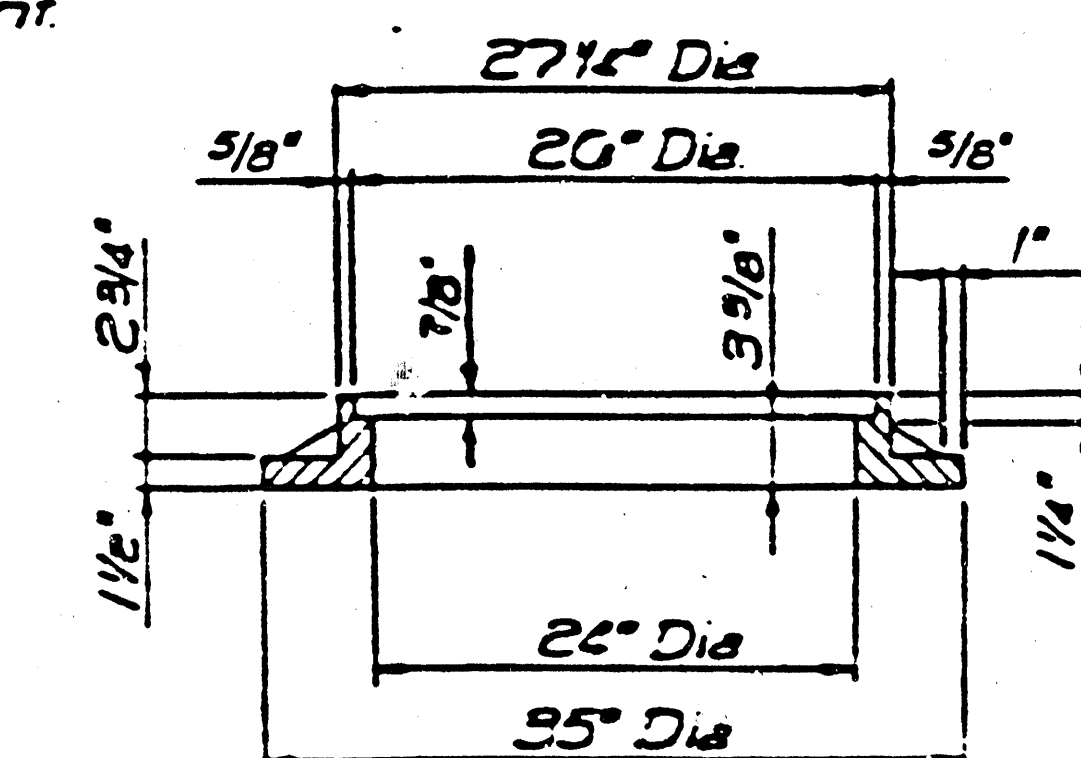
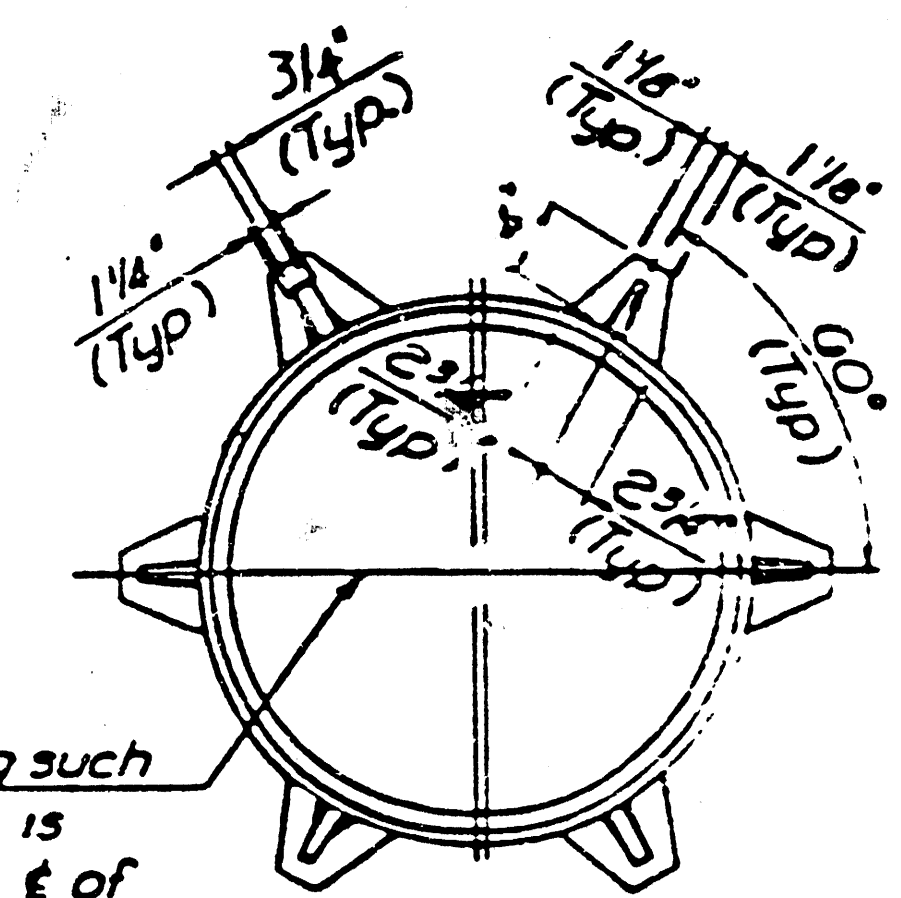
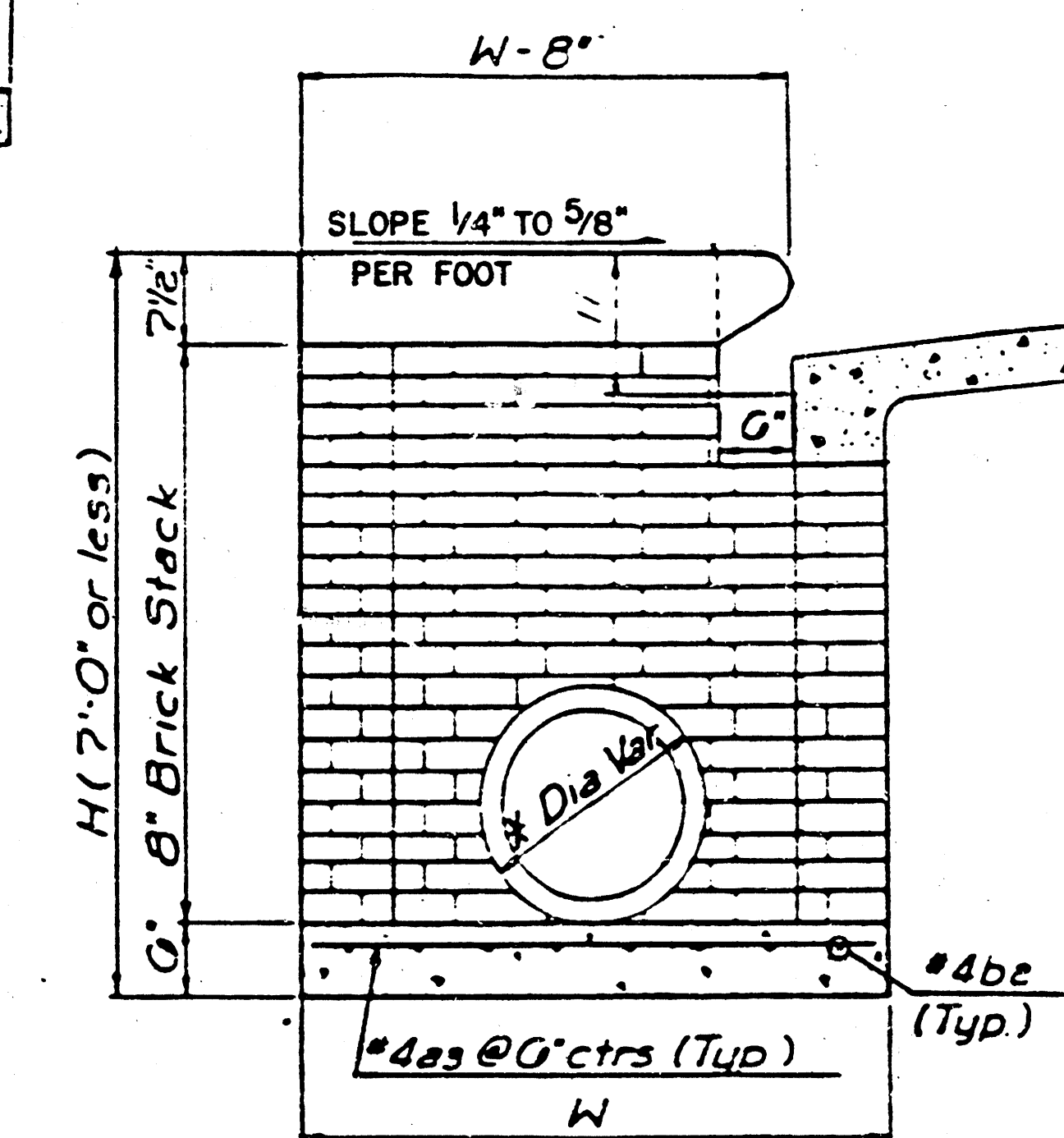
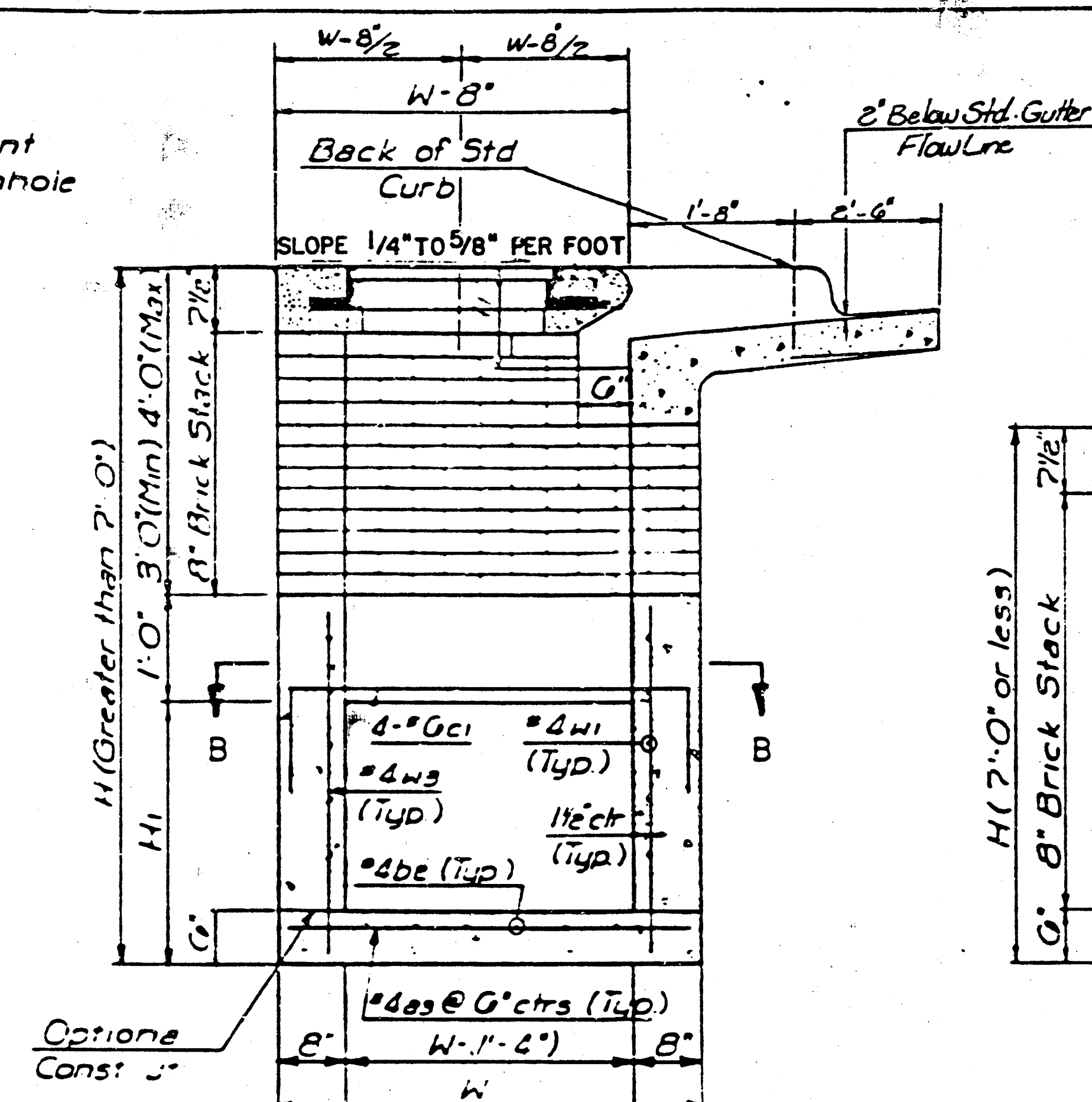
STANDARD CURB INLET PRECAST TOPS			
W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4' 4"	5'6"x 6'4" x 7 1/2"	21" & SMALLER	0.38 ±
5' 4"	6'6"x 6'4" x 7 1/2"	24" & 30"	0.51 ±
6' 4"	6'6"x 6'4" x 7 1/2"	36" & 42"	0.64 ±
7' 4"	6'6"x 6'4" x 7 1/2"	48" & 54"	0.77 ±
8' 4"	7'8"x 6'4" x 7 1/2"	60" & 66"	0.90 ±

6/11



SECTION B-B

Note Bars to be field bent
or cut to clear Manhole
Ring



SEE CITY OF WICHITA STANDARD MANHOLE
FRAME AND COVER DETAIL SHEET FOR COVER
DETAILS TO BE USED WITH INLET FRAME.

GENERAL NOTES

Concrete shall be COW Standard
Paving Mix All exposed edges shall be
finished with an edging tool.
Reinforcing Bars shall be field bent
or cut to clear pipes
All bars are #4 bars at 6" Spacing
and shall have a minimum clearance
of 1 1/2" unless otherwise noted
Floors of inlet shall be shaped with
8" Sack Sand Mix Concrete to increase
hydraulic efficiency such that the
inlet will be self cleaning between
all inlet and/or outfall pipe(s)
The Contractor shall have the option
of constructing 6" Brick Masonry
Walls between the concrete inlet
base and top on this inlet when
H=7'-0" or less and W=6'-4" or less.

THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.

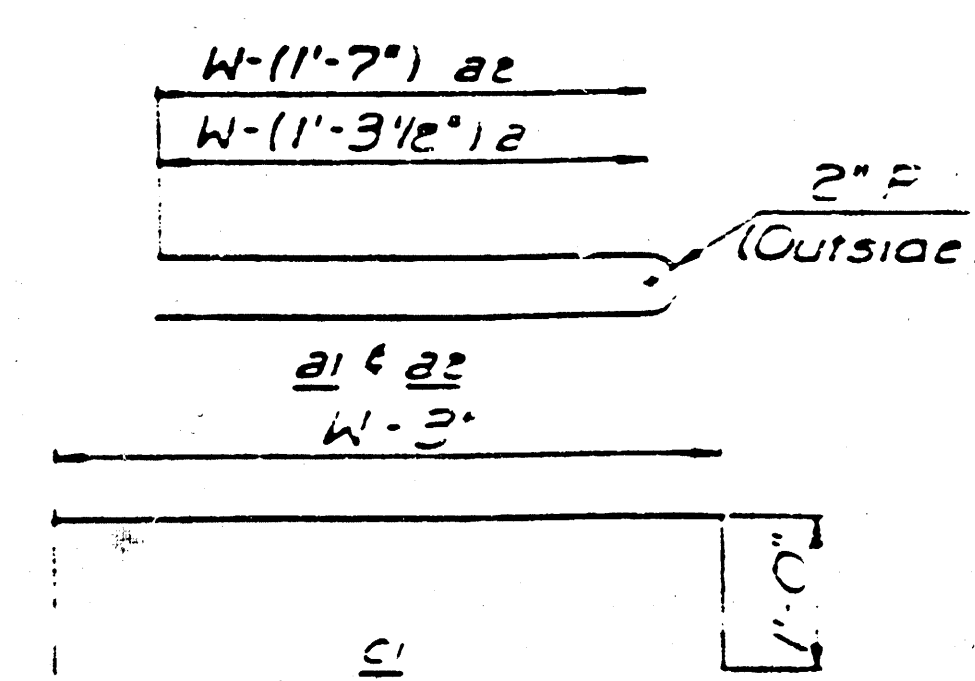
SLAB AND FLOOR REINFORCING											
		W=4'-0"		W=5'-0"		W=6'-0"		W=7'-0"		W=8'-0"	
Mark	Size	No	Length	No	Length	No	Length	No	Length	No	Length
a1	#4	13	6'-7 1/4"	13	8'-7 1/4"	13	10'-7 1/4"	13	12'-7 1/4"	13	14'-7 1/4"
a2	#4	2	6'-0"	2	8'-0"	2	10'-0"	2	12'-0"	2	14'-0"
a3	#4	20	4'-11"	20	5'-11"	20	6'-11"	20	7'-11"	20	8'-11"
b1	#4	1	0'-8"	1	0'-8"	1	0'-8"	1	0'-8"	1	0'-8"
*b2	#4	18	11'-1"	24	11'-1"	30	11'-1"	36	11'-1"	42	11'-1"

WALL REINFORCING											
		W=4'-0"		W=5'-0"		W=6'-0"		W=7'-0"		W=8'-0"	
Mark	Size	No	Length	No	Length	No	Length	No	Length	No	Length
c1	#4	4	0'-11"	4	2'-1"	4	3'-1"	4	4'-1"	4	5'-1"
w1	#4	1	11'-1"	1	11'-1"	1	11'-1"	1	11'-1"	1	11'-1"
w2	#4	1	4'-1"	1	5'-1"	1	6'-1"	1	7'-1"	1	8'-1"
w3	#4	2	3	2	3	2	3	2	3	2	3

WALL REINFORCING											
		W=4'-0"		W=5'-0"		W=6'-0"		W=7'-0"		W=8'-0"	
Mark	Size	No	Length	No	Length	No	Length	No	Length	No	Length
C1	#6	4	10'-11"	4	7'-11"	4	8'-11"	4	9'-11"	4	10'-11"
W1	#4	1	11'-11"	1	11'-11"	1	11'-11"	1	11'-11"	1	11'-11"
W2	#4	1	4'-11"	1	5'-11"	1	6'-11"	1	7'-11"	1	8'-11"
W3	#6	2	15	2	15	2	15	2	15	2	15

* Field bend or cut Reinforcing as required for clearance

① $4(H_1 - G^*)$ ② $40 + 4(W - 1)$ ③ $H_1 - 10^*$



BENDING DIAGRAMS

DETAIL STANDARD
TYPE 1A CURB INLET

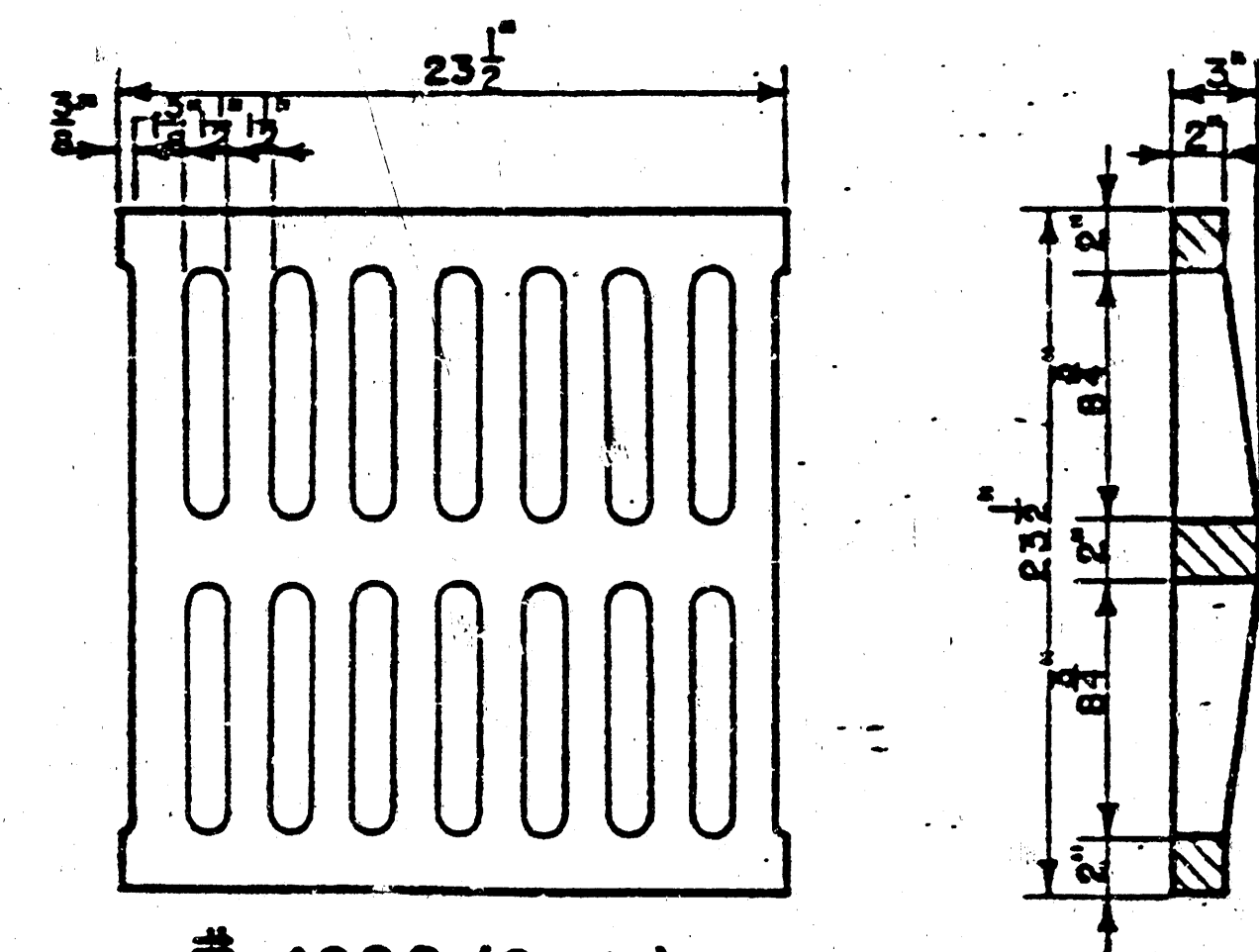
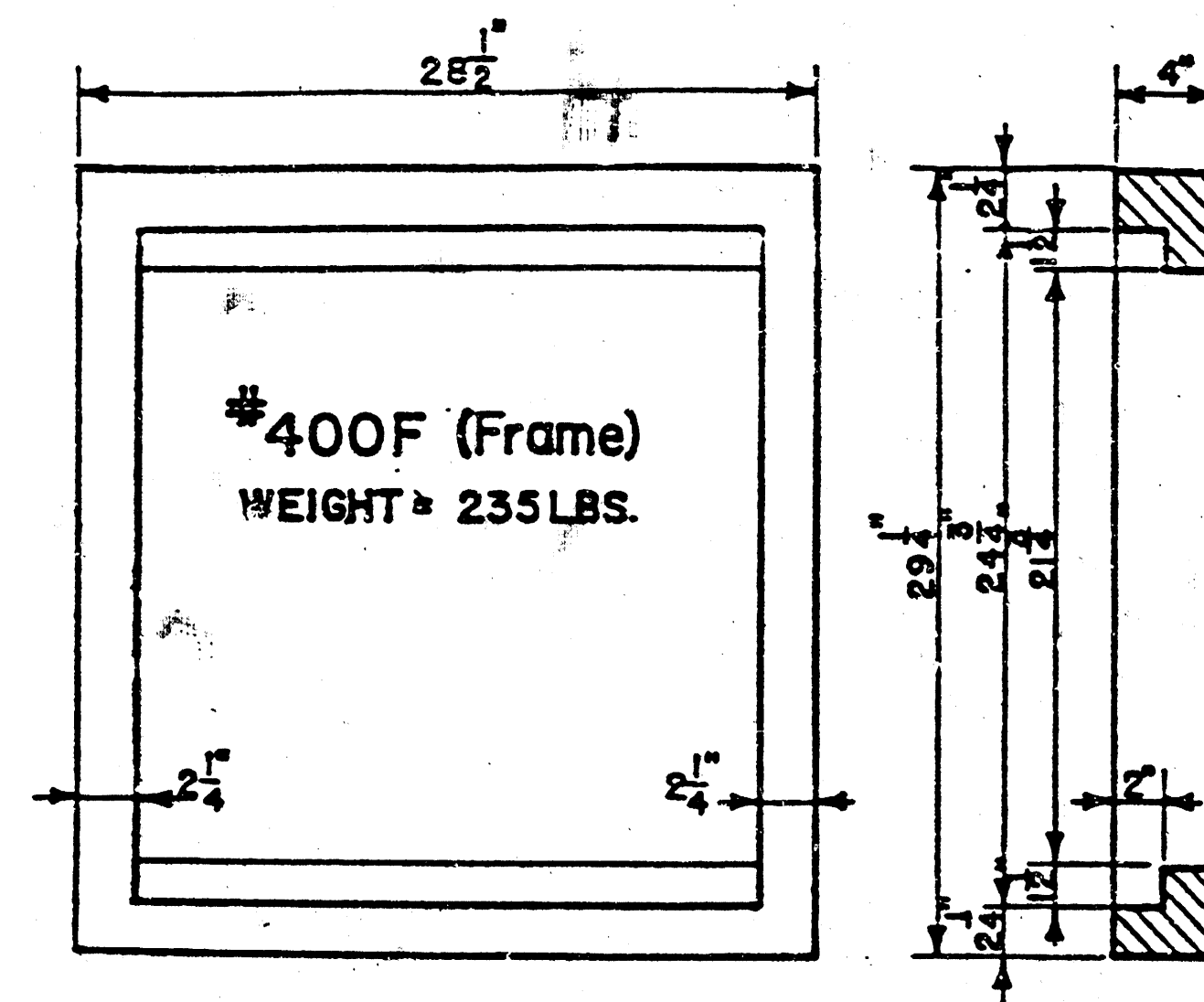
INLET OPENING = 6" x 10'-0"

CITY OF WICHITA

M. E. LINDEBAK, CITY ENGINEER

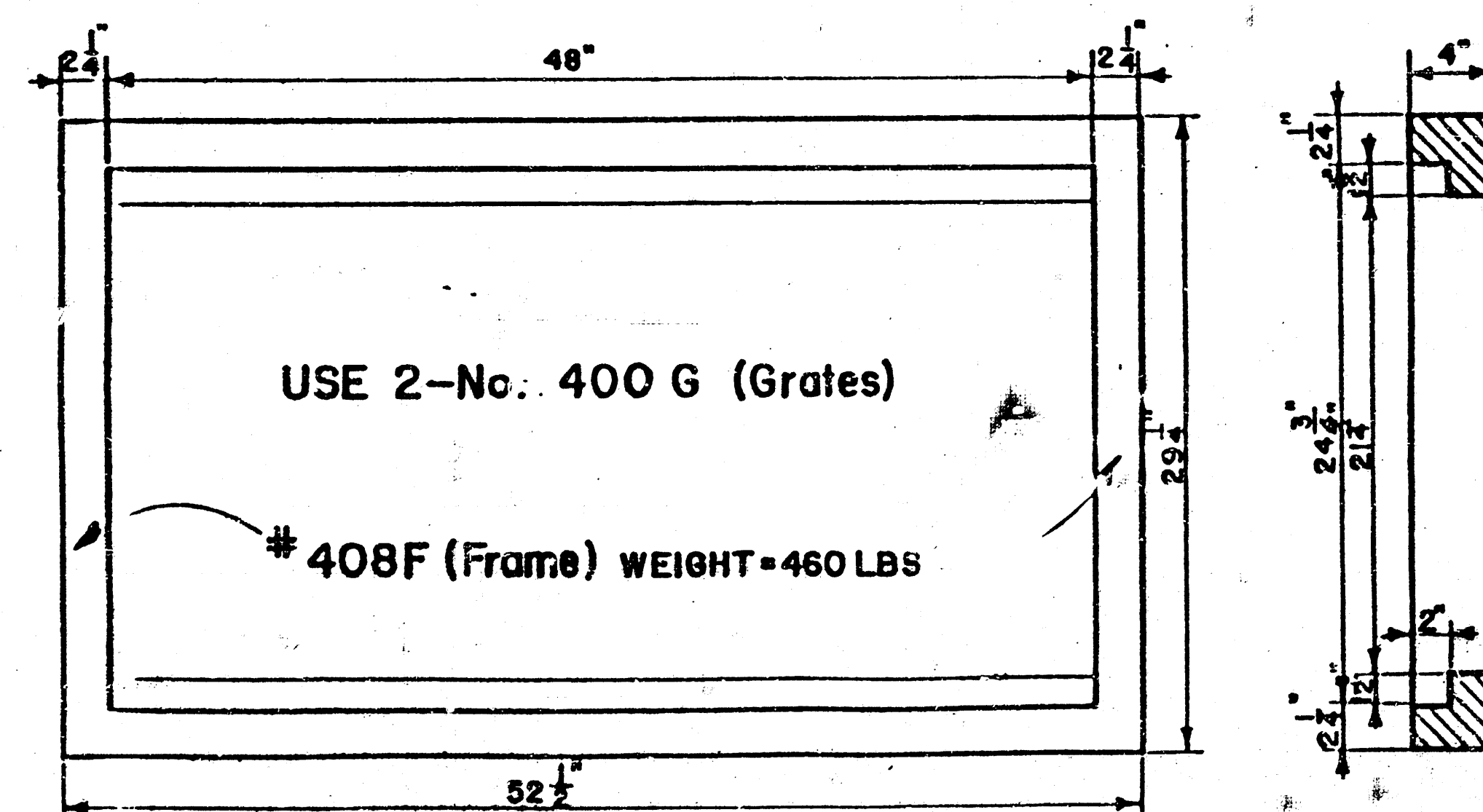
OCTOBER 1984

NOTE: Grates shall be imprinted on the top surface with "CITY OF WICHITA" using letters at least 1" in height. Other marking methods may be used only if approved by the engineer.

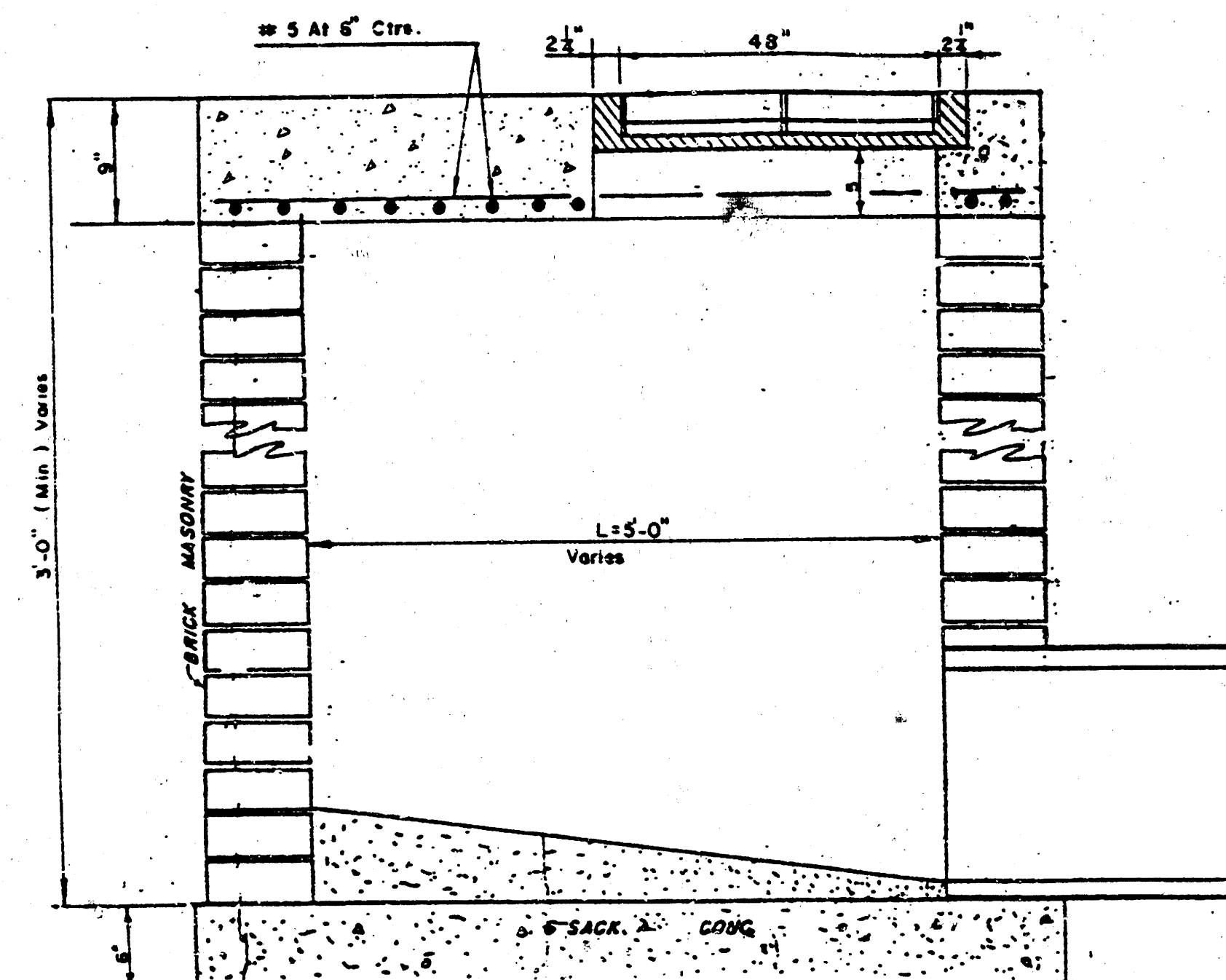
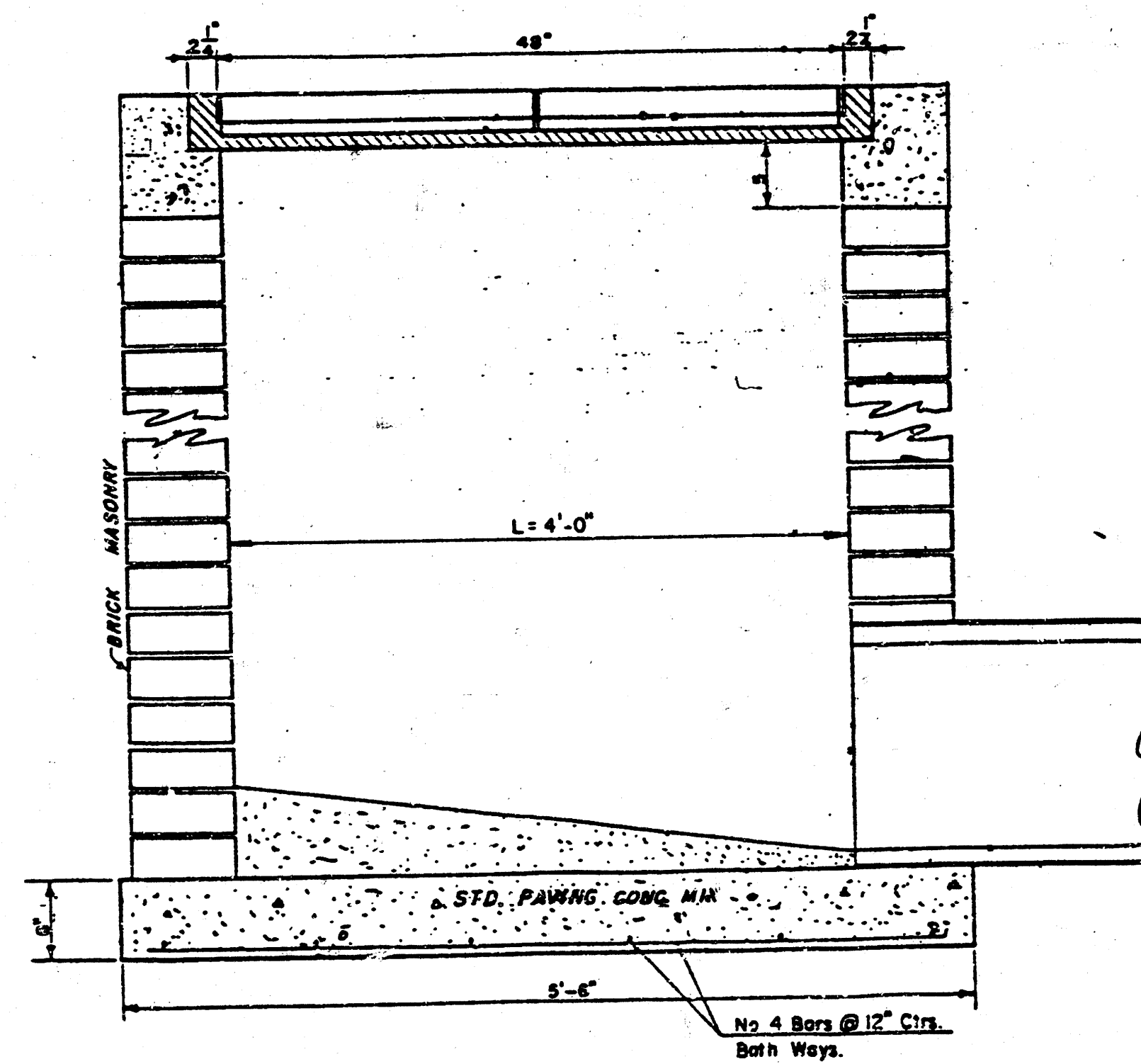
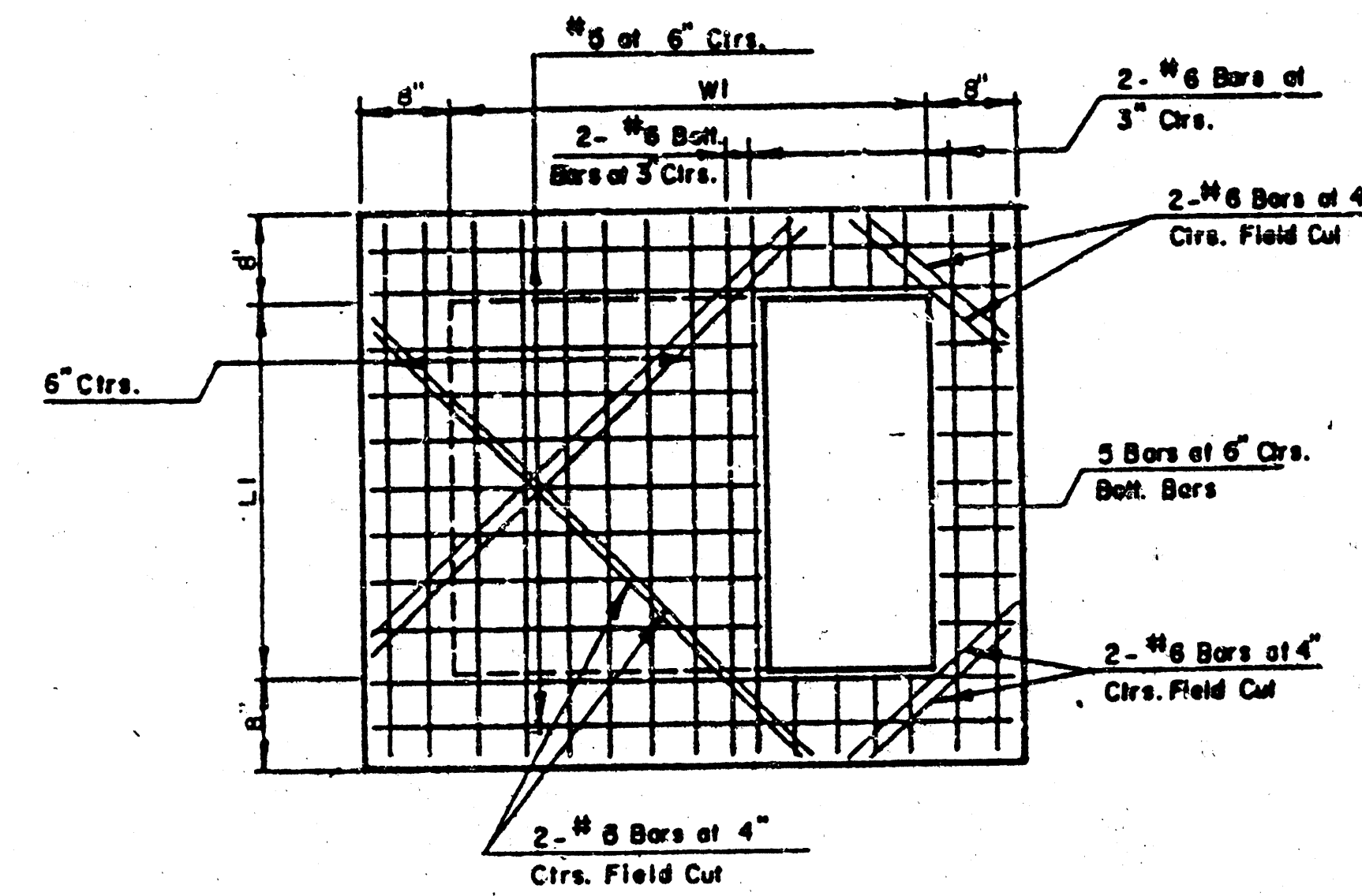
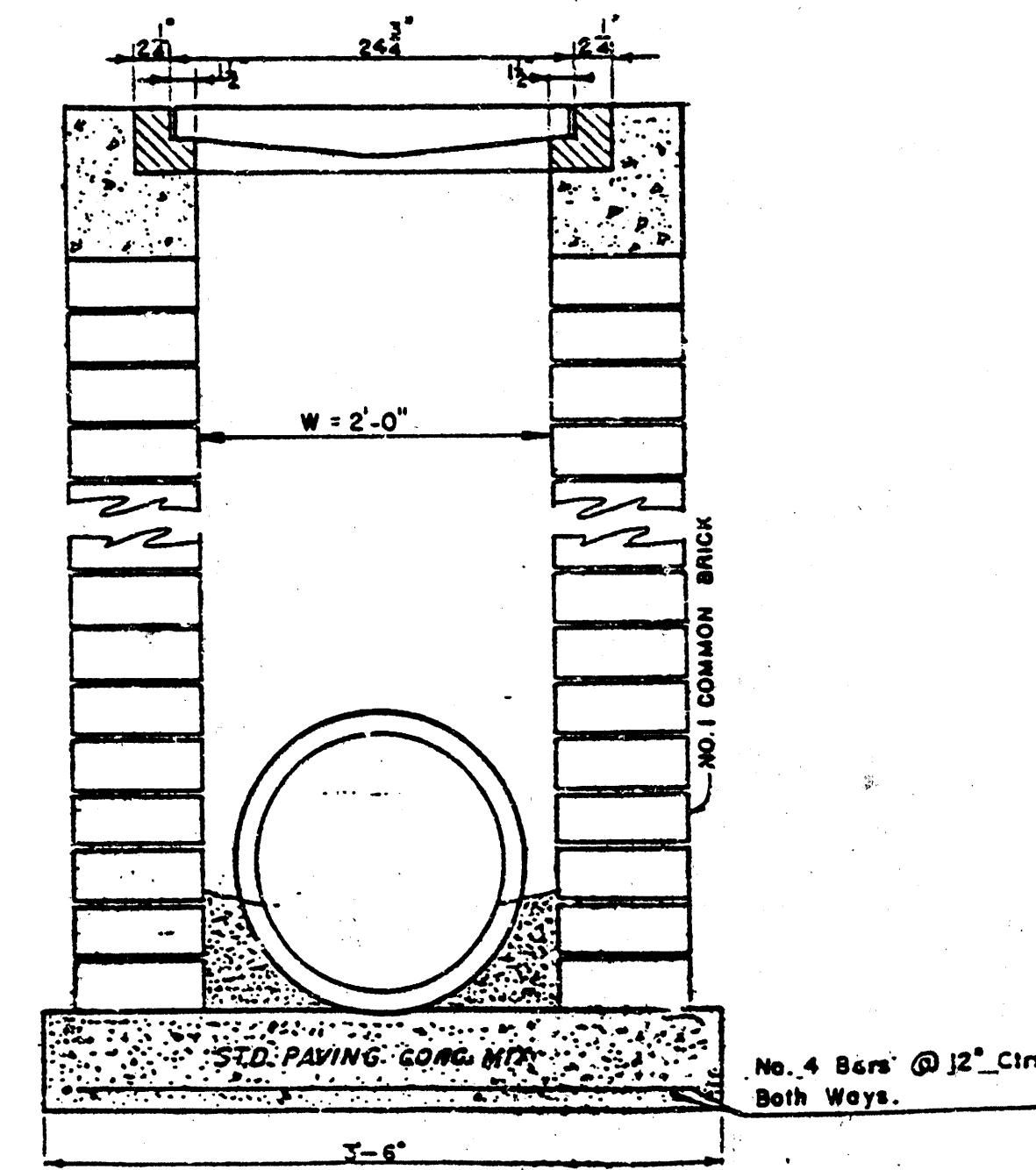


400G (Grate)
WEIGHT = 235 LBS

24"x24" Frame & Grate Detail



Double 24"x24" Frame Detail



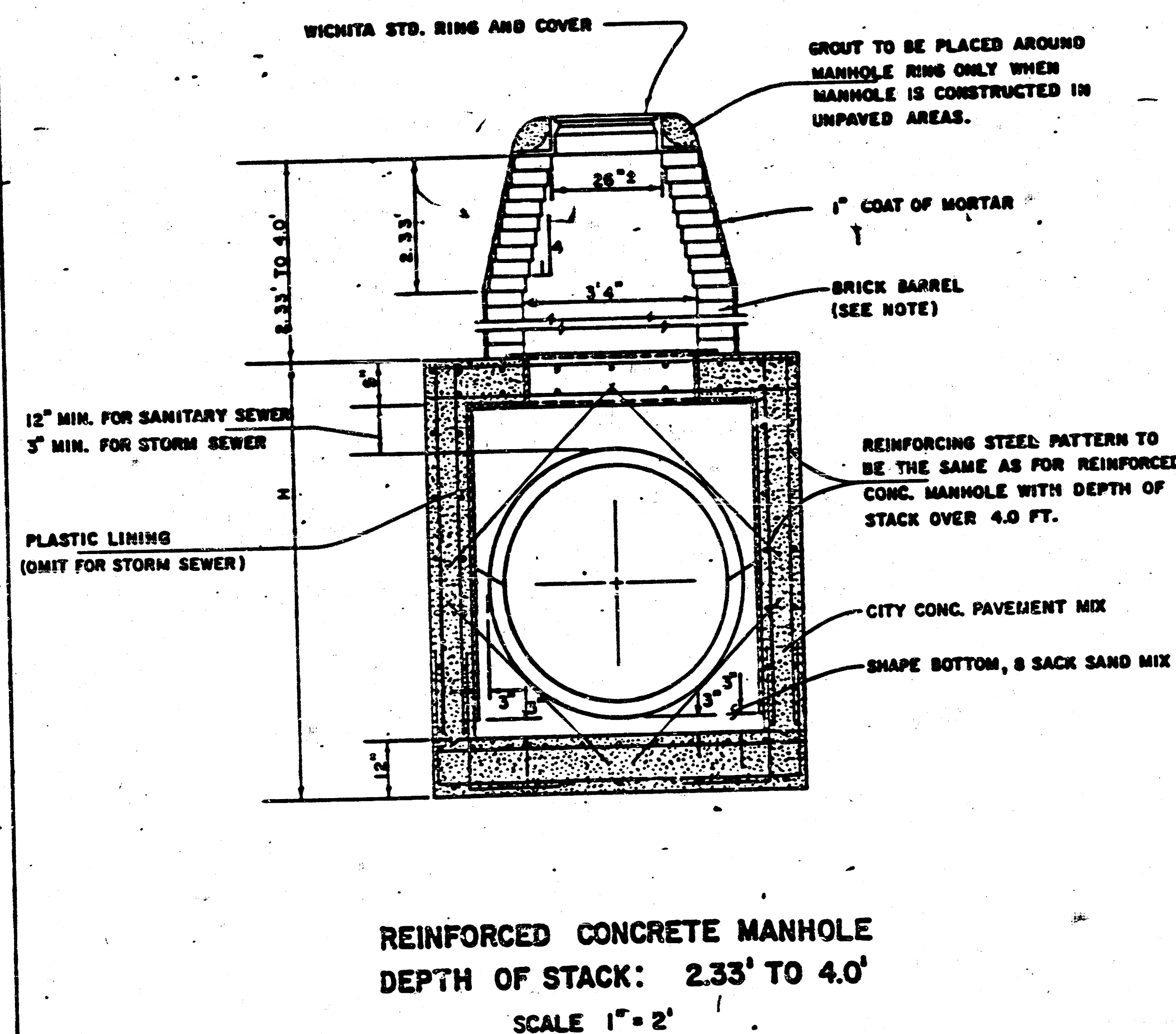
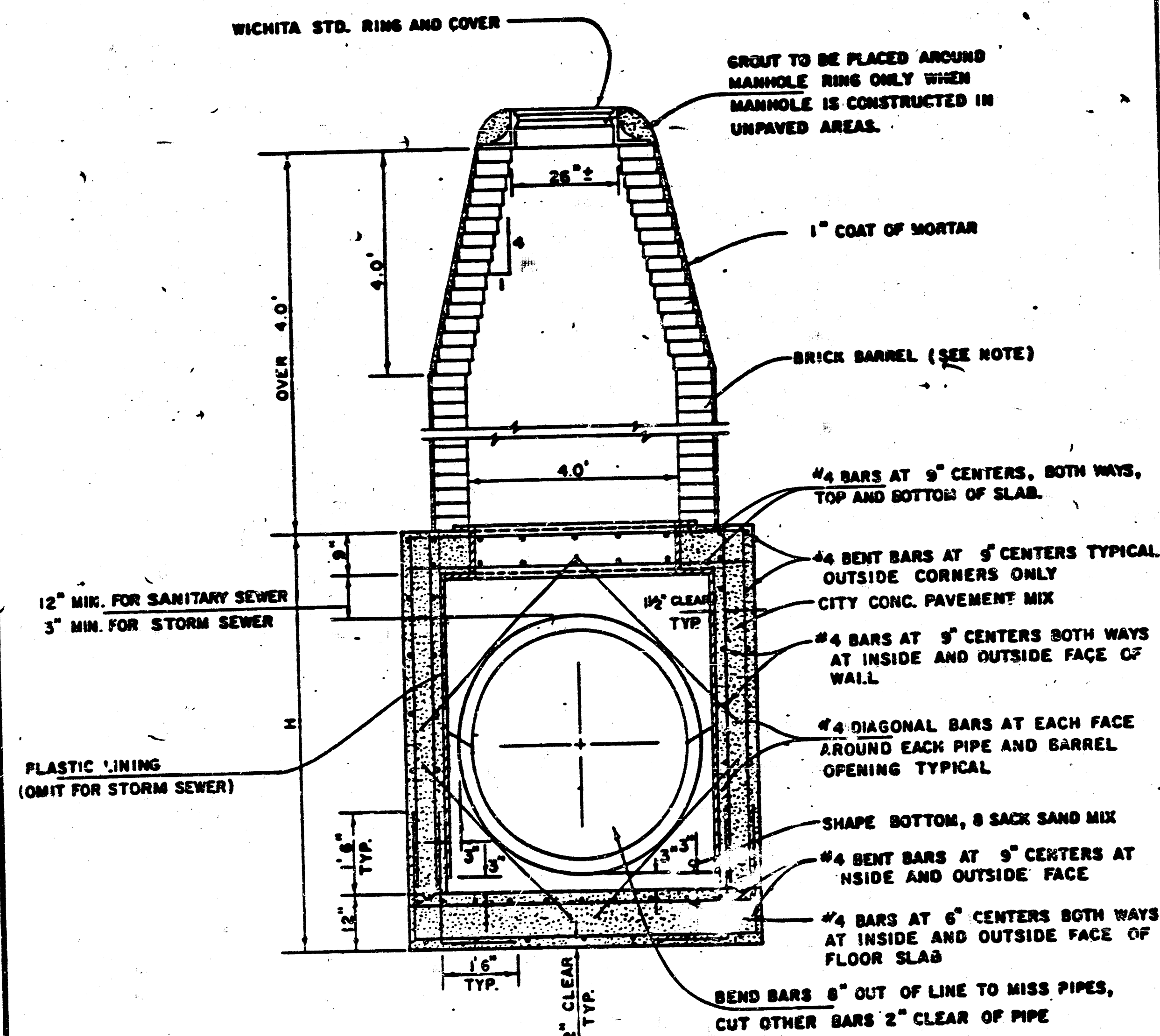
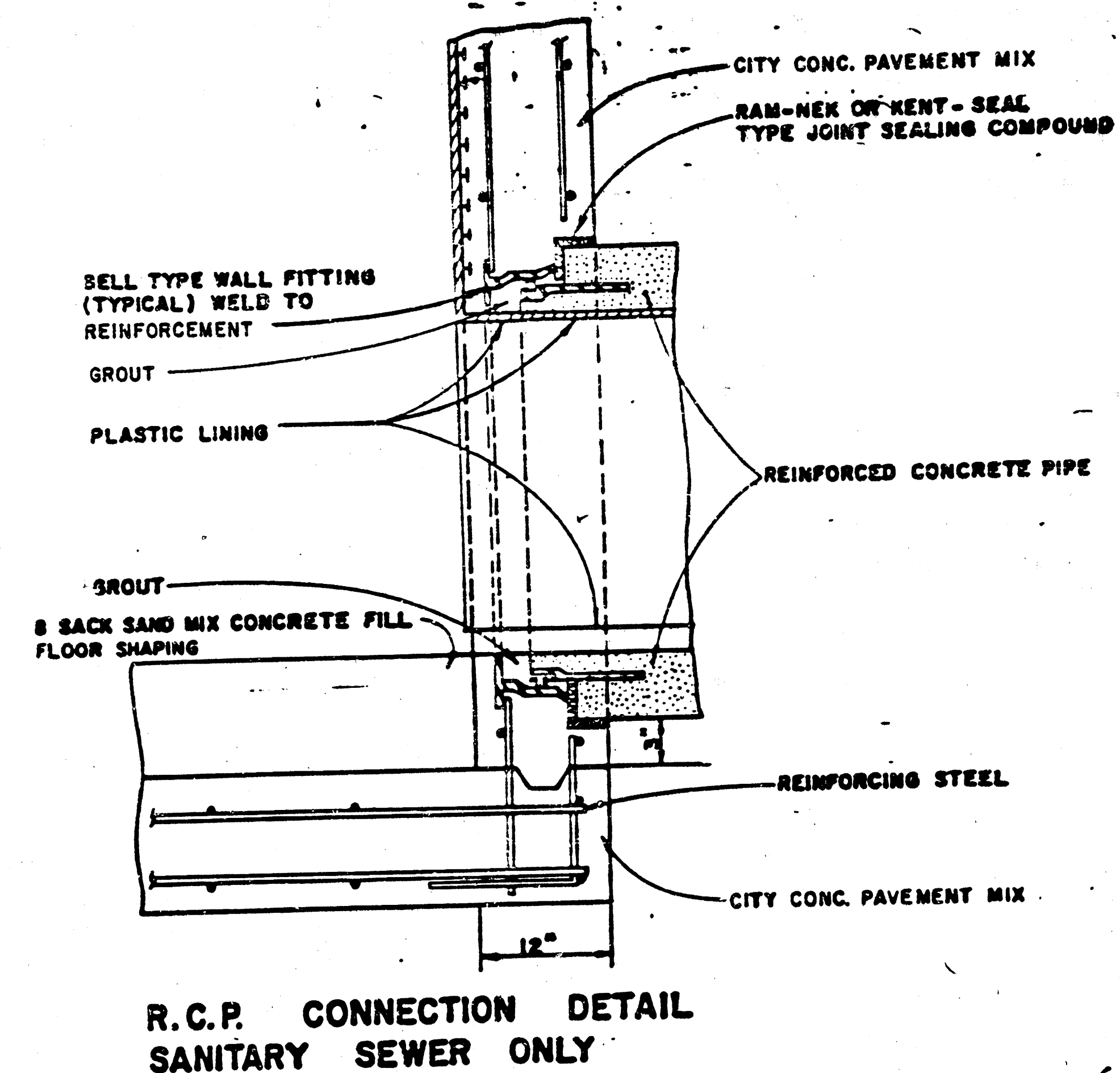
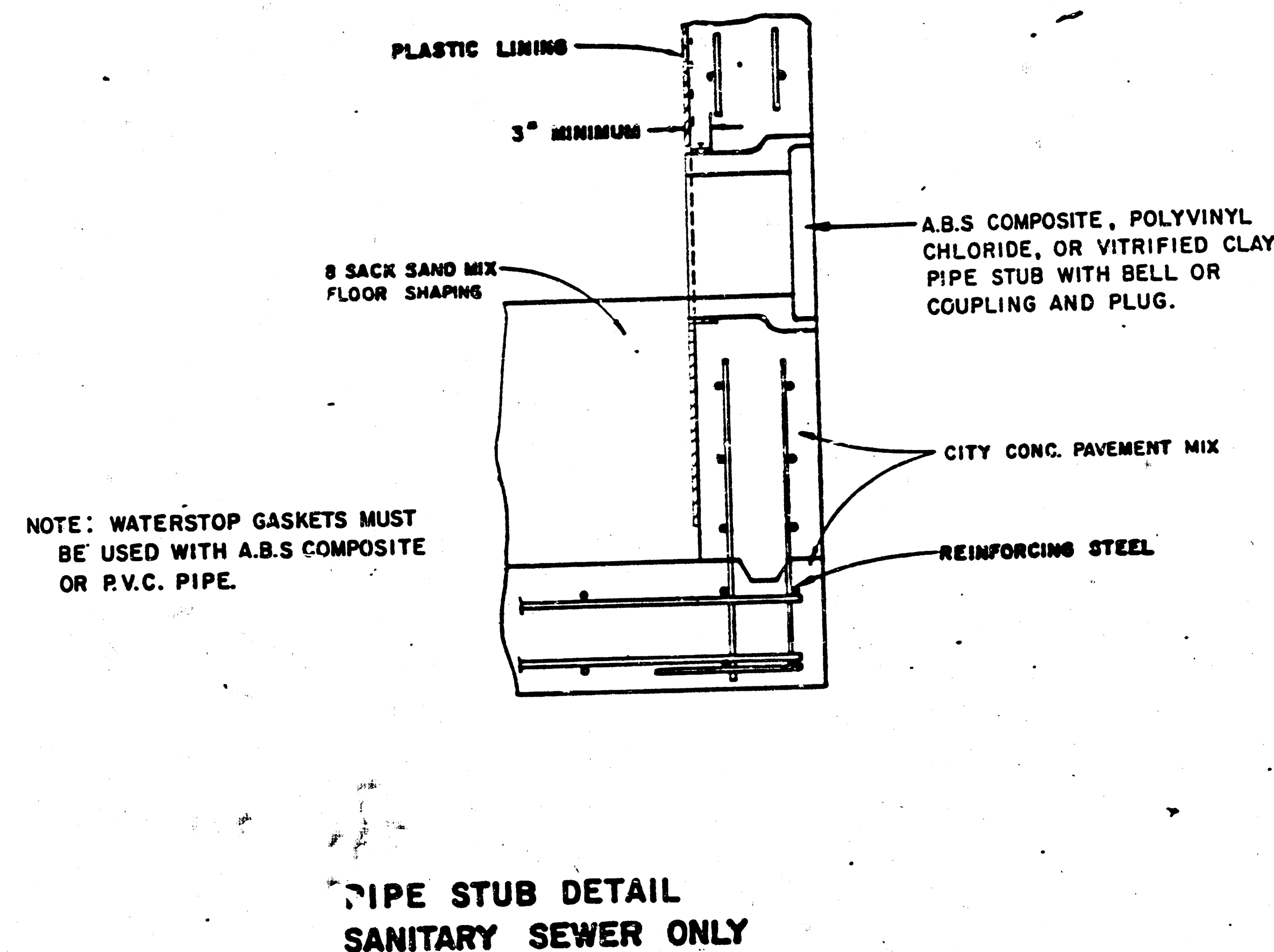
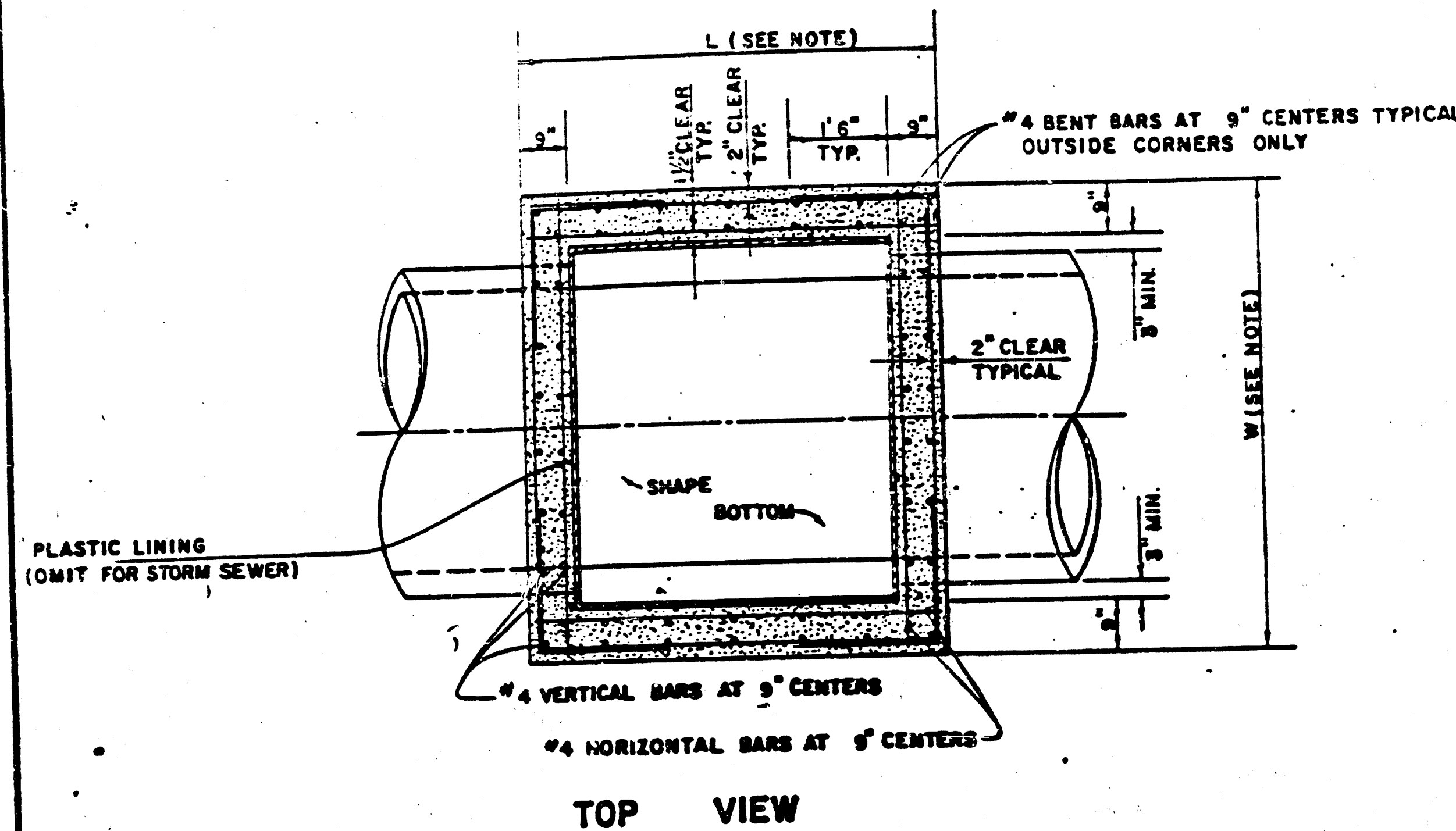
DROP INLET DETAILS
M.E. LINDEBAK, CITY ENGINEER
CITY OF WICHITA, KANSAS

MID-KANSAS ENGINEERING CONSULTANTS PA
240 NORTH ROCK ROAD
SUITE 100
WICHITA, KANSAS 67206

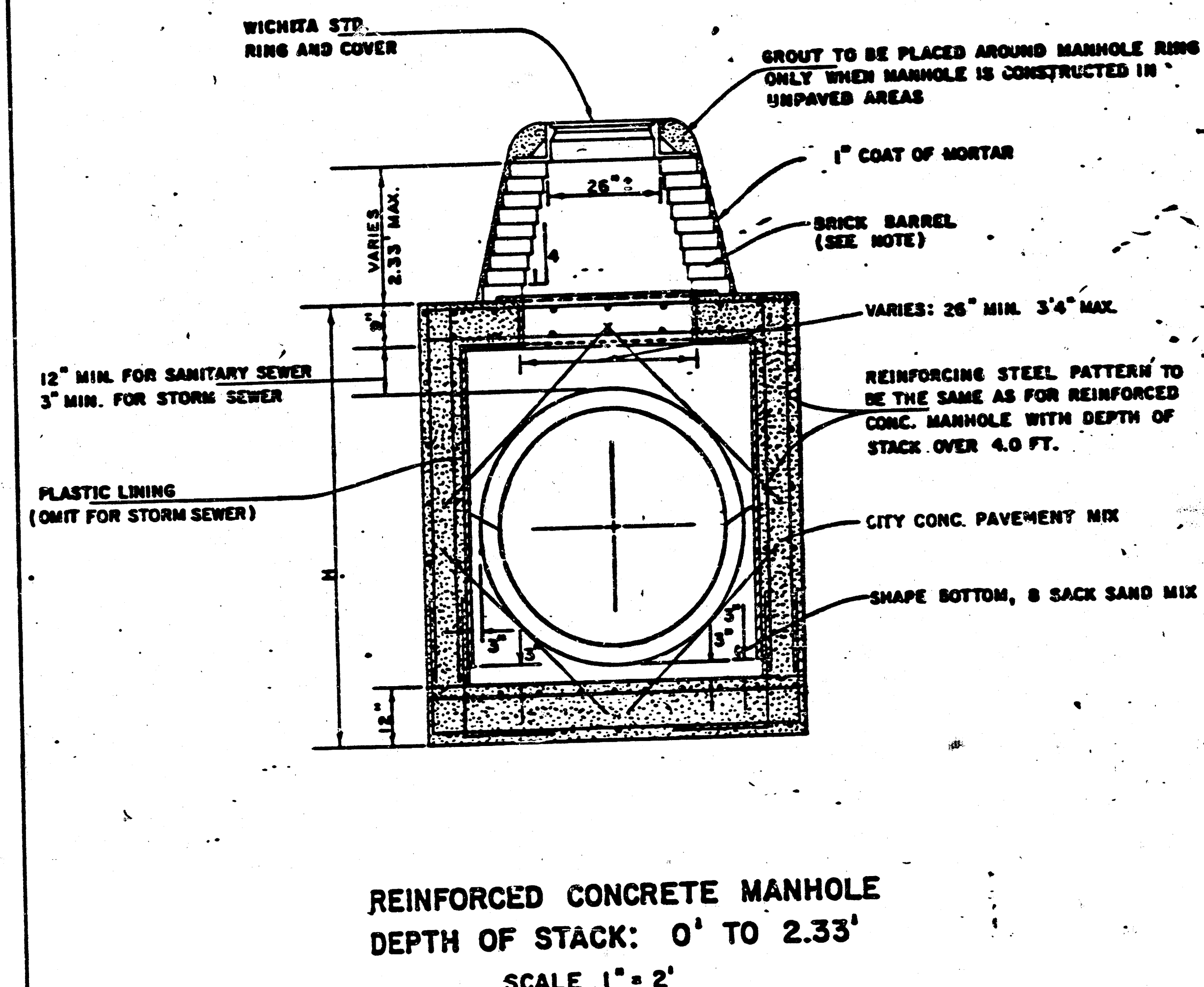
682-6561

Design
Drawn by
Checked by
Date
Job no.

Sheet
8
of
11

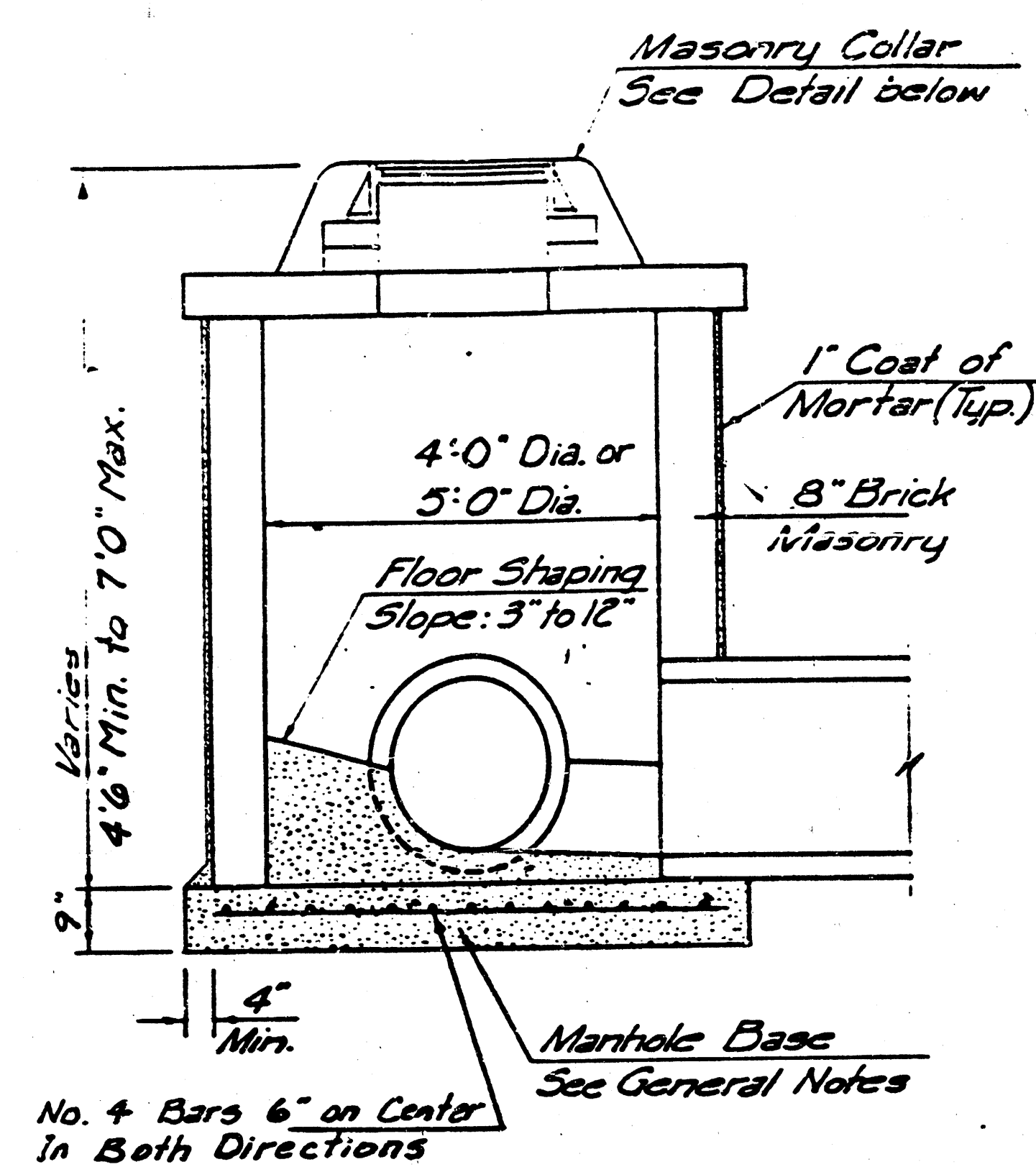


NOTE:
BRICK BARRELS LESS THAN 16' DEEP SHALL HAVE 8" WALLS EXCEPT WHEN LOCATED WITHIN PUBLIC STREET OR ALLEY PAVEMENT THEN THE WALL SHALL BE 12" BRICK BARRELS MORE THAN 16' DEEP SHALL HAVE 12" WALLS. THE "L" AND "W" DIMENSIONS SHALL BE A MINIMUM OF 5'6" FOR BRICK BARRELS WITH 8" WALLS AND 6'2" FOR BRICK BARRELS WITH 12" WALLS WHEN THE BRICK BARRELS ARE OVER 4 FT. IN HEIGHT.

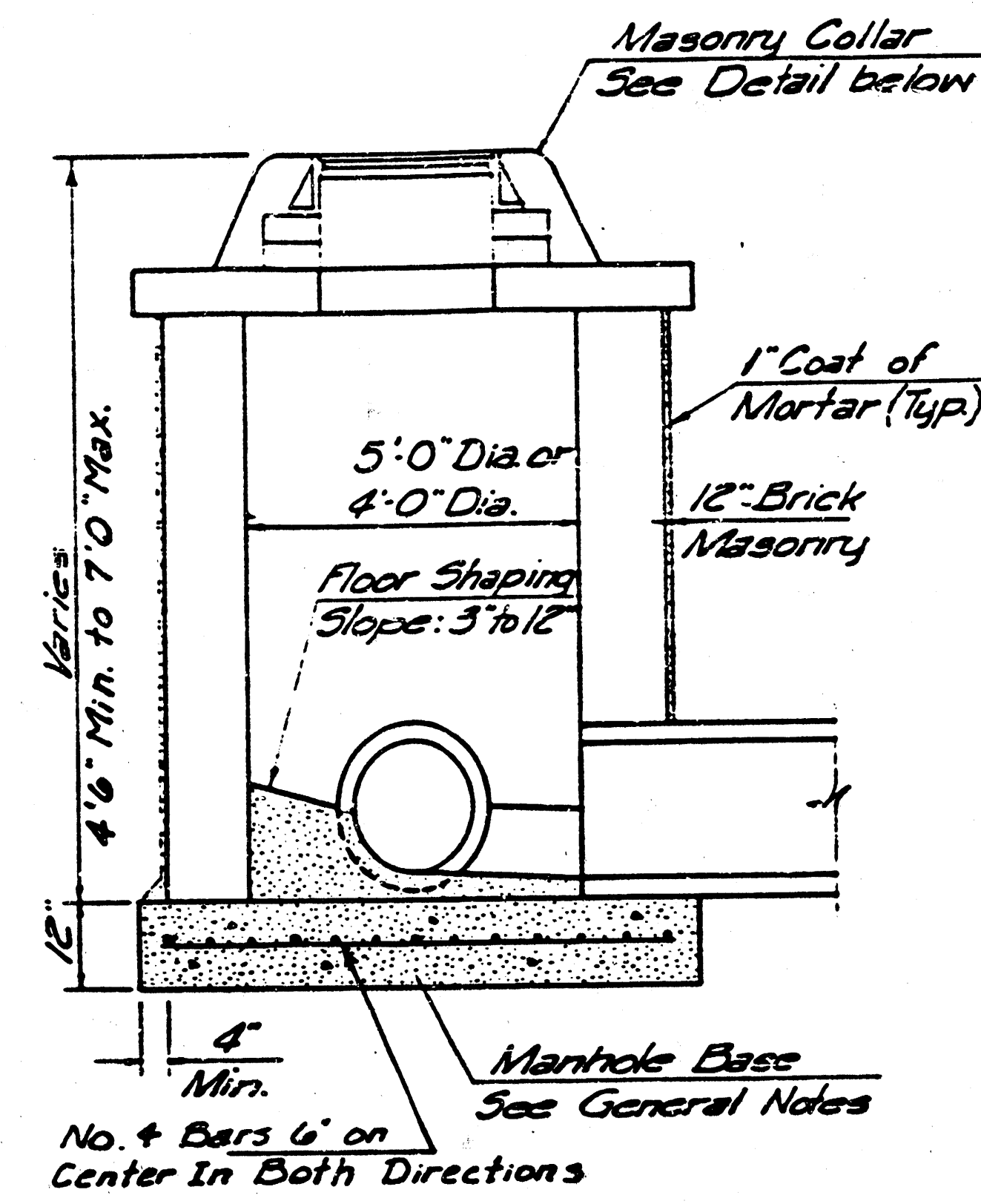


REVISED 1-7-85

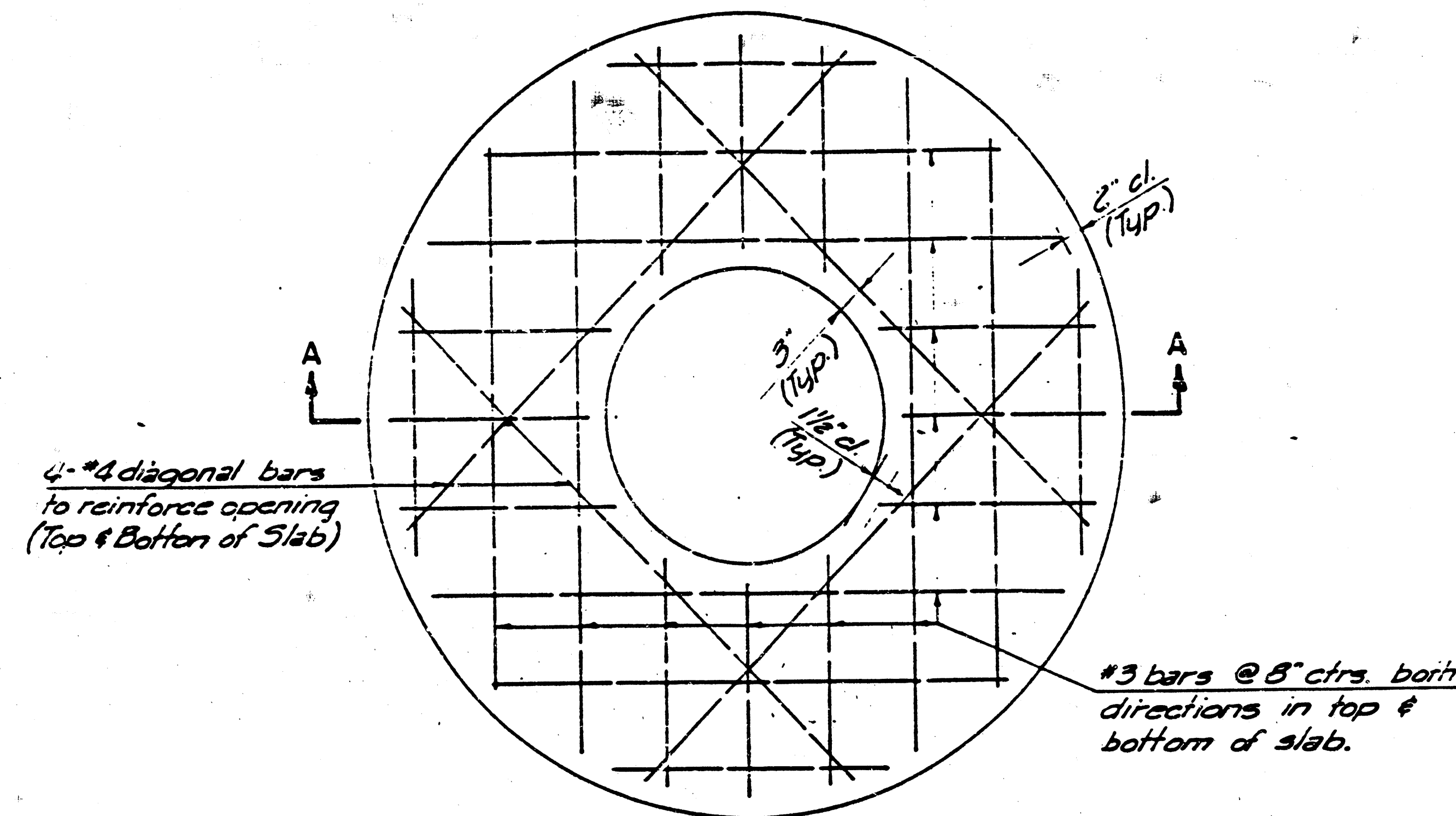
STANDARD DETAILS
REINFORCED CONCRETE MANHOLES
CITY OF WICHITA
FEBRUARY 1984



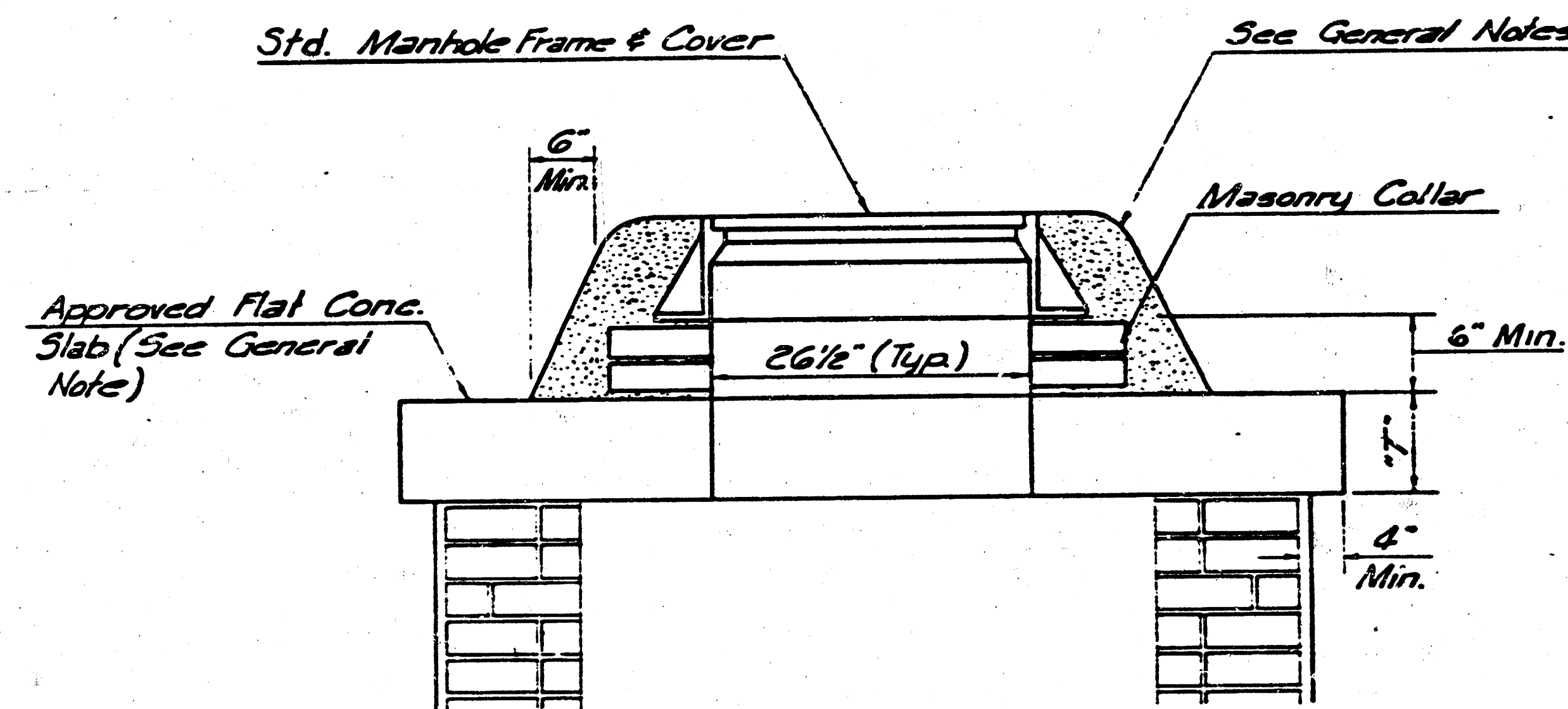
SHALLOW TYPE "A" MANHOLE



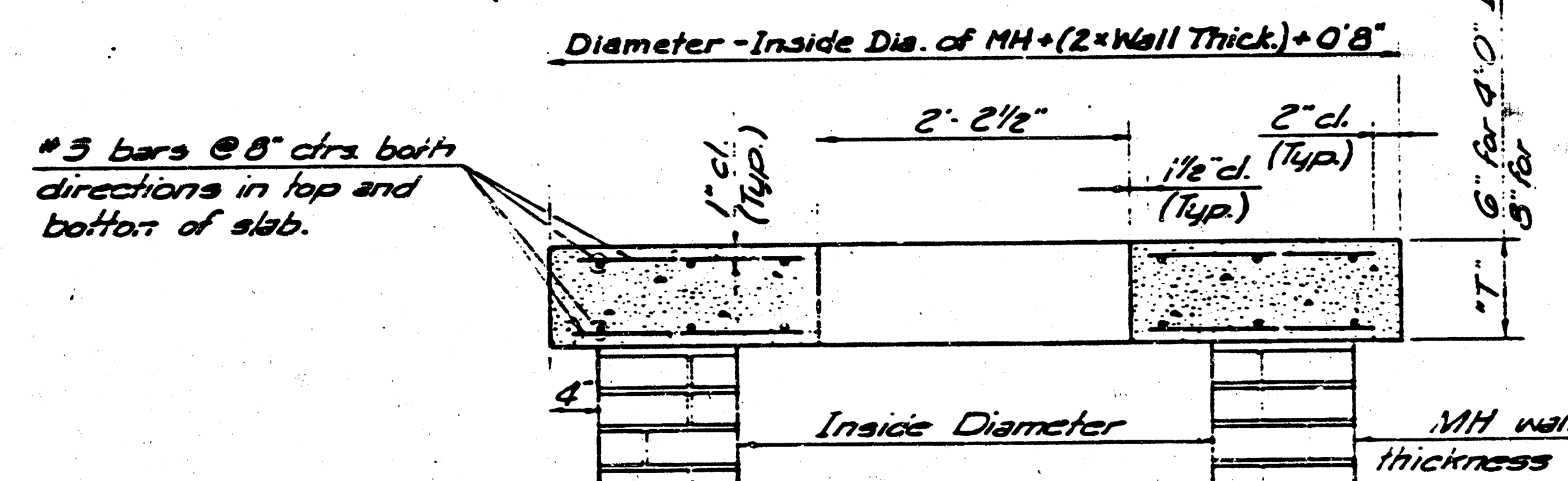
SHALLOW TYPE "B" MANHOLE



PLAN

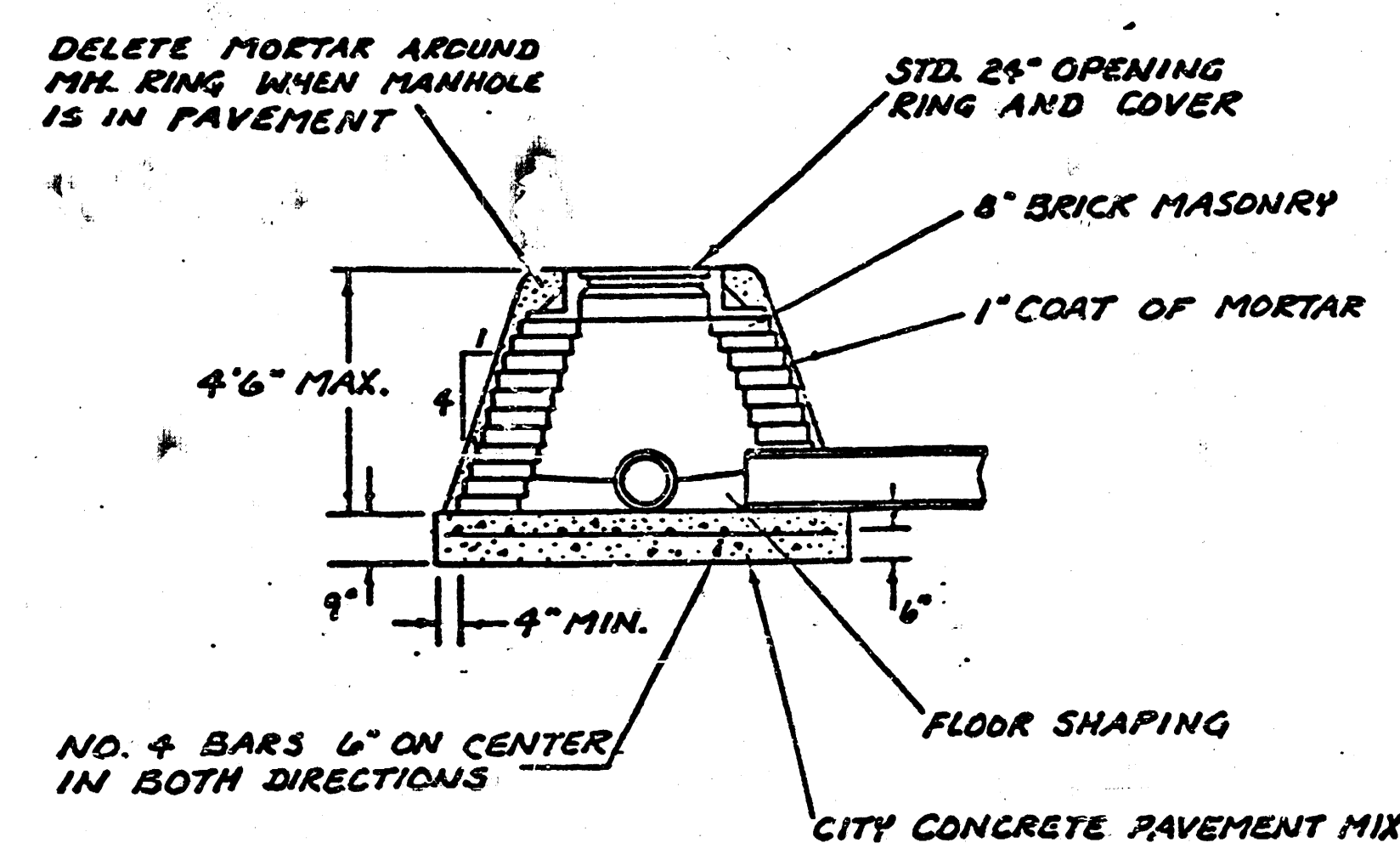


MASONRY COLLAR DETAIL

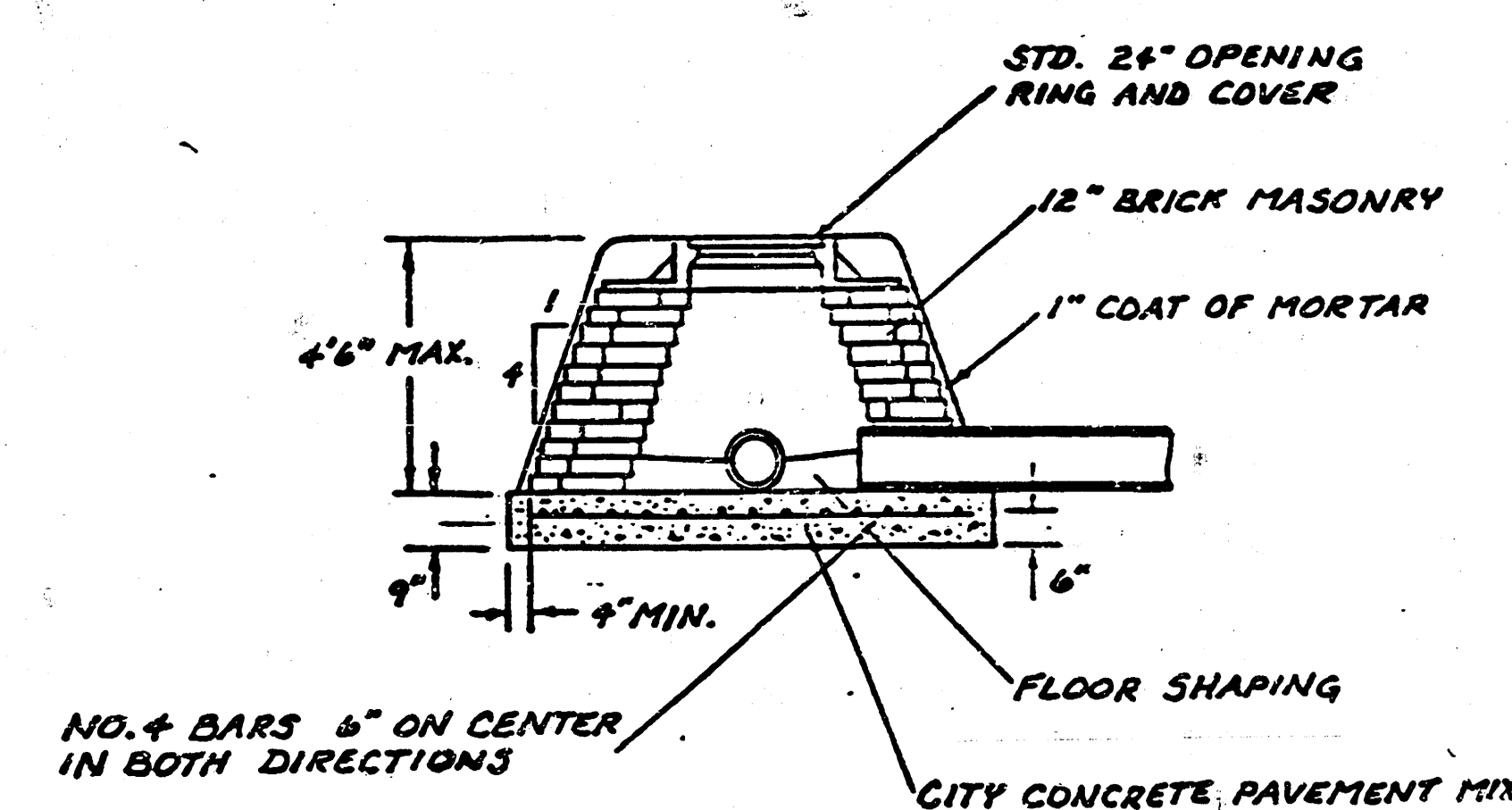


SECTION A-A

FLAT CONCRETE SLAB DETAILS



SPECIAL SHALLOW TYPE "A" MANHOLE



SPECIAL SHALLOW TYPE "B" MANHOLE

GENERAL NOTES

- MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE BASES SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE CEMENT MIX WITHOUT AIR ENTRAINING ADMIXTURE. MORTAR SHALL BE PLACED AROUND THE MANHOLE RING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED AREAS. TYPE "A" SHALLOW MANHOLES CAN BE USED ON SEWERS WHEN THE MANHOLE IS NOT LOCATED WITHIN PUBLIC STREET PAVEMENT. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE SMALLER THAN 24" SHALL HAVE AN INSIDE DIAMETER OF 4". MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE 24" OR LARGER SHALL HAVE AN INSIDE DIAMETER OF 5". COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.
- REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED 6" ABOVE THE BOTTOM OF THE MANHOLE BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
- THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF CLEANING AND FREE OF AREAS WHERE SOLIDS COULD BE DEPOSITED AS SEWAGE FLOWS THROUGH THE MANHOLE FROM ALL INLET PIPES TO THE OUTLET PIPE. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM HALVES OF THE INFLOWING PIPES AND THE OUTFLOWING PIPE AS SHOWN BY THE DRAWINGS. MANHOLE FLOORS SHALL HAVE SLOPES OF 3 INCHES PER FOOT IN THE AREAS OUTSIDE OF THE FLOW CHANNELS SLOPED TOWARD THE FLOW CHANNELS. PIPES LAID THROUGH MANHOLES SHALL HAVE THE TOP HALF REMOVED TO NEAT LINES FOR THE FULL INSIDE DIAMETER OF THE MANHOLE. MANHOLE FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.
- PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE CRADLED WITH CONCRETE TO THE LIMITS OF THE MANHOLE EXCAVATION. WHEN CLAY PIPE IS USED, THE CRADLE SHALL EXTEND TO THE FIRST JOINT OUTSIDE THE MANHOLE. THE CRADLE SHALL BE TERMINATED AT THE CLAY PIPE JOINT IN A MANNER WHICH WILL MAINTAIN THE FLEXIBILITY OF THE JOINT. COST OF CRADLE WITHIN MANHOLE EXCAVATION OR TO CLAY PIPE JOINTS ADJACENT TO MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
- MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWINGS.
- THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
- STANDARD SHALLOW MANHOLES TYPE "A" AND "B" SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH FOR THE TYPE AND DIAMETER INDICATED. STANDARD SPECIAL SHALLOW MANHOLES TYPE "A" AND "B" SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH FOR THE TYPE INDICATED. ALL STANDARD SHALLOW MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.

CITY OF WICHITA, KANSAS
STANDARD SHALLOW MANHOLES
TYPE 'A' AND TYPE 'B'

Designed by _____
Drawn by _____
Checked by _____
Date _____
Job No. _____

10/11

80-9 TW

I, Michael D. Harding, a Civil Engineer in Kansas, do hereby certify that I have been in responsible charge of surveying and platting of "WILDERNESS SECOND ADDITION", an addition to Wichita, Sedgwick County, Kansas, into lots, blocks, streets and reserves, the same being accurately set forth in the accompanying plat and described herein:

A tract of land lying within the northeast quarter of Section 5, Township 27 South, Range 2 east of the 6th Principal Meridian, more particularly described as follows:

Beginning at the northeast corner of "Wilderness", an addition to Wichita, Sedgwick County, Kansas; thence along the north line of said addition, extended easterly bearing N 89° 06' 39" E, 49.90 feet to a point on the west line of Government Lot 1; thence southerly along said west line bearing S 00° 54' 07" E, 133.25 feet; thence S 89° 06' 39" W, 50.00 feet; thence S 24° 37' 53" W, 218.63 feet; thence S 76° 37' 53" W, 578.64 feet; thence S 21° 37' 53" W, 161.38 feet; thence N 68° 22' 07" W, 150.00 feet to the southeast corner of said "Wilderness", addition; thence northerly along the east line of said addition bearing N 21° 37' 53" E, 70.17 feet to the beginning of a curve to the left, having a radius of 308.50 feet, a central angle of 22° 30' 00", and a long chord bearing N 10° 22' 53" E, 120.37 feet; thence along said curve an arc length of 121.15 feet to the right, having a radius of 174.06 feet, a central angle of 40° 00' 00", and a long chord bearing N 19° 07' 53" E, 119.06 feet; thence along said curve an arc length of 121.52 feet; thence N 39° 07' 53" E, 304.66 feet to the beginning of a curve to the left, having a radius of 262.88 feet, a central angle of 94° 33' 15", and a long chord bearing N 08° 08' 44" W, 386.25 feet; thence along said curve an arc length of 433.83 feet; thence N 55° 25' 22" W, 43.86 feet; thence N 34° 34' 38" E, 80.00 feet to the beginning of a curve to the left, having a radius of 50.00 feet, a central angle of 126° 03' 03", and a long chord bearing N 52° 20' 42" E, 89.12 feet; thence along said curve an arc length of 110.00 feet; thence N 79° 19' 10" E, 183.57 feet; thence N 00° 53' 21" W, 126.72 feet; thence N 44° 06' 39" E, 87.95 feet; thence N 89° 06' 39" E, 145.82 feet; thence N 00° 53' 21" W, 99.00 feet to the beginning of a curve to the left, having a radius of 109.00 feet, a central angle of 45° 00' 00", and a long chord bearing N 23° 23' 21" W, 83.43 feet; thence along said curve an arc length of 85.61 feet; thence N 44° 06' 39" E, 257.28 feet to the point of beginning containing 19.63 acres more or less.

I hereby certify that the details of this plat are correct to the best of my knowledge and belief this 5TH day of November, 1984.

Michael D. Harding
Michael D. Harding
Mid-Kansas Engineering Consultants, P.A.
240 N. Rock Road, Suite 130
Wichita, KS 67206



Know all men by these presents that we the undersigned property owners of the land as above set forth in the Civil Engineers Certificate, have caused the same to be surveyed and platted into lots, blocks, streets and reserves, the same to be known as "WILDERNESS SECOND ADDITION" an addition to Wichita, Sedgwick County, Kansas. The streets are hereby dedicated to and for the use of the public. Easements for the construction and maintenance of public utilities and drainage are hereby granted as indicated. The reserves are being platted for construction and maintenance of public utilities, landscaping, irrigation, cart paths, recreation buffer zones, open space, and drainage. Reserve "D" is also reserved for a screen wall. Reserves shall be owned and maintained by the Homeowners Association. All abutters rights of access to or from 29th Street North over and across the north line of Lot 25 Block 2, "WILDERNESS SECOND ADDITION", is hereby granted to the City of Wichita. The building setbacks shall be in accordance with the Tallgrass Community Unit Plan (D.P. - 96) on file in the City of Wichita, Sedgwick County Metropolitan Area Planning Department Office.

Tallgrass Company, a partnership

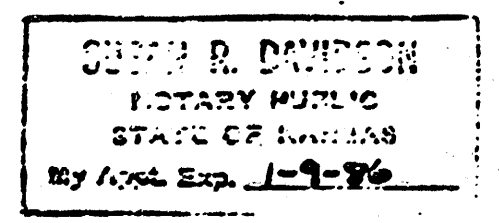
By: Jack D. Ritchie, partner

STATE OF KANSAS
COUNTY OF SEDGWICK

Be it remembered that on this 5th day of November, 1984, before me, a Notary Public in and for said State and County, came Jack D. Ritchie, partner on behalf of Tallgrass Company, a partnership to me personally known to be the same person who executed the foregoing instrument of writing and duly acknowledged the execution of the same, in testimony whereof I have hereunto set my hand and affixed my notarial seal the day and year above written.

Susan G. Davidson, Notary Public

My Appointment Expires: 1-9-86



FINAL PLAT OF WILDERNESS SECOND ADDITION

AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS



This plat of "Wilderness second addition" has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this 18th day of October, 1984.

Wichita-Sedgwick County Metropolitan Area Planning Commission

James C. Wilson, Chairman
James C. Wilson

Robert A. Lakin, Secretary
Robert A. Lakin

This plat approved and all dedications shown hereon, if any, accepted by the City Commission of the City of Wichita, Kansas, this 11th day of November, 1984.

Robert G. Knight, Mayor
Robert G. Knight

Donald C. Gluck, City Clerk
Donald C. Gluck

This plat approved and all dedications shown hereon, if any, accepted by the Board of County Commissioners of Sedgwick County, Kansas, this 12th day of December, 1984.

Jack Spratt, Chairman
Jack Spratt

Donald E. Gragg, Commissioner
Donald E. Gragg

Tom Scott, Commissioner
Tom Scott

Michael T. Sawyer, County Clerk
Michael T. Sawyer

Entered on transfer record this 12th day of December, 1984.

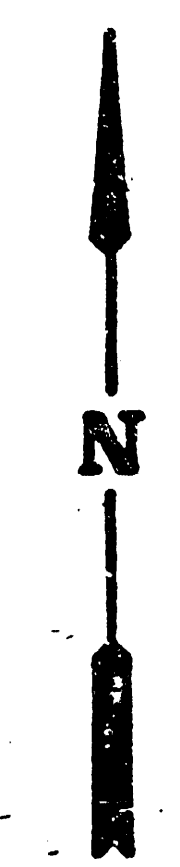
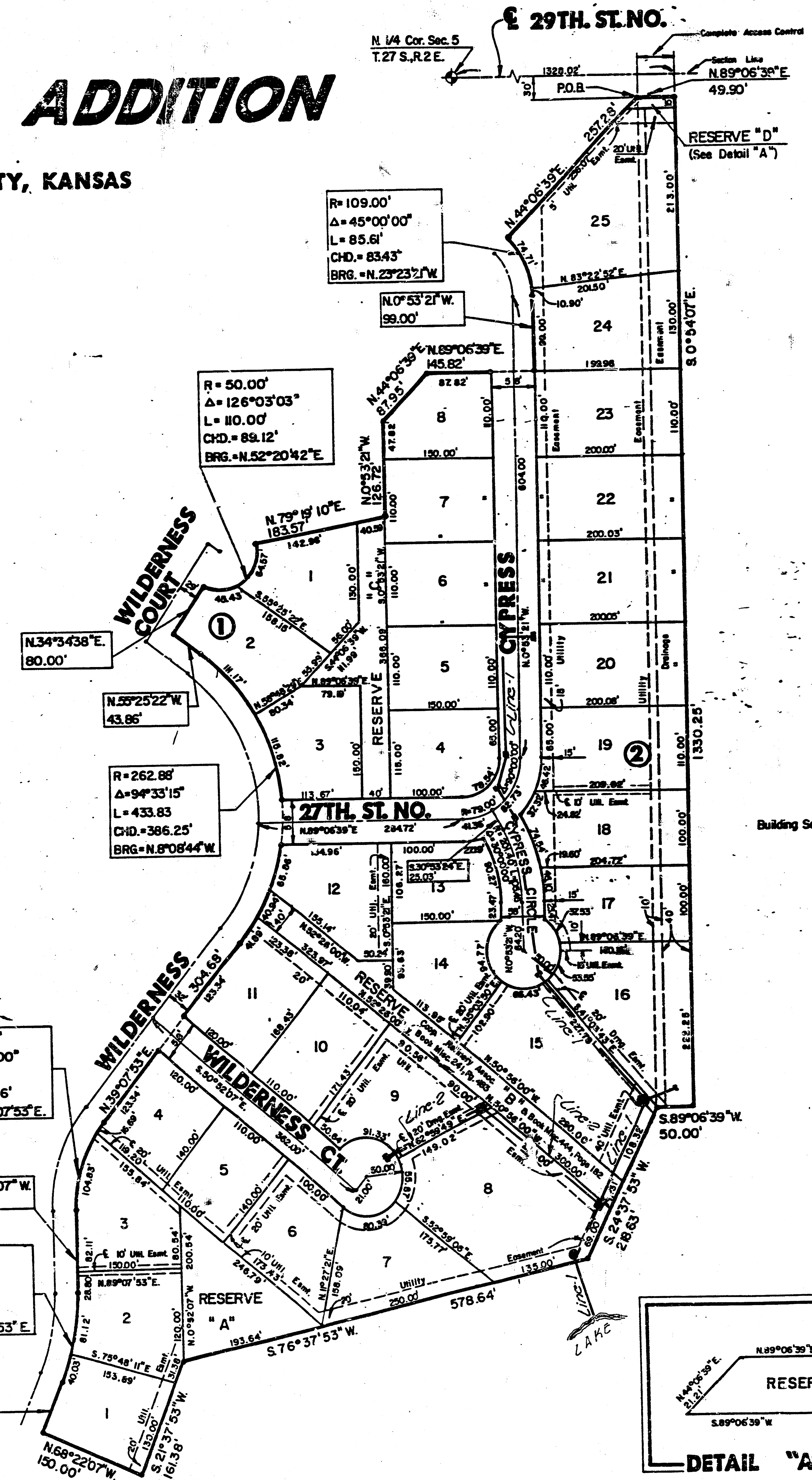
Michael T. Sawyer, County Clerk
Michael T. Sawyer

STATE OF KANSAS
COUNTY OF SEDGWICK

This is to certify that this instrument was filed for record in the Register of Deeds Office at 8:00 AM on the 13th day of DECEMBER, 1984.

Bette F. McCart, Register of Deeds
Bette F. McCart

Pat Kettler, Deputy
Pat Kettler

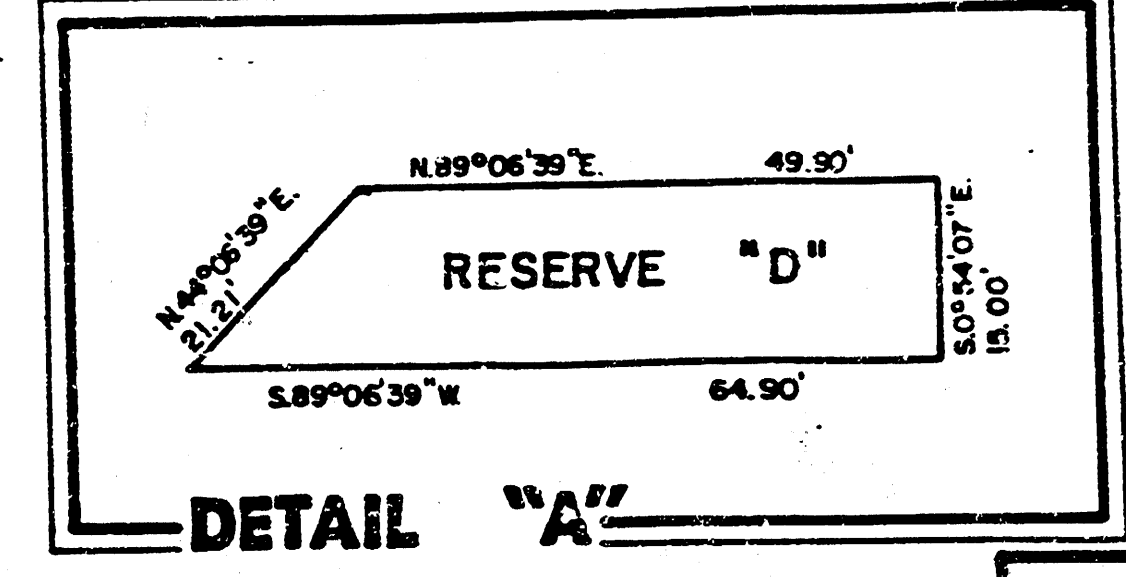


Scale: 1" = 100'

LEGEND

• = Iron

Building Setbacks As Per (D.P. - 96)



20.00
M-1 6-23

Restriction Correlates F-699 & 236 & 237