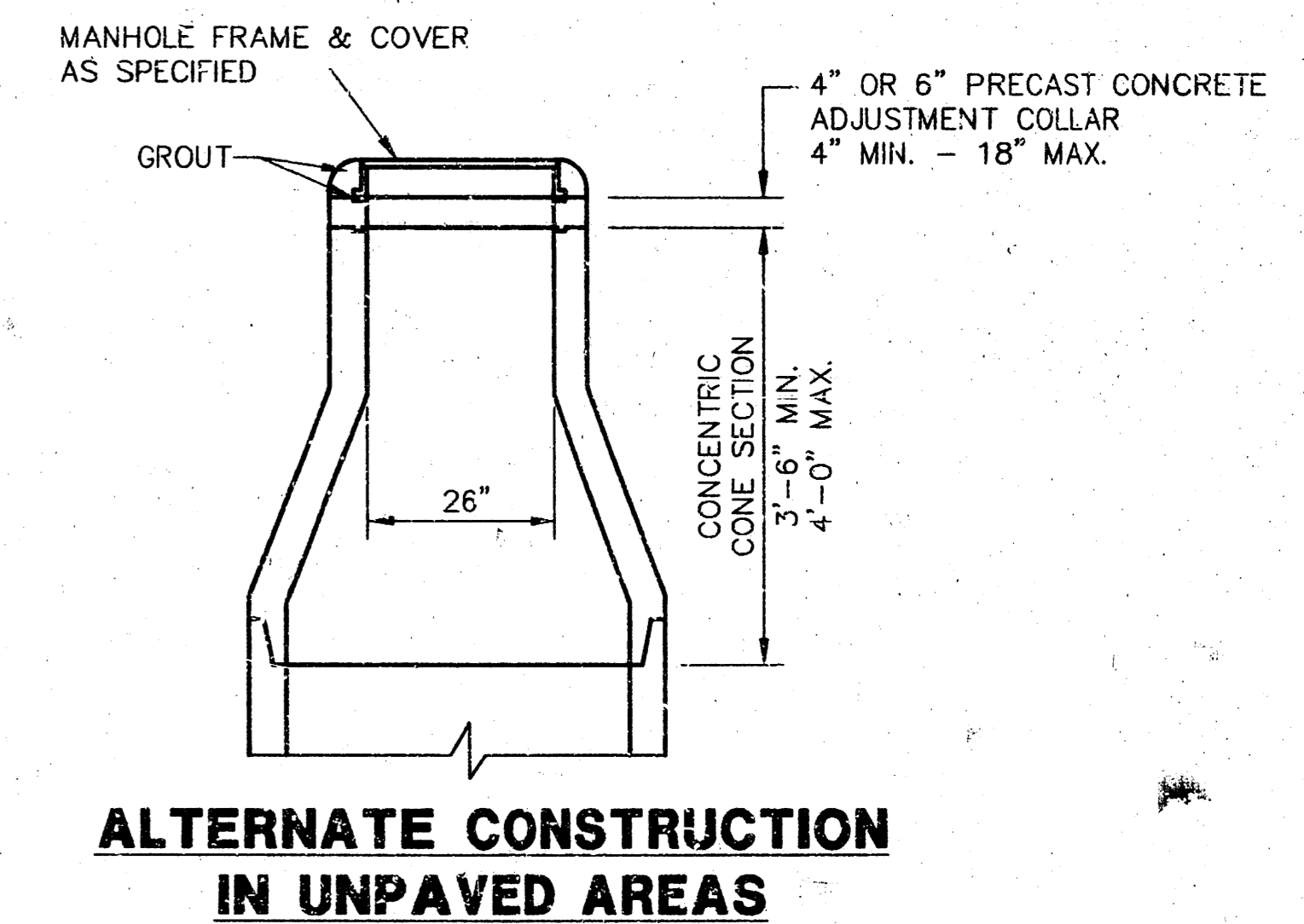
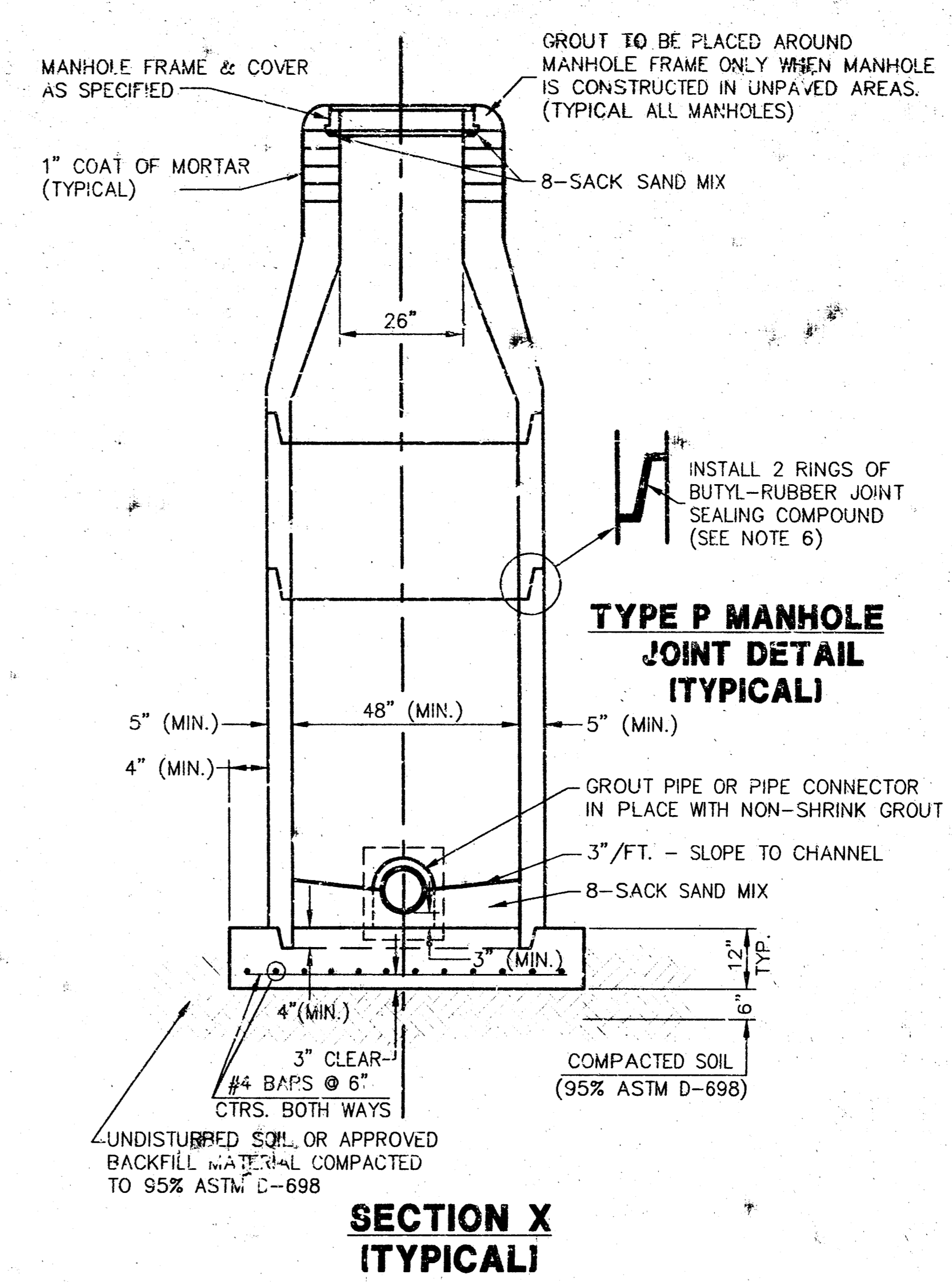
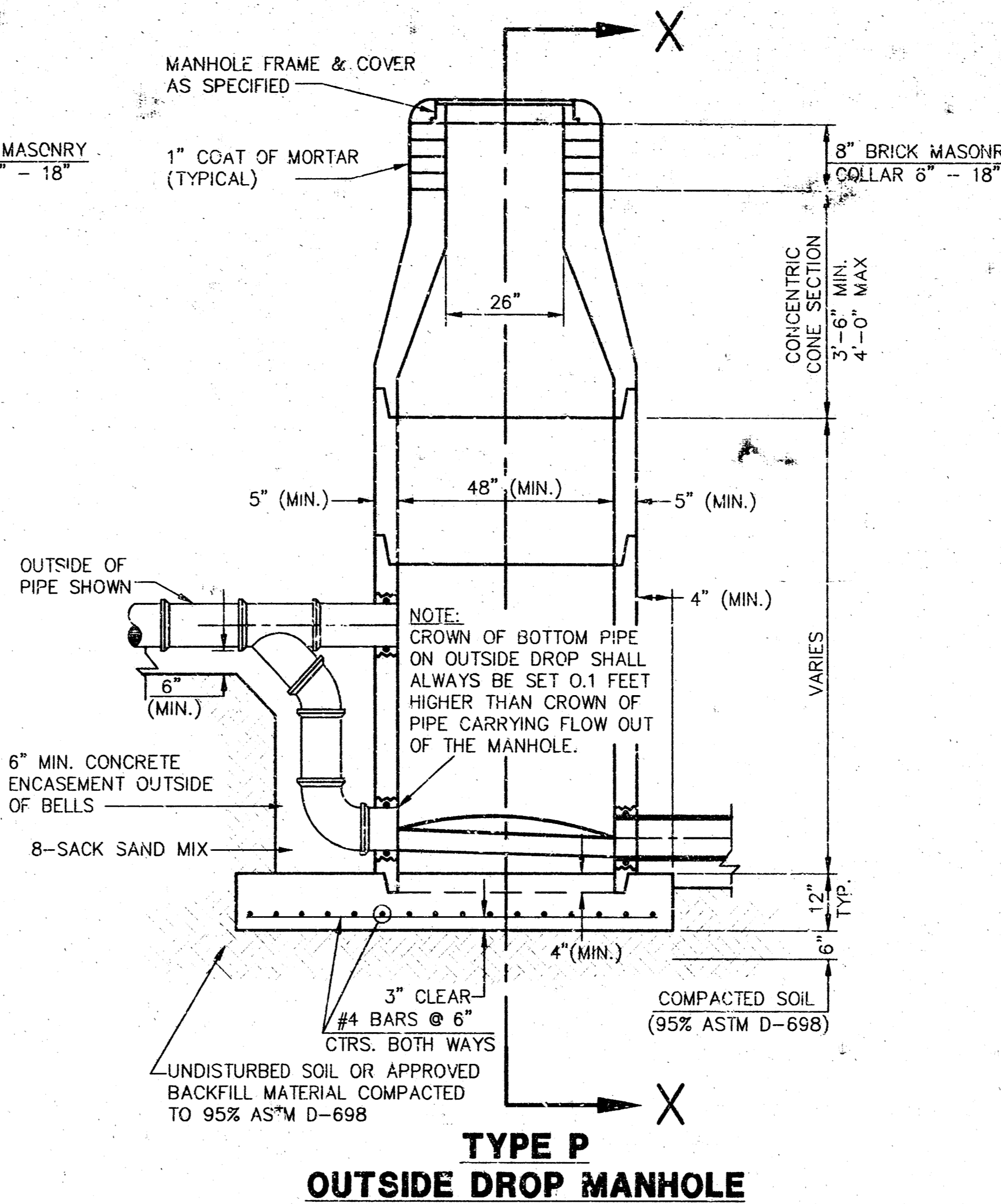
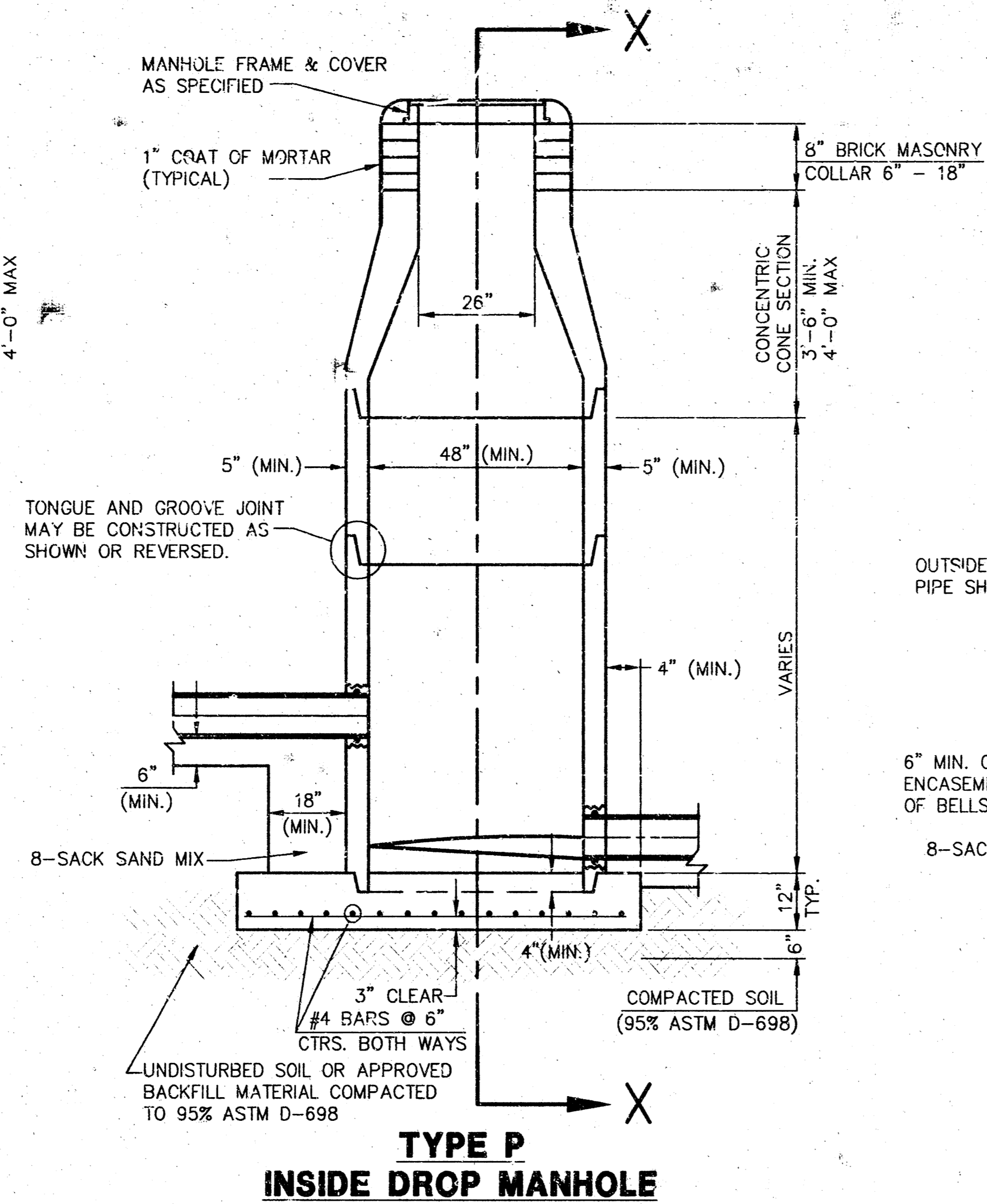
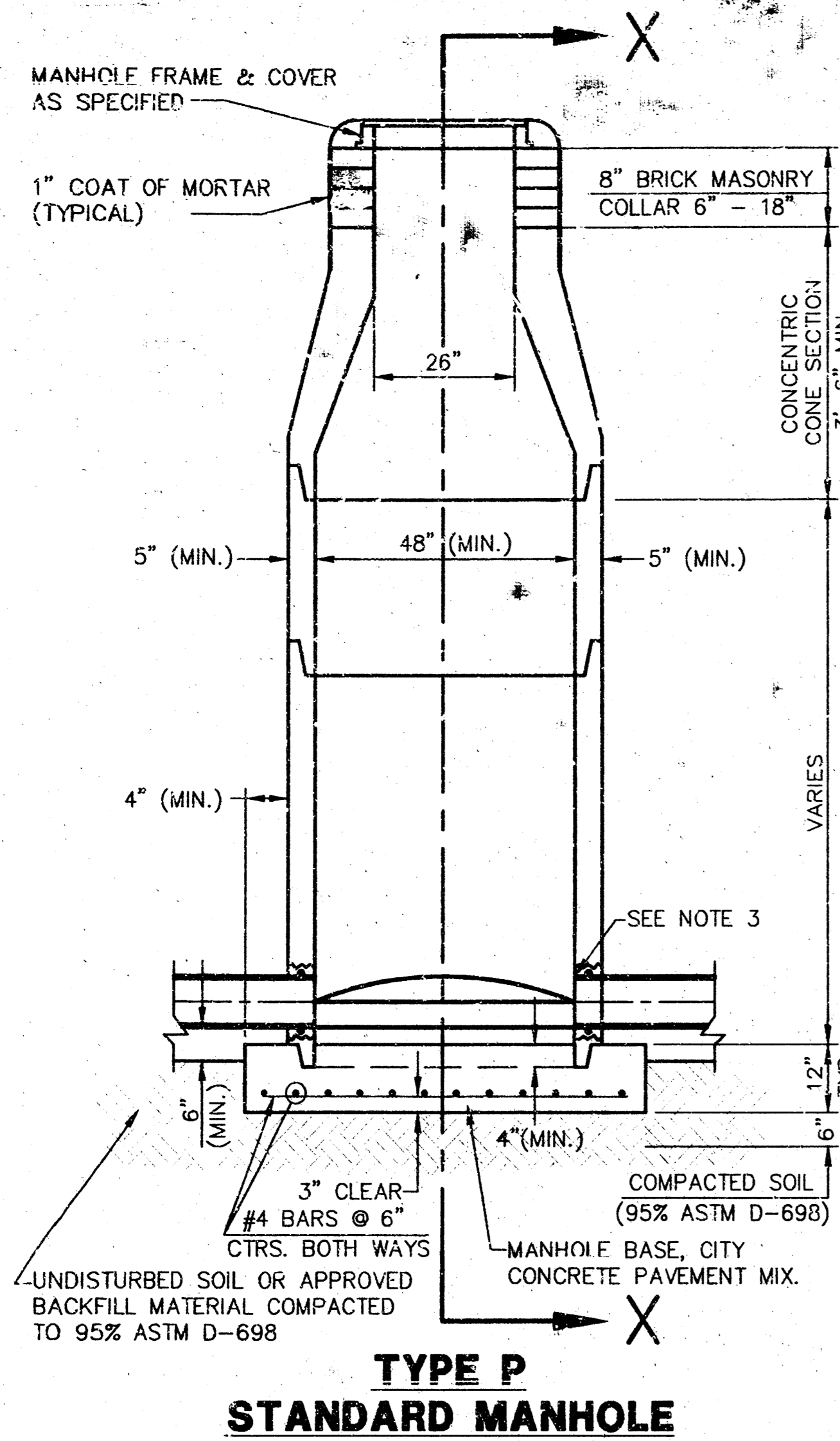


SEWER APPURTENANCES DETAILS

ADOPTED AS STANDARD DESIGN
BY
CITY OF WICHITA



GENERAL NOTES - PRECAST MANHOLE NOTES

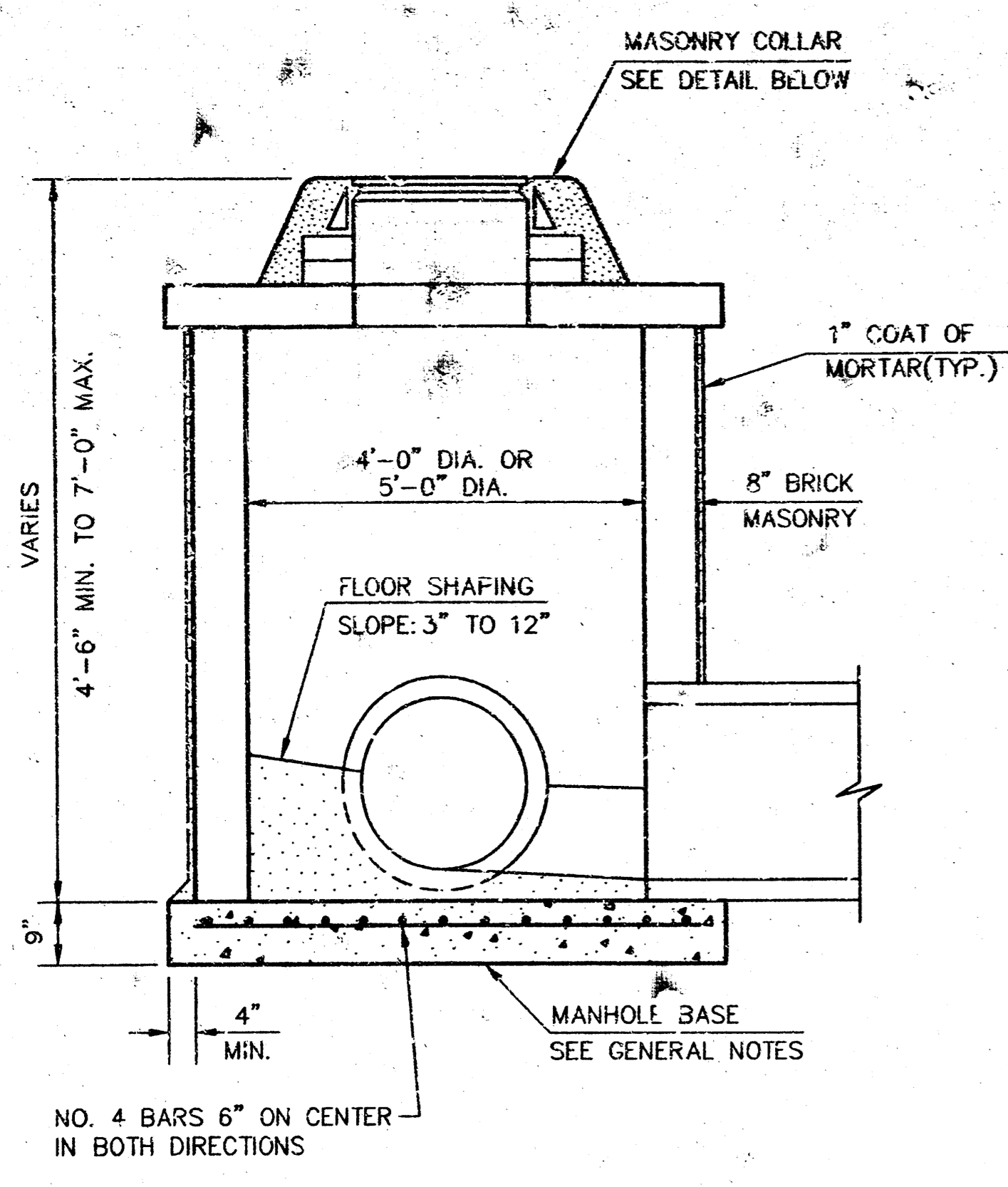
- ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C478 AS MODIFIED BY THE SPECIFICATIONS.
- NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
- APPROVED FLEXIBLE WATERSTOP GASKETS SHALL BE INSTALLED TO JOIN THE SEWER TO THE MANHOLE WALL WHEN A.B.S. COMPOSITE PIPE OR P.V.C. PIPE IS USED. FOR OTHER TYPES OF PIPE THE SEWER SHALL BE GROUTED IN PLACE WITH NON-SHRINK GROUT. THE SEWER PIPE SHALL BE SUPPORTED WITH CONCRETE ENCASEMENT A MINIMUM OF 3 FEET FROM THE MANHOLE WALL AND TO THE FIRST JOINT FOR V.C.P. SUCH THAT THE JOINT REMAINS FLEXIBLE.
- ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED WITH 2 COATS TNEC SERIES 66 HI-BUILD EPOXOLINE, DRY THICKNESS OF 8 MILS (MIN.).
- EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 633 BITUMINUS COATING.
- JOINT SEALING COMPOUND SHALL BE KENT SEAL NO. 2 OR APPROVED EQUAL.
- PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE.
- TOP OF MANHOLE FLOOR SLAB SHALL BE AT LEAST 3 INCHES BELOW THE FLOW LINE OF THE OUTLET PIPE TO INSURE SUFFICIENT MINIMUM THICKNESS OF SHAPED INVERT.
- LIFTING HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.
- 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 PAVEMENT MIX WITHOUT AIR ENTRAINING ADMIXTURE. MORTAR SHALL BE PLACED AROUND THE MANHOLE RING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAED AREAS. 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 AT LEAST 3" 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.
- OPENINGS SHALL BE CUT INTO THE MANHOLE WALL WHEN OUTSIDE DROPS ARE CONSTRUCTED ON EXISTING MANHOLES. SUCH OPENINGS CUT INTO EXISTING MANHOLES SHALL BE AS SMALL AS PRACTICAL TO FACILITATE INSTALLING AND ROUTING THE NEW PIPE IN PLACE. WATERSTOP GASKETS SHALL BE USED WITH P.V.C. AND A.B.S. COMPOSITE PIPE. THE NEW PIPE SHALL BE GROUTED INTO THE OPENING USING AN APPROVED NONSHRINK GROUT FOR THE FULL MANHOLE WALL THICKNESS. THE EXTERIOR OF THE COMPLETED CONNECTION SHALL BE SEALED WITH AN APPROVED BITUMINOUS COATING SUCH THAT THE CONNECTION WILL BE WATER TIGHT. FLOOR OF MANHOLE SHALL BE MODIFIED TO FORM NEW FLOW CHANNEL FOR THE NEW CONNECTION AS INDICATED BY THE DRAWING. THIS WORK, INCLUDING MODIFICATION OF MANHOLE FLOOR, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR OUTSIDE DROP STACK CONSTRUCTED ON EXISTING 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 EXCEPT FOR INSIDE DROP MANHOLES. FLOW CHANNELS FOR INSIDE DROP MANHOLES SHALL BE CONSTRUCTED AS INDICATED BY THE DRAWING. 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 DRAWING.
- THE VERTICAL DROP IN INSIDE DROP MANHOLES SHALL NOT EXCEED 2' FOR INFLOWING PIPES. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
- STANDARD MANHOLES AND STANDARD INSIDE DROP MANHOLES SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED. OUTSIDE DROP MANHOLES SHALL BE BID AS STANDARD OUTSIDE DROP MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.
- A BRICK MASONRY COLLAR SHALL BE INSTALLED BETWEEN THE CAST IRON FRAME AND THE CONCENTRIC CONE. THE COLLAR WILL HAVE 8" WALLS AND A VERTICAL HEIGHT OF 6" MINIMUM AND 18" MAXIMUM. A 1" COAT OF MORTAR WILL BE PLASTERED ON THE OUTSIDE OF THE COLLAR.

REVISED: 6-12-88

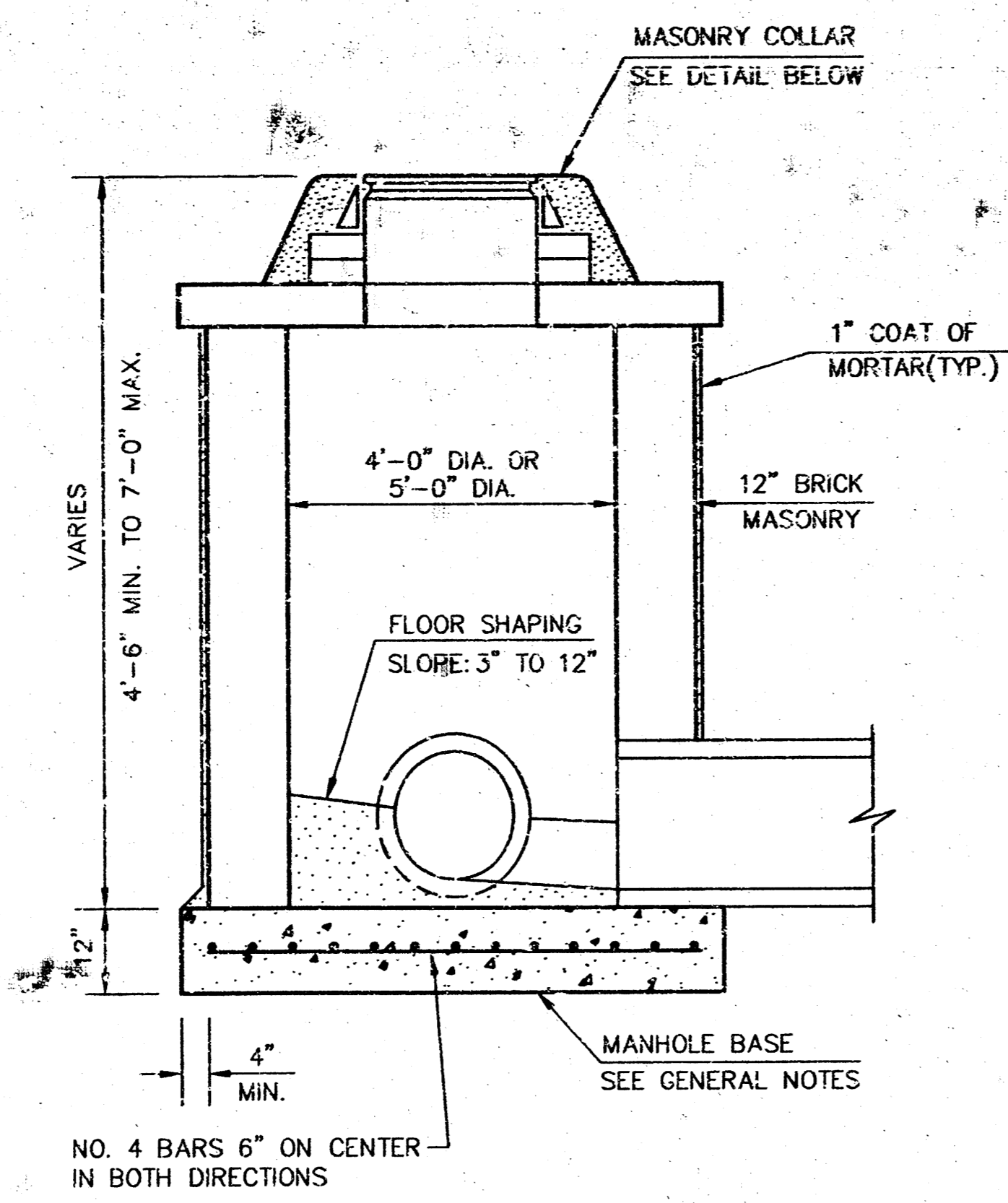
MANHOLE DETAILS

CITY OF WICHITA, KANSAS

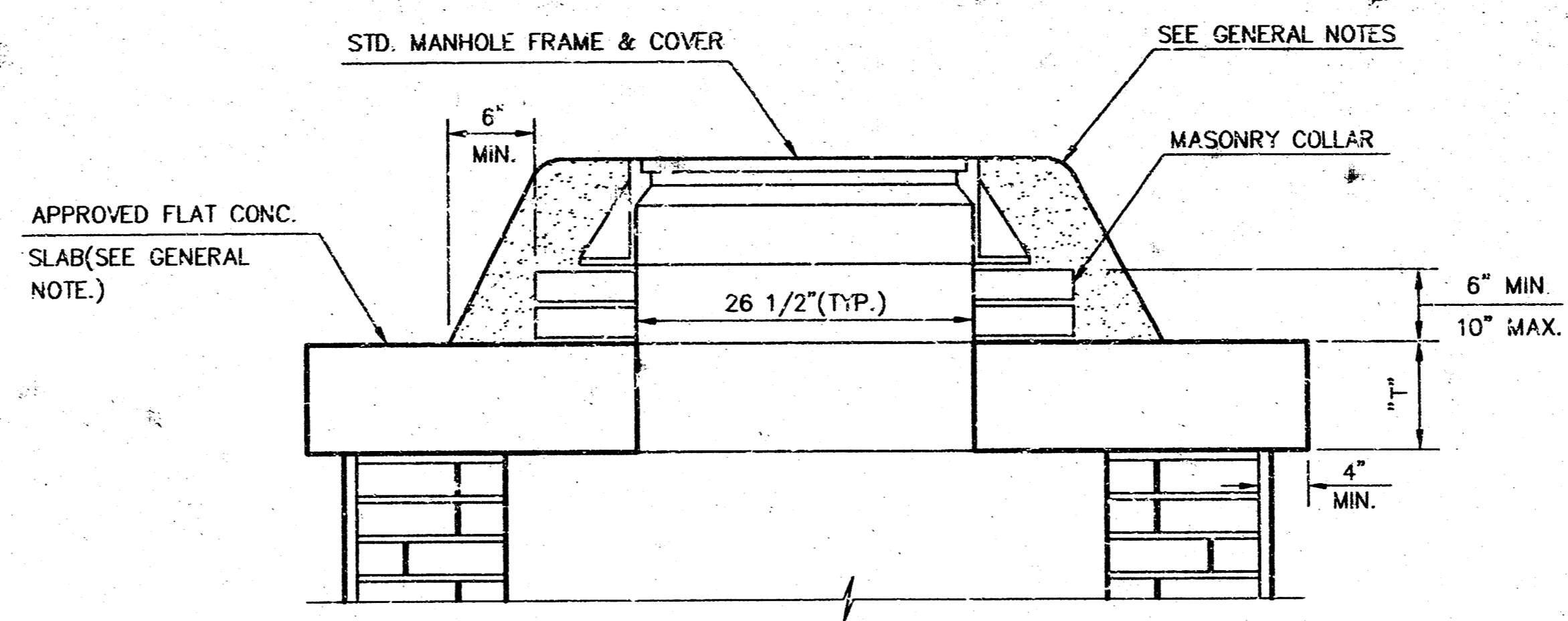
Design	C.O.W.	Checked by	Checked by	SHEET 2/7
Drawn by	Date	Date	JULY 2000	Job No. 00109BD1



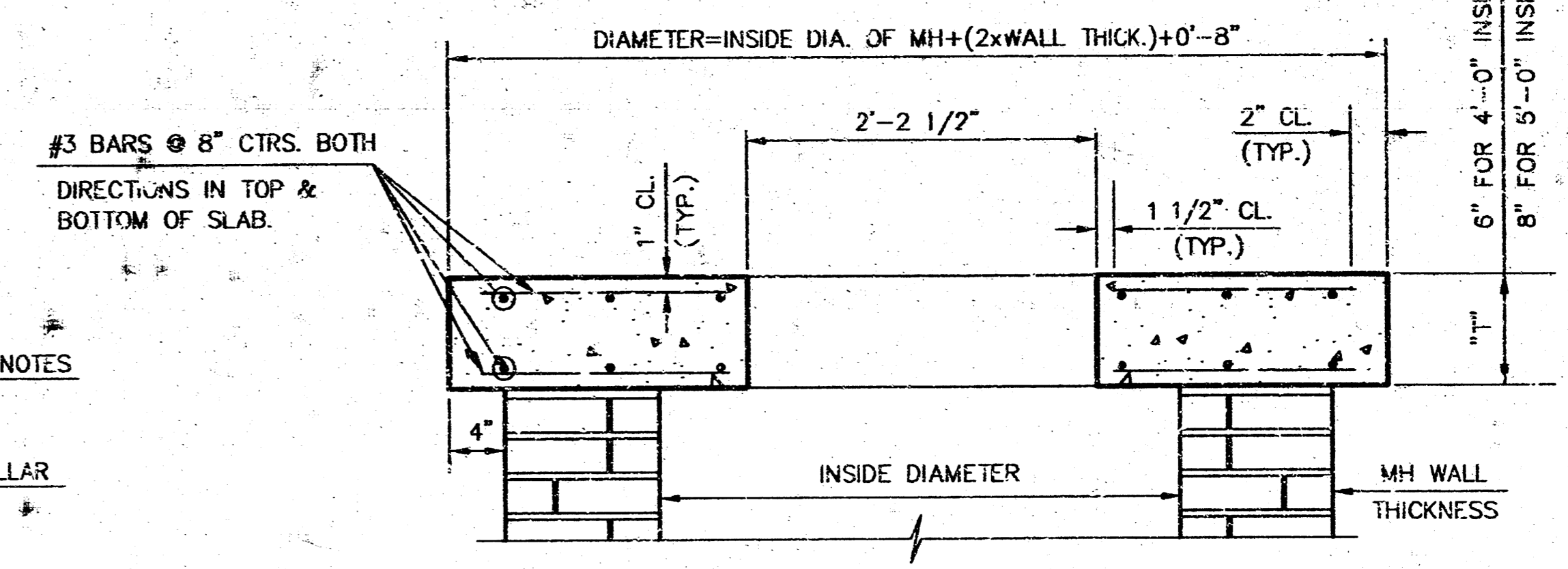
SHALLOW TYPE "A" MANHOLE



SHALLOW TYPE "B" MANHOLE



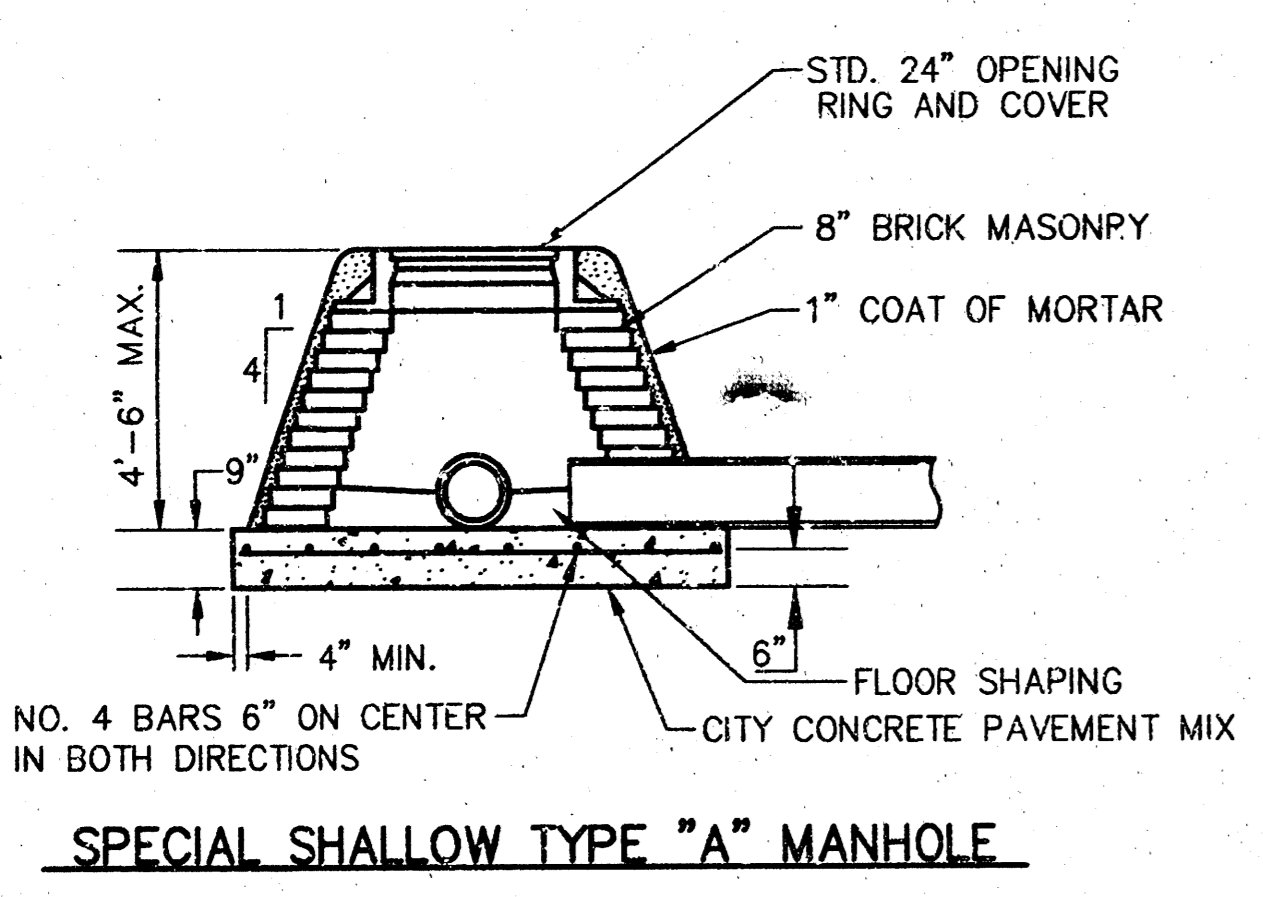
MASONRY COLLAR DETAIL



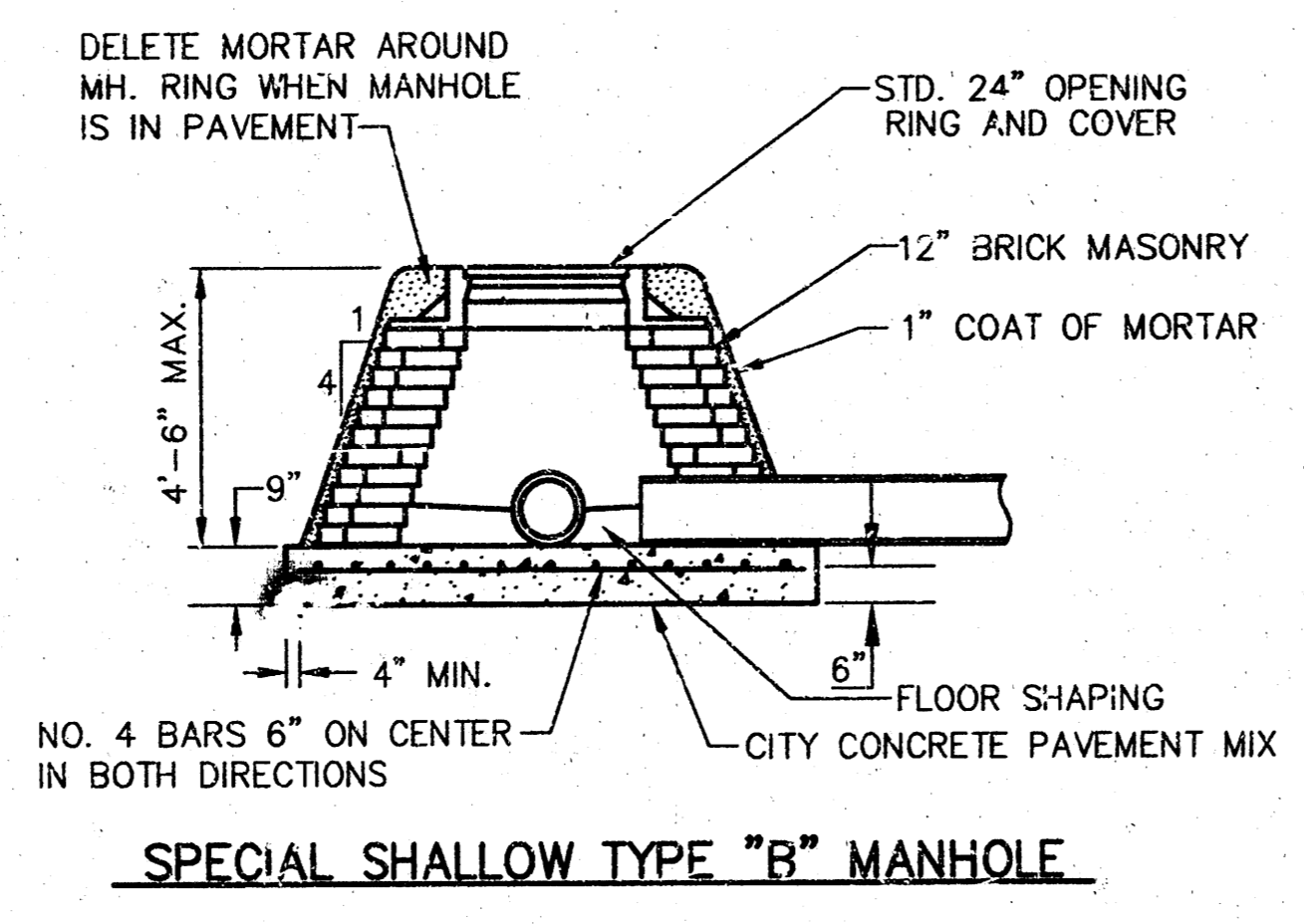
**SECTION A-A
FLAT CONCRETE SLAB DETAILS**

GENERAL NOTES

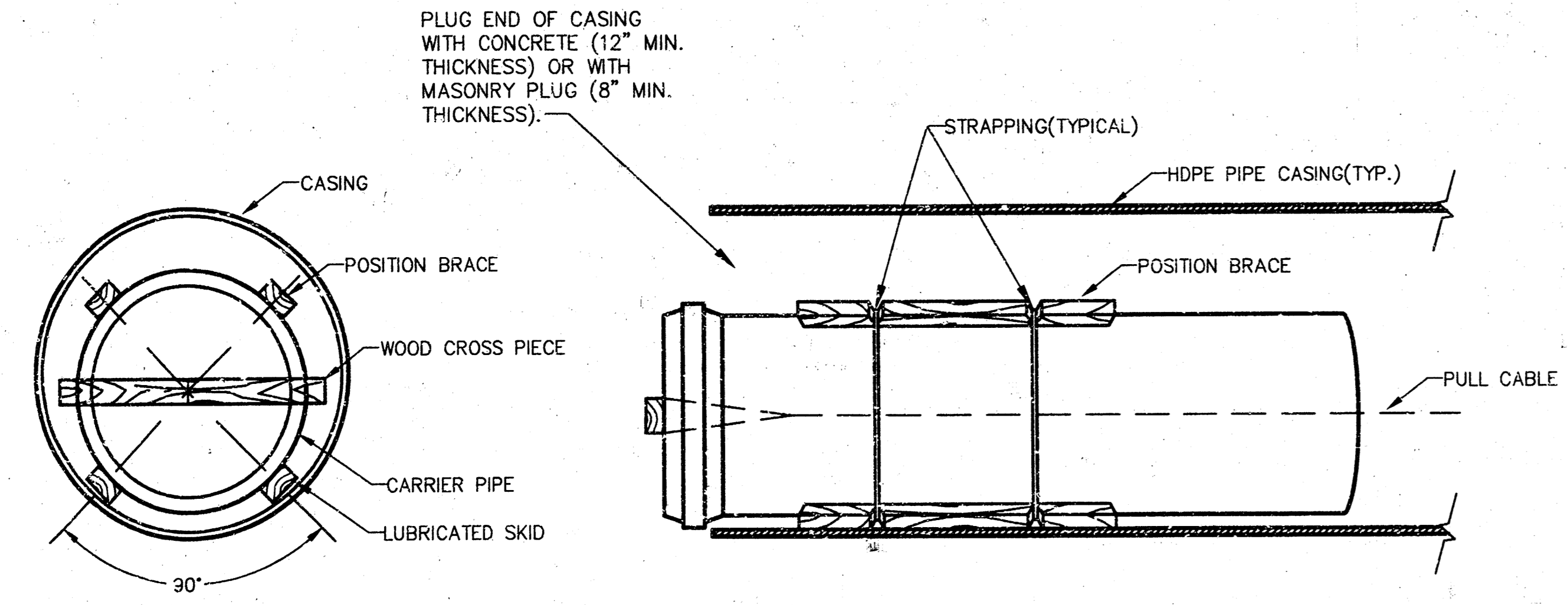
- MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE BASES SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE CEMENT MIX WITHOUT AIR ENTRAINING 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.



SPECIAL SHALLOW TYPE "A" MANHOLE

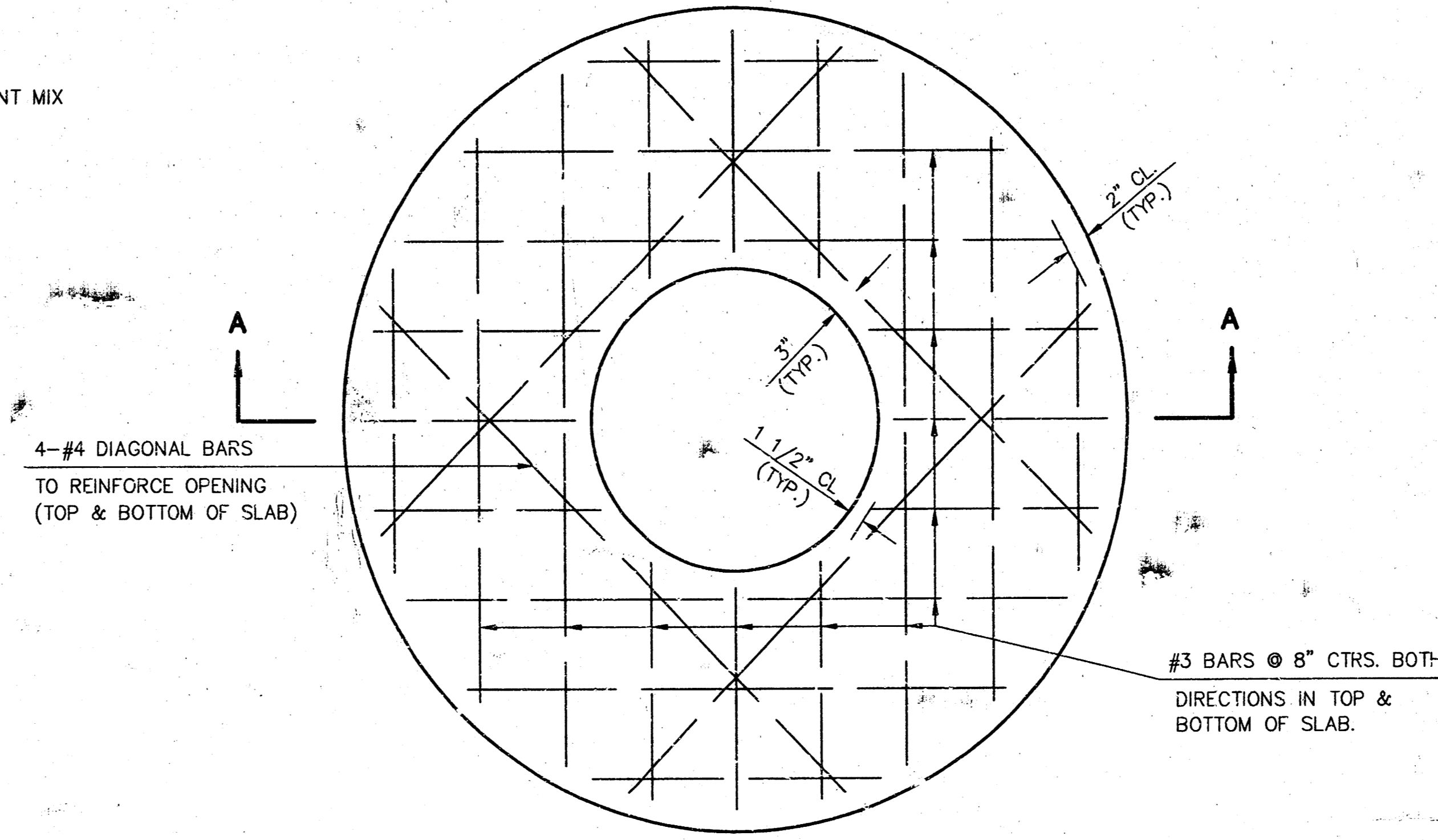


SPECIAL SHALLOW TYPE "B" MANHOLE



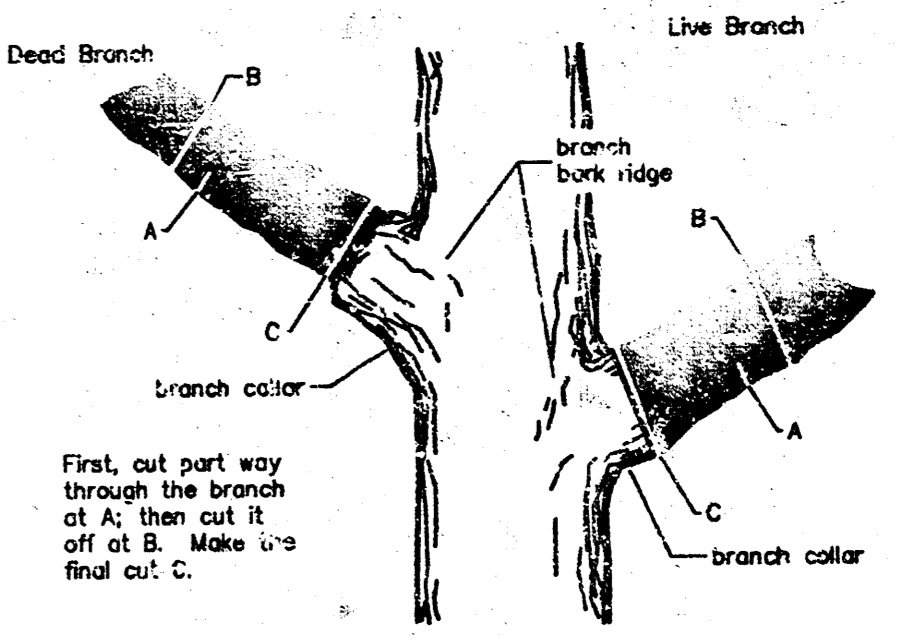
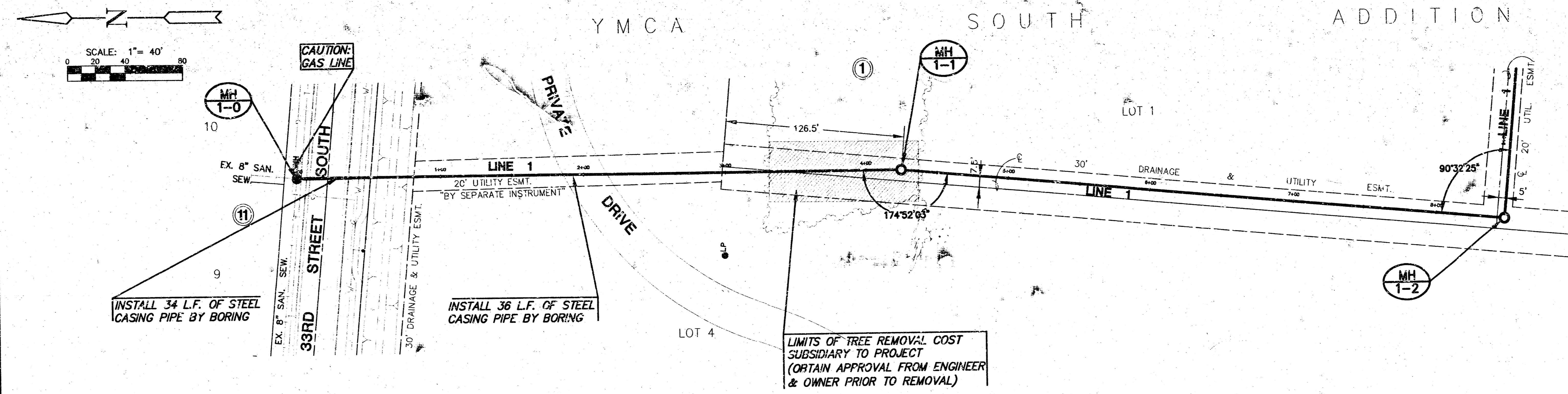
**CASING DETAIL
NO SCALE**

NOTE:
PIPE CASING SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) CONFORMING TO ASTM D 1248 (TYPE III, CLASS C, CATEGORY 5, F.34) AND ASTM D 3350 MATERIAL DESIGNATION PE 340B, RATED SDR 21 OR LESS. JOINING SHALL BE THE BUTT FUSION METHOD, PERFORMED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. PIPE CASING SHALL BE INSTALLED BY BORING WITH APPROVED EQUIPMENT AND PERSONNEL EXPERIENCED IN THIS TYPE OF CONSTRUCTION. BORING PITS AND OPERATIONS SHALL BE LOCATED TO AVOID CONFLICTS WITH UTILITIES AND OTHER IMPROVEMENTS. THE ENTIRE VOID BETWEEN THE CASING AND FORCE MAIN PIPE SHALL BE FILLED WITH BLOWN SAND OR OTHER APPROVED BACKFILL AND THE ENDS OF CASING PIPE SEALED WITH CONCRETE OR MASONRY PLUGS.



STANDARD SHALLOW MANHOLES TYPE "A" AND TYPE "B"			
CITY OF WICHITA, KANSAS			
Design	C.O.W.	Checked by	Checked by
Drawn by	Date	Date	JULY 2000
			Job No. 00109B02

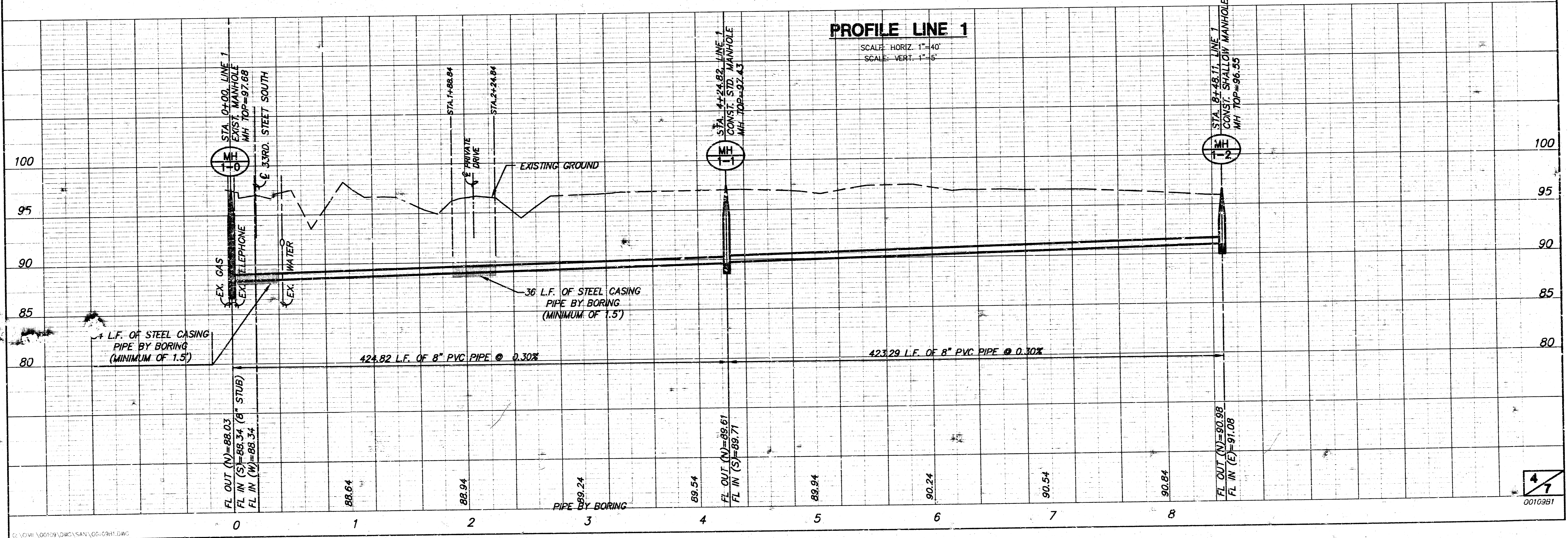
**YMCA SOUTH ADDITION
SANITARY SEWER PLANS
LINE 1**



- NOTES**
- TREESHEDS ARE AN IMPORTANT ASSET TO THIS DEVELOPMENT. ONLY TREESHEDS WITH TRUNKS LIVING WITHIN THE PAVED AREA MAY BE REMOVED. EVERY EFFORT SHALL BE MADE TO SAVE ALL OTHERS OUTSIDE THE CURBSIDE/UTL. LINES.
 - EQUIPMENT AND CONSTRUCTION MATERIALS SHALL REMAIN OUT OF AND AWAY FROM TREE CRIMLES WHEREVER POSSIBLE SO AS TO NOT COMPACT THE ROOT ZONE OR DAMAGE THE TREE.
 - CONTRACTOR SHALL COORDINATE WITH GCM AND ENGINEER ON THE REMOVAL OF TREESHEDS OUTSIDE BACK OF CURB/SIDEWALK. NO TREESHEDS SHALL BE REMOVED PRIOR TO A MEETING ON SITE WITH GCM AND ENGINEER.
 - TREE REMOVAL TO BE SUBSIDIARY TO CLEARING & SITE PREP RESTORATION.
- LEGEND**
- Trees to be removed (dashed circle)
 - Trees to be preserved (solid circle)
 - Treeshed to be removed (circle with X)

PLAN LINE 1

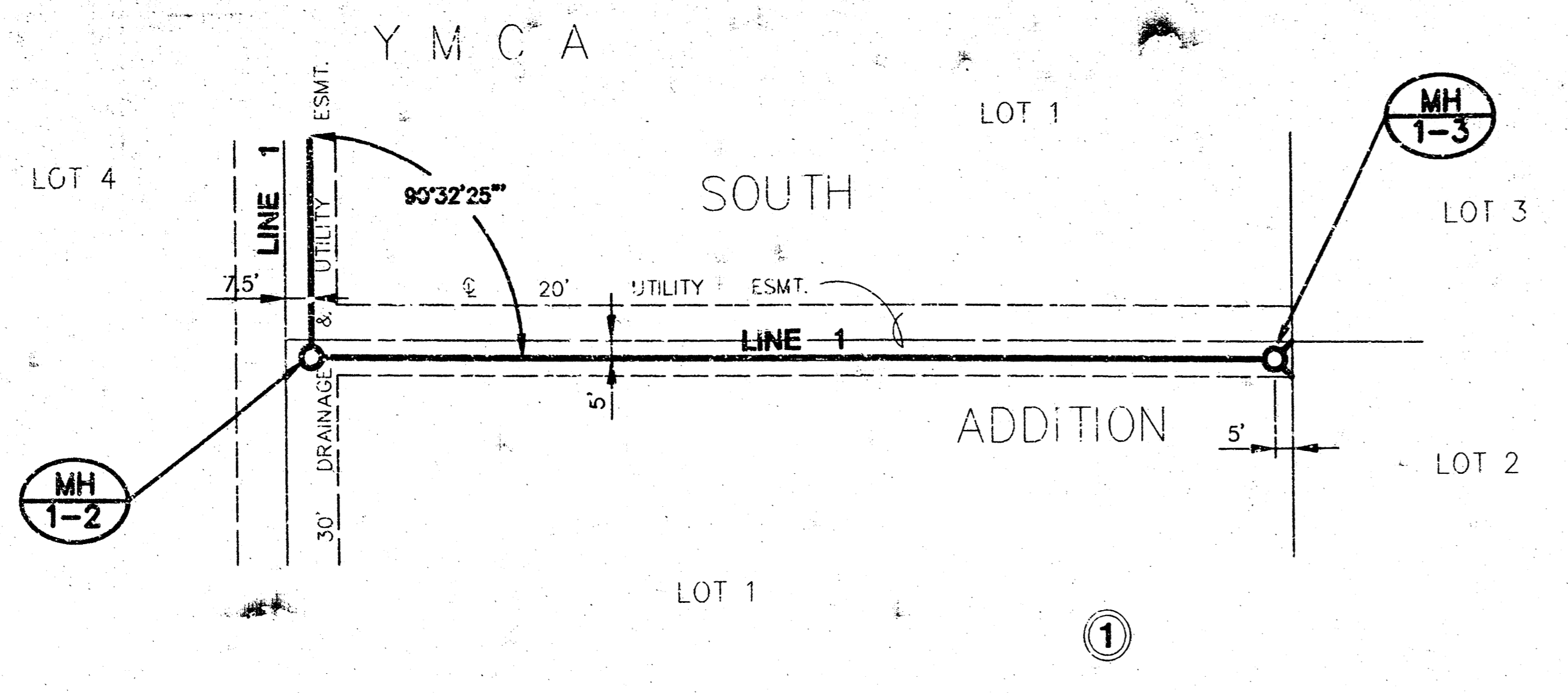
SCALE: 1"=40'



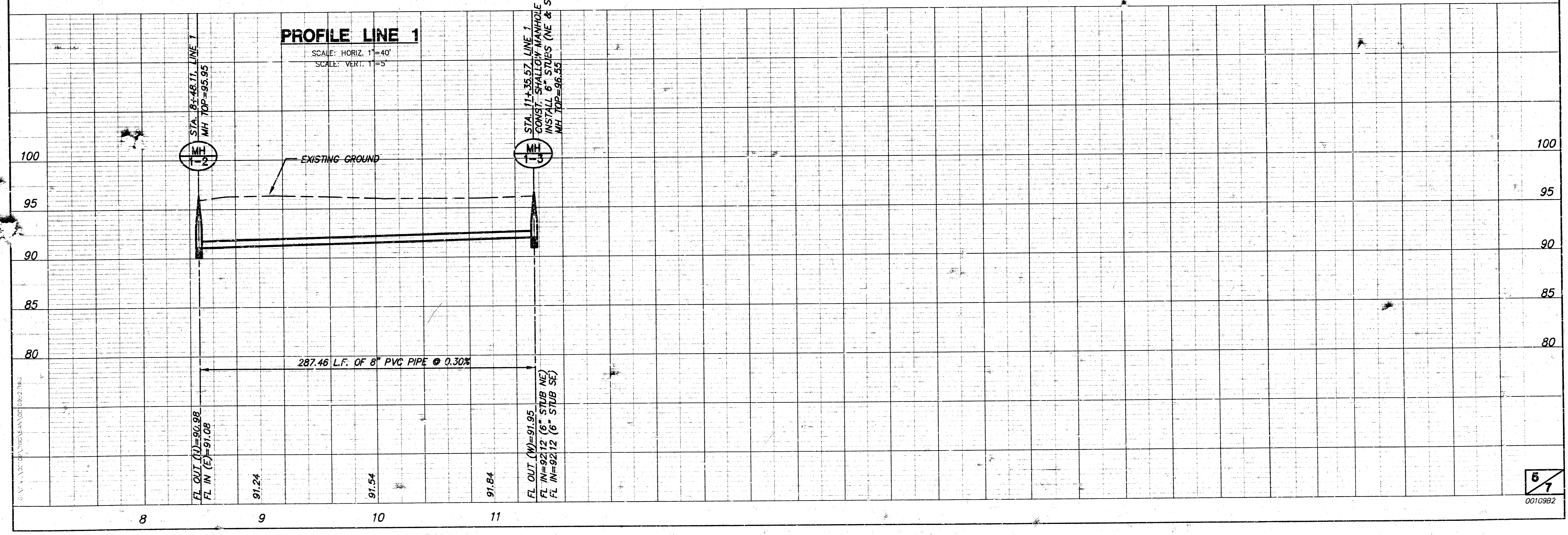
PROFILE LINE 1

SCALE: HORIZ. 1"=40'
SCALE: VERT. 1"=5'

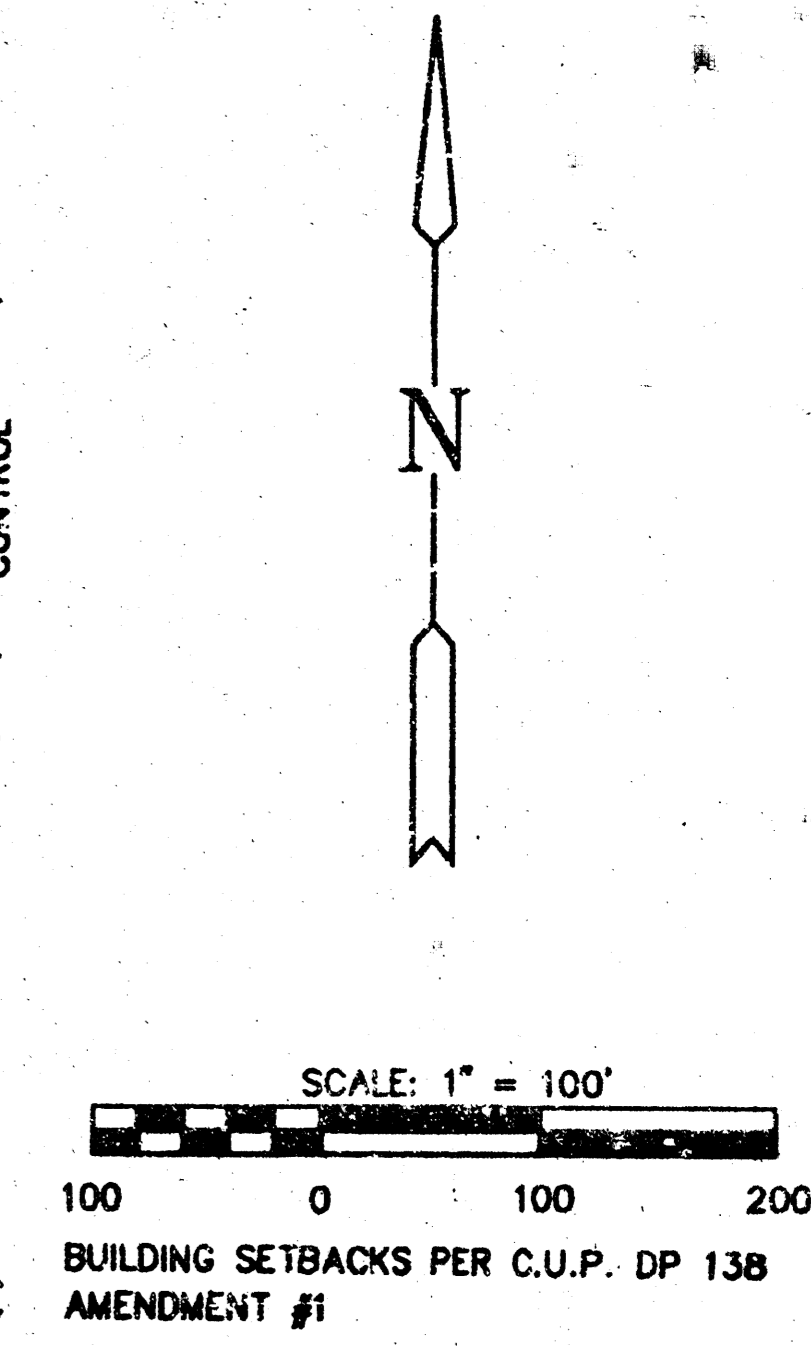
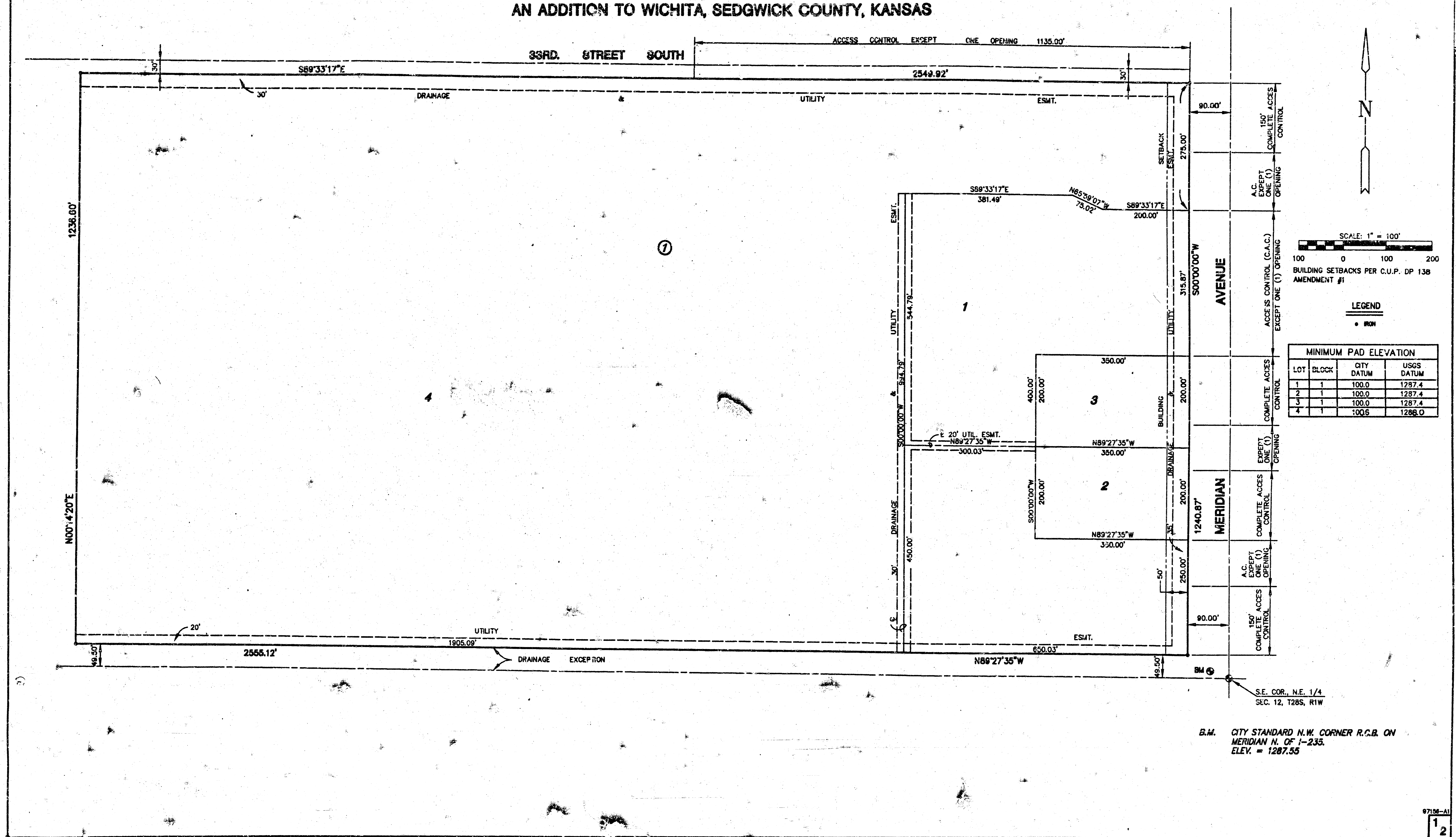
**YMCA SOUTH ADDITION
SANITARY SEWER PLANS
LINE 1**



PLAN LINE 1
SCALE: 1"=40'



FINAL PLAT OF
YMCA SOUTH ADDITION
AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS



LEGEND

- IRON

MINIMUM PAD ELEVATION			
LOT	BLOCK	CITY DATUM	USGS DATUM
1	1	100.0	1287.4
2	1	100.0	1287.4
3	1	100.0	1287.4
4	1	100.0	1288.0

S.E. COR., N.E. 1/4
SEC. 12, T28S, R1W

B.M. CITY STANDARD N.W. CORNER R.C.B. ON
MERIDIAN N. OF 1-235.
ELEV. = 1287.55

FINAL PLAT OF YMCA SOUTH ADDITION AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS

I, Gregory J. Allison, a Registered Land Surveyor in Kansas, do hereby certify that I have been in responsible charge of surveying and platting of "YMCA SOUTH ADDITION", an addition to Wichita, Sedgwick County, Kansas, into lots and a block, the same being accurately set forth in the accompanying plat and described herein:

A replat of MERIDIAN OUTLET MALL, an addition to Wichita, Sedgwick County, Kansas, that being Lots 1 through 25, inclusive, Block 1 and Lots 1 and 2, Block 2, Reserves A, B, C, D, 35th Street South, 35th Street South Circle, and Gordon Circle. All lots, blocks, streets, utility easements, drainage easements, access control, reserves, and building setbacks within the above described property are hereby vacated and replatted by virtue of K.S.A. 12-512(b).

I hereby certify that the details of this plat are correct to the best of my knowledge and belief this 27th day of April, 1998.

Gregory J. Allison
Gregory J. Allison
Mid-Kansas Engineering Consultants, Inc.
411 North Webb Road
Wichita, Kansas 67208

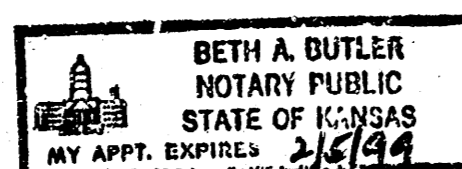


Know all men by these presents that we the undersigned, property owners of the land above set forth in the Registered Land Surveyor's Certificate, have caused the same to be surveyed and platted into lots and a block the same to be known as "YMCA SOUTH ADDITION", an addition to Wichita, Sedgwick County, Kansas. Easements for the construction and maintenance of public utilities and drainage as indicated on the accompanying plat are hereby granted. All abutters' rights of access to or from Meridian over and across the East line of YMCA SOUTH ADDITION, are hereby dedicated to the City of Wichita, provided however, Lots 1, 2, 3, and 4, Block 1 shall have access to Meridian, as indicated on the accompanying plat. All abutters' rights of access to or from that part of 33rd Street South lying East of Gordon, over and across the North line Lot 4, YMCA SOUTH ADDITION, are hereby dedicated to the City of Wichita, provided however, Lot 4 shall have access to 33rd Street South as indicated on the accompanying plat. The City Engineer shall approve all points of access. The building setbacks shall be in accordance with the Meridian Outlet Mall Community Unit Plan, (DP-138) Amendment No. 1 on file in the office of the Wichita-Sedgwick County Metropolitan Area Planning Department. Minimum pad elevations are as indicated on the accompanying plat.

BUILDERS, INC. a Kansas corporation
Bradley K. Shifor
Bradley K. Shifor
Executive Vice President

STATE OF KANSAS)
SEDGWICK COUNTY) ss.
BE IT REMEMBERED, that on this 14th day of May, 1998, before me the undersigned, a Notary Public in and for the County and State aforesaid, came Bradley K. Shifor, Vice President 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 WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year last above written.
Beth A. Butler
Beth A. Butler
Notary Public
My appointment expires: 2/18/99



The Young Men's Christian Association of Wichita, Kansas

Ronald L. Mann
Ronald L. Mann, Board President-Elect

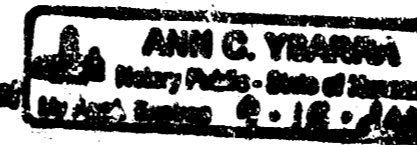


STATE OF KANSAS)
SEDGWICK COUNTY) ss.

BE IT REMEMBERED, that on this 14th day of May, 1998, before me the undersigned, a Notary Public in and for the County and State aforesaid, came Ronald L. Mann, Board President-Elect 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 WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year last above written.

Ann C. Ybarra
Ann C. Ybarra
Notary Public
My appointment expires: 9-18-2000



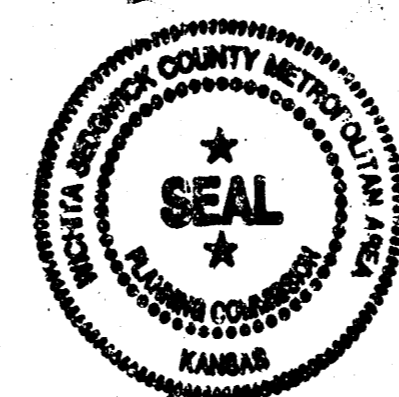
This plat of "YMCA SOUTH ADDITION", has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this 26th day of March, 1998.

WICHITA-SEDGWICK COUNTY METROPOLITAN PLANNING COMMISSION

Richard S. ...
Richard S. ... Chairman

Mervin S. Kraut
Mervin S. Kraut Secretary



This plat approved and all dedications shown thereon, if any, accepted by the City Council of the City of Wichita, Kansas, this 25 day of JUNE, 1998.

Bob Knight
Bob Knight Mayor

Pat Burnett
Pat Burnett City Clerk

Entered on transfer record this 9th day of July, 1998.

James Alford
James Alford County Clerk



STATE OF KANSAS)
SEDGWICK COUNTY) ss.

This is to certify that this instrument was filed for record in the Register of Deeds office this 9th day of July, 1998.

Bill Meek
Bill Meek Register of Deeds

Linda Kizzire
Linda Kizzire Deputy

1706418

40.00
ck