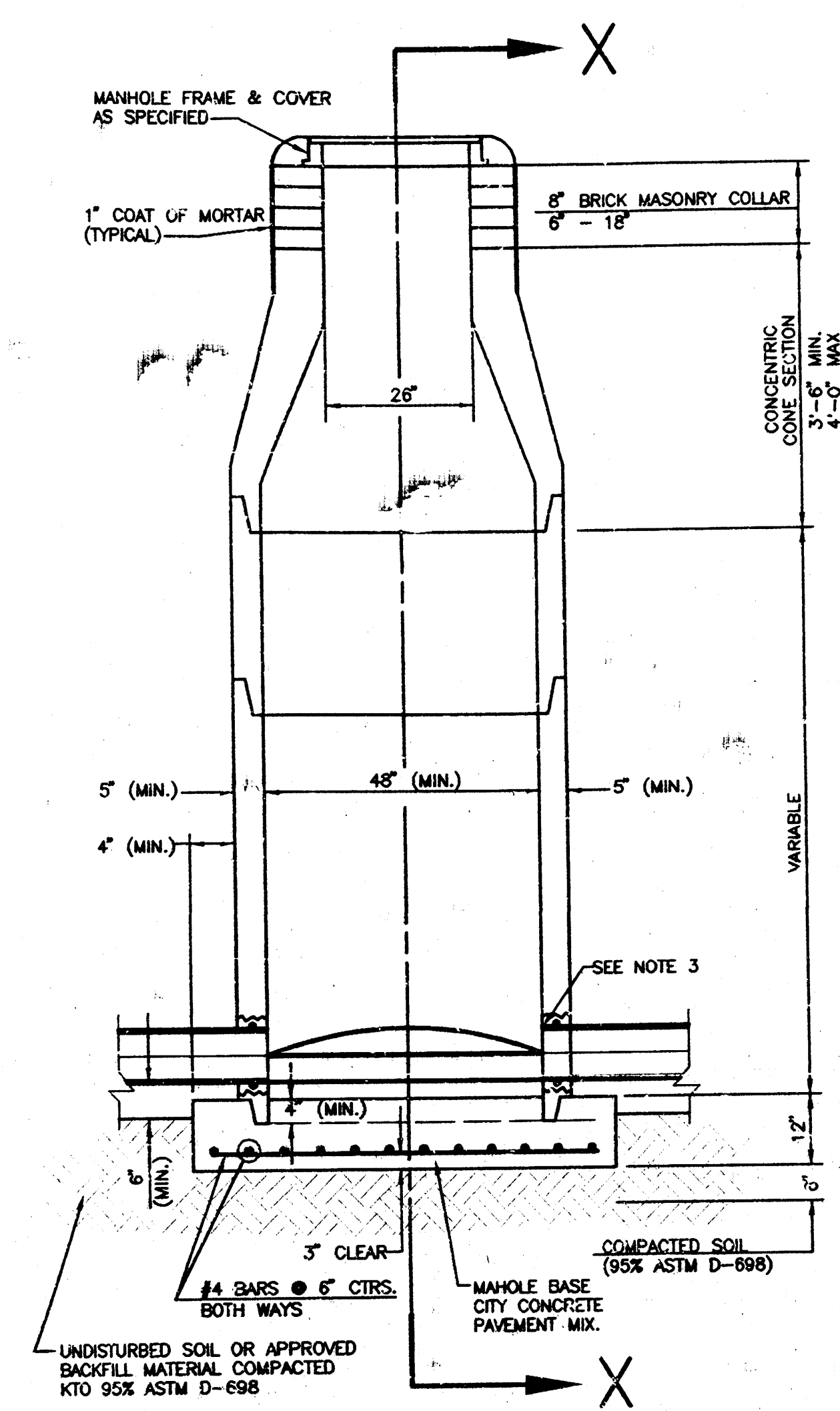
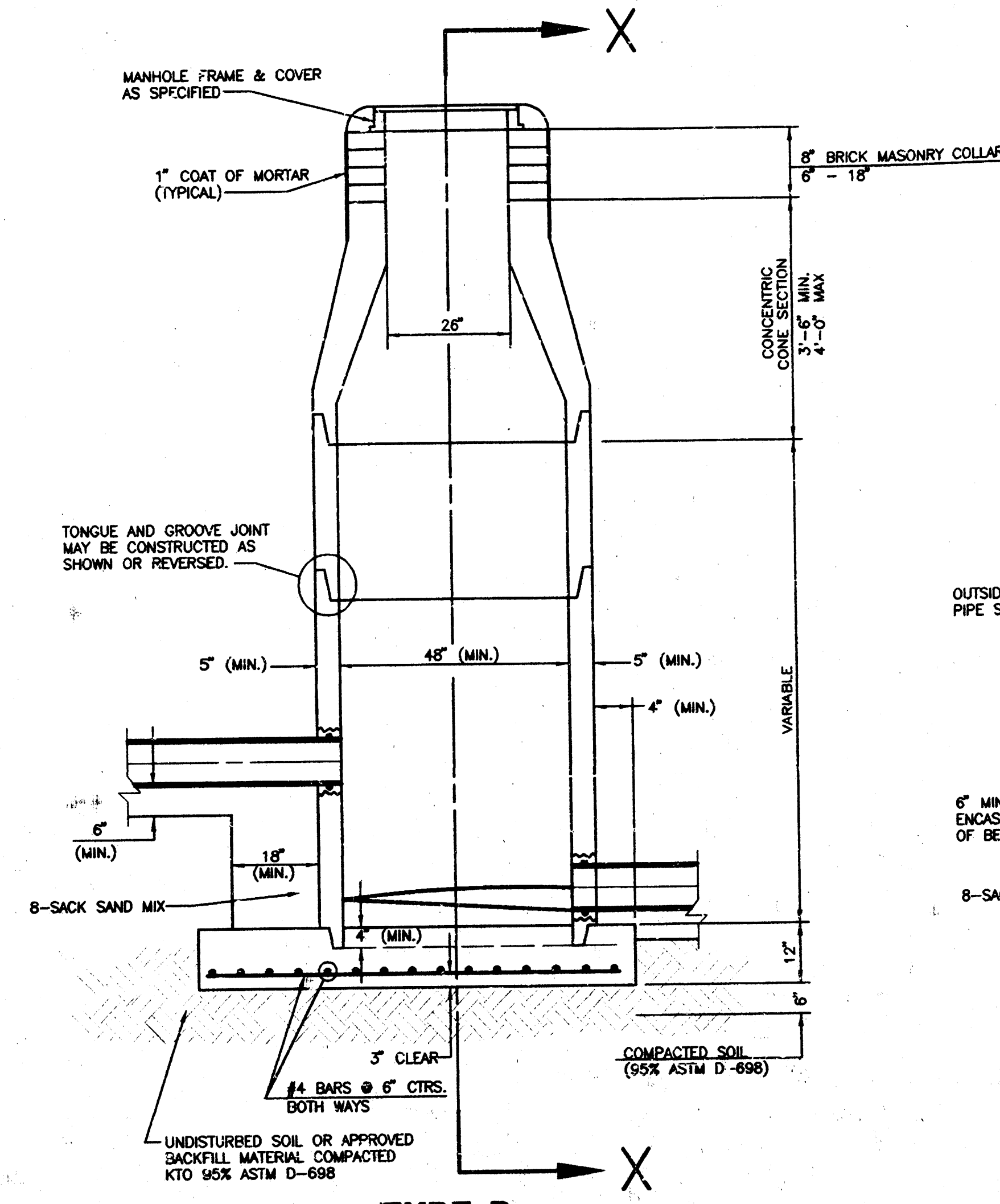


SEWER APPURTENANCES DETAILS

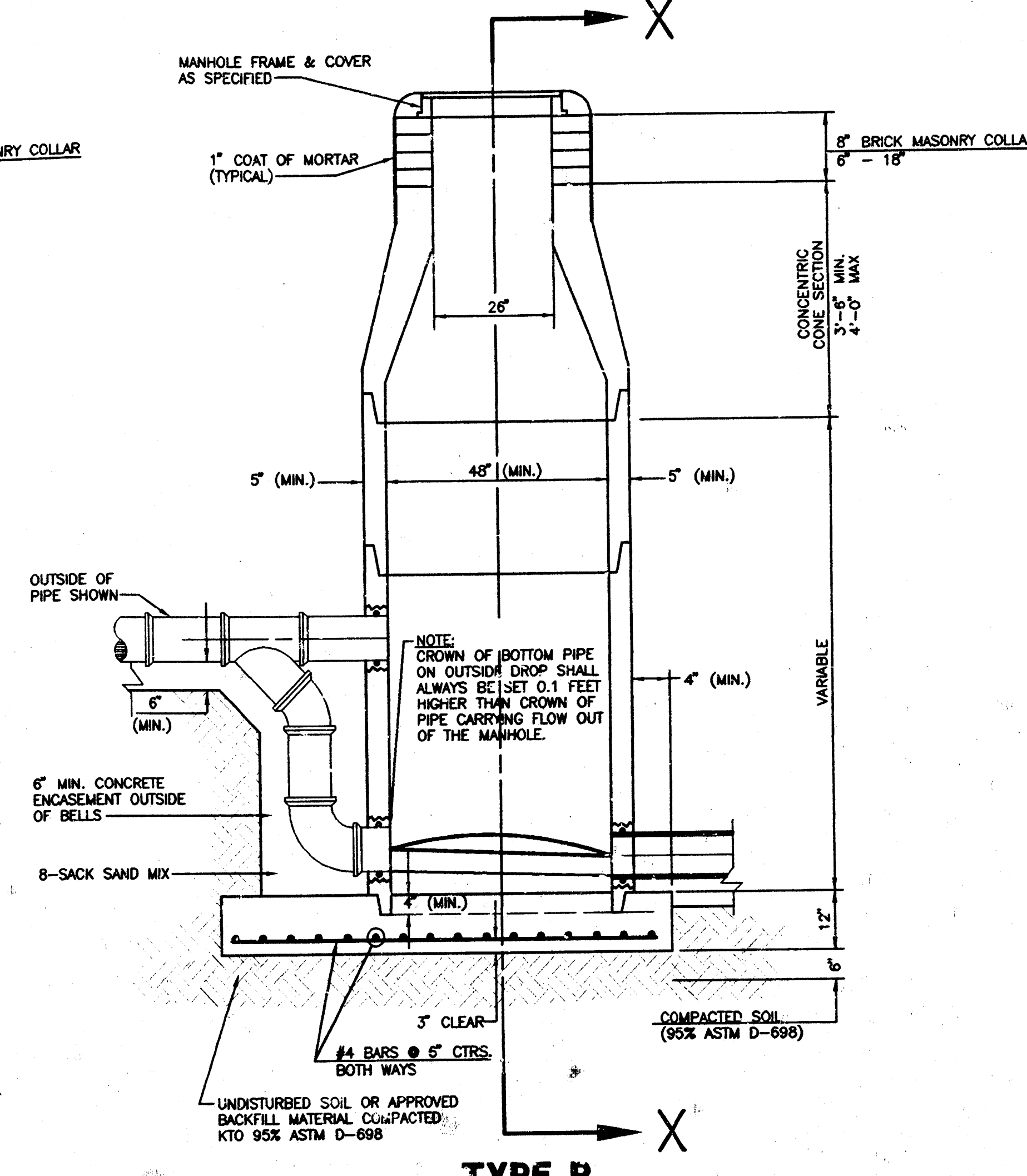
ADOPTED AS STANDARD DESIGN
BY
CITY OF WICHITA



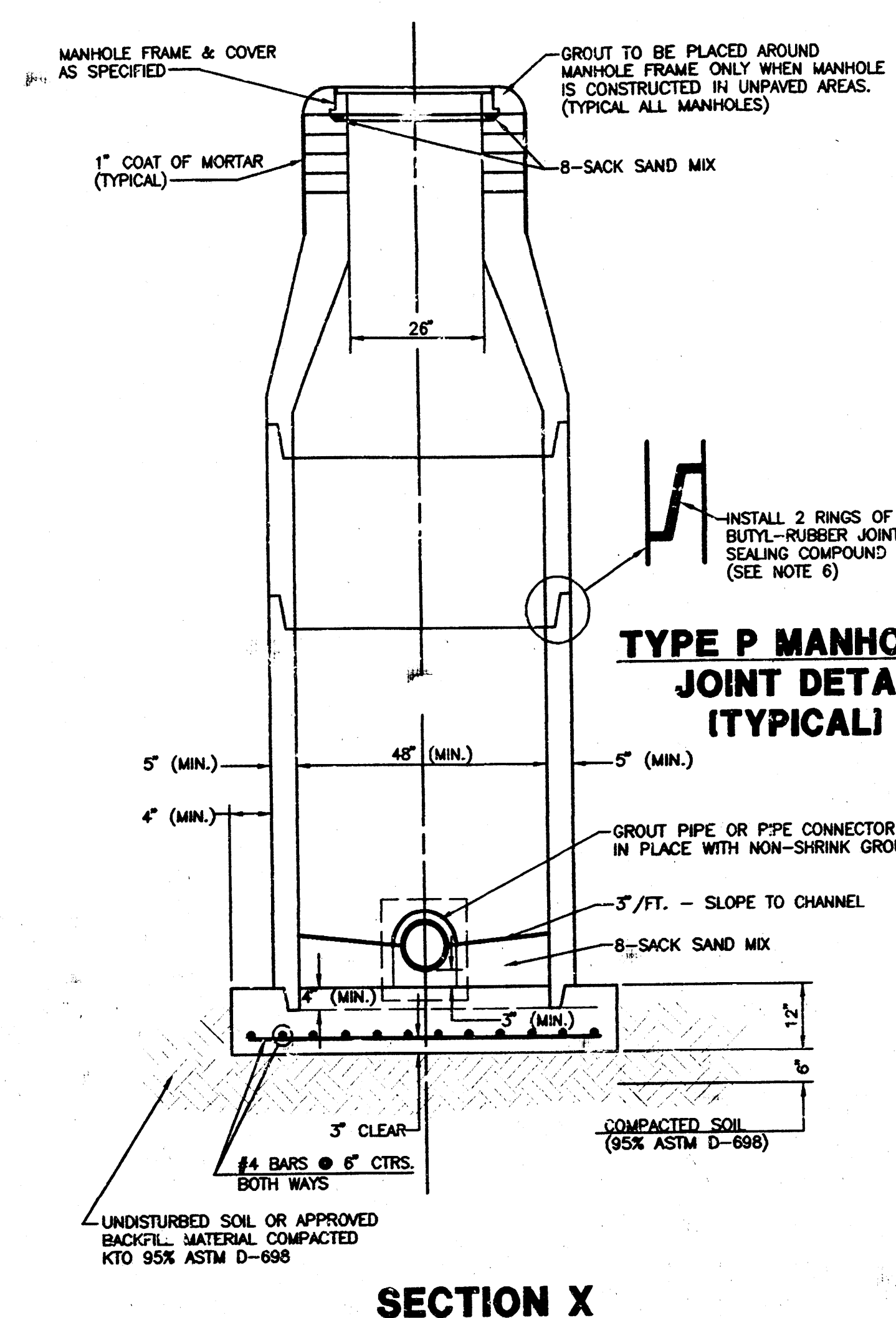
**TYPE P
STANDARD MANHOLE**



**TYPE P
INSIDE DROP MANHOLE**



**TYPE P
OUTSIDE DROP MANHOLE**



**SECTION X
(TYPICAL)**

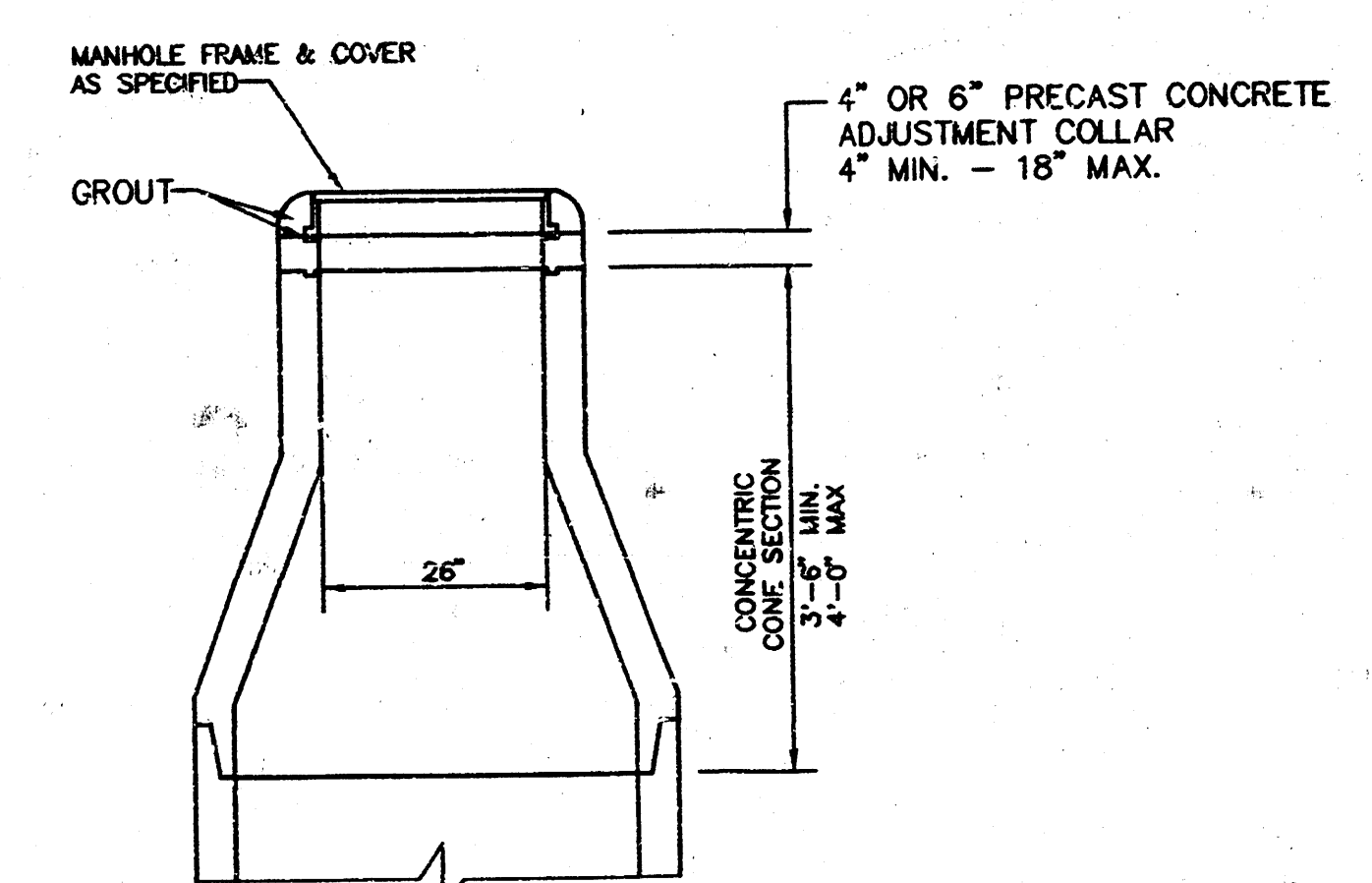
GENERAL NOTES

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 CURT.
- 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 PLACED AROUND THE MANHOLE RING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED 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 GROUTING 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 BITUMINUS 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.

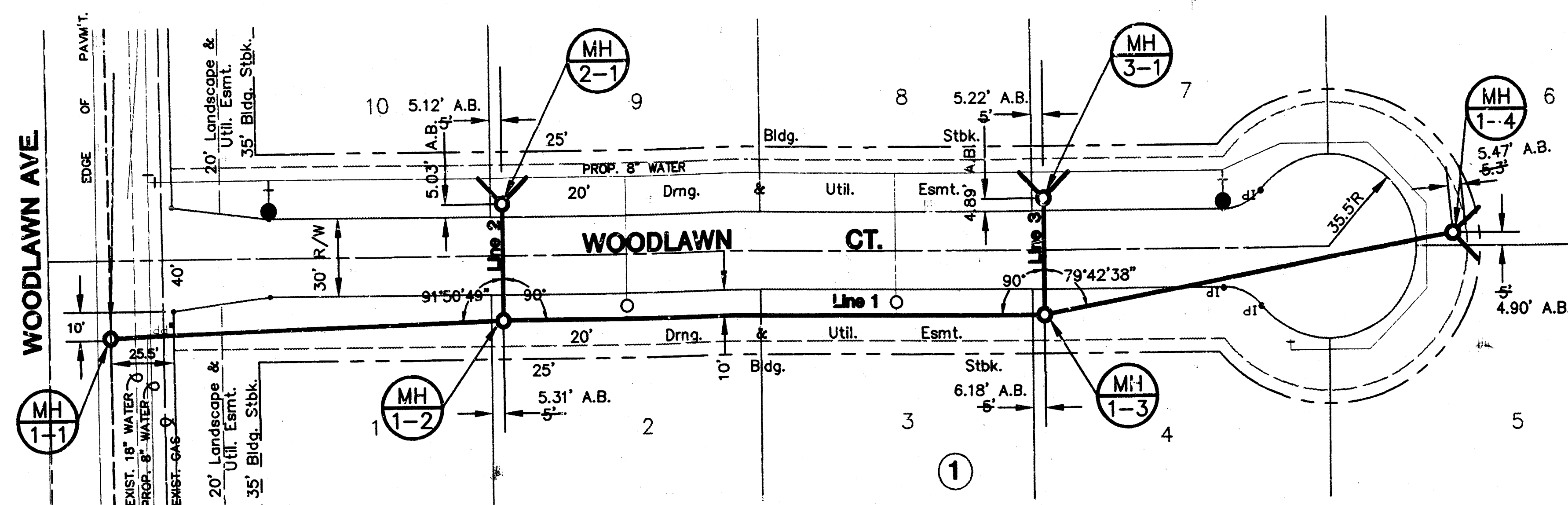


**ALTERNATE CONSTRUCTION
IN UNPAVED AREAS**

AS BUILT 12/14/94

	BELAIRE PLAZA SECOND		Design GA
	MANHOLE DETAILS		Drawn by AN
			Checked by GA
	MID-KANSAS ENGINEERING CONSULTANTS INC. 3500 NORTH ROCK ROAD BUILDING #800 WICHITA, KANSAS 67226		Date 6/92
		Job no. 94049-193-B	Sheet 2
		(316) 636-5566	Of 4

BEL AIRE PLAZA SECOND ADD.
SANITARY SEWER PLANS
PROJ. NO.

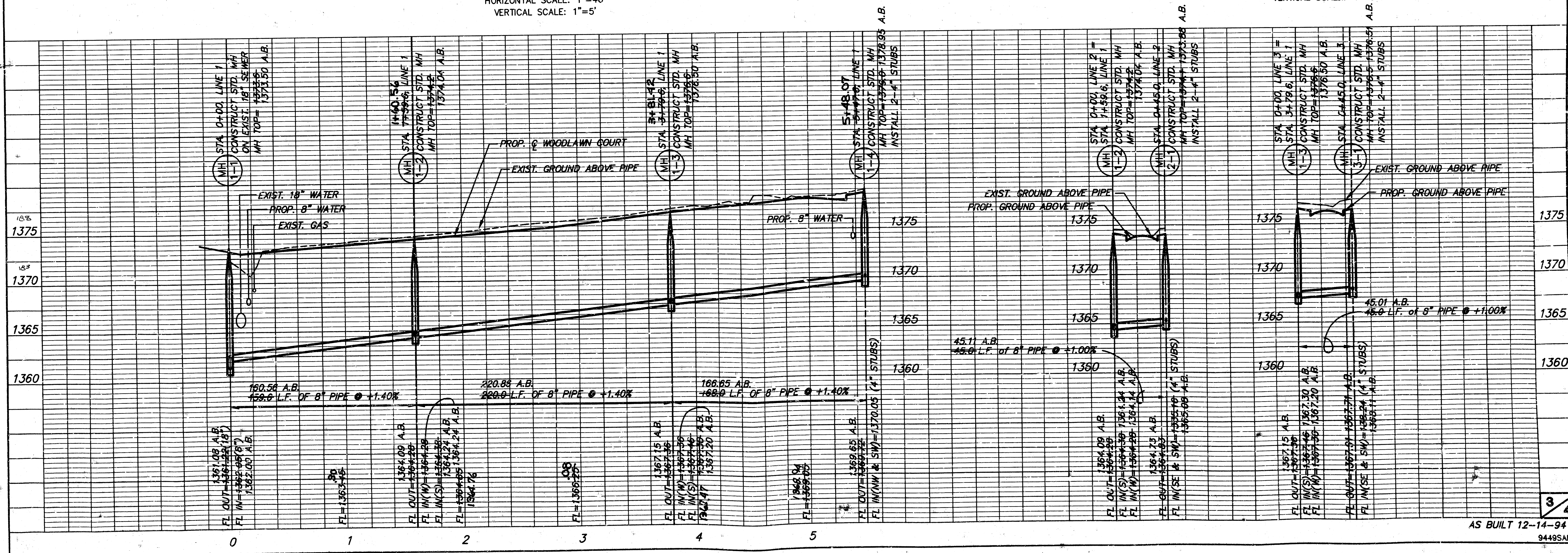


PLAN - LINES 1, 2 & 3
SCALE: 1"=40'

PROFILE - LINE 1
HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=5'

PROFILE - LINE 2
HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=5'

PROFILE - LINE 3
HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=5'



PC 43-10

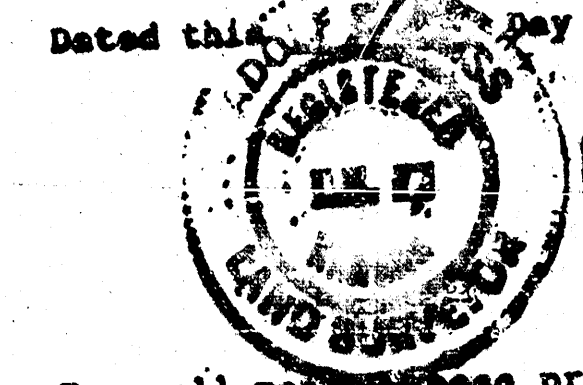
LEGAL DESCRIPTION

A replat of the north 250 feet of Lot 1, Block 1, Bel Aire Shopping Center, an Addition to Bel Aire, Sedgwick County, Kansas.

STATE OF KANSAS)
COUNTY OF SEDGWICK) ss

I, Adolf E. Reiss, being a duly licensed professional land surveyor in said County and State, do hereby certify that I have caused the tract of land as set forth in the Legal Description to be surveyed and platted and that said survey and the accompanying exhibit are true and correct to the best of my knowledge and information available.

Dated this 14th day of February, 1994.



Know all men by these presents that K. C. "Buck" Alley and Gladys S. Alley, husband and wife, have caused the tract of land as set forth in the Legal Description to be surveyed and platted into lots, a block and a street to be known as Bel Aire Plaza II, Bel Aire, Sedgwick County, Kansas. Easements for the construction and maintenance of public utilities and drainage as indicated on the face of the plat are hereby granted. The street is hereby dedicated to and for the use of the public. All abutting rights of access to Woodlawn Boulevard are hereby granted to the City of Bel Aire.

K. C. Alley
K. C. Alley
Gladys S. Alley
Gladys S. Alley

STATE OF KANSAS)
COUNTY OF SEDGWICK) ss

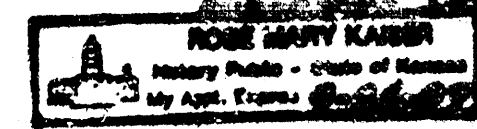
The foregoing instrument was acknowledged before me this 14th day of February, 1994, by K. C. "Buck" Alley and Gladys S. Alley.

Adolf E. Reiss, Notary Public
My Appointment Expires: 2-26-97
We, Bank IV Kansas, N.A., holders of a Mortgage on the above described property, do hereby consent to the plat of Bel Aire Plaza II, Bel Aire, Sedgwick County, Kansas.

Mark E. Heiman, Assistant Vice President
MARK E. HEIMAN

STATE OF KANSAS)
COUNTY OF SEDGWICK) ss

The foregoing instrument was acknowledged before me this 14th day of February, 1994, by Mark E. Heiman, Assistant Vice President, on behalf of Bank IV Kansas, N.A.



Adolf E. Reiss, Notary Public
My Appointment Expires: 2-26-97

This plat of Bel Aire Plaza II, Bel Aire, Sedgwick County, Kansas has been submitted to and approved by the Bel Aire Planning Commission, Bel Aire, Kansas.

Dated this 14th day of February, 1994.

BEL AIRES PLANNING COMMISSION

Charles S. Downing, Chairman
CHARLES S. DOWNING
Edy L. Martinez, Secretary
EDY L. MARTINEZ

This plat approved and all dedications shown herein consented by the Board of City Commissioners of the City of Bel Aire, Kansas, this 17th day of April, 1994.

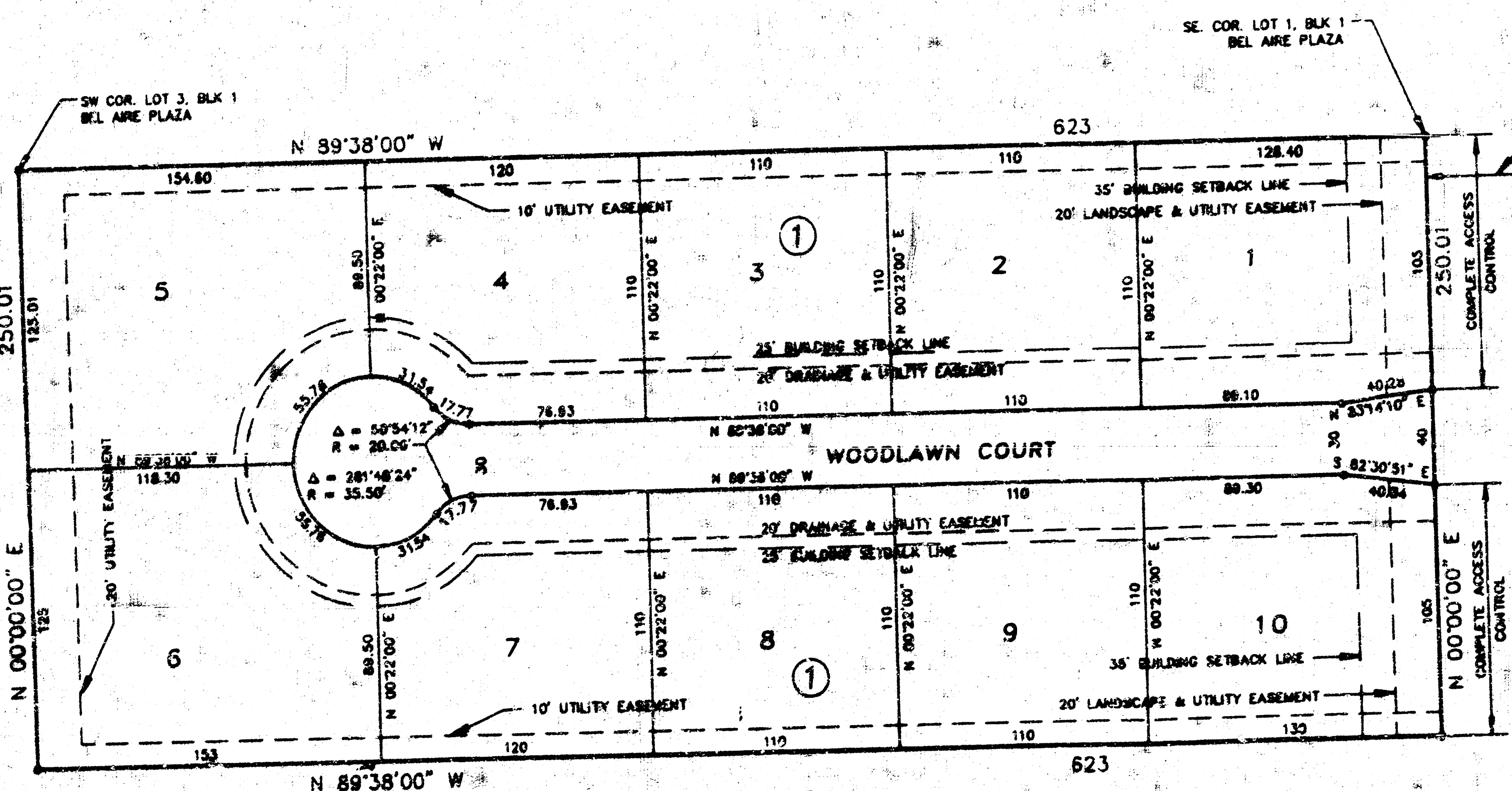
Harold A. Smith, Mayor
HAROLD A. SMITH
Harold A. Smith, City Clerk
HAROLD A. SMITH

Entered on transfer record this 28th day of April, 1994.
Susan E. Crockett, County Clerk
SUSAN E. CROCKETT

STATE OF KANSAS)
COUNTY OF SEDGWICK) ss

This is to certify that this instrument was filed for record in the Register of Deeds Office at Bel Aire, Kansas, on this 14th day of February, 1994.

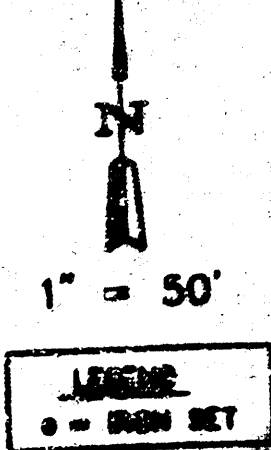
Ed Reiss, Register of Deeds
ED REISS
Ed Reiss, Deputy
ED REISS



EXISTING 50' R-O-W
RECORDED BOOK 610, PAGE 429

FINAL PLAT
BEL AIRES PLAZA II
BEL AIRES, SEDGWICK COUNTY, KANSAS
1994
REISS & GOODNESS ENGINEERS

REMARKS:
CITY OF BEL AIRES, KANSAS TO BEL AIRES PLAZA II, KANSAS, 200 FEET NORTH OF BEL AIRES PLAZA II, KANSAS, LOCATED NORTH OF PLAT.
ELEV. 1074.17 M.S.L.



20.00
2

PC 43-10

4362